FLORA OF THE QUEEN VICTORIA NIAGARA
FALLS PARK

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FLORA OF THE QUEEN VICTORIA NIAGARA FALLS PARK.

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In order that the subject of this paper may be more readily understood, the writer purposes making some general remarks before entering upon a detailed list of the plants obtained by him during several visits to this rich botanical hunting ground within the past two years; these visits varying from a few days to three weeks at a time, and made in the months of May, July, August and September.

The park being situate almost midway between Lakes Erie and Ontario, occupies a most favourable position in reference to climatic influences. It begins at the Clifton House and extends along the left bank of the Niagara River for two miles and a half, commanding a magnificent view of both the American and the Canadian Falls. The area of land included is 154 acres, in the form of a narrow strip of land about two miles along the river bank.

Walking along this bank a magnificent scene passes in review before the observer; raging cataracts pouring into fathomless depths below; seething water seeming perplexed to find a course as it comes to the surface in innumerable eddies; precipitous rocks marking the boundaries of the river, and lofty columns of mist rising from the maddened waters below.

Passing onward above the Falls on the Canadian side, other scenes lie before the visitor; rapids for miles stretch before him, the waters of which seem to rush with maddening force to make a final leap into the great chasm; continuing the walk for about a mile a cluster of islands is reached, around and through which are tortuous paths, every step marked by views that leave a lasting impression upon the mind.

While the park is such a beautiful spot, surrounded by so many inviting scenes to any visitor, it becomes especially attractive to the student of plant life. To the botanist conditions are at once apparent that indicate a varied flora. Passing from the waters edge for considerable distance up the bank, you have the soil that has been made up largely from the rocks above—the fragments of which falling year after year finally accumulate so as to form a bed suitable for certain plants; beyond this is the perpendicular bank or wall of dolomite, decked here and there with many varieties of mosses and ferns, in every shade of green, and other plants that can thrive in such conditions. The bank reached and he sees the beautiful sward stretching out before him, to where it is bounded by a steep bank about 40 feet high and 200 yards from the cliff. You have thus four distinct areas:—

1. Talus derived from the disintegration of the dolomite that forms the bank.
2. The perpendicular wall of dolomite.
3. A level plain.
4. A hillside.

On all of which you find characteristic plants; but when you consider the soil of the park, as found in the portion extending from the edge of the precipice back you discover no less than thirteen distinct areas to which we will refer subsequently.

Another condition is found here, that has a marked influence in modifying plant life, viz.: the continual presence of large quantities of moisture from the clouds of mist generated at the Falls. The moisture and the comparatively high mean temperature of the place supply two very important factors in producing a very luxuriant plant growth. We have thus a strong combination of soil, temperature, moisture, and position well suited to produce a marked variety in plant life.

It would be difficult to find a place more favourably situated for the study of botany. Few, if any, scientific visitors have ever visited this place but have been surprised at such a varied flora within so limited a district. The following areas have been mapped out by Mr. Cameron, the gardener of the park, and the writer; each space possessing characters peculiar to itself, and consequently in some respects a flora of its own.

1. Extends from the entrance gate to the artificial ponds, embracing an area of about 16 acres. This is chiefly made up soil, and in several places quite shallow with underlying rock.

2. Embraces from the ponds to a line extending from the "Jolly Cut" to the river bank, and consists largely of a sandy loam, shallow in some parts.

3. Continues from "Jolly Cut" to Murray Street ravine. Its southern boundary passing along the north side of the garden near the restaurant. Part of this is somewhat swampy while the remainder has a sandy soil. In the damp parts the "grass-of-Parnassus" (*Parnassia Caroliniana*) flourishes in abundance.

4. Consists of the space extending from the garden to Table Rock. The soil in this is loam with some spots of quicksand, and in places light sand. In several places along the hill side it is quite springy. It is in this area we find excellent specimens of *Apios tuberosa* (ground-nut) both on the cliff and upon the hillside about half way up.

5. The face of the ridge skirting district 4, and along 6. The soil is a rich loam underlaid by quicksand, and in some places springy, holding considerable water. It is rich in plants, representatives of spring types and the asters of autumn.

6. A small patch of low lying wet soil, extending from Table Rock to Cedar Island. This is one of the richest areas in the whole park. It abounds with flowers of many varieties. It is largely swampy but shallow. Here can be found forms peculiar to dry areas where such exist and all the varieties found in wet places. There are three *Loosestrifes* here, and the attractive *lobelia Kalmia*. On one occasion we gathered twenty species of purple flowers in this comparatively small area which may be well considered an "Eldorado" for botanists.

7. Embraces Cedar Island, largely of gravelly soil, enriched by leaves and silt washed from the river. The Legumes are well represented here. Some beautiful shrubs, and towards autumn, the asters and golden rods decorate the attractive island. Several varieties of *St. John's Wort* and masses of wild *Bergamot* cover many spots.

