

Columbia, form probably, a later flora brought into existence after the first upheaval of the great parallel chains of mountains there. Following on all of these older floras, but possibly contemporaneous in age with some of them, are the sub-arctic species now on the headlands of Lake Superior and the maritime plants presently on the shores of all of the Great Lakes. The most recent creations are without doubt those species—well represented by composite—which frequent more especially the newer prairies of Manitoba.

It is not difficult to see that the development of life on the earth from its dawn to the present time has been largely influenced by the vast changes which have proceeded gradually but constantly throughout geologic time. In the Laurian age, which was a prolonged period, the great central plains of North America parallel to and east of the Rocky Mountains, and throughout much of the length of the continent, formed a vast, perhaps relatively, shallow inland fresh water sea; during and after the glacial times, whilst an equally great inland, ice-laden sea again prevailed over the northern central parts of the same continent, the southern portions were dry land. In later cretaceous and Eocene times, the climate of the sub-arctic regions was, relatively speaking, warm; in glacial times and since, it has been so cold as to give a meaning of its own to the name arctic. During the tertiary times, the great dividing ridges forming the Rocky Mountains, were finally raised to their present elevations; whilst, as glacial times were passing away, the then much higher elevations and mountain ranges, which gave rise to the eastern glaciers of this period, were gradually lowered in elevation to what they appear at the present day. And these vast physical and climatic changes in tertiary and post-tertiary times are but an illustration of what has been going on from age to age from the very dawn of life upon the earth. What vast destruction of animals and plants each change must have occasioned! What a struggle for existence must have taken place among those which were left! What adaptation to new conditions in which the survivors constantly