

these species in Acadia is easily accounted for when it is considered that there is a continuous water communication from the great lakes of the interior to the northern confines of Acadia. But it is more remarkable, if we fail to give due weight to the transporting powers of the Polar Current, that *all* the high Northern forms, with half a dozen exceptions, should be already known as indigenous to the North West Territory, between Red River, the Arctic Sea, and the Rocky Mountains. Moreover, there are three species which, if one may judge from the authorities above quoted, are not known to occur in the interspace between this region and Acadia, or to the N. E. of the latter. These are the *Collomia linearis*, discovered by Mr. Fowler on the Gulf coast; *Vilfa cuspidata*, found by Mr. Goodale on the Upper St. John, and *Oxytropis campestris*, gathered by Professor Bailey on the Main St. John. This list of adventurous emigrants from the North West would be largely increased were we to include species which occur in the intervening country only on the mountain tops of New England and New York.

The second great agent in transporting seeds in this region, to which allusion has been made, is the River St. John. This stream appears to have played an important part in distributing plants throughout Acadia, and a few remarks on its peculiarities may, therefore, not be out of place. It is one of the most considerable of the numerous rivers which take their rise in the Appalachian range, and about one-half of Continental Acadia is included within the limits of its basin. A connection with the sea, as singular as that of the St. John, is to be found in few rivers (if any) of equal size, on the globe.

The outlet of this river at the "Falls" (or, more correctly speaking, Rapids), is a narrow and tortuous channel, bordered by cliffs and obstructed by rocky ledges. Over this barrier, as is well known, there is a flux and reflux of the tide twice a day; but as the tidal wave must rise fifteen feet or more before it can overcome this impediment, its influence on the river above is comparatively trifling, the water within the barrier not rising more than two and a half feet, while at high tide the level of the water in the harbor is about thirteen feet above that of the river at its summer level.

It is not so generally known, however, that during the spring floods the quantity of water poured into the River Saint John, through its various tributaries, is such as to exclude any influx