8. A strip skirting the river below the terraces in front of Falls View. The area is of a swampy nature with considerable quicksand. Some plants such as *Typha Sparganium* and allied forms are readily found, but the district does not offer many attractions.

9. Extends from the bridge connecting Cedar Island with the main land to Dufferin Islands, exclusive of the strip immediately at the bank behind. It is gravelly with a light warm soil, and forms one of the largest areas, extending nearly a mile with a width of about one-eighth of a mile. It is not very varied in its flora, considerable *Dogbane* occurs in one part, and many plants all of a more or less common character. The gardener's residence is located in this area.

10. Immediately behind No. 9 is an area largely bog and rich in plant life. Here the types characteristic of the district grow in great abundance and luxuriance. The *Archangelica* grows to twelve feet in height. On the hillside, skirting this locality, the *Maiden Hair* fern grows in great profusion. This district is also one of the richest in the whole park.

11. Is a small island in front of the gardener's residence. It is well covered with *Sumach*, and hence receives the name "Sumach Island." The soil is sandy loam and does not produce other than ordinary types.

12. Embraces the Dufferin Islands, consisting of rich soil largely derived from the silt of the river, and the accumulated remains of plants that have flourished upon their surface during the past. This is also a rich locality and will amply repay a botanist for his trouble in wandering over every foot of the ground. There the peculiar "Lizard's Tail," the "Water-Willow," "Poison Sumach," "Button Bush," "Mesereum," "Ground Hemlock," several members of the Heath family, and innumerable other plants of more than ordinary interest.

13. Is the bank which skirts the river flowing around the islands. It extends from the bridge at River Side Ramble to Observation Point, consisting largely of clay loam

which produces a flora in some respects different from that of the districts already referred to.

Such is an outline of what may be termed the botanical districts into which Victoria Park may readily be divided. Areas that supply all the conditions required to furnish elements suitable to provide a varied flora. It is exceptional, even after many visits to this place, to return without acquiring some new form of plant life not seen on former trips. In the collection given here the writer has restricted himself to the plants of the Park proper; had he taken in results obtained about the river to Queenston Heights, the number would be largely increased. He has thought it expedient to confine the essay to the present park and at some future time, add results that shall include the remainder of the ground which is really also a part of the Provincial Park.

The list contains only the plants observed during the writer's various visits. It is far from embracing all the plants. Several types were but little examined, especially those growing in the wet places and low lying parts and the flowers of the garden have also been omitted. There is no doubt but a thousand species of plants may be found here, if a regular systematic course of collecting is followed, and if the search is continued along to Queenston Heights the number would be largely augmented. In the following list the genera in each order are alphabetically arranged and as far as possible common names have been given as well as scientific.

RANUNCULACEÆ (CROWFOOT FAMILY).

- Actæa alba*, Bigel—White Cohosh (Bane berry.) Very common along the bank that skirts the park.
- Actæa Spicata*, L, Var *arguta* Torr—Red Cohosh. Readily found on Dufferin Islands.
- Anemone cylindrica*, Gray—Wind Flower. Seen on Cedar Island.
- Anemone dicholtoma*, L—Wind Flower.
- Anemone acutiloba*, L—(*Hepiticea acutiloba*, Liver leaf.)
- Anemone nemorosa*, L—Wind Flower.
- Aquilegia Canadensis*, L—Wild Columbine.
- Caltha Palustris*, L—Marsh Marigold.
- Cimicifuga racemosa*, Nutt—Black Snake Root.
- Clematis Virginiana*, L—Virgin's Bower.
- Ranunculus acris*, L—Common Buttercup.
- Ranunculus Pennsylvanicus*, L—Bristly Crowfoot.
- Ranunculus repens*—Creeping Buttercup.
- Ranunculus aquatilis*, L—White Water Crowfoot.
- Ranunculus sceleratus*, L—Cursed Crowfoot.
- Thalictrum dioicum*, L—Early Meadow Rue.
- Thalictrum cornuti*, L—Tall Meadow Rue.
- Thalictrum purpurascens*, L—Purplish Meadow Rue.

MAGNOLIACEÆ (MAGNOLIA F.)

- Liviodendron Tulipifera*, L—Tulip Tree.
- Magnolia acuminata*, L—Magnolia.

The above trees are in the garden at the old museum.

BERBERIDACEÆ (BARBERRY F.)

- Berberis vulgaris*, L—Barberry. Common on Dufferin Islands.
- Caulophyllum thalictroides*, Michx.—Blue Cohosh.
- Podophyllum peltatum*, L—May Apple or Mandrake.

PAPAVERACEÆ (POPPY F.)

- Chelidonium majus*, L—Celandine.
- Sanguinaria Canadensis*—Bloodroot.

FUMARIACEÆ (FUMITORY F.)

