like that of *Dikelocephalus granulosus*. (Owen). [See Geo. Rep. Wisconsin, Pl. 1, Fig. 7.]

Limestone No. 1, not common.

## ARIONELLUS SUBCLAVATUS. N. S.

Fig. 15,-a.

Description.—Glabella as long as the head, separated from the front margin by a narrow groove only, strongly convex, and elevated in the anterior two-thirds, less convex, more depressed, and somewhat parrower in the posterior third; sides gently convex, nearly straight, sub-parrallel, slightly more distant from each other towards the front than behind, front obtusely rounded. The neck segment and furrow are rounded and well defined all across; the posterior glabellar furrows are rather strong, directed forwards at an angle somewhat less than 45°, their inner extremities separated by one-third the width of the glabella, and distant from the neck furrow about the width of the neck segment. front of these are two obscure, nearly vertical furrows on each side, at about equal distances from each other. The fixed cheeks are strongly elevated, and separated from the glabella by the deep, narrow dorsal furrows. The eyes are small, and situated on a line drawn across the head, passing about midway between the two posterior glabellar furrows. They are connected with the front lobes of the glabella, by slender ocular ridges, as in the genus Conocephalites. The distance of the eye from the glabella, is a little more than half the width of the neck segment. The facial suture cuts the front margin, a little inside of a line drawn through the eye, parallel with the length of the body. Behind the eye it runs obliquely outward with a gentle curve, and cuts the posterior margin at a point between the line passing through the eye, and the posterior angles of the head. The surface in the large specimens is finely tubercular, but in the small ones apparently smooth. Length of largest head seen five lines and a half; the width of the glabella at one-third the length from the front, is about three-fourths of its own length, excluding the neck segment and furrow. Moveable cheeks, thorax and pygidium unknown.

Limestone No. 1.