Dr. S. B. Woolworth,

Secretary of the Regents:

Sir—The following report for 1868 is respectfully submitted:

The specimens of plants known as the "Beck Collection" have been taken from the folios, poisoned, and arranged in the cabinet case prepared for them. A few folios, containing the undistributed specimens of the collection, yet remain, there not being room for them in the case without too close pressing.

The unmounted duplicate specimens of the State Herbarium have been arranged, with their proper labels, in the empty folios.

The number of specimens* of the State collection that have been poisoned and mounted is about one thousand five hundred, representing four hundred and ten species, distributed as follows: Phoenogamia, or flowering plants, one hundred and seventy-eight; Cryptogamia, or flowerless plants, two hundred and thirty-two; of which nine species are ferns, one hundred and eighty mosses, and forty-three are liverworts. The names of the species are given in the accompanying list, marked A.

In mounting the specimens of mosses, the species, so far as possible, have been represented by series of specimens illustrating the different forms, variations in size, aspect, etc. In most instances a single plant has been separated from the tuft and placed by itself on the species sheet, that it may be seen individually as well as collectively. When the genus contains several or many species, the specimens of it have been prefaced by arranging a single plant of each species side by side on one sheet, thus giving, as it were, a synopsis of the genus. Great care has been taken to select the best specimens that could be obtained, and to mount only clear, unmixed ones; a very important matter, surely, since these diminutive plants often

*The word specimens, when used in reference to the smaller Cryptogamia, denotes, not a single plant, but a moderate sized tuft or aggregation of individual plants.
grow so intermingled that a small tuft frequently contains several different species.

The time between May 12th and November 1st was spent in the field in making observations and collections. Specimens have been taken from the counties of Albany, Essex, Herkimer, Rensselaer, Greene, Richmond, Kings, Queens and Suffolk. The number of specimens collected is about four thousand, belonging to six hundred and ninety-seven species, of which three hundred and ninety species are new to the Herbarium; three hundred and seventy-eight new to the State flora, and three are new to science, and are now described for the first time. The distribution of these species among the classes and orders is given below in tabular form. A list of the names is given in a paper marked B. The desiderata especially supplied in the Phoenogamia is marked opposite the name in this list.

**TABULAR STATEMENT OF PLANTS COLLECTED.**

<table>
<thead>
<tr>
<th></th>
<th>No. of specimens. (Estimated.)</th>
<th>Species represented.</th>
<th>Species new to Herb'm.</th>
<th>Species new to State.</th>
<th>Species new to Science.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungi</td>
<td>700</td>
<td>173</td>
<td>173</td>
<td>173</td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>400</td>
<td>69</td>
<td>51</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td>Lichenes</td>
<td>900</td>
<td>105</td>
<td>105</td>
<td>105</td>
<td></td>
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<tr>
<td>Hepaticae</td>
<td>200</td>
<td>33</td>
<td>13</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Musci</td>
<td>800</td>
<td>98</td>
<td>23</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>Characeae</td>
<td>20</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Filices</td>
<td>15</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cryptogamia</td>
<td>3,035</td>
<td>488</td>
<td>372</td>
<td>371</td>
<td>1</td>
</tr>
<tr>
<td>Phoenogamia</td>
<td>1,000</td>
<td>209</td>
<td>18</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>4,035</td>
<td>697</td>
<td>390</td>
<td>378</td>
<td>3</td>
</tr>
</tbody>
</table>

Apart from the plants themselves, a small quantity of the seeds of two hundred and forty-two species has been collected. Seeds not only afford characters for comprehensive classification, but they also frequently furnish good marks for specific distinction; hence their presence in the Herbarium is quite important. With them it is possible, should a specimen, whose station is remote or exhausted, become lost, to replace it by raising a new plant. A list of the species of which seeds have been collected is marked C.
It is with pleasure that acknowledgment is made of the aid received from the botanists of the State. Several of them have contributed liberally and furnished specimens of some very rare and interesting plants. Though all are good, it seems but just to make special mention of the large contribution of fungi made by Dr. Howe, and numbering two hundred and sixty-seven species. The whole number of species represented by contributed specimens is three hundred and forty-six, of which two hundred and six were neither represented in the Herbarium nor among my collections of the past season. A list of the botanists with their contributions is given in a paper marked D.

It is an interesting fact that the past season appears to have been one prolific in white flowered varieties. Species which have been occasionally observed to produce white flowers appear to have manifested an unusual tendency in that way, while others have been found for the first time, so far as we know, with such flowers. Spiria tomentosa, L., Cirsium arvense, Scop., Malva moschata, L., Viola cucullata, Ait., Trifolium pratense, L., Statice limonium, L., Gentiana saponaria v. linearis, Gray, have been observed by me with white flowers, while Cypripedium arietinum, R. Br., Lobelia syphilitica, L., and Lobelia kalmii, L., have been reported to me; the last one, however, from Michigan. What natural causes or conditions produce this variation in the color of the flower, and how far may these causes be under human control?

People are desirous of knowing the uses of plants. "What is the use of these things" is almost the first question uttered by many in reference to the botanist's treasures. Mere boys have frequently propounded it to me, and indicated a willingness to look after "such things," could they be assured of any material benefit to be derived from them. All readily admit the value of our cultivated plants, but few consider the wild ones, and especially those of the lower orders, to be of any account or importance. But the cultivated ones have been brought into the service of man from Nature's broad field, and additions are occasionally made to their number. Doubtless plants are now to be found growing wild in our woods and waste places, which, by cultivation, might be made as valuable as those in our fields and gardens. Asclepias cornuti might rival the Asparagus plant, Apios tuberosa, the Potato, and several of the Leguminosae might come into equal value with Peas and Beans. But we may not look for useful plants among the higher orders alone. Mushrooms
have long been known to afford delicious and nutritious food. They are largely used in some of the countries of Europe, and have begun to be an article of commerce, and, preserved in cans, are brought to this country and offered for sale. In view of these facts, and of the increasing interest in the cultivation and use of these fungi in this country, it has been thought best to add brief remarks to the more important species of the Cryptogamia concerning their uses, and to note particularly those that are edible. The number of species of edible fungi already found in our State is thirty-three, a list of which is given in a paper marked E.

Further remarks upon these and other plants both useful and injurious, together with a record of those new to our State flora, descriptions of new species, etc., are given in a paper marked F.

A.

LIST OF SPECIES OF WHICH SPECIMENS HAVE BEEN MOUNTED.

Clematis ochroleuca, Ait.
Ranunculus flammula v. reptans.
Trollius laxus, Salisb.
Dentaria diphylla, L. 2 spms.
“ maxima, Nutt.
Sinapis nigra, L.
Viola selkirkii, Pursh.
Ascyrum crux-andreae, L.
Hypericum canadense, L.
 Arenaria greenlandica, Spreng.
Stellaria longifolia, Muhl.
“ borealis, Bigel.
Ceanothus ovalis, Bigel.
Acer spicatum, Lam.
“ dasycarpum, Ehrh.
Lespedeza stuiei, Nutt.
Baptisia tinctoria, R. Br. 2 spms.
Geum album, Gmelin. 2 spms.
“ virginianum, L.
Potentilla tridentata, Ait.
Parnassia caroliniana, Michx.
Circea alpina, L.
Epilobium hirsutum, L.
Gaura biennis, L.
Ludwigia alternifolia, L.
Rhedia virginica, L.