Dicentra Canadensis, D.C.—Squirrel Corn.

Dicentra Cucullaria, D.C.—Dutchman's Breeches or Deer Fly.

CRUCIFERÆ (MUSTARD.)

—*Arabis Canadensis*, L.—Sickle Pod.

Arabis perfoliata—Tower Mustard.

Barbarea vulgaris, R. Br.—Winter Cress.

Brassica Sinapastrum, Boiss.—Wild Mustard.

Capsella Bursa-pastoris, Moench.—Shepherd's Purse.

Dentaria diphylla, Michx.—Toothwort or Crinkle Root.

Erysimum cheiranthoides, L.—Worm-seed Mustard.

—*Lunaria biennis*—Honesty.

Lepidium campestre, R. Br.—Field Peppergrass.

Lepidium Virginicum, L.—Wild Peppergrass.

Nasturtium officinale, R. Br.—Water Cress.

Sisymbrium officinale, Scop.—Hedge Mustard.

VIOLACEÆ (VIOLET F.)

Viola blanda, Willd.—White Violet.

Viola Canadensis, L.—Canada Violet.

Viola Canina, Gray—Dog Violet.

—*Viola Palmata*, L.—Hand-leaved Violet.

Viola pubescens, Ait.—Downy Yellow Violet.

Viola rostrata, Muhl.—Long Spurred Violet.

CARYOPHYLLACEÆ (PINK F.)

Arenaria serpyllifolia, L.—Thyme leaved Sand Wort.

Cerastium viscosum, L.—Clammy Mouse-ear Chickweed.

Cerastium vulgatum, L.—Common Mouse-ear Chickweed.

Dianthus armeria, L.—Deptford Pink. A beautiful little pink flower north of old museum.

Lychnis Githago, Larn.—Purple Cockie.

Lychnis vespertina—White Cockle.

Saponaria officinalis, L.—Soap Wort or Bouncing Bet.

Silene inflata, L.—Bladder Campion.

Stellaria longifolia (Mich.)—Stitchwort. Damp places.

Stellaria media, Sm.—Common Chickwood.

PORTULACACEÆ (PORTULACA F.)

Claytonia Caroliniana (Mich.)—Broad leaved Spring Beauty.

Claytonia Virginica, L.—Narrow leaved Spring Beauty.

Portulaca oleracea, L.—Purslane.

HYPERICACEÆ.

—*Hypericum Kalmianum*, L., Kalmis—St. John's Wort. On Cedar Island, in the vicinity of the bridge crossing to the mainland on the way to Dufferin Islands.

—*Hypericum Maculatum*, Walt.—Spotted St. John's Wort.

Hypericum Mutilum, L.—Small St. John's Wort.

Hypericum perforatum, L.—Common St. John's Wort.

MABRACEÆ (MALLOW F.)

- ← *Althaea rosea*—Hollyhock.
- Malva moschata*, L.—Musk Mallow.
- Malva rotundifolia*, L.—Common Round leaved Mallow.

TILIACEÆ.

- Tilia Americana*, L.—Basswood.

GERANIACEÆ (GERANIUM F.)

- Geranium maculatum*, L.—Wild Geranium.
- Geranium Robertarium*, L.—Herb Robert.
- Impatiens fulva*, Nutt.—Orange Wild Balsam.
- Impatiens pallida*, Nutt.—Pale Wild Balsam.

This variety is comparatively common along the road leading to the "Maid of Mists" landing place. The common variety occurs at almost all damp spots.

- Oxalis corniculata*, var *Stricla*—Yellow Sorrel.

CELASTRACEÆ (STAFFTREE F.)

- Calastrus scandens*, L.—Climbing Bittersweet. Forming beautiful festoons on trees along the banks of the river and near many of the pathways through different parts of the park. It is one of the most common climbers on the grounds.
- *Enonymus Americanus*, L.—Strawberry Bush.

VITACEÆ (VINE F.)

- Ampelopsis quinquefolia*, Michx.—Virginia Creeper.
- Vitis aestivalis*, Michx.—Summer Grape.
- Vitis cordifolia*, Lam.—Frost Grape.

SAPINDACEÆ (SOAP-BERRY F.)

- Acer dasycarpum*, Erhart—White Maple.
- Acer rubrum*, L.—Swamp or Red Maple.
- Acer saccharinum*, Wang—Sugar Maple.
- Acer spicatum*, Lam.—Mountain Maple.
- Negundo aceroides*, Moench—Ash-leaved Maple.

ANACARDIACEÆ (CASHEW F.)

- Rhus Toxicodendron*, L, Var *radicans* Torr—Poison Ivy. Too common.
- Rhus typhina*, L—Stag-Horn Sumach.
- *Rhus venenata*, D.C.—Poison Sumach. On Dufferin Islands, one at the south side of the second bridge.

LEGUMINOSÆ (BEAN F.)

