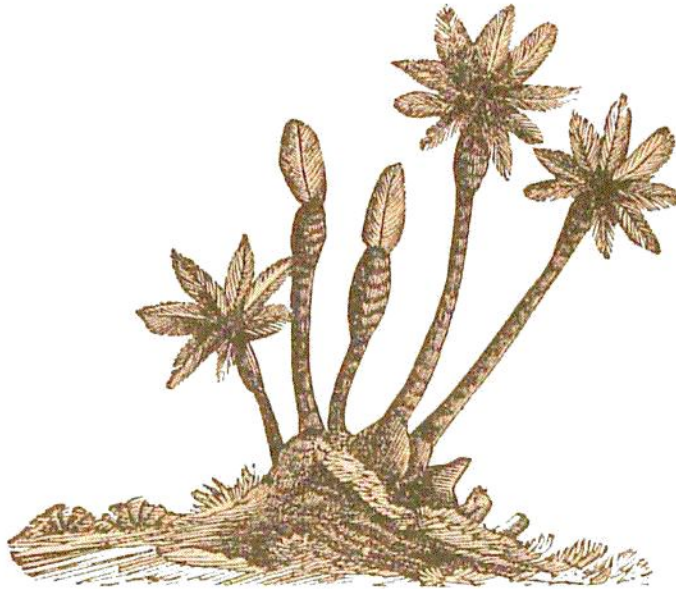


Fig. 175.

*Pear Encrinite.*

5. The Polycrinidæ; 6. The Haplocrinidæ; 7. The Anthocrinidæ; 8. The Cyathocrinidæ; 9. The Pycnocrinidæ. These families he divides into 105 genera. Of these, thirty-seven are peculiar to the Lower and Upper Silurian, sixteen to the Devonian, nineteen to the Carboniferous, one in the Permian; in the Triassic six, in the Jurassic fourteen, in the Cretaceous seven, in the Tertiary two, and two exist in our present seas, to which should be added a third, the *Holopus*, which is found only among existing animals. The genus *Pentacrinus* began its existence in the Triassic period, and has continued to the present time, though there have been several changes of the species.

Among the Crinoids the Cystidæ have attracted special attention, and those of Canada have been finely illustrated by Mr. E. Billings, palæontologist of the Canada Survey. According to him, there have been found in the lower half of the Lower Silurian (in Bohemia and nowhere else) four species, in the upper half sixty-three; in the Upper Silurian eighteen species, and perhaps some doubtful ones in the Devonian; above which none occur. Fig. 176 shows one of these little mailed animals from the Trenton limestone, the *Pleurocystites filitextus*.

*Crustacea.*—Crustaceans form the highest order of articulated animals. By far the most remarkable group of them in the earlier or palæozoic rocks are the Trilobites, so called because their shell or buckler is divided into three parts. So different are they from living crustaceans, that for a long time it was contended that they were molluscs or insects.

The shield or buckler of this animal covered its anterior part, while the abdomen had numerous segments that folded over each other like those on a lobster's tail. By this arrangement some of the species had the power to roll themselves up like the wood-