

Head three-tenths the length of the entire animal; length and breadth as 3 to 4½. Margin bordered by a narrow, rounded rim that is continued at the genal angles as comparatively short aciculate spines; posterior side transverse to the pleural angle,<sup>1</sup> where it bends obliquely forward to the genal angle, a small short spine marking the pleural angle. Glabella elongate, of nearly the same width throughout, and marked by four lobes, the anterior of which is large, subcircular, and more or less convex; the three posterior transverse lobes are of nearly equal size, the first and second being confluent at their extremities and uniting with the anterior end of the palpebral lobes; occipital segment rather broad and not well defined from the glabellar lobes preceding it. Eyes elongate, narrow, and arching from opposite the anterior glabellar furrows back to a point opposite the second posterior lobe of the glabella and at a little distance from the dorsal furrow. Fixed and free cheeks not definitely separated anteriorly; back of the eye the facial suture extends obliquely outward, cutting the posterior rim of the head at the pleural angle. Free cheeks large, roughly subtriangular.

Thorax elongate, tapering gradually to the pygidium; segments, 26; the two anterior segments arch slightly forward and terminate abruptly, the postero-lateral angle of the pleura being produced into a short backward-pointing spine; the third segment has its pleural lobes greatly developed in width, and terminating in a strong spine on the same plane as those on the two anterior segments; the 14 segments back of the large third segment are uniform in character, decreasing in breadth, but having the geniculated portion of the pleural lobe increasing in length and size; the fifteenth segment is deeper than the fourteenth on the axial lobe, but the pleural lobes are much shorter, and a long acicular dorsal spine arises at the center of the axial lobe and extends back over the succeeding 11 segments to the pygidium or beyond; the 11 posterior segments are smaller and appear to have been of a more delicate texture than the anterior 15 segments. The pleural groove of the lateral lobes is broad, flat, and continued outward beyond the genal angles to the union of the two margins of the segment to form the terminal spine or point.

Pygidium small, ovate, terminating in three points posteriorly; the axial lobe occupies all the central portion, leaving a narrow pleural lobe on each side; posterior margin concave between the outer terminal points, and with a slight point at the center.

Surface of the entire body, except the free cheeks, very finely granulose under a strong magnifier; from the base of the eyes, irregular, venulose lines radiate towards the outer margin.

*Observations.*—The genus appears to be one intermediate between the genera *Paradoxides* and *Olenellus*, or a form in which the character-

<sup>1</sup>The pleural angle is the angle of the posterior margin of the head, opposite the geniculation of the pleural lobe of the thorax.