

HANOVER, IND., December 1, 1874.

PROF. E. T. COX:

State Geologist.

SIR:—I send you a list of the plants of Jefferson county, as far as worked up. Subsequent investigations will undoubtedly make many additions, but they will be of rarer plants, as it is believed that nearly all the common flowering plants of the county are included in this list. I have used as a basis the fine list made out by Mr. A. H. Young, and published in your report for 1870; and I would here express to him my thanks for his botanical labors in this county. I have included from his list many species of which I have seen no specimens and have called attention to them by an asterisk (*). The order of Gray's Manual has been followed, and no apology need be made for the free use made of that noble work in describing the habitat of plants. There should be a systematic working up of the flora of every county in the State, for in many of them strange forms are lurking, and I hope soon to hear from our sister counties. Thanks are due to M. Stanley Coulter for his list of Sedges and Grasses, and also to Messrs. Karr and Eastman, of the College, for their kindly aid in making out the list.

I remain, Sir,

Your obedient servant,

JOHN M. COULTER.

A PARTIAL LIST OF THE FLORA

OF

JEFFERSON COUNTY, INDIANA.

BY JOHN M. COULTER, OF HANOVER COLLEGE.

RANUNCULACEÆ.

Clematis viorna, L. (Leather Flower.) May, August. Grows in abundance along the edge of the cliffs.

Clematis virginiana, L. (Common Virgin's Bower.) July, August. Common along water courses and ascending the ravines, climbing over shrubs, and producing great abundance of white flowers. "In autumn the fertile flowers are succeeded by the conspicuous feathery-tails of the fruit."

Amenone virginiana, L. (Wind-Flower.) June, August. Rocky ledges.

Hepatica triloba, Chaix. (Liver Leaf.) March. Good specimens of *H. acutiloba*, D. C., were found; but as in this locality *H. acutiloba*, D. C., undoubtedly runs into *H. triloba*, Chaix, all the specimens have been included in the latter species.

Thalictrum anemonoides, Michx. (Rue-Anemone.) March, May. Common in open woods.

Thalictrum dioicum, L. (Early Meadow Rue.) March, May. Common in rocky woods.

Thalictrum purpurascens, L. (Purple Meadow-Rue.) April, June.

Thalictrum cornuti, L. (Fall Meadow-Rue.) June, September. "Wet meadows and along rivulets."

Ranunculus alismæfolius, Geyer. (Water Plantain, Spearwort.) June, August. Common in marshy places.

Ranunculus flammula, L., var. *reptans*, Gr. (Creeping Spearwort.) June, September.

Ranunculus abortivus, L. (Small-flowered Buttercup.) March, June. Very abundant.

Ranunculus recurvatus Poir. (Hooked Buttercup.) April, June. Common.

Ranunculus fascicularis, Muhl. (Early Buttercup.) April, May. Rocky hills.

Ranunculus repens, L. (Creeping Buttercup.) April, August. Extremely variable in size and foliage.

Isopyrum biternatum, Tor. & Gr. (False Rue-Anemone.) March, June. Very abundant in moist, shady places. This species is very apt to be mistaken for *Thalictrum anemonoïdes*, Mx.; but differs from it in the fact that it invariably has five sepals; the four pistils are divaricate in fruit, and the root fibres are thickened here and there into little tubers.

Aquilegia canadensis, L. (Common Wild Columbine.) April, June. Common on rocks.

Nigella damascena, L. (Common Funnel Flower. Ragged Lady. Devil-in-a-bush.) June, September. Has escaped from cultivation and grows spontaneously along roadsides.

Delphinium tricorne, Mich., (Dwarf Larkspur) March, May. Flowers bright blue and white.

**Delphinium azureum* Michx., (Azure Larkspur. June.

Hydrastis canadensis, L., (Orange Root, Yellow Raccoon.) March, June. Recognized by the thick and knotted yellow rootstock.

**Actæa spicata*, L. var. *rubra*, Michx. (Red Bane-berry.)
April, May.

Actæa alba, Bigel, (White Bane-berry.) April, May.

Cimicifuga racemosa, Ell, (Black Snake Root.) June,
July. Specimens have been found with the stem over eight
feet high, the racemes being three feet long.

MAGNOLIACEÆ.

Magnolia acuminata, L., (Cucumber-tree.) May, June.
Rich woods.

Liriodendron tulipifera, L., (Tulip-tree.) Commonly
and wrongly called Poplar. May, June. About the
largest tree in the forest.

ANONACEÆ.

Asimina triloba, Dunal, (Common Papaw.) March, May.
The fruit ripens in September and October.

MENISPERMACEÆ.

Menispermum canadense, L., (Moonseed.) May, July.
Found climbing over fences in the neighborhood of dwell-
ings.

BERBERIDACEÆ.

Berberis vulgaris, L., (Barberry.) May, June. Occasion-
ally spontaneous.

Caulophyllum thalictroides, Michx, (Blue Cohosh, Pap-
oose Root,) March, May.

Jeffersonia diphylla, Pers., (Twin Leaf.) March, May.
Very abundant in early spring along hill sides with southern
exposure, also called *rheumatism root*.

Podophyllum peltatum, L., (May-Apple, Mandrake.) April,
May. The apple is not ripe before July. The leaves and
roots are said to be poisonous.

PAPAVERACEÆ.

Papaver somniferum, L., (Common Poppy.) May, July.
Spontaneous near dwellings.

Stylophorum diphyllum, Nutt., (Celandine Poppy.) March, June. Very abundant, almost covering some hill sides.

Sanguinaria canadensis, L., (Blood Root.) March, May.
Very common in open rich woods.

FUMARICEÆ.

Dicentra cucullaria, D. C., (Dutchman's Breeches, White Ear Drop,) March, May. Grows in large patches, along with the next, in rich woods.

Dicentra canadensis, D. C., (Squirrel Corn.) March, May.

Corydalis flavula, Raf., (Yellow Corydalis.) April, July.
This species very much resembles *C. aurea*, Willd., and has by some authors been placed as a variety of it. It can always easily be distinguished, however, by the tips of the outer petals being wing-crested and pointed. Every specimen collected in this locality had these characteristic crests. Their color, however, better suited *C. aurea*, Willd. Very abundant in shady, rocky places.

CRUCIFERÆ.

Nasturtium officinale, R. Br., (True Water-cress.) May, June. Brooks and ditches; escaped from cultivation.

Nasturtium armoracia, Fries, (Horse Radish.) July, August. Escaped from cultivation.

Dentaria diphylla, L., (Two-leaved Pepper-root.) April, May. Rare.

Dentaria laciniata, Muhl, (Pepper-root.) March, May.
Grows in greatest abundance in rich soil. This species is one of the most variable and most perplexing we have met. A long list might be made of the various forms in which it occurs. *D. maxima*, Nutt., *D. heterophylla*, Nutt., *D.*

lacineata, Muhl, and *D. multifida*, Muhl. All undoubtedly run together in this locality. Specimens of these different species have been found growing in the same patches, and even from the same root.

The leaves vary from almost entire to finely dissected. Sometimes there are three leaves in a whorl; sometimes these leaves are alternate; sometimes there are four alternate leaves; often there are but two leaves either opposite or alternate. In fact there is no kind of division or position of leaves which is not represented in this species.

Cardamine rhomboidea, D. C. (Spring Cress.) March, June. Not very abundant.

* *Cardamine rhomboidea*, D. C. Var. *purpurea*, Torr.

Cardamine hirsuta, L. (Small Bitter-cress.) April, July. Very common and very variable.

* *Arabis petræa*, Lam. May.

Arabis patens, Sullie. April, May.

Arabis lævigata, D. C. March, May. Grows in great abundance in rocky places, and is the common *Arabis* of this region.

Arabis hesperidoides, Gr. May, June. Along the banks of Ohio river and running a little up into the ravines.

Barbarea vulgaris, R. Br. (Common Winter Cress.) April, May.

Sisymbrium officinale, Scop. (Hedge Mustard.) May, September. Common in gardens and meadows.

Brassica sinapistrum, Boisser. (*Sinapis arvensis*, L.) (English Charlock.) May. Common in grain fields.

Brassica (or *Sinapis*) *alba*, Gr., (White Mustard.)

Brassica (or *Sinapis*) *nigra*, Gr., (Black Mustard.)

Alyssum maritimum, L., (Sweet Alyssum.) June, October. Escaped from cultivation.

