

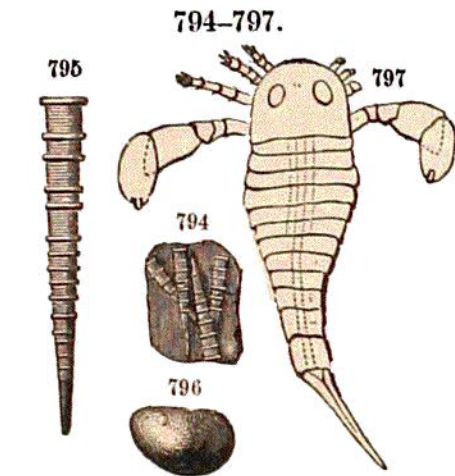
A dike of a chrysolitic eruptive rock, altered to serpentine, intersects the Salina group at Syracuse (though now concealed from view), which was first described by Vanuxem in 1839, and by Beck in 1842, and has recently been studied and explained by G. H. Williams (*Am. Jour. Sc.*, 1887).

LIFE.

The fossils that have been supposed to occur in the lower beds of the Salina group in New York are referred to the Niagara group, and those at the top are Water-lime species. Regarding the Water-lime beds of Ohio as synchronous with the Salina and Water-lime of New York, the fossils of the Water-lime stand for those of the Onondaga period. But they are few in number, the limestone having originated, as its fine texture and impurity

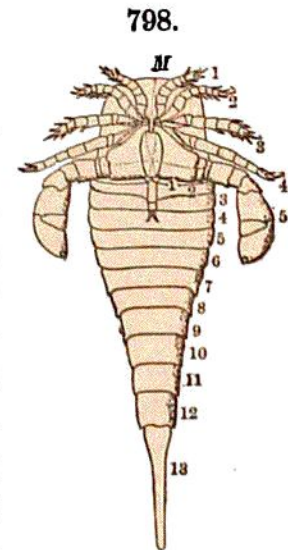
show, in shallow waters, under their gentle triturating action, and differing in origin from the Salina beds in having had more open connection with the Interior Continental Sea. Unquestioned remains of *Fishes* are among the fossils, and also the first of American terrestrial species, a *Scorpion*.

Some of the characteristic fossils of the Water-lime are represented in the annexed figures. Fig. 794 is the more common species of *Tentaculites* of the Tentaculite limestone, and 795 is the same enlarged. It is regarded as the shell of a small Pteropod. Fig. 796 is an Ostracoid Crustacean (*Leperditia alta*); it is very common in the Tentaculite limestone and



Figs. 794, 795, *Tentaculites gyracanthus*; 796, *Leperditia alta*; 797, *Eurypterus remipes*, the three anterior legs of the right side mutilated, a young individual. Meek.

Water-lime. Fig. 797 represents a young Eurypterid (*Eurypterus remipes*), a common species in the Water-lime, related to the species of the Trenton period, mentioned on page 513, but of different genus. Some specimens are a foot in length. *E. giganteus*, a species from near Buffalo, described by J. Pohlman, was nearly six inches broad and probably 20 inches long. The under surface of *E. remipes* restored is shown in Fig. 798; and on it the segments of the thorax and abdomen are numbered. Anteriorly, the members of the cephalic portion are five in number of pairs, and they serve both as feet and jaws, as in the modern *Limulus*. There are no antennæ corresponding to the chelate or pincer-like antennæ of *Limulus*. Behind the legs, an apron-like pair of limbs, with a narrow prolongation at the center, pertains to the first thoracic segment, which has the position of a similar pair in *Limulus*.



Restoration of *Eurypterus remipes*, ventral view. *M*, mouth. Hall.