

latitudes which we observe at present must have existed, probably in a greater degree, in the Glacial age.

The sufficiency of the Lyellian theory to account for the facts, in so far as plants are concerned, may, indeed, be inferred from the course of the isothermal lines at present. The south end of Greenland is on the latitude of Christiania, in Norway, on the one hand, and of Fort Liard, in the Peace River region, on the other; and while Greenland is clad in ice and snow, wheat and other grains, and the ordinary trees of temperate climates, grow at the latter places. It is evident, therefore, that only exceptionally unfavourable circumstances prevent the Greenland area from still possessing a temperate flora, and these unfavourable circumstances possibly tell even on the localities with which we have compared it. Further, the mouth of the McKenzie River is in the same latitude with Disco, near which are some of the most celebrated localities of fossil Cretaceous and Tertiary plants. Yet the mouth of the McKenzie River enjoys a much more favourable climate, and has a much more abundant flora than Disco. If North Greenland were submerged, and low land reaching to the south terminated at Disco, and if from any cause either the cold currents of Baffin's Bay were arrested, or additional warm water thrown into the North Atlantic by the Gulf Stream, there is nothing to prevent a mean temperature of 45° Fahrenheit from prevailing at Disco; and the estimate ordinarily formed of the requirements of its extinct floras is 50°, which is probably above, rather than below, the actual temperature required.

We thus know that the present distribution of land and water greatly influences climate, more especially by affecting that of the ocean currents and of the winds, and by the different action of land as compared with water in the reception and radiation of heat. The present distribution of land gives a large predominance to the Arctic and sub-Arctic regions,