

that such conditions may have been general or universal in the primeval times we are here considering.

If we ask to what extent the carbon extracted from the atmosphere and stored up in the earth has been, or is likely to be, useful to man, the answer must be that it is not in a state to enable it to be used as mineral fuel. It has, however, important uses in the arts, though at present the supply seems rather in excess of the demand, and it may well be that there are uses of graphite still undiscovered, and to which it will yet be applied.

Finally, it is deserving of notice that, if Laurentian graphite indicates vegetable life, it indicates this in vast profusion. That incalculable quantities of vegetable matter have been oxidised and have disappeared we may believe on the evidence of the vast beds of iron-ore; and, in regard to that preserved as graphite, it is certain that every inch of that mineral must indicate many feet of crude vegetable matter.

It is remarkable that, in ascending from the Laurentian, we do not at first appear to advance in evidences of plant-life. The Huronian age, which succeeded the Laurentian, seems to have been a disturbed and unquiet time, and, except in certain bands of iron-ore and some dark slates coloured with carbonaceous matter, we find in it no evidence of vegetation. In the Cambrian a great subsidence of our continents began, which went on, though with local intermissions and reversals, all through the Siluro-Cambrian or Ordovician time. These times were, for this reason, remarkable for the great abundance and increase of marine animals rather than of land-plants. Still, there are some traces of land vegetation, and we may sketch first the facts of this kind which are known, and then advert to some points relating to the earlier Algæ, or sea-weeds.

An eminent Swedish geologist, Linnarsson, has de-