and cetacea. If, therefore, there are geological grounds for suspecting that Scandinavia or Scotland or Wales was ever in the same glacial condition as Greenland now is, we must not imagine that the contemporaneous fauna and flora were everywhere poor and stunted, or that they may not, especially at the distance of a few hundred miles in a *southward* direction, have been very luxuriant.

Another series of observations made by Captain Graah, during a survey of Greenland between 1823 and 1829, and by Dr. Pingel in 1830–32, adds not a little to the geological interest of the 'outskirts,' in their bearing on glacial phenomena of ancient date. Those Danish investigators, with one of whom, Dr. Pingel, I conversed at Copenhagen in 1834, ascertained that the whole coast from lat. 60° to about 70° north has been subsiding for the last four centuries, so that some ancient piles driven into the beach to support the boats of the settlers have been gradually submerged, and wooden buildings have had to be repeatedly shifted farther inland.*

In Norway and Sweden, instead of such a subsiding movement, the land is slowly rising; but we have only to suppose that formerly, when it was covered like Greenland with continental ice, it sank at the rate of several feet in a century, and we shall be able to explain why marine deposits are found above the level of the sea, and why these generally overlie polished and striated surfaces of rock.

We know that Greenland was not always covered with snow and ice, for when we examine the tertiary strata of Disco Island (of the upper miocene period) we discover there a multitude of fossil plants, which demonstrate that, like many other parts of the arctic regions, it formerly enjoyed a mild and genial climate. Among the fossils brought from that island, lat. 70° N., Professor Heer has recognised *Sequoia Langsdorfii*, a coniferous species which flourished

* Principles of Geology, ch. xxx.