

minerals, although presenting certain dense portions which seemed to indicate the presence of some foreign matter. These portions however showed only a cellular structure, like that in the specimen from Hohenberg, without any tubuli; nor did etching succeed in developing any structure in these wholly calcareous specimens. When therefore carbonate of lime both constitutes the skeleton, and replaces the sarcode, there is evidently little hope of recognizing these organic forms. If however the flaky pellicles which remain suspended in the acid after the solution of the lime, in these almost wholly calcareous specimens, are examined, they present a very great resemblance to the similar pellicles from the Eozoon limestone of Steinhag, already figured, which have such a striking resemblance to organic forms. The careful examination of the limestone from many other parts in the Fichtelgebirge, affords evidence of organic life similar to those of Hohenberg; thus tending more and more to fill up the interval between the Laurentian gneiss, and the primordial zone of the Lower Silurian fauna. We may therefore reasonably hope that in the study of these more ancient rock-systems, which geologists have only recently ventured to distinguish, paleontological evidence will be found no less available than in the more recent sedimentary formations. The inferences which we are permitted to draw from the discovery of organic remains in these ancient rocks, confirm the conclusion to which I had previously arrived from the study of the stratigraphical relations, and the general character of these ancient rock-systems; viz., *that there exists, in these ancient crystalline stratified rocks, a regular order of progress determined by the same laws which have already been established for the formations hitherto known as fossiliferous.*

I cannot conclude this notice of the preliminary results obtained in the investigation of the ancient Eozoon limestones of Bavaria, without adding a few observations upon some foreign crystalline limestones. It is well known that the crystalline minerals, which in numerous localities are found in these limestones, often present rounded surfaces, as if they had at one time been in a liquid state. As examples of these, Naumann mentions apatite, chondrotite, hornblende, pyroxene, and garnet. The edges and angles of these are often rounded; the planes curved or peculiarly wrinkled, and only rarely presenting crystalline faces; having in short a half-fused aspect, and offering a condition of things hitherto unexplained. One of the best known instances of this is found in