

the middle of the valve and from there to the hinge the valve is flat. In the oldest portion of the shell, i. e. from the beak to about one half the distance to the front, both valves present the appearance of a typical *C. acutiplicata* (Con.). But from this point to the front the valves grow rapidly toward each other, thus producing a very conspicuous thickening of the shell. With this thickening there is an increased prominence of the concentric lamellae. The dimensions of a large specimen are: length, 12mm; breadth, 16mm; thickness, 9mm.

This species which is from the very lowest Onondaga, immediately above the Esopus-Schoharie, evidently represents an offshoot of *C. acutiplicata* which, rapidly accentuating certain characters, soon became extinct, for it was not found in any higher beds. It must be regarded as a phylogerontic type, in which the characters normal in the adult of its ancestors are lost in its own ephelic stage.

Figured specimen, paleontologic collection, Columbia University, catalogue no. 19,326.

***Leptocoelia flabellites* (Conrad)**

One of the most characteristic Upper Oriskany species, and occurs also less abundantly in the middle Oriskany.

***Whitfieldella? nucleolata* (Hall)**

Very abundant in the Upper Manlius. The shell is small, an average one measuring 6mm by 5mm by 3mm in length, width and thickness respectively. It is not noticed in the Lower Manlius, while several specimens of the average size were found in the Favosites bed.

***Trematospira multistriata* Hall**

Abundant in the Upper New Scotland; it does not vary from the description of the type.

***T. perforata?* Hall**

Several external molds and an internal mold of the pedicle valve from the Upper New Scotland present the characters of this species.

***Nucleospira concentrica?* Hall**

In the Lower New Scotland are many specimens of a shell which in external characters comes nearest this species but differs from it in the absence of a central, longitudinal, depressed line of the dorsal valve and in the fact that the dorsal valve is not depressed at the