Camelina sativa, Crantz, (False Flax.) June.

Capsella bursa-pastoris, Mœnch, (Shepherd's Purse.) The commonest of weeds; blooms from March until killed by cold weather.

Lepidium virginicum, L., (Pepper-grass, Tongue-grass.) May, November. A common weed.

CAPPARIDACEÆ.

Polanisia graveolens, Raf. June, August.

VIOLACEÆ.

Solea concolor, Ging., (Green Violet.) April, June.
Found along rocky hillsides.

Viola lanceolata, L., (Lance-leaved Violet.) April, May.
Grows abundantly in wet meadows.

Viola blanda, Willd. (Sweet White Violet.) April,
May. Common in damp places.

Viola cucullata, Ait, (Common Blue Violet.) March,
May. Grows everywhere; very variable.

Viola cucullata, Ait, var. *palmata*, Gr., (Hand-leaf Violet.)
April, May.

Viola sagittata, Ait, (Arrow-leaved Violet.) April,
June. Dry or moist open meadows.

Viola canina, L., var. *sylvestris*, Regel, (Dog Violet.)
May, July.

Viola striata, Ait, (Pale Violet.) April, October. Com-
mon in low grounds.

Viola canadensis, L., (Canada Violet.) April, August.
Common in rich woods.

Viola pubescens, Ait., (Yellow Violet.) March, June.
Varies in the amount of pubescence. Found everywhere.

HYPERICACEÆ.

Hypericum prolificum, L., (Shrubby St. Johnswort.)
July, September.

Hypericum perforatum, L., (Common St. Johnswort.)
June, September. A well known weed in fields.

Hypericum corymbosum, Muhl, June, September. Dis-
tinguished from the last in having larger leaves, smaller
flowers, and petals marked with black lines as well as dots.

Hypericum mutilum, L., (Dwarf St. Johnswort.) July,
August. Found everywhere in low ground.

CARYOPHYLLACEÆ.

Saponaria officinalis, L., (Common Soapwort, Bouncing Bet.) July, September. Escaped from cultivation.

**Vaccaria vulgaris*, Host, (Cow Herb.) July, October.

Silene stellata, Ait., (Starry Champion.) June, July.

Silene nivea, D. C., July, August.

**Silene pennsylvanica*, Michx., (Wild Pink.) June, July.

Silene virginica, L., (Fire Pink. Catchfly.) April, August.

Silene antirrhina, L., (Sleepy or Snap-dragon Catchfly.) May, September.

**Silene noctiflora*, L., (Night-flowering Catchfly.)

Lychnis githago, Lam., (Corn Cockle.) May, July. A common weed and a nuisance in wheat fields.

Stellaria media, Smith, (Common Chickweed.) February, November. Everywhere in damp grounds and in this locality the earliest bloomer.

Stellaria pubera, Michx., (Great Chickweed.) March, June. Grows in clumps among shaded rocks.

Stellaria longifolia, Muhl., (Long-leaved Stitchwort.) April, July. Common along the grassy banks of creeks.

Cerastium vulgatum, L., (Mouse-ear Chickweed.) April, July. Some of the earlier specimens had petals a little longer than the calyx. Very common in grassy places.

Cerastium viscosum, L., (Larger M.) May, August. Common in fields and thickets.

Cerastium nutans, Raf. April, July.

Anychia dichotoma, Michx., (Forked Chickweed.) May, July. Varies exceedingly.

Mollugo verticillata, L., (Carpet-weed.) June, September. Very common in gardens.

PORTULACACEÆ.

Portulaca oleracea, L., (Common Purslane, Pigweed.) July, August. A troublesome weed in gardens.

Claytonia virginica, L., (Spring Beauty.) March, April. The leaves vary from narrowly linear to linear-lanceolate. Very common in moist open woods.

Claytonia caroliniana, Michx. March, April. I very much doubt the genuineness of the specimens placed under this species. The leaves are really broad linear-lanceolate or lanceolate, but hardly spatulate-oblong or oval-lanceolate. I strongly suspect it to be nothing more than an extreme form of *C. virginica*, L.

MALVACEÆ.

Malva rotundifolia, L., (Common Mallow.) May. Common in cultivated grounds and along road sides.

Sida spinosa, L. July, August. Common everywhere.

Abutilon avicennæ, Gaertn, (Velvet Leaf, Indian Mallow.) July, September. Escaped from gardens.

Hibiscus militaris, Cav., (Rose Mallow.) July, August. Grows along the banks of Ohio river.

TILIACEÆ.

Tilia americana, L., (Basswood, Lime-Tree, White-Tree, Linden.) May, July.

Tilia heterophylla, Vent., (White Basswood.) May, June. Leaves larger than the last. River bluffs.

LINACEÆ.

Linum striatum, Walt. Wet grounds.

Linum usitatissimum, L., (Common Flax.) June, July. Occasionally spontaneous.

GERANIACEÆ.

Geranium maculatum, L., (Wild Cranesbill.) April, July. Abundant in open woods and fields.

Impatiens pallida, Nutt; (Pale Touch-me-not.) Moist, shady places, and along streams in rich soil. Grows in large patches along with the next. July, September.

Impatiens fulva, Nutt, (Spotted Touch-me-not.) June, September.

Oxalis violacea, L., (Violet Wood-Sorrel.) April, June. Grows in grassy as well as rocky places.

Oxalis stricta, L., (Yellow Wood-sorrel.) May, September. Common in woods and along old fences.

RUTACEÆ.

Zanthoxylum americanum, Mill., (Northern Prickley Ash, Toothache Tree.) April, May.

Ptelea trifoliata, L., (Shrubby Treefoil, Hop Tree.) June.

Ailantus glandulosus, Desf., (Tree of Heaven.) April, June. The staminate flowers exhale a very disagreeable odor.

ANACARDIACEÆ.

Rhus glabra, L., (Smooth Sumach.) June, July. Rocky soil.

Rhus copallina, L., (Dwarf Sumach.) July, August.

Rhus toxicodendron, L., (Poison Ivy, Poison Oak.) April, June. Affects persons very differently, some can handle it with impunity, while others are badly poisoned by simply coming near it.

Rhus aromatica, Ait., (Fragrant Sumach.) April, May. Found along the bluffs of the river. Not poisonous in most cases.

VITACEÆ.

Vitis labrusca, L., (Northern Fox Grape.) May, June. Fruit ripe in September or October. Common in thickets.

Vitis aestivalis, Michx, (Summer Grape,) May, June.

Vitis cordifolia, Michx, (Winter or Frost Grapes.) May,

June. Flowers very sweet-scented, exhaling the odor of mignonnette.

**Vitis indivisa*, Willd. June.

Ampelopsis quinquefolia, Michx, (Virginia Creeper.)
July. Also called American Ivy and Woodbine. A very common woody vine, climbing extensively over fences and trees. Easily recognized by its five leaflets.

CELASTRACEÆ.

Celastrus scandens, L., (Wax-work, Climbing Bittersweet, Staff tree.) May, June.

Euonymus atropurpureus, Jacq., (Burning Bush, Wahoo.)
June.

**Euonymus americanus*, L., var. *obvatus*, T. & G.

LAPINDACEÆ.

Staphylea trifolia, L., (American Bladder-nut.) April,
May. Common.

Æsculus glabra, Willd, (Ohio Buckeye.) April, June.
Common in this neighborhood.

Æsculus flava, Ait., (Sweet Buckeye.) April, May.

Acer saccharinum, Wang, (Sugar or Rock Maple.) March,
May. A common forest tree.

Acer dasycarpum, Ehrhart, (White or Silver Maple.)
March, April. River banks.

Acer rubrum, L., (Red or Swamp Maple.) March, April.
An early bloomer, with beautiful crimson blossoms.

Negundo aceroides, Mœnch, (Box Elder, Ash-leaved
Maple.) Not very abundant.

Cardiospermum halicacabum, L., (Balloon-vine, Heart-
seed.) July, August.

POLYGALACEÆ.

Polygala nuttallii, Torr & Gr. June, July. Found only
on a sandy flat, back from the river.

Polygala verticillata, L. July. Found along the terraces of streams.

LEGUMINOSÆ.

Trifolium pratense, L., (Red Clover.) May.

Trifolium repens, L., (White Clover.) April, September.

Melilotus alba, Lam., (Sweet Clover.) July, August.

Robinia pseudacacia, L., (Common Locust.) April, June. Very valuable for timber.

