

(and I fear a very imperfect) history of the poisonous plants which are either indigenous to, or which have become naturalized in the immediate neighbourhood of Toronto.

The district, whose poisonous vegetable productions I propose to examine is very limited, being bounded by the river Don on the east, the Humber on the west, and extends north about four or five miles, while on the south it is washed by the Lake.

Contracted as the area is, it is remarkable for the variety of its soil, from the most stubborn and tenacious clay, to the lightest and most barren sand; yet, it is not distinguished for any peculiarity in its stratification.

It is of importance to remark the geological relations of plants, particularly in a new country, because it throws some light on the laws of vegetable distribution. It suggests the questions whether it be indigenous and coeval with the soil; or if introduced, by what means has that been effected.

Whether arts or commerce, agriculture or manufactures, superstition or medicine, has brought it; or, which is frequently the case, whether the altered state of the earth's surface has not afforded to nature, by her ordinary laws, increased means of diffusion.

We are told that in the days of Gesner, the *Fumaria Officinalis*, or *Fumatory* was a very rare plant in the fields of southern Europe, and was supposed to have come from the east; now, it is the commonest weed in corn fields and gardens from Greece to Lapland.

When I first came to Canada in 1834, many of the plants which are now most common were then never seen, in proof of which I may instance, the *Agrostemma* or Corn Cockle, the *Senecio Vulgaris* or Groundsel, the pretty little Pimpernel, and the *Fumatory*. It is remarkable that the *Anthemis Cotula* (stinking May weed) which in this neighbourhood renders all our road sides white with its blossoms during the greater part of the summer, should not be found fifty miles to the north of Toronto.

Having made these preliminary observations, I shall now commence this grave subject by a description of the most poisonous plants, after which I shall speak of those which are simply acid in their recent state, but, I greatly fear that I shall not be able to relieve its technical dulness by any little excursions into the by paths of literature, or by its useful application to science—you must be prepared, therefore, Mr. President, to find it as dry and uninteresting as a spelling book, or as that engaging and entertaining work Dr. Johnson's Dictionary.

1st. The *Datura Stramonium*—Thorn Apple—also known under the names of The Devil's Apple, Apple of Peru, and Jamestown Weed. It belongs to the Linnæan class, and order Pentandria—Monogynia, and Natural Family Solanacea.

It is found in various parts of Europe, Asia, and America, growing in gardens on rubbish heaps, and road sides.

The Thorn Apple is an annual, growing to the height of from three to five feet, according to the richness of the soil; it has a leafy, branchy stem, of a purple colour, with green spots; the leaves are large, ovate, sinuous, and deeply cut; the flowers, which make their appearance in August and September, are axillary, long, trumpet-shaped, white, pale purple, or blue, and are followed by a capsule the size of a large walnut, covered with long sharp prickles, four-celled, and filled with blackish, rough kidney-shaped seeds. The whole plant when recent, has a strong nauseous and disagreeable odour, which, when powerful, is stated by Beck to be 'certainly noxious.' All the domestic animals refuse it as food.

It is a powerful narcotic poison, and used as such in the East for nefarious purposes, and in Russia for increasing the intoxicating effects of beer. Medicinally, the Thorn Apple has been found efficacious in asthma, and organic diseases of the heart, when its fumes have been inhaled by smoking.

It is not, however, for its medicinal, but for its poisonous properties, that I wish to direct your attention to it; and, having witnessed these effects in several instances, I can speak of them from personal observation.

Being an early plant, it is occasionally gathered when young in mistake for Lamb's Quarter, (*Epilobium*?) boiled, and eaten as greens—the effects in many instances being followed by serious consequences.

At first it produces dryness of the mouth and throat, speedily followed by nausea, delirium, loss of sense, a sort of madness or fury, loss of memory—sometimes transitory, and sometimes permanent—convulsions, paralysis of the limbs, excessive thirst, dilatation of the pupils, tremblings, and death.

The severity of the symptoms depend greatly upon the peculiar constitution and age of the person; children, two or three years old, have died in two hours from eating some of the seeds, whereas adults who have partaken freely of it, have recovered after a time, and without any permanent ill effects being produced.

A family whom I attended some years ago, were all attacked in the manner above described; the children vomited before I reached the house, and speedily recovered; but the father and mother, who had partaken more freely of it, continued ill for many days, ultimately recovering, but with permanent paralysis of the extensor muscles of the feet.

In Beverley's History of Virginia, we find the following curious account of its effects:—The Jamestown Weed, which resembles the Thorny Apple of Peru, is supposed to be one of the greatest coolers in the world. This being an early plant, was gathered very young for a boiled salad, by some of the soldiers sent thither to quell the rebellion of Bacon; and some of them eat plentifully of it, the effect of which was a very pleasing comedy, for they turned natural fools upon it for several days. One would blow up a feather in the air; another would dart straws at it with much fury; another, stark naked, was sitting up in a corner like a monkey, grinning and making mows at them; a fourth would fondly kiss and paw his companions, and sneer in their faces with a countenance more antic than any in a Dutch droll. In this frantic condition they were confined, lest, in their folly, they should destroy themselves. A thousand simple tricks they played, and after eleven days returned to themselves again, not remembering anything that had passed.

Numerous cases in which death has taken place after eating this plant, might also be cited.

2nd. *Rhus Toxicodendron* or *Radicans*—The Poison Ivy. This plant is very common in Canada and the United States, growing on the borders of woods, in the angles of fences, and road sides; flowering in June and July, and belongs to the Class Pentandria, Order Trigynia, and to the Nat. Family Terebinthaceæ of Decandolle.

The root is generally trailing along the ground, sending up many stems, but when it meets with support, such as a tree or a wall, it will climb like ivy to a considerable height.

The leaves are alternate, supported on long petioles; the leaflets ternate, rhomboidal, acute, smooth and shining; the veins on the under surface, slightly hairy. The flowers are small, greenish white, in panicles which are chiefly axillary. The berries are roundish, of a pale green color, approaching to white.