

formed in any other way. Nor need we be astonished at the fineness of the infiltration by which these minute tubes, perhaps $\frac{1}{10000}$ of an inch in diameter, are filled with mineral matter. The micro-geologist well knows how, in more modern deposits, the finest pores of fossils are filled, and that mineral matter in solution can penetrate the smallest openings that the microscope can detect. Wherever the fluids of the living body can penetrate, there also mineral substances can be carried, and

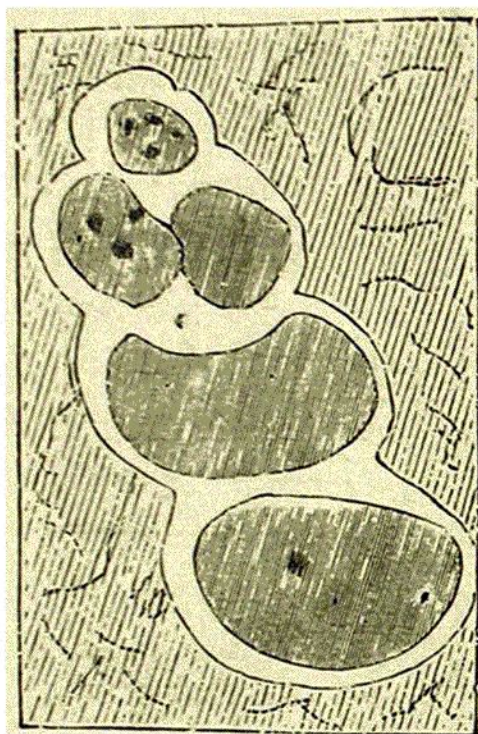


FIG. 17.—Shell from a Silurian Limestone, Wales ; its cavity filled with Hydrous Silicate. Magnified 25 diameters.

this natural injection, effected under great pressure and with the advantage of ample time, can surpass any of the feats of the anatomical manipulator. Fig. 16 represents a microscopic joint of a Crinoid from the Upper Silurian of New Brunswick, injected with the hydrous silicate already referred to, and Fig. 17 shows a microscopic chambered or spiral shell, from a Welsh Silurian limestone, with its cavities filled with a similar substance.

Taking the specimens preserved by serpentine as typical, we now turn to certain other and, in some respects, less character-