defined,) chains of serpentine grains, of nearly equal size, connected with each other. When by means of acids the lime is removed from these aggregates, a perfectly coherent serpentine skeleton is in all cases obtained, which may be compared to a piece of wood perforated by ants. * * * * *

The surface of the serpentine grains is rounded, pitted, and irregular; plane surfaces and straight lines are rarely to be seen. Even when dilute nitric or acetic acid has been used to remove the lime, a white down-like coating is frequently found on the serpentine, which does not answer to the nummuline wall of the calcareous skeleton. In many cases, where the lime is very crystalline, and the more delicate organic structure obliterated, small tufts of radiated crystals, apparently hornblende or tremolite, are seen resting upon the serpentine. These crystals, when seen in thin sections, by transmitted light, may easily give rise to errors; their formation seems to have been possible only where the calcareous skeleton had been destroyed, and crystalline carbonate of lime deposited in its stead; during which time free space was given for the formation of these crystalline groups. In very many cases there are seen, by a moderate magnifying power, (in the residue from acids) deposits of small detached cylindrical stems, with some larger ones, consisting of a white matter insoluble in acids. These appear to be the casts of the tubuli which penetrated the calcareous skeleton, and of the less frequent stolons, as will be described.

The serpentine in these sections never appears quite homogeneous, but exhibits, on the contrary, irregular groups of small dark-colored globules disseminated through the mass, without however any definite indications of organic form. Still more frequently, the serpentine is penetrated by irregularly reticulated dark colored veins, giving to the mass a cellular aspect.

In certain parts of the serpentine, however, parallel lines, groups of curved tube-like forms, and oval openings, clearly indicate an organic structure like that of the Canadian Eozoon. The finely tubulated nummuline wall of the chambers, which was discovered by Carpenter, and the casts of whose tubuli appear in the decalcified specimens from Canada as a soft white velvet-like covering, could only be found in a few isolated cases in the Bavarian specimens, but was clearly made out in a few fragments. (Pl. I., 4.) The somewhat oblique section shows the openings of the minute tubuli.