Astragalus canadensis, L., (Milk-vetch.) July, August. Principally along the river banks.

Desmodium nudiflorum, D. C. July, August. Very common in dry woods.

Desmodium acuminatum, D. C. July, August. Rich woods.

Desmodium pauciflorum, D. C. July, August.

Desmodium rotundifolium, D. C. August. Dry, rocky woods.

**Desmodium viridiflorum*, Beck. August.

Desmodium dilleni, Darlingt. July. Open woods.

Desmodium paniculatum, D. C. July, August. Very common in thickets.

Desmodium canadense, D. C. August.

Desmodium rigidum, D. C. August.

Desmodium ciliare, D. C. August.

Phaseolus perennis, Walt., (Wild Bean.) July, August. Thickets.

Phaseolus diversifolius, Pers. August, October. Common in the sand of river banks.

Phaseolus helvolus, L. August, September. Sandy fields and fence corners.

Amphicarpæa monoica, Nutt., (Hog Pea-nut.) July, September. Rich woods.

Baptisia australis, R. Br., (Blue False Indigo.) May, August. Along the river bank.

Baptisia leucantha, Torr. & Gr. May, July.

Cercis canadensis, L., (Red Bud, Judas Tree.) March, May. Common on rich hillsides.

Cassia marilandica, L., (Wild Senna.) July, August. Common along streams.

Cassia obtusifolia, L. July. Bank of the Ohio river.

Cassia chamæcrista, L., (Partridge Pea.) August. Very common in sandy fields.

Gymnocladus canadensis, Lam., (Kentucky Coffee Tree.) May, July. Rich woods near the river.

Gleditschia triacanthos, L., (Honey Locust.) May, June. The wood is very white and compact, and might be worked to advantage. Used for hedges.

ROSACEÆ.

Prunus americana, Marshall, (Wild Yellow or Red Plum.) March, May. Common in thickets.

Prunus serotina, Ehrhart, (Wild Black Cherry.) April, June. Wood very hard and used for cabinet making.

Spiræa opulifolia, L., (Nine-Bark.) June, July. River banks.

Spiræa salicifolia, L., (Common Meadow-Sweet.) July, August.

Spiræa tomentosa, L., (Hardhack, Steeple Bush.) July, August. Common in old meadows and thickets.

Spiræa lobata, Murr, (Queen of the Prairie.) June, July. Grows in grassy meadows near the line between Jefferson and Scott counties.

Spiræa aruncus, L. (Goat's Beard.) May, July.

Agrimonia eupatoria, L., (Common Agrimony.) July, September. Very common in thickets and in fence corners.

Agrimonia parviflora, Ait. July, August. Woods and meadows.

Geum album, Gmelin. May, August. Common in thickets and borders of woods.

Geum virginianum, L. June, August.

Geum strictum, Ait. July, August. Moist meadows.

Geum vernum, Torr & Gr. April, June. Very common in thickets.

Potentilla norvegica, L. June. Very few specimens of this species were found.

Potentilla canadensis, L., (Common Cinquefoil or Five Finger.) April, August. Common in dry fields.

Fragaria virginiana, Ehrhart, var., *illinoensis*, Gr., (Wild Strawberry.)

Fragaria vesca, L. April, May. Fields and rocky places.

Rubus strigosus, Michx, (Wild Red Raspberry.) May, July.

Rubus occidentalis, L., (Black Raspberry, Thimble Berry.) April, May. Fruit ripe in June and July.

Rubus villosus, Ait, (Common or High Blackberry.) Very common in this region, making dense thickets.

Rubus villosus, Ait, var. *humifusus*, Gr. May, June.

Rubus canadensis, L., (Low Blackberry, Dew Berry.) April, May. Larger and more palatable than the former.

Rubus hispidus, L., (Swamp Blackberry.) May, June.

Rosa setigera, Michx, (Climbing or Prairie Rose.) June, July.

**Rosa carolina*, L., (Swamp Rose.) June, July.

Rosa lucida, Ehrhart, (Dwarf Wild Rose.) May, July.

Rosa, rubiginosa, L., (Eglantine, Sweet Brier.) May, August.

Crataegus coccinea, L., (Scarlet Fruited, Hawthorn.) April, May.

Crataegus tomentosa, L., (Blackthorn.) April, May.

Crataegus tomentosa, L., var., *punctata*. Gr. April, May.

Crataegus tomentosa, L., var., *mollis*. Gr. May.

Pyrus coronaria, L., (American Crab-Apple.) April, May.

Pyrus arbutifolia, L., (Chokeberry.) May, June.

Amelanchier canadensis, Torr. & Gr., var., *alnifolia*. Gr., (Shadbush, Serviceberry.) April, May.

SAXIFRAGACEÆ.

Ribes cynosbati, L., (Wild Gooseberry.) April, May.
Grows among the rocks.

Ribes hirtellum, Michx., April, May. Moist grounds.

Ribes rotundifolium, Michx., March, April. Rocks.

Ribes floridum, L., (Wild Black Currant.) May. Common in woods.

Ribes rubrum, L., (Red Currant.) April, June.

Hydrangea arborescens, L., (Wild Hydrangea.) May, July. Common among rocks.

Sullivantia ohionis, Torr. & Gr. June, August. Grows in considerable abundance in certain localities, especially seeking damp limestone cliffs. Fine patches cling to the cliffs just above Clifty falls.

Heuchera americana, L., (Common Alumroot.) June, July. Rocky woodlands.

Mitella diphylla, L., (Mitre-wort, Bishop's Cap.) March, May. Very common along the rocky slopes of streams and rich hillsides.

CRASSULACEÆ.

Penthorum sedoides, L., (Ditch Stone-crop.) July, October. Common in wet places.

Sedum ternatum, Michx., (Stone-crop.) April, June. Clings to the rocks everywhere.

HAMAMELACEÆ.

Hamamelis virginica, L., (Witch Hazel.) Blossoms late in autumn and retains its flowers until the next spring, ripening its seeds in the summer.

Liquidambar styraciflua, L., (Sweet Gum, Bilsted.) April. A large and beautiful tree, rather common in our forests.

HALORAGEÆ.

Proserpinaca palustris, L., (Mermaid-weed.) June.
Common in swamps.

ONAGRACEÆ.

Circœa luteliana, L., (Enchanter's Nightshade.) June,
Common in rich woods.

Circœa alpina, L. June, July. Readily distinguished
from the former by being smaller, and having leaves plainly
heart-shaped. Grows in darker, damper woods.

Epilobium coloratum, Muhl. July, September.

Enothera biennis, L., (Common Evening Primrose.)
July, August. Very common in old dry fields.

Enothera biennis, L., var. *parviflora*, Gr. August.

Enothera fruticosa, L., (Sundrops.) June, August.
Open fields.

Ludwigia alternifolia, L., (Seed-box, False Loosestrife.)
July, September. Very common in swampy meadows.

MELASTROMACEÆ.

Rhexia virginica, L., (Deer-Grass, Meadow-Beauty.)
July, August. A beautiful plant growing in moist mead-
ows.

LYTHRACEÆ

Cuphea viscosissima, Jacq., (Clammy Cuphea.) July, Aug-
ust. Common in dry fields.

PASSIFLORACEÆ.

Passiflora lutea, L., (Passion Flower.) June, Septem-
ber.

CUCURBITACEÆ.

Sicyos angulatus, L., (One-seeded Star Cucumber.) July,
September. Common along river banks and in back yards.

UMBELLIFERÆ.

Some of the *Umbelliferæ* of this region are as yet uncertain, owing to the great difficulty of obtaining proper specimens for determining the species. I give what have been worked out with tolerable certainty.

Sanicula canadensis, L., (Sanicle, Black Snakeroot.) May, August.

Sanicula marilandica, L. July.

Daucus carota, L., (Common Carrot.) June, September. Very abundant in old fields, sometimes completely taking possession of them.

Pastinaca sativa, L., (Common Parsnip.) May, July. Fields. Said to be poisonous when run wild.

Archemora regida, D. C., (Cowbane.) June, August. Very poisonous.

Thaspium barbinode, Nutt., (Meadow Parsnip.) May, July.

Thaspium aureum, Nutt. May, June. Damp places along the river bank.

Thaspium trifoliatum, Gr. April, June.

Cicuta maculata, L., (Spotted Cowbane, Musquash Root, Beaver Poison.) July, August. Common in swamps. Very poisonous.

