species of *Goniatites* and *Orthoceras*, and a few other species. The Naples beds, in the Lower Portage, have afforded the first of American species of

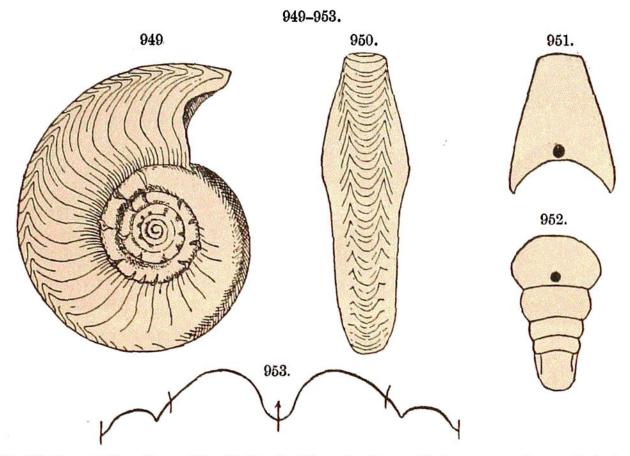
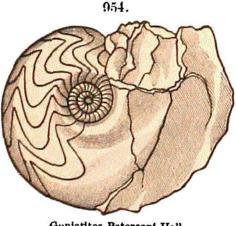


Fig. 949, Clymenia Neapolitana, of New York (× 4); 950, profile of same; 951, transverse section near beginning of 5th whorl; 952, same at end of 1st, 2d, 3d, and 4th whorls; 953, form of the suture at 2½ revolutions. J. M. Clarke.

Clymenia (Fig. 949), a genus related to Nautilus, but having the siphuncle dorsal (Fig. 951). Fig. 954 represents Goniatites intumescens (G. Patersoni Hall) of the same beds; it occurs also in the Ithaca group.



Guniatites Patersoni Hall.

The so-called *Catskill* beds contain no remains of marine Mollusks of any kind, except occasionally such as are regarded as Chemung, and as indications that the beds are Chemung.

5. Crustaceans. — Trilobites have not a recorded species from the New York Portage; and in the Chemung occur only *Phacops nupera* H., doubtfully, and *Cyphasphis lavis* H., *Phacops rana* and *Dalmanites* (*Cryphœus*) Boothi. But conditions were more favorable in Ohio, and a Chemung fauna, according to Herrick, has afforded the follow-

ing species : Proetus minutus Hk., P. præcursor, P. doris Winchell, P. auriculatus H., Phæthonides occidentalis Hk., P. spinosus Hk., and others.

Phyllopod Crustaceans were of various forms and species in the Portage,