- Amphicarpæa monoica*, Ell.—Hog Peanut.
- Apios tuberosa*, Moench—Ground Nut. On the cliff near Table-rock house, and also on the bank a little south of the old museum.
- Astragalus Canadensis*, L—Milk Vetch.
- Desmodium acuminatum*, D.C.—Tick Trefoil.
- Desmodium Canadense*, D.C.—Tick Trefoil.
- *Desmodium pauciflorum*, D.C.—Tick Trefoil.
- *Gleditschia triacanthos*, L—Honey Locust.

Lathyrus palustris, L.—Marsh Pea.
Medicago lupulina, L.—Black Medick.
Melilotus alba, Lam.—Sweet Clover.
Melilotus officinalis, Willd.—Yellow Melilot.
 — *Onobrychis sativa*, Lam.—Sainfoin.
Robinia pseudacacia, L.—Common Locust.
Trifolium Arvense, L.—Rabbit's Foot Clover.
Trifolium hybridum, L.—Alsike Clover.
Trifolium pratense, L.—Common Red Clover.
Trifolium repens, L.—White Clover.
Trifolium procumbens, L.—Hop Clover.
Vicia Americana, Muhl.—Vetch.
Vicia Cracca, L.—Wild Tare.
Vicia sativa, L.—Tare.

There are no doubt many other species of legumes which have escaped the writer's notice as yet. The Bean family is well represented in many parts, but especially in Cedar Island, where its representatives line the beautiful pathways through this sylvan spot.

ROSACEÆ (ROSE F.)

Agrimonia Eupatoria, L.—Agrimony.
Amelanchier Canadensis, T. & G.—June Berry.
Crataegus coccinea, L.—Thorn.
Fragaria vesca, L.—Common Strawberry.
Fragaria Virginiana—Wild Strawberry.
Geum album, Gmelin—Avens.
Geum rivale, L.—Water or Purple Avens.
 — *Pyrus aucuparia*, L.—Mountain Ash.
Pyrus malus, L.—Apple.
 — *Pyrus communis*, L.—Pear.
Potentilla anserina, L.—Silver Weed.
Potentilla argentea, L.—Silvery Cinquefoil.
Potentilla pilosa, Willd.
Prunus Americana, Marsh—Wild Plum.
Prunus serotina, L.—Black Cherry.
Prunus Virginiana, L.—Choke Cherry.
Rosa blanda, L.—Early Wild Rose.
Rosa Carolina, L.—Swamp Rose.
Rosa rubiginosa, L.—Sweet Brier.
Rubus occidentalis, L.—Thimbleberry or Black Raspberry.
Rubus odoratus, L.—Purple Flowered Scotch Cap.
Rubus strigosus, Michx.—Wild Red Raspberry.
Rubus triflorus, Richard—Dwarf Raspberry.
Rubus villosus, Ait.—High Blackberry.
 — *Spiræa opulifolia*, L.—Nine-Bark. Common on way to Maid of Mist.
Spiræa salisifolia—Meadow Sweet.
Waldsteinia fragarioides, Tratt—Barren Strawberry.

SAXIFRAGACEÆ (SAXIFRAGE F.)

Chrysosplenium Americanum, Schu.—Golden Saxifrage.
Mitella diphylla, L.—Bishop's Cap or Mitre Wort.
Parnassia Caroliniana, Michx.—Grass of Parnassus.
Ribes cynosbati, L.—Wild Gooseberry.
Ribes floridum, L., Her.—Wild Black Currant.
Ribes oxycanthoides, L.—Swamp Gooseberry.
Tiarella cordifolia, L.—False Mitre Wort.

CRASSULACEÆ (ORPINE F.)

- Penthorum sedoides*, L.—Ditch Stone-crop.
Sedum acre, L.—Stone crop.
Sedum Telephium, L.—Live-for-ever.

HALORAGÆ (WATER-MILFOIL F.)

- Myriophyllum heterophyllum*, Michx.—Water Milfoil.
Myriophyllum spicatum, L.—Milfoil.

ONAGRACEÆ (EVENING PRIMROSE F.)

- Circœa Alpina*, L.—Small Enchanter's Night-shade.
Circœa Lutetiana, L.—Enchanter's Night-shade.
Epilobium coleratum, Muhl.—Willow Herb.
Epilobium molle, Torr.—do. do.
Epilobium palustre, L.—do. do.
Epilobium angustifolium, L.—Great Willow Herb.
Enóthera biennis—Evening Primrose.
Enóthera pumila—Dwarf Evening Primrose.

CUCURBITACEÆ (GOURD F.)

- Echinocystis lobata*, Torr & Gray.—Wild Cucumber.

UMBELLIFERÆ (PARSLEY F.)