Ammannia humilis, Michx.
Cuphea viscosissima, Jacq.
Thaspium trifoliatum, Gray.
Aralia trifolia, Gray.
“ quinquefolia, Gray.
Cornus florida, L.
“ sericea, L.
Lonicer a ciliata, Muhl.
Viburnum acerifolium, L.
Houstonia caerulea, L.
Eupatorium sessilifolium; L.
Aster ericoides, L.
“ laevis, L. 2 spms.
“ undulatus, L.
Solidago thyrsoides, E. Meyer.
“ arguta, Ait.
“ bicolor v. concolor, Gray.
“ ulmifolia, Muhl.
“ mühlenbergii, T. & G.
Xanthium spinosum, L.
Galinsoga parviflora, Cav. 2 spms
Anthemis arvensis, L.
Artemisia biennis, Willd.
Cacalia snaveonla, L.
Senecio aureus, L.
Arnica mollis, Hook.
Sisyrhus oleraceus, L. 2 spms.
  " asper, *Vill.*
  " arvensis, L.
Gaylussacia resinosa, T. & G.
Vaccinium macrocarpon, *Ait.*
  " oxyoeeus, *L.*
  " uliginosum, L.
Pyrolo a elliptica, *Nutt.*
Primula mistassinica, *Michx.*
Lysimachia lanceolata, *Walt.*
Samolus valerandi, L.
Utricularia intermedia, *Hayne.*
  " gibba, L.
Catalpa bignonioides, *Walt.*
Veronica officinalis, L.
Gerardia pedicularia, *L.*
Pedicularis lanceolata, *Michx.*
Lycopbus europeus, L.
Origanum vulgare, L.
Lithospermum hirtum, *Lehm.*
Phlox subulata, L.
Gentiana saponaria v. linearis, *G.*
Chenopodium glaucum, L.
Atriplex rosea, L.
Polygonum acre, *H. B. K.*
Lindera benzoin, *Meisner.*
Dirca palustris, L.
Shepherdia canadensis, *Nutt.*
Callitrichia verum, L.
Aceldypha virginica v. gracilens.
Urtica urens, L.
  " dioica, L.
Carya porcina, *Nutt.*
  " alba, *Nutt.*
Abies canadensis, *Michx.*
Quercus ilicifolia, *Wang.*
  " obtusiloba, *Michx.*
Salix cordata, *Muhl.* 2 spms.
  " longifolia, *Muhl.* 3 spms.
Peltandra virginica, *Raf.*
Symlocarpus foetidus, *Salish.*
Lemna torreyi, *Aust.*
Sparganium simplex, *Huds.*
Najas major, *All.*
  " flexilis, *Rostk.* 2 spms.
  " indica v. gracillima.
Ruppia maritima, L. 2 spms.
Zannichellia palustris, L.
Potamogeton pectinatus, L.
  " praelongus, *Wolf.*
Potamogeton perfoliatus, L.
  " pauciflorus, *P'sh.*
  " hybridus, *Michx.*
  " lucens, L.
Triglochin maritimum v. elatum.
Habenaria dilatata, *Gray.*
  " obtusata, *Richardson.*
  " orbiculata, *Torr.*
  " hookeri, *Torr.*
  " fimбриata, *R. Br.*
Goodyera pubescens, *R. Br.*
Listera cordata, *R. Br.*
Arethusa bulbosa, L.
Pogonia verticillata, *Nutt.*
Corallorhiza multiflora, *Nutt.*
  " innata, *R. Br.*
Cypripedium spectabile, *Swartz.*
Trillium sessile, L.
  " grandiflorum, *Salish.*
Smilacina racemosa, *Desf.*
Erythronium americanum, *Sm.*
Ornithogalum umbellatum, L.
Luzula parviflora v. melanoarpa
Juncus trifidus, L.
  " nodosus, L. 2 spms.
  " articulatus, L.
  " scirpoides v. macrostemon.
Eleocharis intermedia, *Schultes.*
  " rostellata, *Torr.*
  " compressa, *Sulliv.*
Scripus caespitosus, L.
  " planifolius, L.
  " sylvaticus, L.
Eriophorum vaginatum, L.
Rhynchospora alba, *Vahl.*
  " fusca, *R. & S.*
Carex scirpoidea, *Michx.*
  " teretiuscula v. major, *K.*
  " alopecoidea, *Tuck.*
  " cephalophora, *Muhl.*
  " unescens v. vitilis, *Gray.*
  " sylvnocephala, *Carey.*
  " bigelovii, *Torr.*
  " torta, *Boott.*
  " aperta, *Boott.*
  " stricta v. strictior, *Gray.*
  " lenticularis, *Michx.* 2 spms
  " limosa, L.
  " irrigua, *Smith.*
  " platyphylla, *Carey.* 2 spms
Carex retrocurva, *Dew.* 2 spms.
" laxiflora v. blanda. *Gray.*
" novae-angliae, *Schr.*
" richardsonii, *R. Br.*
" houghtonii, *Torr.*
" lupulina v. gigantoidea, *G.*
" rostrata, *Michx.* 2 spms.
" hartii, *Dew.*
" utriculata, *Boott.* 2 spms.
" monile, *Tuck.*
" oligosperma, *Michx.*
Triticum caninum, *L.*
Alopecurus geniculatus, *L.*
" aristulatus, *Michx.*
Aristida tuberculosa, *Nutt.*
Bouteloua curtipendula v. aristo-
*Gray.*
Leptochloa fascicularis, *Gray.*
Tricuspis purpurea, *Gray.*
Bromus secalinus, *L.*
" kalmii, *Gray.*
" ciliatus, *L.*
Aira flexuosa, *L.*
Panicum xanthophyllum, *Gray.*
Andropogon furcatus, *Mühl.*

Filices.
Woodsia glabella, *R. Br.*
" ilvensis, *R. Br.*
" obtusa, *Torr.*
Aspidium spinulosum v. boottii.
Asplenium ebeneum, *Ait.*
Cheilanthes vestita, *Swartz.*
Ophioglossum vulgatum, *L.*
Botrychium lunarioides, *Swartz.*
" simplex, *Hitchcock.*

