

took its origin in the north and advanced southward over new lands in process of emergence from the sea. The somewhat similar condition evidenced by the Lower Carboniferous limestone preceded the advent of the great and rich flora of the coal-formation.

Lyell's theory on this subject has, I think, in some recent publications, been somewhat misapprehended. It is true that he stated hypothetically two contrasted conditions of distribution, in one of which all the land was equatorial, in another all polar; but he did not suppose that these conditions had actually occurred; and even in his earlier editions, before the recent discoveries and discussions as to ocean currents, he was always careful to attach due value to these in connection with subsidences and elevations.* In his later editions he introduced more full references to current action, and also stated Croll's theory, but still maintained the validity of his original conclusions.

The sufficiency of this Lyellian theory to account for the facts, in so far as plants are concerned, may, I think, 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

* See "Principles of Geology," edition of 1840, chapter vii.

† See "Macoun's Report," "Geological Survey of Canada," and Richardson's "Boat Voyage."