Their forms are best understood by the figures 6, *a*, *b*, *c* and *d*. The examination of the fine slimy residues from the solution of various primary crystalline limestones, in which, from the absence of well marked foreign minerals, it may be difficult to prove the presence of distinct organic forms, will, I think, afford the quickest and readiest mode of establishing the existence of organisms.

The presence of the Eozoon in the primary limestone of Steinhag being thus established, I proceeded to examine such specimens as were at my disposal from other localities of similar limestones in the vicinity of Passau. I must here remark that these specimens, collected during my geological examinations twelve years since, were chosen as containing intermixtures of serpentine and hornblende, and not with reference to the possibility of their holding organic remains. I succeeded however in detecting at least traces of Eozoon in specimens of the limestone from Untersalzbach, (fig. 2,) from Hausbach, Babing, (fig. 3,) and from Kading and Stetting. Moreover a specimen of ophicalcite from a quarry near Srin, in the region between Krumau and Goldenkron, among the primitive hills of Bohemia, afforded unequivocal evidences of Eozoon. Von Hochstetter moreover has received specimens of crystalline limestone from the same strata at Krumau, in which Dr. Carpenter has shown the presence of Eozoon. To the same formation belong the calcareous rocks near Schwarzbach, in the vicinity of which, as near Passau, great masses of graphite are intercalated in the gneiss hills. These limestones of Schwarzbach connect those of Krumau with the similar strata near Passau, from which they are only separated by the great granite mass of the Plockenstein hills. We thus obtain a still farther proof of the similarity of structure throughout the whole range of primitive rocks of Bavaria and Bohemia; and of the parallelism of their lowest portion with the Laurentian gneiss system of Canada. I think therefore that we may, without hesitation, *place the Hercynian gneiss formation of the mountains forming the Bavarian and Bohemian frontier, on the same geological horizon with the Laurentian system.*

Farther northward, in similar gneiss hills, occupying a limited area, a crystalline limestone occurs near Burggrub, not far from Erbendorf, from which a few specimens were at hand. They were however a reddish, very ferruginous dolomite, penetrated by fibres of hornblende and epidote, and gave me no trace of organic remains.

Besides these limestones of the Hercynian gneiss, there is found