Musci.
Funaria flavigens, *Michx.*
" hygrometrica, *Hedw.*
Aphanorhegma serrata, *Sulliv.*
Physcomitrium pyriforme, *L.*
Schistostega osmundacea, *W. M.*
Tetraplodon mnioideas, *L. jil.*
Splennum ampullaceum, *L.*
Hedwigia ciliata, *Dicks.*
Racomitrium microcarpum, *B’d*
" sudeticum, *Funk.*
" fasciculare, *Brid.*
Racomitrium aciculare, *Brid.*
" ohneyi, *Sulliv.*
" leucopoea, *Greve.*
" pennsylvanica, *Sch’gr.*
Schistidium confertum, *Funk.*
" apocarpum, *Hedw.*
" agassizii, *S. & L.*
Timmia megapolitana, *Hedw.*
Aulacomnion turgidum, *Sch’gr.*
" palustre, "
Mniium circinoides, *Hub.*
" punctatum, *Hedw.*
" hornum, *Hedw.*
" serratum, *Brid.*
" lycepodioides, *Hook.*
" cuspidatum, *Hedw.*
" rostratum, *Schwägr.*
" drummondii, *Br. & Sch.*
" affine, *Bland.*
Bryum pallescens, *Schwägr.*
" pallens, *Swartz.*
" uliginosum, *Brid.*
" elongatum, *Dicks*
" nutans, *Schreb.*
" crundum, *Schreb.*
" annotinum, *Hedw.*
" wahlenbergii, *Schwägr.*
" pyriforme, *Hedw.*
" intermedium, *Brid.*
" binum, *Schreb.*
" pseudo-triquetrum, *Se’gr*
" roseum, *Schreb.*
" capillare, *Hedw.*
" caspicicum, *L.*
" atropurpureum, *W. & M.*
" argenteum, *L.*
Bartramia oederi, *Swartz.*
" pomiformis, *Hedw.*
" fontana, *Brid.*
" muhlenbergii, *Sch’gr.*
Conostomum boreale, *Swartz.*
Meesia uliginosa, *Hedw.*
" tristicha, *Funk.*
" longisetla, *Hedw.*
Atrichum undulatum, *Beauv.*
" angustatum, *Beauv.*
Pogonatum brevicaule, Brid.
  " urnigerum, Brid.
  " alpinum, Brid.
Polytrichum piliferum, Schreb.
  " juniperinum, H'w.
  " formosum, Hedw.
  " commune, L.
Diphyseum foliosum, W. & M.
Buxbaumia aphylla, Haller.
Fontinalis antipyretica v. gigantea, Sulliv., 2 spms.
Fontinalis novæ-angliae, Sulliv.
  " dalecarlica, Bry. Eur.
Dichelyma capillaceum, Dill.
  " falcatum, Hedw.
Pterigynandrum filiforme, T'm.
Leucodon brachypus, Brid.
Leptodon trichomitron, Mohr.
Anomodon viticulosus, L.
  " apiculatus, Bry. Eur.
  " obtusifolius, "
  " attenuatus, Schreb.
  " tristis, Cesati.
Leskea polycarpa, Ehrh.
  " obscura, Hedw.
  " nervosa, Schwoegr.
  " rostrata, Hedw.
  " denticulata, Sulliv.
Thelia hirtella, Hedw.
  " asprella, Schvp.
Myurella careyana, Sulliv.
  " julacea, Bry. Eur.
Anacampodon splachnoides, B.
Pylaisca subdenticulata, Schp.
  " intricata, Hedw.
  " velutina, Schp.
Homalotheicum subcapillatum.
Platygyrium repens, Brid.
Cylindrothecium eladorrizhans.
  " seductrix, Hedw.
  " brevisetum, Sp.
Neckera pennata, Hedw.
Homalia gracilis, James.
Climacium americanum, Brid.
  " dendroides, L.
Hypnum tamariscinun, Hedw.
  " delicatulum, Mull.
  " minutulum, Hedw.
  " pygmaeum, Bry. Eur.
  " sejatum, Beavv.
Hypnum abietinum, L.
  " blandowii, W. & M.
  " paludosum, Sulliv.
  " squarrosum, L.
  " triquetrum, L.
  " brevirostre, Ehrh.
  " splendens, Hedw.
  " umbratum, Ehrh.
  " alleghaniense, Mull.
  " hians, Hedw.
  " piliferum, Schreb.
  " sullivantii, Spruce.
  " strigosum, Hoffm.
  " diversifolium, Bry. E.
  " bosei, Schwoegr.
  " serrulatum, Hedw.
  " demissum, Wils.
  " cylindricarpmum, Mull.
  " reenrvans, Schwoegr.
  " molle, Dicks.
  " encyrium, Bry. Eur.
  " ochracecum, Turn.
  " montanum, Wils.
  " cuspidatum, L.
  " schreberi, Willd.
  " cordifolium, Hedw.
  " giganteum, Schp.
  " stramineum, Dicks.
  " sarmentosum, Wahl.
  " uncinatum, Hedw.
  " revolvens, Swartz.
  " fluitans, Hedw. 2 spms.
  " aduncum, Hedw. 2 spms.
  " sendtenri, Schp.
  " filicumum, L. 3 spms.
  " crista-estrensis, L.
  " imponens, Hedw.
  " reptile, Miche.
  " fertile, Sendt.
  " hamulosum, Bry. Eur.
  " curvifolium, Hedw.
  " haldanianum, Grev.
  " pratense, Koch.
  " rugosum, Ehrh.
  " nitens, Schreb.
  " salbosum, Hoffm.
  " laetum, Brid. 2 spms.
  " acuminatum, Beauv.
  " rutabulum, L.
  " plumosum, L.
Hypnum velutinum, L.
  "  rivulare, Brch.
  "  novae-angliae, S. & L.
  "  stellatum, Schreb.
  "  polymorphum, Brch.
  "  hispidulum, Brid.
  "  dimorphum, Brid.
  "  minutissimum, S. & L.
  "  subtile, Höffm.
  "  adnatum, Hedw.
  "  radicale, Brid.
  "  orthocladon, Beauv.
  "  noterophilum, S. & L.
  "  riparium, L.
  "  polygannum, Bry.Eur.
  "  lescurii, Sulliv.
  "  denticleatum, L.
  "  mühlenbeckii, Hartm.
  "  sylvaticum, L.
  "  pulchellum, Dicks.

Hepaticæ.
Riccia fluitans, L.
  "  natans, L.

Anthoceros levus, L.
Duvalia rupestris, Nees.

Reboulia hemisphaerica, Raddi.
Fegatella conica, Corda.
Preissia commutata, Nees.
Blasia pusilla, L.
Pellia epiphylla, Nees.
Steetzia lyelli, Lehm.
Chiloseyphus polyanthus, Corda.

Geocalyx graveolens, Nees.
Sphagnacectis communis, Nees.
Jungermannia trichophylla, L.
  "  convivens, Dicks.
  "  curvifolia, Dicks.
  "  catenulata, Hub.
  "  peckii, Aust.
  "  barbata, Schreb.
  "  taylorii, Hook.
  "  schraderi, Mart.
  "  inflata, Huds.
  "  spahellata, Gies.
  "  obtusifolia, Hook.
  "  incisa, Schrad.
  "  exsecta, Smith.

Scapania nemorosa, Nees.
Sarcoseyphus elrharti, Corda.

Frullania grayana, Mont.
  "  aeolitis, Nees.
  "  virginica, Gottsche.
  "  eboracensis, Göttscche.

Lejunia serpyllifolia, Libert.
Radula complanata, Dumort.
  "  obconica, Sulliv.

Madothecia platyphylla, Dumort.
  "  porella, Nees.

Ptilidium ciliare, Nees.
Trichocolea tomentella, Nees.
Sendtnera juniperina, Nees.

Mastigobryum trilobatum, Nees.
  "  deflexum, Nees.

Calypogeia trichomanis, Corda.
B.

PLANTS COLLECTED.

( Flowering Plants—Phænogamia.)

Anemone pennsylvanica, L. Fr.
Hepatica triloba, Chaix.
" acutiloba, DC.
Coptis trifolia, Salisb.
Ranunculus recurvatus, Poir.
" fascicularis, Muhl.
Trollius laxus, Salisb. Fr.
Thalictrum purpurascens, L. Fls.
" cornuti, L. Fr.
" anemonoides, Me.
Sanguinaria canadensis, L.
Nymphæa minor, * DC.
Sarracenia purpurea, L.
Dentaria laciniata, Muhl. Root.
Barbarea vulgaris, R. Br.
Arabis hirsuta, * Scop.
" canadensis, L.
Lepidium campestre, L.
Nasturtium armoracia, Fr.
Viola canadensis, L.
" pubescens, Ait. Fr.
" v. eriocarpa, * Nutt.
" v. scabrinucula, * T. & G.
" cucullata, Ait. Whitish fls.
" v. cordata, * Gr.
" pedata, L.
Hypericum canadense v. major, *
Elatine clintoniana, * Peck.
Silene noctiflora, L.
" stellata, Ait. Fr.
Althæa officinalis, L. Fr.
Malva moschata, * L.
Rhus copallina, L.
Vitis cordifolia, Michx. Fr.
Rhamnus alnifolius, L’Her. Fr.
Acer spicatum, Lam. Fr.
Lupinus perennis, L. Fr.
Trifolium pratense, L. Wh. fls.
Robinia pseudacacia, L.
Lespedeza stuevi, Nutt. Fr.
Lathyrus palustris, L. Nar. lvs.
Apios tuberosa, Mæch. Tubers.

Cassia chamaecrista, L.
" nictitans, L.
Prunus maritima, Wang.
" pumila, L.
Spiraea tomentosa, L. Wh. fls.
Fragaria vesca, L.
Rubus strigosus, Michx. Fr.
" neglectus, * Peck.
" occidentalis, L. Fr.
" hispidus, L. Fr.
Rosa carolina, L.
Crataegus crus-galli, L.
Epilobium hirsutum, L.
" palustre v. linearis.
Enothera pumila, L.
Mitella unda, L. Fr.
Ribes laeustre, Poir. Fr.
" floridum, L.
Sanicula canadensis, L.
" marilandica, L.
Zizia integerrima, DC.
Cryptotaenia canadensis, DC.
Apium graveolens, * L.
Lonicer a oblongifolia, Muhl. Fr.
Cornus canadensis, L. Fr.
Viburnum opulus, L.
" pubescens, Pursh.
" nudum, L. Nar. lvs.
Galium boreale, L.
" triflorum, Michx.
" trifidum v. pusillum, * Gr.
Eupatorium teurcifolium, Willd.
Aster flexuosus, Nutt. Dwarf.
" linifolius, L.
Erigeron annunn, Pers.
" philadelphicum, L.
Solidago cesia, L.
" muhlenbergii, T. & G.
" thyrsoides, E. Meyer.
" virga-aurea, L.
Baccharis halimifolia, L.
Bident e cernua, L. Dwarf.