- Archangelica atropurpurea*, Hoffm.—Great Angelica. Immense specimens of this grow in the rich swampy district near the gardener's house, some 10 to 16 feet high.
Carum carui, L.—Caraway.
Cicuta bulbifera, L.—Water Hemlock.
Cryptotaenia Canadensis, D. C.—Hone Wort.
Héracleum lanatum, Mich.—Downy Cow Parsnip.
Hydrocotyle Americana, L.—Water Penny Wort.
Osmorrhiza brevistylis, D. C.—Hairy Sweet Cicely.
Peucedaneum sativum, Benth & Hook.—Parsnip.
Sium cicutæfolium, Gmel.—Water Parsnip.
Thaspium aureum, Meth.—Meadow Parsnips.

ARALIACEÆ (ARABIC F.)

- Aralia nudicaulis*, L.—Wild Sarsaparilla.
 —*Aralia quinquefolia*, D. C. & Planch.—Ginseng.
Aralia trifolia, D. C. & Planch.—Dwarf Ginseng.

CORNACEÆ (DOGWOOD F.)

- Cornus alternifolia*, L.—Alternate leaved Dogwood.
 —*Cornus florida*, L.—Flowering Dogwood.
Cornus sericea, L.—Silky Dogwood.
Cornus paniculata, L. Her.—Panicked Dogwood.
Cornus stolonifera, Michx.—Red Osier Dogwood.

CAPRIFOLIACEÆ (HONEYSUCKLE F.)

- Diervilla trifida*, Moench.—Bush Honeysuckle.
Lonicera ciliata, Muhl.—Fly Honeysuckle.

Lonicera Tartarica, L—Tartarian Honeysuckle.
Sambucus Canadensis, L—Black Berried Elder.
Sambucus racemosa, L—Red Berried Elder.
Symphoricarpos racemosus, Michx—Snowberry.
Viburnum acerifolium, L—Maple leaved Arrow Wood.
Viburnum Lentago, L—Sheep Berry.
Viburnum pubescens, Bursh—Downy Arrow Wood.

RUBIACEÆ (MADDER F.)

Galium asprellum, Michx—Rough Bedstraw.
Galium Boreale, L—Northern Bedstraw.
Galium aparine, L—Cleavers or Goose Grass.
Galium trifidum, L—Small Bedgrass.

COMPOSITE (COMPOSITE F.)

Achillæa millefolium, L—Yarrow.
Ambrosia artemisiaefolia, L—Rag Weed.
Antennaria plantagenifolia, Hook—Everlasting.
Anthemis Cotula, L, *Maruta Cotula*, D. C.—Mayweed.
Lappa Major, L—Burdock.
Aster azureus, Lindl.—Aster.
Aster Cordifolius, L—Heart leaved Asters.
Aster diffusus, Ait—Bushy Aster.
Aster multiflorus, Aid—Many flowered Aster.
Aster paniculatus, Lam.—Red stemmed Aster.
 — *Aster prenanthoides*, Muhl.
 — *Aster undulatus*, Mill—Wave leaved Aster.
Asters agittifolius Willd.
 — *Aster viminens*, Lam.
Bellis perennis, L—Daisy.
Bedens cernua, L—Bur Marigold.
Bidens chrysanthemoides, Michx—Larger Bur Marigold.
Bidens frondosa—Beggars' tricks.
Leucanthemum, L—Ox-eye Daisy.
Cichorium Intybus vulgare, Lam.—Chicory.
Cirsium Altissimum, Spreng—Tall Thistle.
Cirsium lanceolatum soop—Bull Thistle.
Erechthites hieracifolia, Raf.—Fireweed.
Erigeron annuus, Pers.—Fleabane.
Erigeron Canadensis—Horseweed.
Erigeron strigosus, Muhl.—Fleabane.
Eupatorium ageratoides, L—White Snake Root.
Eupatorium perfoliatum, L—Boneset.
Eupatorium purpureum, L—Purple Thorough Wort.
Gnaphalium polycephalum, L, Michx—Everlasting.
 — *Gnaphalium uliginosum*, L—Low Cudweed.
Helianthus annuus, L—Sunflower.
Helenium autumnale, L—Sneeze-weed.
Helianthus decapetalus, L.
Helianthus strumosus, L.
Hieracium aurantiacum, L—Hawkweed.
 — *Hieracium Gronovii*, L.
Inula Helenium, L—Elecampane.
Lactuca Canadensis, L—Wild Lettuce.
Lactuca integrifolia, Bigel.
 — *Lactuca leucophœa*, Gray—Blue Lettuce.

- *Polymnia Canadensis*, L, on Ferry Road—Leaf Cup.
- Prenanthes alba*, L (*habalus alba*)—White Lettuce.
- Rudbeckia laciniata*, L—Cone Flower.
- Senecio vulgaris*, L—Groundsell.
- Solidago latifolia*.
- Solidago nemoralis*, Ait.
- Sonchus arvensis*, L—Field Sow Thistle.
- Sonchus oleraceus*, L—Sow Thistle.
- Tanacetum vulgare*, L—Tansy.
- Taraxacum officinale*, Weber—Dandelion.

