

ure is so compact that they are seldom found compressed, while all species of *Serpulites* are almost invariably in that condition, showing that they consist in general of something more like a membranous sack than a hard-shelled tube."

The shell of the species of this genus is strong and comparatively thick, much more like those of *Tentaculites* than *Serpulites*, and I am inclined to agree with M. Barrande that the relations of the genus are with *Tentaculites* and *Hyolithes* (Sys. Sil. Bohême, vol. iii, p. 138, 1867).

The three species described by Mr. Billings, *S. rugosa*, *S. pulchella*, and *S. obtusa*, are from the Middle Cambrian, Georgia Group, on the north side of the Straits of Belle Isle, the two latter species occurring in the same hard specimens of rock.

Salterella obtusa proves to be a species of *Hyolithes* and is removed to that genus.

Salterella Billingsi Safford (Geology of Tennessee, p. 289, 1869) is from the Trenton Group. Until more is known of the genus I would place this species under it with a query.

SALTERELLA PULCHELLA Billings.

Plate xiii, figs. 3, 3a, pl. viii, 7, 7a-c.

Salterella pulchella, Billings, 1861. Geology of Vermont, vol. ii, p. 955. *Idem*, 1865. Pal. Foss., vol. i, p. 18.

Original description.—"Elongate, conical, gently curved, from six to eight lines in length and from one line to one and a half in width at the aperture. Surface ornamented with small encircling striæ just visible to the naked eye.

"This species is larger than *S. rugosa*, always a little curved, not so abundant, and when weathered does not present the sharp imbricating annulations of that species."

The species in the Winooski marble is observed only on the polished sections, and it is very difficult to determine its specific characters. It appears to have a smooth outer surface, as no annulations are shown in the longitudinal sections. In form it varies from the description of *S. pulchella*, in being shorter and larger at the aperture; but, as we find numerous examples of a form that corresponds to *S. pulchella* 300 feet higher in the section, associated with the casts of shorter, stouter shells, and also forms that appear intermediate between the slender and stouter examples, it is probable that all belong to one species. In all the specimens yet obtained but a single shell or sheath is shown. This may be owing to the fact that in those from the Winooski marble the separate shells may have disappeared in the semi-crystallization to which the calcite replacing them has been subjected, and all the specimens from the gray and reddish magnesian limestones are in the form of casts of the interior and exterior surface or else showing only the outer surface.