* Not before represented in the State Herbarium.

[Sen. No. 87.]
Nabalus fraseri, DC.
Hieracium scabrum, Michx.
Helianthus annuus, L. Dwarf.
Lactuca canadensis.
Lobelia salmioides, L. Simple form.
Campanula aparinoidea, Pursh.
Vaccinium stamineum, L. Fr.
Vaccinium cespitosum, Michx.
Lactuca canadensis, L.
Lobelia kalmii, L. Simple form.
Dortmanna, Z, Dwarf.
Campanula aparinoides, Puls h.
Vaccinium stamineum, L. Fr.

*Not before represented in the State Herbarium.
Juncus nodosus, L.
" canadensis v. coareatus.
" " v. longicandatus, Engm.
" articulatus, L.
" alpinus v. insignis, Fr.
" maritimus, Lam.
Rhyneohespora capillacea, Torr.
Carex siecata, Dew.
" gynocrates v. substamina-
" stellulata v. scirpoides, Gr.
" laxiflora v. blanda, Gray.
" varia, Muhl.
" pennsylvanica, Lam.
" arctata, Boot.
" tuckermanii, Boot.
" straminea v. tenera, Gr.

Carex scoparia, Schk.
" emmonsii, Dew.
" rosea v. radiata, Dew.
" pauciflora, Lightf.
" vulpinoides, Miech.
" lagopodioides, Schk.
" tentaculata v. gracilis, Bl.
" scirpoidae, Miech.
Brizopyrum spicatum, H. Root.
Eragrostis reptans, Nees.
" pectinacea, Gray.
" pumilioides, Beavw.
Panicum clandestinum, L.
" depauperatum, Muhl.
" latifolium, L.
Calamagrostis canadensis, Beavw
Triticeum repens, L. Root.

(Flowerless Plants — Cryptogamia.)

Ferns—Filices.
Woodwardia angustifolia. Sm.
Phegopteris hexagonoptera, Fée.
Pellaea gracilis, H.

Mosses—Musci.
Sphagnum rigidum, Schp.
" sedoides, Brid.
" wallianum, Angst.
" girgensohnii, Russ.
" faricium, Lindbg.
" lindenbergi, Schp.
" subsecundum v. contort-
" um, Nees.
" recurvum, Beavw.
" squarrosum, Pers.
" cymbifolium v. congestum,
" Bry. Eur.*
" acentifolium, Ehrh.
Andreae erassinervia,* Breh.
" rupestris, Turn.
Weisia viridula, Brid.
Rhabdoweisia fugax, Bry. Eur.
" denticulata.
Gymnostomum rupestre, Schgr.
" curvirostrum.
Astomum sullivantii,* Bry. Eur.
Anodus donians,*

Tetraphis pellucida, Hedw.
Dicranum montanum, Hedw.
" rufescens, Turn.
" heteromallum, Hedw.
" flagellare, Hedw.
" elongatum, Schwgr.
" longifolium, Hedw.
" spurium,* Hedw.
Paludella squarrosa,* L.
Fissidens osmundoides, Hedw.
Barbula fragilis,* Wils.
" mucronifolia, Schgr.
Didymodon rubellus, Roth.
Blüthia acuta, Dicks.
Encalypta ciliata,* Hedw.
Amphoridium lapponicum, Sch.
" mougeotii,* Schp.
" peckii,* Sulliv.
Racemitrium sudeticum, Funk.
Drummondia clavellata, Hook.
Orthotrichum obtusifolium, Sed.
" anomum, Hedw.
" strangulatum, Beavw.
" canadense, Schp.
" ludwigii, Brid.
" hutchinsiae, H-T.
Coscinodon pulvinatus,* Br. Eu.
Pogonatum urnigerum, Brid.

* Not before represented in the State Herbarium.
Polytrichum commune, L.
  " fornosum, Hedw.
Mnium affine, Bland.
  " stellare,* Hedw.
  " medium,* Schip.
  " cuspidatum, Hedw.
  " drummondii, Br. & Sch.
Timmia megapolitana, Hedw.
Amblyodon dealbatus,* Beauv.
Bryum pallens, Swartz.
  " binum, Schreb.
  " pyriforme, Hedw.
  " pseudo-triquetrum, Schgr.
  " nutans, Schreb.
Aulacomnion palustre, Schwagr.
Buxbaumia aphylla, Haller.
Fontinalis nove-anglica, Sulliv.
Lencodon brachyplus, Brid.
Myrella careyana, Sulliv.
Pylaisiea velutina, Schp.
Aphanorhegma serrata, Sulliv.
Hypnum denissum, Wilc.
  " fluitans, Hedw.
  " sendtneri, Schp.
  " revolvens, Swartz.
  " turfaceum,* Lindbg.
  " pratense, Koch.
  " radicale, Brid.
  " orthocladon, Beauv.
  " delicatulum, Mull.
  " giganteum, Schp.
  " sullivantii, Spruce.
  " plumosum, L.
  " populeum v. rufescens,*
  " stramineum, Dicks.
  " stellatum, Schreb.
  " gracile,* Bry. Eur.
  " nitens, Schreb.
  " schreberi v. montanum,*
  " cuspidatum, L.
  " scorpioides,* L.
  " strigosum, Hoffm.
  " polymorphum, Breh.
  " brevirostre, Ehrlh.
  " splendidus, Hedw.
  " seiptum, Beauv.
  " blandowii, W. & M.
  " serpens, L.

Homalia jamesii,* Schp.

LIVERWORTS—Hepaticae.
Riccia sullivantii,* Aust.
Anthoceros laevis, L.
Marchantia polymorpha,* L.
Preissia commutata, Nees.
Duvalia rupestris, Sulliv.
Pellia epiphylla, Nees.
Grindalia barbifrons,* Raddi.
Reboulia hemispharica, Raddi.
Anura palmata,* Nees.
Metzgeria pubescens,* Raddi.
  " turgata,* Nees.
Geocalyx graveolens, Nees.
Plagiochila spinulosa,* N. & M.
  " asplenioides,*
Sphagnoecetis communis, Nees.
Jungernannia obtusifolia, Hk.
  " trichophylla, L.
  " setiformis,* Ehrlh.
  " curvifolia, Dicks.
  " connivens, Dicks.
  " catenulata, Hub.
  " inflata, Hedl.
  " bicuspida, L.
  " divaricata,* Sm.
Frullania grayana, Mont.
  " eboracensis, Lefln.
  " hutchinsiae,* Nees.
Lejumia serpyllifolia, Libert.
Radula complanata, Dumont.
  " pallens,* Nees.
Ptilidium ciliare, Nees.
Trichocolea tomentella,* Nees.
Lepidozia reptans, Nees.

(LICHENS—Lichenes.)
Usnea barbata, Fr.
  " " v. florida, Fr.
  " " v. hirta, Hoffm.
  " " v. dasypoga, Fr.
  " " longissima, Ach.
Alectoria jubata v. chalybeiformis, Ach.
  " " v. implexa, Fr.

* Not before represented in the State Herbarium.
Evernia prunastri, Ach.
Evernia furfuracea, Mann.

" v. eladonia, Tk.
Ramalina calicaris v. fastigiata.

" v. farinacea.
" v. inflata.
Cetraria aculeata, Fr.

" islandica, Ach.
" cuneillata, Ach.
" ciliaris, Ach.
" lacunosa, Ach.
" oakesiana, Tuck.
Solorina saccata, Ach.

