

chamber of habitation is two inches in depth, and the greatest diameter two inches. The aperture is often very much constricted.

1.—Chamber of habitation only, length 2 inches ; diameter of aperture, 16 lines ; dorso ventral diameter at last septum, 22 lines ; lateral diameter, 24 lines.

2.—Chamber of habitation and last two septa ; dorso—ventral diameter of aperture, 17 lines ; lateral, 18 lines ; dorso ventral diameter at the last septum, 22 lines ; lateral, 24 lines : depth of chamber of habitation, 26 lines.

3.—Length, 4 inches, but, when perfect, probably 6 inches ; aperture visible on the dorsal side only ; length of chamber of habitation, 30 lines ; section at last septum nearly circular, and 25 lines across ; there are 7 septa in 20 lines on the dorsal side. On the ventral side there are about 3 septa to the inch in large specimens.

This species differs from *O. Pettiti* in being more slender, and in having the ventricose position more extended in length in proportion to the whole length of the shell. The surface is covered with fine obscure transverse striae, which make a sinus on the median line of the ventral aspect. Faint longitudinal sulci are visible on the cast.

Grimsby ; Niagara formation. J. Pettit.

Genus, STREPTOCERAS, N. G.

The above generic name is proposed for species having the form of *Oncoceras*, but with a tri-lobed aperture like *Phragmoceras*.

S. JANUS, n. sp.—Large individuals are seven inches in length, and two and a half inches in greatest diameter ; gradually enlarging from the aperture to about the mid-length ; then more abruptly contracting ; the apical fourth of the length more slowly diminishing. Section at the aperture sub-triangular ; in the main body of the shell broad ovate or nearly circular and towards the apex circular, less convex on the dorsal than on the ventral aspect. Aperture, in contour, a triangle with the angles rounded, forming three lobes, one of which is ventral, and the other two lateral, but near the dorsal aspect. The ventral lobe is narrowly rounded, and forms a projection like the lip of a pitcher. The lateral edges (of the aperture) behind the ventral lobe are at first gently concave, and then gently convex, gradually rounding into the two lateral lobes ; the dorsal edge between the two lateral lobes, is gently concave. The outline of the body of the shell on the dorsal aspect is nearly straight or slightly concave from the aperture for two-thirds the length, then curved. The ventral aspect almost uniformly arched to a radius of about four inches in a specimen seven inches in length. Siphuncle situated in the median line of the ventral aspect, moniliform, the segments nearly three lines in diameter. Septa about four to the inch on the side, becoming more numerous towards