Cryptotenia canadensis, D. C., (Honewort.) June, September. Common in thickets.

Cherophyllum procumbens, Lam., (Chervil.) April, June.

Osmorrhiza longistylis, D. C., (Smoother Sweet Cicely.) May, June. Not so common as the next.

Osmorrhiza brevistylis, D. C., (Hairy Sweet Cicely.) April, May. Found everywhere.

Erigenia bulbosa, Nutt., (Harbinger-of-Spring, Pepper and salt.) March, May. Very convenient in rich woods. Sometimes called Turkey Pea, and much eaten by children.

ARILIACEÆ.

Aralia spinosa, L., (Angelica tree, Hercules Club.) July, August. A common shrub.

Aralia racemosa, L., (Spikenard.) July, August. Has very large, spicy roots.

Aralia quinquefolia, Gr., (Ginseng.) May, July.

CORNACEÆ.

Cornus florida, L., (Dwarf Cornel, Bunchberry.) March, June. Common everywhere.

**Cornus sericea*, L., (Silky Cornel, Kinnikinnik.) June. Rare.

**Cornus paniculata*, L. Her., (Panicled Cornel.) May.

Nyssa multiflora, Wang., (Tupelo, Pepperidge, Black or Sour Gum.) April, May.

CAPRIFOLACEÆ.

Symphoricarpos racemosus, Michx., (Snowberry.) May, September.

Lonicera sempervirens, Ait., (Trumpet Honeysuckle.) May. Sparingly spontaneous.

Triosteum perfoliatum, L., (Fever-wort, Horse-Gentian.) April, May. Very common in rich woods.

Sambucus canadensis, L., (Common Elder.) May, June. Found in most all thickets, especially along fence rows.

Sambucus pubens, Michx., (Red-berried Elder.) May, June.

**Viburnum lentago*, L., (Sweet Viburnum, Sheep berry.) April, May.

Viburnum prunifolium, L., (Black Haw.) April, May.

**Viburnum dentatum*, L., (Arrow-wood.) May, June. Rather common.

Viburnum nolle, Michx. June.

Viburnum acerifolium, L., (Maple-leaved, Arrow wood, Dockmackie.) Grows on the College Hill.

RUBIACEÆ.

Galium aparine, L., (Cleavers, Goose-grass.) April.
Common in thickets as well as all the following species.

Galium concinnum, T. & G. May, June.

Galium trifidum, L., (Small Bedstraw.) June, wonderfully variable.

Galium trifidum, L., var., *tinctorium*, Gr. May. Very common.

Galium triflorum, Michx., (Sweet-scented Bedstraw.) June, July.

Galium circeæans, Michx., (Wild Liquorice.) May, June.

Spermacoce glabra, Michx., (Button Weed.) River bank. May, June.

Cephalanthus occidentalis, L., (Button Bush.) June, August.

Mitchella repens, L., (Partridge-berry.) May, July. Common among moss, especially at the roots of trees.

Houstonia purpurea, L. April, July. Very common in woods and meadows.

Houstonia purpurea, L., var. *ciliolata*, Gr. July.

Houstonia cœrulea, L., (Bluets, Innocence.) April, May. Very abundant in moist meadows.

VALERIANACEÆ.

Valeriana pauciflora, Michx., (Valerian.) May, June. Common on shady hillsides and in open woods.

Valeriana sylvatica, Richards. May, June.

DIPSACEÆ.

Dipsacus sylvestris, Mill., (Wild Teasel.) June, July. Exceedingly common along roadsides and hillsides.

COMPOSITÆ.

Vernonia noveboracensis, Willd., (Iron Weed.) July, September. A very common, coarse weed.

Elephantopus carolinianus, Willd, (Elephant's foot.) August, September. Very common on dry, sandy banks.

Eupatorium purpureum, L., (Joe-Pie-Weed, Trumpet-Weed.) July, August. Common and varies greatly. Includes several nominal species in this locality, prominent among which is *E. fistulosum*, Barratt, and *E. mactulatum*, L.

Eupatorium perfoliatum, L., (Thoroughwort. Bone-set.) July, October. Very common.

Eupatorium serotinum, Michx., August, September.

Eupatorium ageratoides, L., (White Snake-root.) August, September. Very common along rich hillsides.

Conoclinium coelestinum, D.C., (Mist-flower.) August, October. Very abundant everywhere.

Aster shortii, Boott. September, October. A beautiful and showy Aster, common among cliffs.

Aster undulatus, L., September, October. Common.

Aster cordifolius, L., September, October. Very common among shaded rocks and found growing along with the next.

Aster sagittifolius, Willd. October.

Aster ericoides, L., September.

Aster multiflorus, Ait. October. Common in dry open fields.

Aster dumosus, L., August. Very common in thickets and along fence rows.

Aster tenuifolius, L., August, November.

Aster puniceus, L., Very common in thickets.

Aster prenanthoides, Muhl. September, October. This species does not occur in any abundance but is unmistakable.

Erigeron canadense, L., (Horse-weed, Butter-weed.) July, October. A common and vile weed.

* *Erigeron bellidifolium*, Muhl. (Robin's Plantain.)

Erigeron philadelphicum, L.. (Common Fleabane.) May, August. Common.

Erigeron annuum, Pers. (Daisy Fleabane, Sweet Scabious.) May, August. Very common.

Erigeron strigosum, Muhl. June, August. Found everywhere.

Boltonia glastifolia, L'Her. August.

Solidago latifolia, L., September, November. Grows in abundance among shaded rocks along with the next.

Solidago caesia, L., September, November. Common.

* *Solidago petiolaris*, Ait. September, October.

Solidago neglecta, T. and G. Swamps.

* *Solidago arguta*, Ait. June.

Solidago altissima, L., August, September. Very common in borders of fields and thickets. Specimens were found from two to three feet high.

Solidago ulmifolia, Muhl. August, September. Very near the last and probably runs into it.

Solidago nemoralis, Ait. July, September. Very common in dry fields. About the earliest *Golden-rod* in this region.

Solidago canadensis, L. August. Exceedingly common in old fields. Easily distinguished from the next two species by its rough, hairy stem. In other characters it very much resembles them.

Solidago serotina, Ait. August. The leaves are rough above and very smooth beneath.

Solidago gigantea, Ait. August, September. Leaves are very smooth both sides.

Solidago lanceolata, L. August. Very common along streams.

Inula helenium, L., (Common elecampane.) June, August. Very abundant on certain hillsides.

* *Pluchea foetida*, D. C., (Marsh fleabane.) August. Rather common.

Polymnia canadensis, L., (Leaf-cup.) Grows abundantly in shaded ravines along with the next. In the specimens collected the rays were all pure white, and invariably 3-lobed. July, September.

Polymnia wedalia, L. August September.

* *Parthenium integrifolium*, L. June.

Ambrosia trifida, L., (Great ragweed.) August. Grows

in dense thickets along the river bank, from which stems have been preserved eighteen feet high.

Ambrosia artemisiifolia, L., (Wormwood, Hogweed, Bitter-sweet.) August, September. Found everywhere and varies greatly.

Xanthium strumarium, L., (Common Cocklebur.) August, September. Found everywhere, especially in worn out fields.

Xanthium spinosum, L., (Spiny Clotbur.) Common along road sides.

Eclipta procumbens, Michx. June, October. Especially abundant along river banks where it attains a very rank growth.

Heliopsis laevis, Pers., (Ox-eye.) July, August. Not so common as the variety.

Heliopsis laevis, Pers., var. *scabra*, Gr. June, October. Very common in thickets.

Rudbeckia laciniata, L., (Cone-flower.) July, September.

Rudbeckia triloba, L. July, August.

Rudbeckia speciosa, Wenderoth. Dry soil. July, August.

Rudbeckia hirta, L. June, August. Very common in meadows and about the earliest showy composite.

Helianthus annuus, L., (Common Sunflower.) Escaped from cultivation.

Helianthus microcephalus, Torr. & Gr. August. Grows in thickets.

Helianthus hirsutus, Raf. July.

Helianthus decapetalus, L. July. Probably *H. trachelii-folius*, Willd. Was also found but the specimen was so similar to some forms of *H. decapetalus*, L., that they were all included under the latter.

Actinomeris squarrosa, Nutt. August, September. Common along rivulets back from the river.

Coreopsis tripteris, L., (Tickseed, Tall Coreopsis.) August, September. In all the specimens gathered the heads strongly exhaled the odor of mignonette, and that too, without bruising.