Nephroma arcticum, Fr.

" tomentosum, Körb.
" tom. v. helveticum.
" levigatum, Ach.
" lav. v. papyraceum.
Peltigera aphthosa, Hoffm.

" canina, Hoffm.
" polydactyla, Hoffm.
" horizontalis, Hoffm.
Sticta pulmonaria, Ach.

" glomerulifera, Delise.
" quercizans, Ach.
" sylvatica, Ach.
Parmelia perlata, Ach.

" v. olivetorum, Ach.
" crinita, Ach.
" tiliacea, Fr.
" saxatilis, Ach.
" conspersa, Ach.
" olivacea, Ach.
" stygia, Ach.
" physodes v. entermorpha, Tuck.
Physcia stellaris, Wallr.

" v. tribracia, Fr.
" cesia v. angustior, Fr.
" obscura, Nyl.
" v. erythrocordia, Tk.
" aquila v. detonsa, Tk.
" pulverulenta, Fr.
" speciosa, Ach.

Physcia speciosa v. leucomela.

Pyxine cocoes v. sorediata, Tk.

Theleschistes parietinus, Norm.

" par. v. polyvarepus, Fr.
" chrysophthalmus.

Placodium rupestre, Tuck.

Placodium aurantiacum, Lightf.

" aur. v. flavovirescens, Fr.

Gyrolea lutea, Tuck.

Lecanora pallida, Scher.

" pallescens, Scher.
" tartarea, Ach.
" v. frigida, Ach.
" subfusca, Ach.
" varia, Ach.
" cinerea, Fr.
" atra, Ach.
" muralis, Scher.
" elatina v. ochrophylla.

Lecidea contigua, Fr.

" albocerulescens.
" enteroleuca, Fr.
" sanguinaria, Ach.

Buellia parasitica, Körb.

" myriocarpa, Tuck.
" petraea, Tuck.
" lactea, Körb.

Biatora atropurpurea, Ach.

" sanguineoatra, Fr.
" rufigrana, Tuck.
" viridescens, Fr.
" vernalis, Fr.
" chlorantha, Tuck.

Baenomyces aeruginosus, DC.

Cladonia cespiticia, Flěrck.

" pyxidata, Fr.
" v. symphicarpa, Fr.
" gracilis, Fr.
" v. hybrida, Fr.
" v. elongata, Fr.

Cladonia gracilis v. taurica.

" degenerans, v. cariosa.
" fimbriata, Fr.
" v. adpersa.
" squamosa, Hoffm.
" v. delicata.
" fureata, Flěrck.
" v. racemosa, Flěk.
" v. substulata, Flěk.
" rangiferina, Hoffm.
" v. alpestris.

" amanorea, Flěrck.
" uncialis, v. turgescens.
" mitrula, Tuck.
" cornucopioides, Fr.
" cristatella, Tuck.
Pilophorum fibula, Tuck.
Stereocalon tomentosum, Fr.
" paschale, Ach.
Urecolaria scrooposa, Ach.
Pannaria microphylla, Mass.
" lanuginosa, Ach.
Pertusaria pertusa, Ach.
" v. areolata.
" velata, Nyl.
" v. multipuncta.
" wulfenii, Dec.
" globularis, Ach.
Conotrema urceolatum, Tuck.
Pyrenula nittida, Ach.
Trypetlielium virens, Tuck.
Graphis scripta, Ach.
Umbilicaria muhlenbergii, Th.
" pustulata, v. papulosa.
" proboscidea, DC.
" hirsuta, Ach.
" dilleni, Tuck.
Collema flaccidum, Ach.
" rysssoleum, Tuck.
Leptogium tremelloides, Fr.
" lacernum, Fr.
" chloromelum, Nyl.
" saturninum, Nyl.

SEA-WEEDS—Algæ.
Chondria dasyphylla, Ag.
" baileyana, Mont.
" tenuissima, Ag.
Gelidium corneum, Lamour.
Polysiphonia subtilissima, Mont.
" olneyi, Harv.
" harveyi, Bail.
" variegata, Ag.
" nigrescens, Grev.
Bostrychia rivularis, Harv.
Dasya elegans, Ag.
Champia parvula, Harv.
Corallina officinalis, L.
Grinnelia americana, Harv.
Delesseria sinnosa, Lamour.
Gracilaria multipartita, J. Ag.
Solieria chordalis; J. Ag.
Polyides rotundus, Grev.
Rhodymenia palmata, Grev.
Phyllophora brodiae, J. Ag.
Anhfélia plicata, Fr.

Chondrus crispus, Lyngb.
Chylocladia baileyana, Harv.
Spyridia filamentosa, Harv.
Ceramium rubrum, Ag.
" rub. v. decurrens.
" diaphanum, Roth.
" fastigiatum, Harv.
" arachnoideum, Ag.
Callithamnion baileyi, Harv.
" byssoidesum, Arn.
Sargassum vulgare, Ag.
" montagnei, Bail.
Fucus nodosus, L.
" vesiculosisus, L.
" scorpioides, Fl. Dan.
Laminaria fascia, Ag.
" saccharina, Lamour.
Desmarestia viridis, Lamour.
Stilophora rhizodes, J. Ag.
Dictyocephalon tenue, Grev.
Chordaria flagelliformis, Ag.
" divaricata, Ag.
Leathesia tuberiformis, Gray.
Ectocarpus viridis, Harv.
" littoralis, Lyngb.
Chorda filum, Stack.
Punctaria latifolia, Grev.
" tenuissima, Grev.
Bryopsis plumosa, Lamour.
Porphryra vulgaris, Ag.
Enteromorpha intestinalis, Link.
" compressa, Grev.
" clathrata, Grev.
Ulva latissima, L.
" linza, L.
Hormotrichum younganum, Dw.
Chetomorpha tortuosa, Dw.
" linum, Kutz.
Cladophora arcta, Dw.
" glaucescens, Griff.
" refracta, Roth.
" fracta, Fl. Dan.
" glomerata, L.
Rhizocladium riparium, Roth.
Chetophora pisiformis, Ag.
" endiviatolia, Ag.
Drapparnalia glomerata, Ag.
Batrachospermum moniliforme.
Xostoe commune, Vaucl.
Characeæ.
Nitella flexilis, Ag.
" mucronata v. flabellata.
" acuminata v. glomerulifera, A. Br.
Chara coronata, Ziz.
" fragilis, Desc.
" fecunda, A. Br.
" contraria, A. Br.