LOBELIACEÆ (LOBELIA F.)

- Lobelia inflata*, L—Blue Lobelia.
- Lobelia Kalmii*, L—Kalms Lobelia.
- Lobelia syphilitica*—Indian Tobacco.

CAMPANULACEÆ (BELL F.)

- Campanula Americana*, L, Tall—Bell Flower. Verry common at the bend on road to Ferry.
- Campanula aparinoides*, Push—Marsh Bell Flower, At the edge of Dufferin Islands.

ERICACEÆ (HEATH F.)

- Granoltheria procumbens*, L—Winter Green.
- Vaccinum corymbosum*, L—Swamp Blue-berry.

PRIMULACEÆ (PRIMROSE F.)

- Lysimachia nummulari*, L—Money Wort.
- Lysimachia stricta*, Ait.
- Lysimachia thyrsiflora*, L.
- Lysimachia ciliata*, L.
- Lysimachia longifolia*, Pursh.

OLEACEÆ (OLIVE F.)

- Fraxinus Americana*, L—White Ash.
- Fraxinus sambucifolia*, Lam—Black Ash.
- *Ligustrum vulgare*, L, Privet.
- *Syringa vulgaris*, L—Lilac.

APOCYNACEÆ (DOGBANE.)

- Apocynum androseamifolium*, L—Dogbane.
- Apocynum cannabinum*, L—Indian Hemp.
- *Vinca minor*, L—Periwinkle.

ASCLEPIADACEÆ (MILKWEED F.)

- Asclepias tuberosa*, L—Butterfly Weed.
- Asclepias incarnata*, L—Swamp Milkweed.
- Asclepias Cornuti*—Common Milkweed.
- Asclepias phytolaccoides*, Pursh—Wood Milkweed.

GENTIANACEÆ (GENTIAN F.)

- Gentiana Andrewsii*, Grisch—Closed Gentian.
- Gentiana crinita*, Fwel—Fringed Gentian.

POLEMONIACEÆ (Phlox F.)

Phlox divaricata, L—Wood Phlox.

HYDROPHYLLACEÆ (WATER LEAF F.)

Hydrophyllum Virginicum, L—Water Leaf.

—Hydrophyllum Canadense, L—Water Leaf.

BORRAGINACEÆ (BORAGE F.)

Cynoglossum officinale, L—Hound's Tongue.

Echinosperrum Luppula, Lehm—Stickseed.

Echinosperrum Virginicum, Lehm.

Echium vulgare, L—Blueweed.

Lithosperrum arvense—Redroot.

—Lithosperrum, latifolium, Mechx.

Lithosperrum, officinale, L—Cromwell.

Myosotis laxa, Lehm—Forget-me-not.

Symphytum officinale—Camfrey.

CONVOLVULACEÆ (CONVONVULUA, F.)

Convolvulus arvensis, L—Bindweed.

—Ipomœa, purpurea, Lam.—Morning Glory.

SOLANACEÆ (NIGHTSHADE, F.)

Lycium vulgare, Dunal—Matrimony Vine.

Physalus Virginiana, Mill—Ground Cherry.

Solanum Dulcamara, L—Bittersweet.

Solanum nigrum, L—Nightshade.

SCROPHULARIACEÆ (FIGWOOD F.)

Verbascum Thapsus, L—Mullein.

Verbascum Blattaria, L—Moth Mullein.

Linaria vulgaris, L—Toad-Flax.

Scrophularia nodosa, L—Figwort.

Chelone Glabra, L—Turtle Head.

Gerardia purpurea, L—Purple Gerardia.

Gratiola Virginiana, L—Hedge Hyssop.

Mimulus ringens, L—Monkey Flower.

Pedicularis Canadensis—Wood Betony.

—Pedicularis Lanceolata, Michx

Penstemon pubescens—Penstemon.

Veronica Anagallis, L—Water Speedwell.

Veronica arvensis, L—Field Speedwell.

Veronica scutellata, L—March Speedwell.

Veronica peregrina, L—Neckweed.

Veronica serpyllifolia, L—Thyme-leaved Speedwell.

ACANTHACEÆ (ACANTHUS F.)

—Dianthera Americana—Water Willow. Very common on edge of some of Dufferin Islands—grows in the water at the edge of river.

 VEBENACEÆ (VERVIAN F.)

Phryma Leptostachya, L—Lop Seed.
 Verbena hastata, L—Common Vervain,
 Verbena urticaefolia—White Vervain.

LABIATÆ (MINT F.)