Bidens frondosa, L., (Common Beggar-ticks.) July, October. Very common.

Bidens connata, Muhl, (Swamp Beggar-ticks.) August, October.

Bidens bipinnata, L., (Spanish Needles.) July, August. Very common.

**Dysodia chrysanthemoides*, Lag., (Fetid Marigold.) August.

Helenium autumnale, L., (Sneeze Weed.) August, September.

**Leptopoda brachypoda*, Torr. & Gr. August.

Maruta cotula, D. C., (Common May Weed, Dog Fennel.) May, July. Very common and very disagreeable.

Achillea millefolium, L., (Common Yarrow or Milfoil.) May, August.

Leucanthemum vulgare, Lam., (Ox Eye, or White Daisy, White Weed.) May, July. Is becoming more abundant every year and almost takes possession of certain old pastures.

Tanacetum vulgare, L., (Common Tansy.) August. Along roadsides.

Gnaphalium polycephalum Michx., (Common Everlasting.) Very common. Called in this region "Indian Tobacco," because when chewed it yields a dark brown spittle.

**Gnaphalium uliginosum*, L., (Low Cudweed.) May.

Gnaphalium purpureum, L., (Purplish Cudweed.) June

Antennaria plantaginifolia, Hook, (Plantain-leaved Everlasting.) April, May.

Erechtithes hieracifolia, Raf. (Fire Weed.) August, September.

**Cacalia reniformis*, Muhl, (Great Indian Plantain.) June, July.

Cacalia atripicifolia, L., (Pale Indian Plantain.) July, September.

Senecio aureus, L., (Golden Ragwort, Squaw Weed.) March, August. Common and very variable.

**Senecio aureus*, L., var. *obovatus*, Gr. April.

Cirsium lanceolatum, Scop., (Common Thistle.) July, September.

Cirsium attissimum, Spreng. August.

Onopordon acanthium, L., (Cotton, or Scotch Thistle.) June, September. A beautiful thistle growing on the College Hill.

Lappa officinalis, Allioni, (Burdock.) Very common all summer.

Cichorium intybus, L., (Succory, or Cichory.) July, October. Spontaneous in old gardens.

Cynthia virginica, Don. May, July.

Hieracium scabrum, Michx, (Rough Hawkweed.) August.

Hieracium gronovii, L., (Hairy Hawkweed.) July, September. Common.

Hieracium paniculatum, L. August. Common and easily distinguished by its very diffuse branching.

Nabalus asper, Torr. & Gr. August, September.

Nabalus crepidineus, D. C. August, October. Not very abundant, and at a casual glance mistaken for a form of *Vernonia noveboracensis*, Willd., although so widely differing from it.

Taraxacum dens-leonis, Desf. (Dandelion.) April, November. Everywhere.

Lactuca canadensis, L., (Wild Lettuce.) June. Common.

Lactuca canadensis, L., var. *integrifolia*, T. & G. June, August.

Mulgedium floridanum, D. C. August, September. "Leaves runcinately pinnate-parted. Segments few, serrate-dented, upper ones triangular, acute or acuminate." Vide Wood. A good description. Common.

Mulgedium leucophæum, D. C. August.

Sonchus oleraceus, L., (Common Low Thistle.) May, September.

Sonchus asper, Vill., (Spiny-leaved Low Thistle.) June, September.

LOBELIACEÆ.

Lobelia cardinalis, L., (Cardinal Flower.) July, September. Grows in abundance along the shaded banks of rivulets.

Lobelia syphilitica, L., (Great Lobelia, Blue Cardinal Flower.) July, September. Common.

Lobelia puberula, Michx. July, August.

**Lobelia leptostachys*, A. D. C. June, July.

Lobelia inflata, L., (Indian Tobacco.) July, September. Very abundant.

**Lobelia spicata*, Lam. September.

CAMPANULACEÆ.

Campanula americana, L., (Tall Bell-flower.) June, August. Common.

Specularia perfoliata, A. D. C., (Venus' Looking-glass.) May, August.

ERICACEÆ.

Gaylussacia resinosa, Torr. & Gr., (Black Huckleberry.) April, June.

Monotropa uniflora, L., (Indian Pipe, Corpse Plant, Bird's Nest.) June, September. Becoming hard to find.

AQUIFOLIACEÆ

**Ilex verticillata*, Gr., (Black Alder, Winterberry).

EBENACEÆ.

Diospyros virginiana, L., (Common Persimmon.) April, June. Fruit edible after frost.

PLANTAGINACEÆ.

Plantago major, L., (Common Plantain.) June, September.

Plantago lanceolata, L., (Ribgrass, Ripplegrass, English Plantain.) June, September.

Plantago virginica, L. May, September.

PRIMULACEÆ.

Dodecatheon meadia, L., (Shooting Star, American Cowslip, Pride of Ohio.) April, June. A very handsome plant, growing in abundance on rocky ledges.

**Lysimachia quadrifolia*, L. May. June.

Lysimachia ciliata, L. June, July. Very common in thickets.

Lysimachia lanceolata, Walt. June. Common in wet meadows.

Lysimachia lanceolata, Walt., var., *angustifolia*, Gr. June, July.

**Lysimachia longifolia*, Pursh. July.

Lysimachia nummularia, L., (Moneywort.) Escaped from cultivation.

Anagallis arvensis, L., (Common Pimpernel.) June. Hard to find as it is easily concealed by the grass.

**Centunculus minimus*, L. May. Common.

Samolus valerandi, L. var., *americanus*, Gr., (Water Pimpernel, Brook Weed.) May, September. Abundant in marshy places.

BIGNONIACEÆ.

Tecoma radicans, Juss., (Trumpet Creeper.) June, August.

Catalpa bignonioides, Walt., (Catalpa, Indian Bean.) June, July. Common in cultivation as a shade tree.

OROBANCHACEÆ.

Epiphegus virginiana, Bart., (Beech-drops, Cancer-root.) August, October. Very common.

Conopholis americana, Wallroth, (Squaw-root.) April, June. Very common on the sand.

Phelipæa ludoviciana, Don., (Broom-rape.) August, October.

**Aphyllon uniflorum*, Torr. & Gr., (One-flowered cancer root.)

SCROPHULARIACEÆ.

Verbascum thapsus, L., (Common Mullein.) June, August. Too common.

Verbascum blattaria, L., (Moth Mullein.) June, July. Common along roadsides.

Linaria vulgaris, Mill., (Common Toad-flax. Butter and Eggs. Ramsted.) June, September. Very common along hillsides and in the ravines.

Scrophularia nodosa, L., (Fig Wort.) July, October.

Collinsia verna, Nutt. April, June. Damp woods.

**Chelone glabra*, L., (Turtle-head. Snake-head.) September, October.

Pentstemon pubescens, Solander. May, July.

Mimulus ringens, L., (Monkey-flower.) June, August. Common along with the next.

Mimulus alatus, Ait., July, August.

Conoclea multifida, Benth., July, September. Common.

Gratiola virginiana, L., (Hedge-hyssop.) May, June. Thickets and along fence rows. Very common.

**Gratiola viscosa*, Schweinitz.

Ilysanthes gratioides, Benth. (False Pimpernel.) July, September. Wet places.

Veronica virginica, L., (Culver's Root.) July, August. Fence rows.

Veronica anagallis, L., (Water Speedwell.) June, August.

Veronica americana, Schweinitz. (American Brook Lime.) June, August. Common in ditches.

Veronica officinalis, L., (Common Speedwell.) May, July. Everywhere.

Veronica serpyllifolia, L., (Thyme leaves. Speedwell.) April, August. Roadsides and fields.

Veronica peregrina, L., (Neckweed. Purslane Speedwell.) April, June.

Veronica avrensis, L., (Corn Speedwell.) April, June. Common.

Seymeria macrophylla, Nutt. (Mullein Foxglove.) July, August. Bluffs of the river.

Gerardia tenuifolia, Vahl. August. A beautiful plant growing in thickets.

Gerardia flava, L., (Downy False Fox Glove.) August.

Gerardia quercifolia, Pursh. (Smooth False Foxglove.) August. Rare.

**Gerardia auriculata*, Michx. August.

Pedicularis canadensis, L., (Louse Wort.) April, May.

ACANTHACEÆ.

Dianthera americana, L., June, September. Common along the river bank.

Ruellia ciliosa, Pursh. June, September.

Ruellia strepens, L., May, September.