Mushrooms—Fungi.
Agaricus mappa, Batsch.
" racemodes, Vitt.
" melleus, Vahl.
" nebularis, Batsch.
" laeatus, Scop.
" radicatus, Bull.
" ochropurpureus, Berk.
" ostreatus, Jaeq.
" salignus, Pers.
" petaloides, Bull.
" atroceruleus, Fr.
" prunulus, Scop.
" polychrons, Berk.
" campestris, L.
" epixanthus, Paul.
" sphagnorum, Pers.
" orella, Bull.
" curtisi, Berk.
Coprinus comatus, Fr.
" atramentarius, Bull.
" domesticus, Pers.
" plicatilis, Curt.
" ephemerus, Fr.
Hygrophorus cinnabarinus, Fr.
" conicus, Fr.
Lactarius torminosus, Fr.
" piperatus, Fr.
" indigo, Fr.
" volemus, Fr.
" chrysorhens, Fr.
" angustissimus.
Rusula emetica, Fr.
" alutacea, Fr.
Cantharellus tubæformis, Bull.
" crispus, Fr.
Marasmius planeus, Fr.
" rotula, Fr.
Lentinus lecontei, Fr.
Panus stypticus, Fr.
Panus dorsalis, Fr.
Schizophyllum commune, Fr.
Lenzites betulina, Fr.
" sepiaria, Fr.
" bicolor, Fr.
Boletus elegans, Fr.
" bovinus, L.
" seaber, Bull.
" fellens, Bull.
Daedalea cineræa, Fr.
" confugiosa, Bull.
Gloeoporus nigropurpureus, Fr.
Polyopus ovinus, Schaff.
" tomentosus, Fr.
" perennis, Fr.
" boucheanus, Fr.
" elegans, Fr.
" lacus, Fr.
" rapidus, Fr.
" adustus, Fr.
" ceriflum, B. & C.
" resinous, Fr.
" subfuscus, Fr. ?
" planatus, Fr.
" igniarus, Fr.
" sentellatus, Fr.
" carneus, Nees.
" cinnabarinus, Fr.
" biforis, Kl.
" hirsutus, Fr.
" hirsutulus, Schw.
" versicolor, Fr.
" abietinus, Fr.
" occidentalis, Kl.
" medulla-panis, Fr.
" laceratus, Berk.
" luridus, B. & C.
Merulius tremellosus, Schrad.
Fistulinæ hepatica, Fr.
Craterellus cornucopioides, P.
Thelephora pallida, Schw.
Hydnum repandum, L.
" suaveolens, Scop.
" gelatinosum, Scop.
" cirrhatum, Pers.
" coralloides, Scop.
Irпex tulipiferæ, Schw.
" deformis, Fr.
Irpex cinnamomeus, Fr.
Stereum fasciatum, Fr.
" complicatum, Fr.
" purpureum, Pers.
" spadiceum, Fr.
" ochraceo-flavum, Schw.
" bicolor, Fr.
" tabacinum, Fr.
Corticium oakesii, B. & C.
Clavaria botrytis, Pers.
" stricta, Pers.
" inaequalis, Fr.
Spathularia flavida, Pers.
Pistillaria muscicola, Fr.
Tremella aurantia, Schw.
Exidia auricula-judae, Fr.
" glandulosa, Fr.
Lycoperdon gemmatum, Batsch.
" pyriforme, Schaff.
" calvescens, B. & C.
" Wrightii, B. & C.
Bovista plumbea, Pers.
Scleroderma vulgaris, Fr.
Geaster hygrometricus, Pers.
Lycogala epidendrum, L.
Æthalium septica, Fr.
Diderma globosum, Pers.
" citrinum, Fr.
Didymium xanthopus, Fr.
Stemonitis farrnginea, Ehrh.
Dietydium micocarpum, Shd.
Cribraria purpurea, Schrad.
" intricata, Schrad.
Areyria cinerea, Fl. Dan.
Trichia rubiformis, Pers.
" clavata, Pers.
Cyathus campanulatus, Fr.
Diplodia viticola, Desm.
Nemaspora crocea, Pers.
Myxosporium nitidum, B. & C.
Uredo solidaginis, Schw.
" luminata, Schw.
Uredo effusa, Strauss.
" leguminosarum, Lk.
" pyrole, Strauss.
Uromyces lepideze-violacea.
Ustilago maydis, Corda.
" urecolorum, DC.
" utriensosa, Nees.
Rustelia lacerata, Sow.
Æcidium grossulariae, DC.
" houstonianum, Schw.
" sambucii, Schw.
" hydnoidenum, B. & C.
Tubercularia vulgaris, Tode.
Polythorganum trifolii, Kze.
Morchella eesuleata, Pers.
Geoglossum hirsutum, Pers.
Peziza macropus, Pers.
" scutellata, L.
" calycina, Schw.
" eyathoida, Bull.
" agassizii, B. & C.
" citrina, Batsch.
Bulgaria sarcoides, Fr.
Dichaena faginea, Fr.
Rhytisma solidaginis, Schw.
" acerinum, Fr.
" decolorans, Fr.
" pruin, Fr.
" punctatum, Fr.
Hysterium lineare, Fr.
Xylaria polymorpha, Pers.
" hypoxylon, Ehrh.
Hypocrea lactiflorum, Schw.
Hypoxylon ustulatum, Bull.
" cohaerens, Pers.
" fragiforme, Pers.
Diatrype diciformis, Fr.
Valsa nivea, Fr.
Depazea brunnea, B. & C.
" cruenta, Fr.
Asterina gaultheriae, Curt.
Eustilbium rehmania, Rubenh.
LIST OF SPECIES OF WHICH SEEDS HAVE BEEN COLLECTED.

Clematis virginiana, \textit{L.}
Hepatica acutiloba, \textit{Chaix.}
Thalictrum dioicum, \textit{L.}
" cornuti, \textit{L.}
" purpurascens, \textit{L.}
Ranunculus abortivus, \textit{L.}
" recurvatus, \textit{Poir.}
" fasciolaris, \textit{Michx.}
Aquilegia canadensis, \textit{L.}
Caltha palustris, \textit{L.}
Trollius laxus, \textit{Salisb.}
Actaea spicata var. alba, \textit{Michx.}
Corydalis glauca, \textit{Pursh.}
Cardamine hirsuta, \textit{L.}
Arabis hirsuta, \textit{Scop.}
" canadensis, \textit{L.}
Polanisia graveolens, \textit{Raf.}
Viola pedata, \textit{L.}
" pubescens v. seabriuscula.
Helianthemum canadense, \textit{Mx.}
Parnassia caroliniana, \textit{Michx.}
Hypericum ellipticum, \textit{Hook.}
" canadense, \textit{L.}
" sarothra, \textit{Michx.}
Elodea virginica, \textit{Nutt.}
Silene stellata, \textit{Ait.}
" noctiflora, \textit{L.}
Lychnis githago, \textit{Lam.}
Arenaria GREENLANDICA, \textit{Spreng.}
" serpyllifolia, \textit{L.}
Lechea major, \textit{Michx.}
Lechea minor, \textit{Lam.}
" thymifolia, \textit{Pursh.}
Drosera rotundifolia, \textit{L.}
Mollugo verticillata, \textit{L.}
Portulaca oleracea, \textit{L.}
Malva rotundifolia, \textit{L.}
Abutilon avicennae, \textit{Gaert.}
Linum usitatissimum, \textit{L.}
Geranium maculatum, \textit{L.}
Rhins toxicodendron, \textit{L.}
Vitis cordifolia, \textit{Michx.}
Rhamnus alnifolius, \textit{L'Her.}
Ceanothus americanus, \textit{L.}
Lupinus perennis, \textit{L.}

Melilotus officinalis, \textit{Willd.}
" alba, \textit{Lam.}
Robinia pseudacacia, \textit{L.}
Lespedeza violacea, \textit{Pers.}
Lathyrus palustris, \textit{L.}
Amplicarpae monoeica, \textit{Nutt.}
Medicago lupulina, \textit{L.}
Baptisia tinctoria, \textit{R. Br.}
Genum virginianum, \textit{L.}
Prunus virginiana, \textit{L.}
Agrimonia eupatoria, \textit{L.}
Rubus odoratus, \textit{L.}
" strigosus, \textit{Michx.}
" occidentalis, \textit{L.}
" villosus, \textit{Ait.}
" canadensis, \textit{L.}
Rosa rubiginosa, \textit{L.}
Rhedia virginica, \textit{L.}
Enothera biennis, \textit{L.}
Epilobium hirsutum, \textit{L.}
" coloratum, \textit{Muhl.}
Ribes cynosbati, \textit{L.}
Penthorum sedoides, \textit{L.}
Saxifraga virginiensis, \textit{Michx.}
Mitella diphylla, \textit{L.}
" nuda, \textit{L.}
Hamamelis virginica, \textit{L.}
Daucus carota, \textit{L.}
Pastinaca sativa, \textit{L.}
Aralia nudicaulis, \textit{L.}
Cornus canadensis, \textit{L.}
" florida, \textit{L.}
Lonicerat oblongifolia, \textit{Muhl.}
Viburnum opulus, \textit{L.}
" acerifolium, \textit{L.}
Mitchella repens, \textit{L.}
Valeriana sylvestra, \textit{Rich.}
Vernonia noveboracensis, \textit{Willd.}
Eupatorium ageratoides, \textit{L.}
" perfoliatum, \textit{L.}
Diplopappus umbellatus, \textit{T. d. G.}
Iva frutescens, \textit{L.}
Ambrosia trifida, \textit{L.}
" artemisieifolia, \textit{L.}
Xanthium strumarium, \textit{L.}

[Sen. No. 87.]
Helianthus giganteus, L.
" strumosus, L.
" decapetalus, L.
" divaricatus, L.
Bidens bipinnata, L.

