rounded in front, sides nearly straight or gently convex, neck furrow well defined all across, and continued on the cheeks to the outer angles of the head, four lobes on each side of which the anterior is largest, the posterior smallest, and the other two almost equal to each other, the furrows directed obliquely forwards at an angle of about 30°, to the longitudinal axis, their inner extremites distant from each other a little less than one-third the width of the glabella. Cheeks moderately convex, punctured. Eye opposite the second lobe from the front, and distant from the glabella apparently about the width of the lobe.

Length of head nearly four lines; of glabella, about three lines and a half; width of glabella two lines and a half.

Limestone, No. 2.

Closely allied to a small species which occurs in the Chazy limestone at Caughnawaga. Another of the same size and type occurs at Phillipsburgh.

ASAPHUS ILLAENOIDES. N. S.

Description.—Head very convex, in shape like that of an IIlaenus, equal to about one-fourth of a sphere, posterior angles rounded; width a little less than twice the length. Glabella obscurely defined, oblong, slightly narrowed just behind the eyes, thence a little widened both forwards and backwards. Eyes subglobular, of a medium size, close to the glabella, the distance between their centres about equal to the length of the head. The facial suture runs from the inner anterior angle of the eye. with a scarcely perceptible curve outwards, directly forward to the front margin, being in this part almost parallel with the longitudinal axis of the body. From the inner posterior angle it runs outwards and backwards, and cuts the margin at a point in a line drawn parallel with the axis of the body, passing outside of the eye at a distance therefrom equal to one-half the width of that organ. The cheeks from the eye to the posterior angle of the head, descend with a flat slope of about 45° to the horizontal plane of the body. The surface appears to be smooth.

The pygidium is depressed, convex, semicircular, the posterior margin regularly rounded; the axis depressed, semi-cylindrical, sub-conical, sides a little concave rather prominent, the extremity very obtusely rounded, the length varying from a little more than one-half to two-thirds the total length; its width a little less than that of the side lobes, five very observe segments of