VERBENACEÆ.

Verbena angustiflora, Michx. All summer. Dry soil.

Verbena hastata, L., (Blue Vervain.) June, August. Very common.

Verbena urticifolia, L., (Nettled-leaved or White Vervain.) Very common all summer in old fields and along roadsides. The flowers sometimes are purple.

Verbena stricta, Vent., (Hoary Vervain.) July. Sandy soil. A very showy Vervain.

Verbena officinalis, L., (European Vervain.) June, July. Not at all abundant.

Verbena brackosa, Michx. May, September. Very common everywhere in waste places, and very variable.

Verbena aubletia, L., April, September. Is very generally cultivated but grows spontaneously.

Lippia lanceolata, Michx, (Fog-fruit.) July, September. Common along shady banks. In all the specimens collected the heads were decidedly purplish-white rather than bluish-white.

Phryma leptostachya, L., (Lopseed.) June, August. Very common.

LABIATÆ.

Teucrium canadense, L., (American Germander, Wood Sage.) June, September.

Isanthus cœruleus, Michx, (False Pennyroyal.) July, October. Very common along sandy banks.

Mentha viridis, L., (Spearmint.) July, September. Common in marshy places.

Mentha piperita, L., (Peppermint.) July, September. Common along brooks.

Mentha sativa, L., (Whorled Mint.) August.

Mentha canadensis, L., (Wild Mint.) July. Common and exceedingly variable, probably including the last.

**Lycopus virginicus*, L., (Bugle-weed.) August.

Lycopus europæus, L., var. *integrifolius*, Gr. August.

Lycopus europæus, L., var. *sinatus*, Gr. August. This and the last are very common.

Pycnanthemum lanceolatum, Pursh, (Mountain Mint.) June, August.

**Calamintha glabella*, Benth., var. *nuttallii*, Gr. August, September.

Calamintha clinopodium, Benth., (Basil.) August. Common in thickets.

Melissa officinalis, L., (Common Balm.) June, July.

Hedeoma pulegioides, Pers., (American Pennyroyal.) Abundant all summer.

Collinsonia canadensis, L., (Horse-balm, Rich-weed, Stone-root.) July, September.

Salvia lyrata, L., (Lyre-leaved Sage.) May.

Monarda fistulosa, L., (Wild Bergamot.) May, September. Very common in the woods.

Monarda bradburiana, Beck. May, July.

Blephilia ciliata, Raf. Summer.

Belephilia hirsuta, Benth. June, August. Very abundant and very variable.

Lophanthus nepetoides, Benth., (Giant Hyssop,) August. Thickets.

Lophanthus scrophularicefolius, Benth. August.

Nepeta cataria, L., (Catnip.) June, September. Very common.

Nepeta glechoma, Benth., (Ground Ivy, Gill-over-the ground.) March, August. Very abundant, and grows in beautiful patches.

Synandra grandiflora, Nutt. May, June. Abundant in Clifty ravine. "Stamens covered with red hairs and corolla, streaked with pinkish lines." Young.

**Physostegia virginiana*, Benth., (False Dragon-head.) August.

Brunella vulgaris, L., (Common Self-heal, or Heal-all.) June, September. Common.

Scutellaria versicolor, Nutt., (Skull Cap.) June, July.

Scutellaria nervosa, Pursh. May, June.

Scutellaria lateriflora, L. July, August.

Marrubium vulgare, L., (Common Hoarhound.) May, June. Common.

Galeopsis tetrahit, L., (Common Hemp, Nettle.) June, September.

Stachys palustris, L., var. *aspera*, Gr. June.

Stachys palustris, L., var. *glabra*, Gr. September.

Stachys palustris, L., var. *cordata*, Gr. June. By far the most common form.

Leonurus cardiaca, L., (Common Motherwort.) June. Very common.

Lamium amplexicaule, L., (Dead Nettle.) March, June. Abundant in cultivated grounds.

BORRAGINACEÆ.

Symphytum officinale, L., (Common Comfrey.) April, June. Common in open woods.

Onosmodium carolinianum, D. C. July.

**Lithospermum latifolium*, Michx. May.

Lithospermum hirtum, Lehm, (Hairy Puccoon.) April, June.

Mertensia virginica, D. C., (Virginian Cowslip, or Langwort, Blue Bells.) March, May. Grows in large patches in certain favorable locations.

**Mysotis verna*, Nutt. Rare. May.

Echinospermum lappula, Lehm, (Stickseed.) July.

Cynoglossum officinale, L., (Common Hounds' Tongue.) April, July. Too common.

Cynoglossum virginicum, L., (Wild Comfrey.) May.

Cynoglossum morisonii, D. C., (Beggar's Lice.) Found everywhere and at all seasons.

Heliotrophytum indicum, D. C., (Indian Heliotrope.) August. Grows in tolerably large patches along the river bank.

HYDROPHYLLACEÆ.

Hydrophyllum macrophyllum, Nutt. April, June. Common in the woods.

Hydrophyllum virginicum, L., April, July.

Hydrophyllum canadense, L., May, August. In some of the specimens referred to this species, the leaves were rough and calyx hispid.

Hydrophyllum appendiculatum, Michx. April, July.

Phacelia bipinnatifida, Michx. April, June. Very common.

POLEMONIACEÆ.

Polemonium reptans, L., (Greek Valerian.) March, June.

Phlox paniculata, L. June, August.

- Phlox paniculata*, L., var. *acuminata*, Gr. June.
Phlox maculata, L., (Wild Sweet William.) June.
Phlox glaberima, L., June, July.
Phlox pilosa, L., April, June.
 **Phlox procumbens*, Lehm. June, July.
Phlox divaricata, L. March, May.

CONVOLVULACEÆ.

- Ipomœa purpurea*, Lam, (Common Morning Glory.)
 June, August. Frequently escaped.
Ipomœa nil, Roth, (Smaller M.) August. Very common
 along the river.
Ipomœa lacunosa, L. August. The peduncles were
 found to be 1-5-flowered, rather than 1-3-flowered.
Ipomœa pandurata, Meyer, (Wild Potato-vine, Man-of-
 the-Earth.) June, August.
Calystegia sepium, R. Br., (Hedge Bindweed.) July.
Cuscuta gronovii, Willd, (Dodder.) Every *Cuscuta* in
 this region seems to belong to *C. gronovii*, Willd., although
 we have desired to place some of them elsewhere.

SOLANACEÆ.

- Solanum dulcamara*, L., (Bittersweet.) May, September.
Solanum nigrum, L., (Common Nightshade.) June,
 November.
Solanum carolinense, L., (Horse-Nettle.) May, August.
 Common.
Physalis philadelphica, Lam. June.
Physalis pubescens, L. June. The most common
Physalis.
 **Physalis viscosa*, L. Summer months.
 **Physalis pennsylvanica*, L. June.
Nicandra physaloides, Gærtn, (Apple of Peru.) June.
 Common.
Lycium vulgare, Dunal, (Common Matrimony Vine.)
 May, June. Escaped.

Datura stramonium, L., (Common Jamestown Weed, or Thorn Apple.) June, October. The common name has long since been corrupted into *Jimson Weed*.

Datura tatula, L., (Purple T.) June, August.

GENTIANACEÆ.

Sabbatia angularis, Pursh. July, August. Common in dry ground.

Gentiana andrewsii, Griseb, (Closed Gentian.) September, October. Common.

**Obolaria virginica*, L. Rare. April.

APOCYNACEÆ.

Apocynum androsæmifolium, L., (Spreading Dogbane.) June, July.

Apocynum cannabinum, L., (Indian Hemp.) June, September. Common along the river banks.

Apocynum cannabinum, L., var. *hypericifolium*, Gr. Along with the former.

ASCLEPIADACEÆ.

Asclepias cornuti, Decaisne, (Common Milkweed, or Silkweed.) June, July. Very abundant.

**Asclepias phytolaccoides*, Pursh, (Poke Milkweed.) June.

**Asclepias purpurascens*, L., (Purple Milkweed.) Rare. June.

Asclepias variegata, L. June.

Asclepias quadrifolia, Jacq., (Four-leaved M.) April, June. Common dry woods.

Asclepias perennis, Walt.

Asclepias incarnata, L., (Swamp Milkweed.) August.

Asclepias incarnata, L. var. *pulchra*, Gr. July, August.

Asclepias tuberosa, L., (Butterfly-weed, Pleurisy root.) June, August. A very showy plant, and rather common.

