or variegated, which I called the Bojian gneiss. This difference of opinion is however at once removed by the remark that I did not intend to maintain in the older gneiss the existence of a formation more ancient than the fundamental gneiss of Scotland, nor yet to assimilate the newer or grey gneiss to the more recent or so-called metamorphic series, which, according to Sir Roderick, may be clearly distinguished in Scotland from the Laurentian gneiss.

[This newer gneissic formation of the Highands is, according to Murchison, Ramsay and others, of Lower Silurian age. Our author simply claims to have established a division in the proper Laurentian rocks of Bavaria and Bohemia. It will be seen from the recently published maps of the Laurentian region of the Ottawa, that Sir William Logan there distinguishes three great limestone formations, by which the enormous mass of Laurentian gneiss is separated into four divisions. One or two of the upper ones of these may be eventually found to correspond to the grey Hercynian gneiss of Bavaria, which is there accompanied by the Eozoon Canadense, a fossil so far as yet known characterizing the highest of the three Laurentian limestones. This grey gneiss of Bavaria appears to be lithologically distinct from the Labrador (or Upper Laurentian) series; nor do we find in the present memoir of Gumbel, any clear evidence of the occurrence either of this, or of the Huronian system, in Bavaria.—T. S. H.

After citing in this connection Sir W. E. Logan's observations on these ancient formations, which are shown, by the results of the Canadian Survey, to represent three great systems of sedimentary rocks, formed under conditions not unlike those of more modern formations, our author observes:—]

Accepting these views of the older Canadian rocks, it would naturally follow that organic life might be expected to reach back much farther than the so-called primordial fauna of Lower Silurian age, and to mark the period hitherto designated as Azoic.

Guided by these ideas, the geologists of Canada zealously sought for traces of organic life in the primitive rocks of that country. Dr. Sterry Hunt had already concluded that it must have existed in the Laurentian period, from the presence of beds of iron ore, and of metallic sulphurets, which, not less than the occurrence of graphite, were to him chemical evidences of an already existing vegetation, when at length direct evidence of life was obtained by the discovery of apparently organic forms in the great beds of