

venting similarly their extension down the St. Lawrence below Quebec.

In the United States and Canada the mountain ranges are somewhat continuous, and have a general northern and southern trend, and this affords an opportunity to the northern trees to extend southward on the mountain flanks, and to the southern trees to range northward in the valleys. The existence of these mountain ranges has in this way given rise to a more extended distribution than could otherwise occur. Thus the White Pine (*Pinus strobus*), Red Pine (*Pinus resinosa*), Tamarac (*Larix Americana*), Hemlock (*Abies Canadensis*), Paper Birch (*Betula papyracea*), and Aspen (*Populus grandidentata*), among others, extend along the Green Mountains, Adirondacks and Alleghanies as far south as Virginia, and one or two range further. Allusion has already been made to similar features in British Columbia.

An important element in the distribution of forest trees, more particularly in the Ontario peninsula, is the chain of great lakes which forms a barrier to the free northward extension into Canada of southern forms common in Ohio, Indiana, Pennsylvania and western New York, and which should otherwise be expected in the counties of Ontario bordering on Lake Erie. Here we should find such trees as the Cucumber Tree (*Magnolia acuminata*), Red-bud (*Cercis Canadensis*), Coffee Tree (*Gymnocladus Canadensis*), Honey Locust (*Gleditsia triacanthos*), Chestnut Oak (*Quercus Prinus*), Black Oak (*Quercus nigra*), and others whose occurrence at present is doubtful. Whilst, however, the Great Lakes form in this way a barrier, the currents of the lakes have been the means of distributing seeds on the jutting headlands of the northern coasts, and though these headlands have not yet been explored with any special care, not a few southern forms have been observed. At the same time, the effect of such large and deep bodies of water, as the Great Lakes, is to lower the general temperature of the immediately surrounding country, and on the one hand to prevent the range to their shores of numerous plants requiring a higher temperature, on the other to afford a climate suitable for more northern species. Thus, as already mentioned, around the coasts of Lake Superior the flora includes some semi-arctic plants, though inland these all disappear and the vegetation is more of a northern temperate type.