

## THE LARGEST KNOWN OSTRACOD

BY

HAROLD W. SCOTT

*University of Illinois, Urbana*

One of the most unusual ostracods that has ever been found was recently collected from the Galena dolomite of northwestern Illinois in the vicinity of Oregon, Ogle County. We ordinarily think of ostracods as minute crustaceans ranging in size from microscopic forms to forms a few millimeters in length. Specimens 15-20 millimeters in length are not common and are observed with considerable interest.

While studying the fauna of the Galena limestone the writer found a specimen of the genus *Leperditia* which measured 58 millimeters in length. This form attained a size more than twice that of any known species and is believed to be the largest ostracod that has ever been found. The largest known living ostracod, *Crossophorus africanus*, recently discovered in Africa, measures 15.5 millimeters in length. *Leperditia gigantea* Weller<sup>1</sup> attained a length of 22.5 millimeters and a height of 14 millimeters being heretofore the largest known fossil species in North America.

*Leperditia titanica* n. sp. probably represents the extreme development in size of any form of ostracod. The extreme size seems to be the natural development of a well established species. Smaller and younger representatives have not as yet been found, but it is believed that they will not be difficult to find when more collections are made.

## LEPERDITIA TITANICA Scott n. sp.

*Description*—Carapace of extraordinary size, suboblong to subovate; anterior border semicircular; cardinal line straight, slightly shorter than greatest length of shell, forming an angle of approximately 110 degrees with the posterior extremity; a low ridge-like thickening occurs along the posterior half of the dorsal margin. Ventral edge of carapace broadly and evenly curved with a backward swing until greatest width of valve is reached where, due to the extreme size, the dorsal and ventral margins are subparallel for a short distance (this parallelism would not be apparent in smaller individuals), both an-

<sup>1</sup>Weller, S., Geological Survey of New Jersey, Paleozoic Faunas, Vol. III, p. 260, Pl. 23, 1902.

teriorly and posteriorly the margin is slightly raised to form a rather indistinct border. Surface of valve smooth, not pitted, evenly convex. Eye tubercle and muscle spot not distinguishable. Only right valve known.

*Dimensions:* greatest length, 58 millimeters; height, 33 millimeters; convexity of one valve, 3 millimeters.

*Remarks.*—The unusual size, angular extremity of the cardinal line, and even convexity of the entire carapace readily sets this species apart from any other. It differs from *L. gigantea* in its greater size, lesser convexity of the valves, more sharp backward swing of the ven-

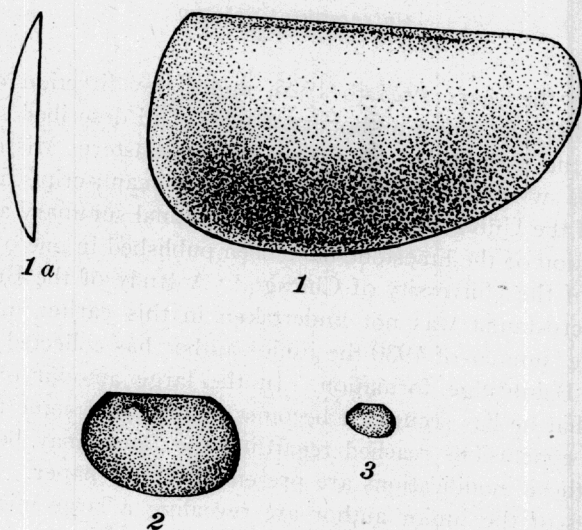


FIG. 1. *Leperditia titanica* n. sp.  
FIG. 1a. Cross-section showing general convexity.  
FIG. 2. *L. gigantea* Weller.  
FIG. 3. *L. alta*.

tral margin, and the presence of a raised border on the ventral edge. It has been suggested that this form might represent a branchiopod, but because of the general form, the convexity of the valve, and the rolled edge of the ventral margin, this seems improbable. Future discoveries may reveal details not shown on the material at hand.

The extraordinary dimensions and general characteristics are brought out in Figs. 1-3 where it is compared with *L. gigantea* and *L. alta*. *L. alta* is a well known and common form that can be considered as of ordinary size. All forms are shown natural size.

*Formation and locality.* Galena limestone; Ogle County, northwestern Illinois.