Brunella vulgaris, L—Self-heal.
 ✕ Calamintha Nutallii, Gray.
 Hedeoma pulegioides, Pers.—False Penny Royal.
 Leonurus Cardiaca, L—Motherwort.
 Mentha Canadensis, L—Spearmint.
 Mentha Viridis, L—Wild Mint.
 Monarda fistulosa, L—Bergamot. Very common on Cedar Island, wild.
 Nepeta Cataria, L—Catnip.
 ✓ Pycnanthemum lanceolatum, Pursh—Mountain Mint.
 Scutellaria lateriflora—Skull-cap.
 Stachys aspera, Mchx—Hedge Nettle.

PLANTAGIACEÆ (PLAINTAIN F.)

Plantago lanceolata, L—Rib Grass.
 Plantago major, L—Common Plantain.
 Plantago media, L.

AMARANTACEÆ (AMARANTH F.)

Amarantus retroflexus, L—Pig weed.

CHENOPODIACEÆ (GOOSEFOOT F.)

Chenopodium album L—Lamb's Quarters.
 Chenopodium, glaucum L.
 Chenopodium, hybridum L.

PHYTOLACCACEÆ (POKEWEED F.)

Phytolacca decandra L—Pokeweed.

POLYGONACEÆ (BUCKWHEAT F.)

Polygonum amphibium, L.
 Polygonum aviculare, L—Door-weed.
 Polygonum convolvulus, L—Black Bindweed.
 Polygonum Hydropiper, L—Smartweed.
 Polygonum hydropiperoides, Michx.
 Polygonum incarnatum, Ell.
 Rumex Acetosella, L—Sorrel.
 Rumex crispus, L—Dock.
 Rumex obtusifolius, L—Bitter Dock.

ARISTOLOCHIACEÆ (BIRTH WORT F.)

Asarum Canadense, L—Wild Ginger.

SAURURACEÆ (LIZARD'S TAIL F.)

Saururus cernuus L—Lizard's Tail. Very common near walk at water's edge on the way to "Lover's Retreat."

LAURACEÆ (LAUREL F.)

Sassafras officinale, Nees.—Sassafras.

THYMELEACEÆ (MEZEREUM F.)

Daphne mezereum, L—Mezereum.

Dirca palustris, L—Leather wood.

ELEAGNACEÆ (OLEASTER F.)

Shepherdia Canadensis, (Nutt)—Shepherdia. Very common along the paths on the islands, especially Cedar Island.

SANTALACEÆ (SANDALWOOD F.)

Ceanotha umbellata, Nutt—Bastard Toad Flax.

EUPHORBIACEÆ (SPURGE F.)

Euphorbia cyparissias, L—Cyprus spurge.

—*Euphorbia hypericifolia*, L—Spurge.

Euphorbia maculata, L—Spotted spurge.

CERATOPHYLLACEÆ (HORNWORT F.)

Ceratophyllum demersum L—Hornwort.

URTICACEÆ (NETTLE F.)

Laportea Canadensis, Gam—Wood Nettle.

Ulmus Americana, L—Elm.

Ulmus fulva, Michx—Slippery Elm.

Urtica gracilis, Ait—Fall Nettle.

—*Morus rubra*, L—Red Mulberry.

PLANTANACEÆ (PLANE TREE F.)

Plantanus occidentalis, L—Button Wood.

JUGLANDACEÆ (WALNUT F.)

Carya alba, Nutt—Shell-bark Hickory.

Juglans cinerea—Butternut.

Juglans nigra—Black Walnut.

BETULACEÆ (BIRCH F.)

Alnus incana, Willd—Alder.

Betula lenta, L—Black Birch.

Betulea lutea, Michx—Yellow Birch.

Betulea papyracea, Michx—Paper Birch.

CUPULIFERÆ (OAK F.)

- Carpinus Caroliniana, Walt—Blue Beech.
- Castanea Americana, Michx—Chestnut.
- Corylus rostrata, Ait—Hazlenut.
- Fagus ferruginea, Ait—Beech.
- Ostrya Virginica, Willd—Ironwood.
- Quercus alba, L—White Oak.
- Quercus coccinea, Willd—Sharlet Oak.
- Quercus palustris, Du Roi—Pin Oak.
- Quercus rubra, L—Red Oak.

SALICACEÆ (WILLOW F.)

- Salix alba L.
- Salix lucida, Muhl—Shining Willow.
- Salix nigra, Marsh.
- Salix rostrata, Rich.
- Populus tremuloides—American Aspen.
- Populus monilifera—Cotton Wood.
- Populus balsamifera—Balm of Gilead.

CONIFERÆ (PINE F.)

- Juniperus communis, L—Juniper.
- Juniperus Virginiana, L—Red Cedar.
- Taxus baccata, L-var Canadensis—Ground Hemlock.
- Pinus Strobus, L—White Pine.
- Abies Canadensis, Carr.—Hemlock.

HYDROCHARIDACEÆ (FROG'S BIT F.)