Cirsium lanceolatum, Scop.
" discolor, Sprreg.
" muticum, Michx.
Lappa major, Gart.

Krigia virginica, Willd.

Galinsoga parviflora, Cav.

Hieracium venosum, L.
" scabrum, Michx.
" gronovii, L.
" arenaria, Nutt.

Amaranthus retroflexus, L.

Polygonum incanatum, Ell.
" tenue, Michx.
" dumetorum, L.
" sagittatum, L.
" hydropiper, L.
" aviculare, L.
" persicaria, L.

Rumex verticillatus, L.

Lindera benzoin, Meisner.

Euphorbia polygonifolia, L.

Euphorbia platypylla, L.

Empetrum nigrum, L.

Urtica urens, L.

Bebmeria cylindrica, Willd.

Myrica gale, L.
" cerifera, L.

Comptonia asplenifolia, Ait.

Betula leuca, L.
" papyracea, Ait.
" alba v. populifolia, Spb.

Alnus viridis, DC.
" serrulata, Ait.

Pinus rigida, Miller.

Abies nigra, Poir.

Sparganium simplex, Huds.

Najas flexilis, Rostk.

Potamogeton claytonii, Tuck.
" oakesianus, Robb.

Scheuchzeria palustris, L.

Sagittaria variabilis, Engelm.

Corallorhiza multiflora, Nutt.

Sisyrochilium bernudiana, L.

Smilax glanca, Walt.

Trillium erectum, L.
" erythrocarpum, Michx.

Stribtopus amplexifolius, DC.

Clintonia borealis, Raf.

Smilacina racemosa, Desf.
Asparagus officinalis, L.
Lilium canadense, L.
Juncus maritimus, Lam.
  " marginatus, Rostk.
  " bufinus, L.
  " tenuis, Willd.
  " articulatus, L.
  " alpinus v. insignis, Fr.
  " nodosus, L.
  " canadensis, J. Gay.
Cyperus michauxianus, Schultes.
  " grayii, Torr.
  " filiculmis, Vahl.
  " nuttallii, Torr.
Eleocharis obtusa, Schultes.
Scurpus pauciflorus, Light.
  " pungens, Vahl.
  " planifolius, Muhl.
Eriophorum alpinum, L.
  " polystachyon, L.
Rhynchospora glomerata, Vahl.
Carex pauciflora, Light.
  " sicata, Dew.
  " teretiscula, Good.
  " vulpinoidea, Michx.
  " rosea var. radiata, Dew.
Carex chordorrhiza, Ehrh.
  " canescens, L.
  " deweyana, Schwein.
  " stellulata, L.
  " scoparia, Schk.
  " lagopodioides, Schk.
  " straminea, Schk.
  " aquatilis, Wahl.
  " stricta, Lam.
  " limosa, L.
  " irrigua, Smith
  " laxiflora v. blanda, Gray.
  " pedunculata, Muhl.
  " ennomusii, Dew.
  " pennsylvanica, Lam.
  " arctata, Boott.
  " extensa, Good.
  " filiformis, L.
  " vestita, Willd.
  " tentaculata v. gracilis.
  " intumescentis, Rudge.
  " folliculata, L.
  " monile, Tuck.
  " lenticularis, Michx.
Panicum clandestinum, L.
Andropogon furcatus, Muhl.

D.

SPECIMENS OBTAINED BY CONTRIBUTION AND EXCHANGE.

From W. R. Gerard, Poughkeepsie.

Salsola kali, L.
Iris ochroleuca?
Leucanthemum vulgare v. tubuliflorum, Tenney.
Linaria vulgaris v. peloria.
Viola tricolor v. arvensis, DC.

From G. T. Stevens, M. D., Albany.

Pinus inops, Ait.

From S. H. Wright, M. D., Penn Yan.

Sedum telephioides, Michx.
Rosa rubiginosa, L.
Vallisneria spiralis, L.
Rumex orbiculatus, Gray.
Carex gynandra, Schw.
Carex extensa, Good.
“ alata, Torr.
“ intunescens, Rudge.
“ retrorsa v. hartii, Gray.
“ tuckermani, Boott.
“ retroflexa, Muhl.
“ stricta v. xerocarpa, Gray.

From E. L. Hankenson, Newark.

Rosa setigera, Michx.
Vaccaria vulgaris, Host.
Scirpus panniculatus, Lightf.
“ smithii, Gray.
Nymphaea tuberosa, Paine.
Atriplex patula v. littoralis, Gray.
Polygonum incanum, Ell.
Potentilla paradoxa, Nutt.
Calendula officinalis, L.

From G. B. Brainard, Brooklyn. (Algae mounted.)

Delesseria leprieurei, Harv.
Rhodomenia rochei, Harv. 3 specimens.
Chylocladia baileyana v. divaricata, Harv.
Spyridia filamentosa, Harv.
Polyisophonia formosa, Suhr. 4 specimens.
“ fastigiata, Grev.
“ nigrescens, Grev.
Callithamnion corymbosum, Ag.
“ hyssoides, Arn.
“ americanum, Harv. 2 specimens.
Griffithsia corallina v. tenuis, Harv.
Cystoclonium purpurescens, Kutz.
Cladostephus spongiosus, Ag.
Asperococcus echinatus, Grev.
Dictyosiphon foniculaceus, Grev.
Mesogloia vermicularis, Ag.? 
Fucus ceranoides, Ag.
Sargassum bacciferum, Ag.
Punctaria tenuissima, Grev. 2 specimens.
Chaetophora pisiformis, Ag.

From C. F. Austin, Closter, N. J.

Cynosurus eristatus, L.
Danthonia compressa, Aust.
Dieranum schreberi, Hedw.
Barbulia fallax, Bry. Eur.
Fissidens exigius, Sulliv.
Homalia jamesii, Schwp.
Leskea nervosa, Schwgr.
From T. F. Allen, M.D., New York.
Wolffia columbiana, Kursten.

From V. Colvin, Albany.
Homalia gracilis, James.

From B. D. Gilbert, Utica. (By exchange.)
Habenaria rotundifolia, Richardson.
Calypso borealis, Salish.
Lamium album, L.
Viola cucullata, var., Ait.

From Hon. G. W. Clinton, Buffalo.
Lunularia vulgaris, Mich.

From E. C. Howe, M.D., Fort Edward.
Carex tuckermani, Boott.
" sparganioides, Muhl.
" stellulata v. scirpoides, Gray.
" vulpinoidea, Michx.
" scoparia, Schk.
" lagopodioides, Schk.
" cephalophora, Muhl.
" hystricina, Willd.
" lupulina, Muhl.
" retrocurva, Dew.
" irrigua, Sm.
Fimbristylis capillaris, Gray.
Cyperus grayii, Torr. Var.
Asplenium ebeneum, Ait. Var.
Onoclea sensibilis, L. Var. near obtusilobata, Torr.
Isoetes echinospora v. braunii, Engelm.
Anacampodon splachnoides, Brid.
Hypnum nitens, Schreb. Var.
Agaricus mappa, Batsch.
" procerus, Scop.
" rachodes, Vitt.
" cristatus, Bolt.
" melleus, Vahl.
" laccatus, Scop.
" radicatus, Bull.
" velutipes, Curt.
" ochropurpureus, Berk.
" epipterygius, Scop.
" ostreatus, Jacq.
" salignus, Pers.
" semiornicularis, Bull.
Agaricus semicaptus, B. & C.

" atrocoeruleus, Fr.

" applicatus, Batsch.

" curtisi, Berk.

" polycephrus, Berk.

" campestris, L.

" arvensis, Schuff.

" cretacens, Fr.

" sublateritius, Schaff.

" epixanthus, Paul.