In the specimens collected the leaves were decidedly petioled and plainly auriculate at base.

Ensenia albida, Nutt. July, September. Common along the river bank.

OLEACEÆ.

Fraxinus americana, L., (White Ash.) March, May.

Fraxinus sambucifolia, Cam., (Black or Water Ash.) April, May.

Fraxinus quadrangulata, Michx., (Blue Ash.) March, May.

ARISTOLOCHIACEÆ.

Asarum canadense, L., (Wild Ginger.) March, ²/₃ May. Grows in abundance on rich hillsides. The full-grown leaves have a rich, satin lustre.

PHYTOLACCACEÆ.

Phytolacca decandra, L., (Common Pokeweed, Scoke, Garget, Pigeon-berry.) June, September.

CHENOPODIACEÆ.

Chenopodium album, L., (Lamb's-Quarters, Pigweed.) Common in cultivated ground.

**Chenopodium ambrosioides*, L., (Mexican Tea.) August.

AMARANTACEÆ.

Amarantus retroflexus, L. August. Common.

Amarantus spinosus, L., (Thorny Amaranth.) August.

**Montelia tamariscina*, Gr. August.

Iresine celosioides, L. August, September.

POLYGONACEÆ.

Polygonum orientale, L., (Prince's Feather.) August.
Escaped to the ravines.

**Polygonum pennsylvanicum*, L. August.

Polygonum incarnatum, Ell. May, July.

Polygonum persicaria, L., (Lady's Thumb.) June.

Polygonum hydropiper, L., (Common Smartweed or Water-pepper.) June.

Polygonum acre, H. B. K., (Water Smartweed.) June, July.

Polygonum hydropiperoides, Michx., (Mild Water-pepper.) July.

**Polygonum amphibium*, L. July.

Polygonum virginianum, L. August. Common in rich soil.

Polygonum aviculare, L., (Knotgrass, Goose-grass, Door-weed.) June, December. The commonest of all weeds.

Polygonum aviculare, L., var. *erectum*, Roth. June, August.

**Polygonum ramosissimum*, Michx. May.

Polygonum sagittatum, L., (Arrow-leaved, Tear-Thumb, Scratch-weed.) August, September.

Polygonum convolvulus, L., (Black Bindweed.) June, August.

Polygonum dumetorum, L., (Climbing False Buckwheat.) May, July.

Polygonum dumetorum, L., var. *scandens*, Gr. August. Thickets. Climbing high.

Fagopyrum esculentum, Mœnch. (Buckwheat.) August. Growing spontaneous.

Rumex longifolius, D. C. June.

Rumex orbiculatus, Gr. (Great Water Dock.) May, June.

Rumex britannica, L., (Pale Dock.) August.

Rumex verticillatus, L., (Swamp Dock.) July. Common in swamps.

Rumex obtusifolius, L., (Bitter Dock.) August.

Rumex acetosella, L., (Field or Sheep Sorrel.) May, June.

LAURACEÆ.

Sassafras officinale, Nees. April, May. Common.

Linbera benzoin, Meisner. (Spice-bush. Benjamin-bush.)
March, April. The bark and young twigs are very spicy to the taste.

LORANTHACEÆ.

Phoradendron flavescens, Nutt. (American Mistletoe.)
Most commonly parasitic on the elm, though found growing on other trees. The flowers and fruits may be found hanging in the same clusters at any time from November to March.

SAURURACEÆ.

Saururus cernuus, L., (Lizard's tail.) June, August.
Common in swamps and very fragrant.

EUPHORBIACEÆ.

Euphorbia maculata, L., July, November. Very common.

Euphorbia humistrata, Engelm. August.

Euphorbia hypericifolia, L., July, October.

Euphorbia marginata, Pursh. August, October. Grows in abundance along roadsides and is not at all cultivated.

Euphorbia corollata, L., July, August.

Euphorbia commutata, Engelm. May, July.

Acalypha virginica, L., (Three seeded Mercury.) July, September. Very common.

URTICACEÆ.

Ulmus fulva, L., (Slippery or Red Elm.) March April.
A common tree.

- Ulmus americana*, L., (American or White Elm.)
March, April.
- Celtis occidentalis*, L. (Sugar-berry. Hackberry.)
March, April.
- Morus rubra*, L., (Red Mulberry), April, May.
- Morus alba*, L., (White Mulberry.)
- Urtica gracilis*, Ait, (Nettle,) August.
- Laportea canadensis*, Gaudichaud, (Wood Nettle.) July,
September. Common in rich woods.
- Pilea pumila*, Gr., (Richweed, Clearweed.) July, Sep-
tember. Exceedingly common in rich ground. At once
recognized by its watery, translucent stems and veins.
- Boehmeria cylindrica*, Willd, (False Nettle.) July, Sep-
tember. Common everywhere.
- Parietaria pennsylvanica*, Muhl. May, August. Com-
mon on shaded banks.
- Cannabis sativa*, L., (Hemp.) July, August.
- Humulus lupulus*, L., (Common Hop.) July.

PLATANACEÆ.

- Platanus occidentalis*, L., (American Plane, or Sycamore,
Buttenwood.) April, May.

JUGLANDACEÆ.

- Juglans cinerea*, L., (Butternut.) April, May. Fruit
ripe in September.
- Juglans nigra*, L., (Black Walnut.) April, May. A
valuable timber tree.
- Carya olivæformis*, Nutt., (Pecan-nut.) May. There
are several trees in the river bottom.
- Carya alba*, Nutt, (Shellbark, or Shagbark Hickory.)
April. Very common.
- Carya macrocarpa*, Nutt, (Small-fruited Hickory.) May.
- Carya sulcata*, Nutt, (Western Shellbark Hickory.)
April.

Carya tomentosa, Nutt, (Mocker-nut, White-heart Hickory.)

Carya porcina, Nutt, (Pig-nut or Broom H.) April.

CUPULIFERÆ.

Quercus alba, L., (White Oak.) April.

Quercus bicolor, Willd, (Swamp White Oak.) April.
Common.

Quercus prinus, L., var., *acuminata*, Michx, (Yellow Chestnut Oak.) April, May.

Quercus coccinea, Wang, (Scarlet Oak.) April. Common.

Quercus coccinea, Wang, var., *tinctoria*, Gr. (Quercitron, Yellow-barked, or Black Oak.) May.

Quercus rubra, L., (Red Oak.) April. Common.

Castanea vesca, L., (Chestnut,) var. *Americana*, Mich. June, July.

Fagus ferruginea, Ait, (American Beech.) March, April.
Very abundant in our forests.

Corylus americana, Walt., (Wild Hazel-nut.) March.

Ostrya virginica, Willd, (American Hop, Hornbeam, Lever-wood.) April. Common.

Carpinus americana, Michx, (American Hornbeam, Iron-wood, Blue or Water Beech.) April. Common along streams.

SALICACEÆ.

**Salix humilis*, Marshall, (Prairie Willow.) April.

Salix discolor, Muhl, (Glaucous Willow.) April, May.

Salix viminalis, L., (Basket Osier.) April.

Salix livida, Wahl., var. *occidentalis*, Carey. May.

Salix nigra, Marsh, (Black Willow.) May, June.

Salix alba, L., (White Willow.) April.

**Salix alba*, L., var. *cærulea*, Carey. April. River bank.

Salix babylonica, Town, (Weeping Willow.) Commonly planted for ornament.

Salix longifolia, Muhl, (Long-leaved Willow.) May, June. Very abundant along streams.

Populus monilifera, Ait., (Cotton-wood, Necklace Poplar.) Along the river. Grows to an immense height, sometimes over 100 feet.

Populus balsamifera, L., (Balsam Poplar, Tacamahac.) March. Grows along the river bank.

CONIFERÆ.

Juniperus communis, L., (Common Juniper.) May, June. By no means abundant.

ARACEÆ.

Arisæma triphyllum, Torr, (Indian Turnip.) April, May. Very common in rich woods.

Arisæma dracontium, Schott, (Green Dragon, Dragon Root.) June.

**Acorus calamus*, L. Rare.

LEMNACEÆ.

Lemna minor, L., (Duckweed.) Very common in stagnant waters. With the next it covers whole ponds with green.

Lemna polyrrhiza. L. Rather more abundant than the former.

TYPHACEÆ.

Typha latifolia, L., (Common Cat-tail or Reed-mace.) June, July.