- Elodea Canadensis, Michx—Water Snake Weed.
- Vallisneria spiralis, L—Eel Grass.

ORCHIDACEÆ (ORCHIS F.)

- Spiranthes latifolia, Torr—Ladies' Tresses.
- Spiranthes cernua.
- Habenaria Hookeri, Torr.
- Cypripedium pubescens, Willd.

IRIDACEÆ (IRIS F.)

- Iris versicolor, L—Blue Flag.
- Sisyrinchium anceps, L—Blue-eyed grass.

LILIACEÆ (LILY F.)!

- Allium tricoccum, Ait—Wild Leek.
- Asparagus officinalis, L—Asparagus.
- Erythronium Americanum, Smitt—Adder's Tongue.
- Lilium Philadelphicum, L—Lily.
- Polygonatum biflorum, L—Solomon's Seal.
- Smilacina bifolia, Desf.
- Smilacina bifolia, Kerr.

Smilax herbaceæ, L.—Carrion Flower.
Streptopus roseus, Michx.—*Streptopus*.
Trillium erectum, L.—Purple Trillium.
Trillium grandiflorum, Salisb.—White Trillium.
Uvularia grandiflora, Smith—Bell wort.

TYPHACEÆ (CAT TAIL F.)

Sparganium eurycarpum, Engelman—Burr Reed.
Sparganium simplex, Hads.
Typha angustifolia, L.—Cat Tail Flag.
Typha latifolia, L.

ARACEÆ (ARUM F.)

Arisaema triphyllum, Torr.—Indian Turnip.
Symplocarpus fœtidus, Salisb.—Skunk Cabbage.

ALISMACEÆ (WATER PLANTAIN F.)

Alisma Plantago, L.—Water Plantain.
Sagittaria variabilis, Eng.—Arrow-head.

CYPERACEÆ (SEDGE F.)

Cyperus strigosus, L.—
Carex polytrichoides, Muhl.
Carex Steudellii, Kunth.
Carex bromoides, Schkr.
Carex sterilis, Willd.
Carex scoparia, Schkr.
Carex tribuloides, Wahl.
Carex torta, Boott.
Carex crinita, Lam.
Carex aurea, Nutt.
Carex granularis, Muhl.
Carex varia, Muhl.
Carex prasina, Wahl.
Carex debilis, Michx.
Carex trichocarpa, Muhl.
Carex comosa, Boott.
Carex intumescens, Rudge.
Carex lupulina, Muhl.
Carex rostrata, With.
Dulichium spathaceum, Pers.
Eleocharis tenuis, Schult.—Spike Reed.
Scirpus pungens, Vahh.
Scirpus lacustris, L.
Scirpus fluviatilis, Gray.
Scirpus atrovirens, Muhl.

GRAMINEÆ (GRASS F.)

Agropyrum repens, L.—Couch Grass.
Agrostis vulgaris, With.—Redtop.
Alopecurus pratensis—Meadow Fox tail.
Andropogon provincialis, Lam.—Beard Grass.

Avena fatua, L.—Wild Oats.
Bromus Secalinus, L.—Ouess.
Cinna arundinacea, L.
Dactylus glomerata, L.—Orachard Grass.
Elymus Virginicus, L.—Lyme Grass.
Festuca elatior, L.—Meadow Fescur.
Festuca ovina, L.—Sheep's Fescur.
Glyceria nervata, Trivo.
Glyceria arundinacea, Kunth.
Leersia oryzoides, Swartz.
Panicum capillare, L.—Witch Grass.
Panicum Crus-Galli, L.—Barnyard Grass.
Panicum glabrum, Gand—Panic Grass.
Panicum virgatum, L.
Phalaris arundinacea.
Phleum pratense, L.—Timothy.
Poa compressa, L.
Poa pratensis, L.—Kentucky Blue Grass.
Poa Serotina, Ehrh.
Setaria glauca, Beauv.—Common Fox-tail.

A perusal of this list, comprising 71 orders, 261 genera and 458 specie, will convince students of Botany that no place can surpass this in affording facilities for practical work.

When the gardener has time to sow the flower seeds other than those now growing, he will be able to develop one of the finest botanical collections for the purpose of instruction that the most enthusiastic teacher of Botany could desire. At an early date a path ("Botanists' Ramble") will be laid out from the bridge leaving Cedar Island to the hillside, skirt the bank in the richest spots and end at the Dufferin Islands. This will lead persons desirous to collect plants over a very rich locality, and will no doubt be one of the most attractive rambles to those who delight in the study of flowers.

To any reader of this paper it will not be a matter of surprise to learn that every member of a class in Practical Botany that botanized in Victoria Park in the summer of 1889 should have been charmed with a vacation, spent within the ceaseless sound of the great cataract, where pleasure and instruction went hand in hand to enlighten the mind and invigorate the body.

(Signed)

J. HOYES PANTON.

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