

and they not improbably represent those stolons or connecting channels with which Carpenter has made us acquainted.

In the decalcified specimens, delicate very slender string-like leaflets were very frequently observed, stretched between the serpentine granules; but they presented no discernible organic structure, and are perhaps only the casts of small crevices. More remarkable are the numerous canals filled with carbonate of lime, which traverse the serpentine granules, and at the surface of these are expanded into funnel shapes. They appear to represent cross connections between the calcareous skeleton.

As my object at present is merely to shew the presence, in the primitive limestones of Bavaria, of forms corresponding to the Canadian Eozoon, I will not dwell longer on these various appearances met-with in the microscopical examinations, nor on the peculiar cellular structures observed in the carbonate of lime. I will, for the same reason, only mention a specimen which exhibits, by the side of a curved main tube, a number of secondary tubuli, and farther on a parallel layer of fibres; and also another radiated form which resembles a section of a Bryozoon. It is sufficient to draw attention to the fact that, in addition to Eozoon, there are other organic remains in these crystalline limestones. There remains however to be noticed a phenomenon of some importance.

When the lime is removed by nitric or acetic acid from the interstices of the serpentine granules, there may be observed, on gently moving the liquid, extremely delicate membranes, that separate themselves from the serpentine grains, (which they covered thickly, as with a fine white down,) and now remain swimming in the liquid, so that they can readily be separated, by decantation, from a multitude of heavier particles, which, having also detached themselves from the serpentine mass, accumulate at the bottom of the vessel. These consist in great part of indistinct mineral fragments, and of small crystalline needles, together with distinct cylindrical portions, which are the broken tubuli of the Eozoon. Besides these are, here and there, distinctly knotted stems or tubules, (Pl. I., figs. 5, *a* and *b*,) which I dare not suppose to belong to Eozoon. Various other fragments of tubuli are also associated with these.

The delicate flakes, which can be obtained by evaporating the liquid in which they are suspended, shew, under a magnifying power of 400 diameters, a membranous character, and peculiar structures, which seem to be undoubtedly of organic origin.