ALISMACEÆ.

Alisma plantago, L., var. *americanum*, Gr., (Water Plantain.) July, September.

Sagittaria variabilis, Engelm, (Arrow-head.) July, August.

HYDROCHARIDACEÆ.

Anacharis canadensis, Planchon, (Water-weed.) July. Common in slow streams and millraces, along with the next.

Vallisneria spiralis, L., (Tape-grass, Eel-grass.) July, August

ORCHIDACEÆ.

Orchis spectabilis, L., (Showy Orchis.) May.

Habenaria psycodes, Gray. July, August.

Habenaria peramœna, Gray. August.

Spiranthes cernua, Richard. August, October.

Corallorhiza odontorhiza, Nutt. May, June.

Aplectrum hyemale, Nutt, (Putty-root. Adam and Eve.) May.

AMARYLLIDACEÆ.

Agave virginica, L., (False Aloe.) September. Hard to find but undoubted.

Hypoxys erecta, L., (Straw-grass.) May, June. Rare.

IRIDACEÆ.

Iris versicolor, L., (Large Blue Flag.) May, June. Common.

Pardanthus chinensis, Ker., (Blackberry Lily.) July, September. Several large patches have escaped from cultivation.

Sisyrinchium bermudiana, L., (Blue-eyed Grass.) May.

Sisyrinchium bermudiana, L., var., *anceps*, Gr. May, June.

DIOSCOREACEÆ.

Dioscorea villosa, L., (Wild Yam-root.) May, July.
Abundant, twining over bushes among thickets.

SMILACEÆ.

Smilax rotundifolia, L., (Common Green-brier.) May,
June. Common.

Smilax glauca, Walt. May, June.

**Smilax hispida*, Muhl. May.

Smilax herbacea, L., (Carrion Flower.) June.

Smilax herbacea, L., var., *pulverulenta*, Gr. May, June.
More abundant than the former.

LILIACEÆ.

Trillium sessile, L., March, April. Very common in
early spring. It often has its sepals changed into leaves,
and also appears with other modifications of the typical
form.

Trillium recurvatum, Beck. April, May. Common.

Trillium erectum, L., (Purple Trillium, or Birthroot.)
April, May.

Trillium erectum, L., var., *album*, Pursh. March, April.
Common in rich woods.

Trillium erectum, L., var., *declinatum*, Gr. May.

Trillium cernuum, L., (Nodding, or Wake-Robin.) April.
Moist woods.

Trillium cernuum, L., var., *atrorubens*, Wood, (2d Indiana
Geol. Survey, p. 286.) This variety was found by Mr.
Young, and described by Prof. Wood.

Uvularia grandiflora, Smith. April.

Uvularia perfoliata, L., April.

Uvularia sessilifolia, L., May.

Smilacina racemosa, Desf., (False Solomon's Seal, or
Spikenard.) April, June. Common.

- Smilacina stellata*, Desf. April, May.
- Polygonatum biflorum*, Ell, (Smaller Solomon's Seal.) May, June. Common.
- Polygonatum giganteum*, Dietrich, (Great S.) April, August. Grows rank in the corners of cultivated fields.
- Asparagus officinalis*, L., (Garden Asparagus.) May, escaped.
- Lilium philadelphicum*, L., (Wild Orange-red Lily.) June. Common on the sand flats.
- Lilium canadense*, L., (Wild Yellow Lily.) July.
- **Lilium superbum*, L., (Turk's-cap Lily.) July.
- Erythronium americanum*, Smith, (Yellow Adder's-tongue.) March, April. Common along with the next.
- Erythronium albidum*, Nutt, (White Dog's-tooth, Violet.) March. Not so common as the last.
- Ornithogalum umbellatum*, L. April, May. Escaped.
- Scilla fraseri*, Gray, (Squill, Eastern Quamash, Wild Hyacinth.) April, May. Grows along the hillsides.
- Allium tricoccum*, Ait., (Wild Leek.) July.
- Allium cernuum*, Roth, (Wild Onion.) July, August. Common.
- Allium canadense*, Kalm, (Wild Garlic.) May, June.
- Muscari botryoides*, Mill, (Grape-Hyacinth.) March, April. Escaped.
- Hemerocallis fulva*, L., (Day-Lily.) May, June. Escaped.

JUNACEÆ.

- Luzula campestris*, D. C. March, May. Very common in dry fields and woods.
- Juncus tenuis*, Willd. Common.

COMMELYNACEÆ.

- Commelyna erecta*, L., (Day-flower.) August, September. Shaded ravines.
- Commelyna virginica*, L., Damp, rich hillsides.

Tradescantia virginica, (Common Spiderwort.) May.
Tradescantia pilosa, Lehm. May, July.

CYPHERACEÆ.

The following list of Sedges and Grasses were named by Dr. Geo. Vasey, of the Agricultural Department, Washington, D. C., from specimens sent by M. Stanley Coulter :

- Eleocharis tenuis*, Schultes.
Eleocharis tenuis, Schultes, var.
Scirpus atrovirens, Muhl.
Scirpus lineatus, Michx.
Carex vulpinoidea, Michx.
Carex stipata, Muhl.
Carex sparganioides, Muhl.
Carex cephalophora, Muhl.
Carex lagopodioides, Schk.
Carex crinita, Lam.
Carex buxbaumii, Wahl.
Carex shortiana, Dew.
Carex granularis, Muhl.
Carex gracillima, Schw.
Carex triceps, Michx.
Carex laxiflora, Lam.
Carex laxiflora, Lam., var., *plantaginea*, Boott.
Carex novæ, Angliæ, Schw., var.
Carex pennsylvanica, Lam., var.
Carex pubescens, Muhl.
Carex debilis, Michx.
Carex lanuginosa, Michx.
Carex tentaculate, Muhl.
Carex tentaculate, Muhl, var.
Carex intumescens, Rudge.
Carex lupulina, Muhl.
Carex squarrosa, L.

GRANIMÉÆ.

- Dactylis glomerata*, L., (Orchard Grass.)
Eatonia pennsylvanica, Gr.
Glyceria nervata, Trin., (Fowl Meadow Grass, in part.)
Festuca nutans, Willd., (Fescue Grass.)
Bromus ciliatus, L., (Broom Grass.)
Gymnostichum hystrix, Schreb., (Elymus Hystrix, L.,)
 (Bottle-brush Grass.)
Danthonia spicata, Beam, (Wild Oat Grass.)
Panicum dichotomum, L.

EQUISETACEÆ.

- Equisetium arvense*, L., (Common Horsetail.)
Equisetum robustum, Braun.

FILICES.

The Ferns of this locality have not been carefully worked up. I only give the most common.

Pellæa atropurpurea, Link. (Cliff-Brake.) Grows in abundance upon our limestone rocks where they are found all the year around, good fruiting specimens having been collected in February, of course wintered from the previous season.

Asplenium ruta muraria, L., April. Not in fruit. Limestone cliffs.

Asplenium angustifolium, Michx. August, September. Common.

Camptosorus rhizophyllus, Link. (Walking-Leaf or Walking-Fern.) Very common on limestone cliffs, forming large patches.

Phegopteris hexagonoptera, Fee. July, August. Common in open woods.

Aspidium filix-mas, Swartz. August.

Aspidium marginale, Swartz. July, August. Some most beautiful specimens of this species were obtained.

Aspidium acrostichoides, Swartz. July, August. Very common along hillsides.

Cystopteris bulbifera, Bernh. July, August. Common in shaded ravines.

Cystopteris fragilis, Bernh. July. Common and very variable.

LICHENES.

The following species, two lichens and three fungi, were sent to Chas. H. Peck, Esq., of Albany, N. Y., who has kindly given their names. A vast field is presented here to the enterprising *mycologist*, and it is to be hoped that it will soon be occupied by laborers competent to do it justice.

Theloschistes parietinus, L. March.

Cladonia degenerans, Flk. March. "Has the appearance of *C. mitrula*, T., but from the dark color of the apothecia I should refer it to *C. degenerans*, Flk."

FUNGI.

Agaricus (collybia) velutipes, Curt. March.

Polyporus boucheanus, Fr. March.

Peziza coccinea, Jacq. February.

This is one of the earliest fleshy fungi, and may be readily recognized by its beautiful little cup with scarlet lining. Grows on half decayed sticks.

SUMMARY.

Number of <i>Families</i>	98
Number of <i>Genera</i>	367
Number of <i>Species</i>	721

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