

belong to this species, there are from 60 to 90 lamellæ to be seen on the outside of the cup at the margin. In those which are empty the cavity once occupied by the inner sack mentioned in the preceding pages, extends downward from one fourth to one third of the length of the fossil. On the outside the lamellæ are seen to branch from the sides of a line running from the top to the bottom along the convex, curved side, and again from two other similar lines at the sides.

This species occurs in the Trenton Limestone, and is somewhat common in the rock at the Barrack Hill at the city of Ottawa. The specific name (*corniculum*) is from the Latin, "a little horn."

STREPTELASMA PROFUNDA, (Hall.)

In this species the cup is very little, or not at all curved. The length is about an inch and a half in full grown specimens, and the cavity within extends sometimes nearly to the bottom, hence the name (*profunda*), "profound" or "deep." There are about 74 lamellæ in specimens of the size represented in Fig. 7. They are usually small, and large alternately. The small ones are those newly developed, and not full grown.

This species occurs in the Black River and Bird's Eye Limestones, at the base of the Trenton.

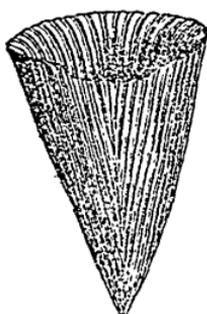
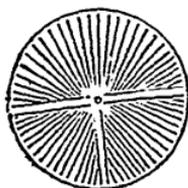


Fig. 7.—*Streptelasma profunda*.

In addition to the above there are several other species in the Trenton Limestone which we shall endeavour to figure hereafter. They are *S. crassa* with about 50 thick coarse lamellæ, *S. multilamellosa* with about 120 lamellæ, and *S. parvula* with only about 30. The latter is very small, and all resemble very much *S. corniculum*. *Crassa*, thick; *multilamellosa*, "many lamellæ;" and *parvula*, small.

The mode of growth of these corals appears to have been as follows:—At first they consisted of a mere point attached to the rock, when the cup commenced to form there were only four partitions or lamellæ, as it increased others were added, three of the original ones continuing to grow, and the fourth being undeveloped. In good empty specimens of *S. profunda* the three large primary lamellæ are very conspicuous above the others on the inside of the cup, and on the outside their position is marked by three upright seams extending from the top to the bottom, and from each side of which the newer lamellæ may be seen branching away. One of those is seen in the front of Figure 7.



These cup shaped corals with the four primary lamellæ commenced their existence in the seas of the Lower Silurian age, but became extinct in the Permian. To this important fact we shall return hereafter.

Fig. 8.—Interior of (*S. profunda*), shewing the three large primary lamellæ.