

Having noticed several European plants naturalized in this country (introduced no doubt with grass seed), which are not recorded by Dr. Gray in his valuable manual, I am desirous of placing them on record, and I avail myself of the opportunity to offer a few general remarks on the Canadian Flora, and the state of our knowledge respecting it. I shall confine myself at present to Phænogamous plants and ferns, with their allies. Mosses, Liverworts, Lichens, Algae, and Fuci, are studied by a much more limited class, and our knowledge of the limits of species is in a much less advanced state; we will not, therefore, at present, venture any opinion respecting them.

Dr. Gray enumerates 2426 species of Phænogamous plants and ferns, as constituting the Flora of the Northern United States, rejecting from this number the Southern forms and the maritime plants, with all those which, from any cause appear to be unknown in Canada about 1000 remain as constituting the Flora of Canada, such as we may expect to find it. Some peculiar forms may be expected northward and eastward, but they can be supposed to make but a very small numerical addition.

I have kept a list of the plants found by me near Toronto, and in a few occasional country excursions, and find the number recorded to be just under 600. Here it is to be considered that, besides the comparatively small space examined, there are several numerous families which have not yet been made a subject of particular examination, and which could hardly fail to add another hundred species. In the number of the *Canadian Journal* for April, 1854, is inserted a list of indigenous plants found in the neighborhood of Hamilton, by Dr. Craigie and Mr. W. Craigie, which appears to be carefully drawn up, though as it seems to note the results of one season's botanizing, there are of course many omissions. This list contains 362 species, of which 15 are not found in my list. The great difference is due partly to oversight, as the list is apparently only the result of one year's botanizing, and partly to the circumstance that most trees and all Cyperaceous and Gramineaceous plants have been entirely omitted.

A complete Flora of Canada cannot be expected for many years; but it appears to me that a tolerably correct and sufficiently useful list of the plants of Western Canada might now be formed, and would include a little above 1000 species of Phænogamous plants and ferns. Even conjecturally the limits may be marked out with sufficient accuracy for practical use, and a few journeys at a favorable season, or the opportunity of examining a few carefully formed local lists, would now settle everything excepting a small number of doubtful species.

Comparing our Flora with that of Great Britain we find we have both less variety upon the whole, fewer successive changes with the progress of the season and less difference of districts. We have a few plants that are only to be found in rocky districts, which are, of course, more limited in their range; but excepting these there is a remarkable conformity in the productions of the different parts of our country. This, with the allowances required for mountain ranges and the sea-coast, as well as for the gradual introduction, as we proceed southward, of new forms, is found also in the Flora of the United States, and is characteristic of the vast continent we inhabit. Our vernal Flora is one of great variety as well as beauty and interest. We have only to regret that it is so transient. At other