" orcella, Bull.

" subinvolutus, Batsch.

" elypeatus, L.

" campanella, Batsch.

" galericulatus, Pers.

Paxillus atroto宵osus, Fr.

Hygrophorus cinnabarinus, Fr.

" ceraceus, Fr.

" conicus, Fr.

Lactarius indigo, Fr.

" subtomentosus, B. & R.

" fuliginosus, Fr.

Russula emetica, Fr.

Cantharellus tubaeformis, Bull.

" albidus, Fr.?

" crispus, Fr.

Marasmius plancus, Fr.

" rotula, Fr.

Panus stypticus, Fr.

Schizophyllum commune, Fr.

Lenzites betulina, Fr.

" sepiaria, Fr.

" cratægi, Berk.

" bicolor, Fr.

Polyporus brunalis, Fr.

" boucheanus, Fr.

" gigantens, Fr.

" labyrinthicus, Fr.

" resinosus, Fr.

" appplanatus, Fr.

" fomentarius, Fr.

" igniarus, Fr.

" subfuscens, Fr.

" caroliniensis, B. & C.

" carnatus, Nees.

" cinnabarinus, Fr.

" radiatus, Fr.

" hirsutus, Fr.

" versicolor, Fr.

" abietinus, Fr.
Polyporus sullivantii, Mont.
  " virgineus, Schw.
  " medulla-panis.
  " vaporarius, Fr.
  " elegans, Fr.
  " lepidens, Fr.
  " sc utellatus, Schw.
  " laceratus, Berk.
  " adustus, Fr.
Merulius tremellosus, Schrad.
Daedalea confagosa, Bolt.
Glœoporus nigropurpurascens, Schw.
Fistulina hepatica, Fr.
Hydnum repandum, L.
  " ochraceum, Pers.
  " himantia, Schw.
  " mucidum, Pers.
  " adustum, Schw.
  " lacticolor, B. & C.
Ir pex tulipifera, Schw.
  " cinnamomeus, Fr.
Thelephora terrestris, Ehrh.
  " pallida, Schw.
Stereum striatum, Fr.
  " complicatum, Fr.
  " purpureum, Pers.
  " hirsutum, Fr.
  " rubiginosum, Schrad.
  " imbricatulum, Schw.
  " frustulosum, Fr.
  " acerinum, Fr.
Corticium oakesii, B. & C.
  " ochroleucum, Fr.
  " cinereum, Fr.
  " scutellatum, B. & C.
Cyphella capula, Fr.
  " muscicola, Fr.
Clavaria inaqualis, Fr.
Pistillaria muscicola, Fr.
Tremella mesenterica, Retz.
  " sarcoides, With.
Exidia truncata, Fr.
  " cinnabarina, B. & C.
Daerymyces stillatus, Fr.
  " tortus, Fr.
Ptychogaster albus, Corda.
Lycoperdon gemmatum, Batsch.
Bovista cyathiformis, Bosc.
Geaster hygrometricus, Pers.
Lycopala epidendrum, L.
Æthalium septicum, Fr.
Physarum nutans, Pers.
Stemonitis ferruginea, Ehrh.
Dictydiun microcarpum, Schrad.
Trichia clavata, Pers.
   " turbinata, With.
Cyathus crucibulum, Pers.
Sphaerobolus stellatus, Tode.
Mycrothyrium microscopicum, Desm.
Diplodia viticola, Desm.
Sphaeropsis insignis, B. & C.
Vermicularia liliaeorum, Schw.
Septoria herbarum, B. & C.
Stilbospora ovata, Pers.
   " pyriformis, Hoffm.
Cytispora rubescens, Fr.
   " leucosperma, Fr.
Nemaspora croceca, Pers.
Myxosporium nitidum, B. & C.
Torula herbarum, Pers.
Septonema spilomenum, Berk.
Puccinia aculeata, Schw.
   " graminis, DC.
   " solida, Schw.
   " waldsteiniae, Curt.
   " junci, Schw.
   " investita, Schw.
Uredo rubigo, DC.
   " caricina, DC.
   " epitea, Këze.
   " polygonorum, DC.
   " solidaginis, Schw.
   " cylindrica, Strauss.
   " potentillae, DC.
   " ruborum, DC.
   " lumnata, Schw.
   " effusa, Strauss.
   " pyrolea, Strauss.
   " saliceti, Schd.
   " violarum, DC.
Uromyces lespedezae-violaceae, Schw
   " lespedezae-procumbentis, Schw.
   " hyperici, Schw.
   " apiculosa, Lev.
Ustilago segetum, Pers.
   " junci, Schw.
Æcidium compositarum, Mart.
   " gnaphaliatum, Schw.
   " hydnoidenum, B. & C.
Cystopus candidus, Lev.
Epicoccum micropus, *Corda.*

Tubercularia vulgaris, *Tode.*
  " granulata, *Pers.*

Sporocybe calicioides, *Fr.*

Helminthosporium macrocarpon, *Grev.*

Podosporium rigidum, *Schw.*

Polythrineicum trifolii, *Kze.*

Cladosporium herbarum, *Lk.*

Penicillium crustaceum, *Fr.*

Helvella esculenta, *L.*

Geoglossum hirsutum, *Pers.*
  " differme, *Fr.*

Peziza translucida, *B. & C.*
  " viticola, *Pers.*
  " sanguinea, *Pers.*
  " lenticularis, *Fr.*
  " citrina, *Batsch.*
  " herbarum, *Pers.*
  " compressa, *A. & S.*
  " flexella, *Fr.*

Solenia candida, *Pers.*

Ascobolus conglomeratus, *Schw.*

Bulgaria inquinans, *Fr.*

Sphinctrina turbinata, *Fr.*

Patellaria discolor, *Mont.*
  " rhabarbarina, *Berk.*

Urnula craterinum, *Fr.*

Dermatea fascicularis, *Fr.*

Cenangium populinum, *Schw.*
  " ribis, *Fr.*
  " pinastri, *Fr.*

Dichæna faginea, *Fr.*

Rhytisma solidaginis, *Schw.*
  " vaccinii, *Fr.*
  " acerinum, *Fr.*
  " punctatum, *Fr.*
  " salicinum, *Fr.*
  " blakei, *Curt.*

Phacidium coronatum, *Fr.*
  " crustaceum, *B. & C.*

Hysterium elongatum, *Wahl.*
  " hiascens, *B. & C.*
  " lineare, *Fr.*
  " pinastri, *Schrad.*

Xylaria polymorpha, *Pers.*
  " hypoxylon, *Ehrh.*

Hypocrea lactifluorum, *Schw.*
  " citrina, *Pers.*
  " rufa, *Pers.*
  " richardsonii, *B. & M.*

[Sen. No. 87.]
Hypoxylon ustulatum, Bull.
  " mumularium, Bull.
  " clypeus, Schw.
  " multifforme, Fr.
  " cohaerens, Pers.
  " fuscum, Pers.
  " rubiginosum, Pers.
  " serpens, Pers.
Diatrype stigma, Fr.
Valsa stilbostoma, Fr.
  " americana, B. & C.
  " constellata, B. & C.
Nectria cinnabarina, Fr.
  " cucurbitula, Fr.
Sphaeria ovina, Pers.
  " pulvis-pyrius, Pers.
  " myriocarpa, Fr.
  " papilla, Schw.
  " pertusa, Pers.
  " fissuratum, B. & C.
  " saubineti, Mont.
  " picea, Pers.
  " rostrata, Fr.
  " ulmea, Schw.
  " lespedezae, Schw.
  " limaeformis, Schw.
  " aculeata, Schw.
  " acuminata, Sow.
  " nigrella, Fr.
  " verbascicola, Schw.
  " potentillae, Schw.
  " punctiformis, Pers.
  " fusca, Pers. Var.
  " disciformis, Hoffm.
  " coryli, Batsch.
  " fimbriata, Pers.
  " quercina, Pers.
  " epidermidis v. microscopica, Desm.
  " desmazieri, B. & Br.
  " nivea, Hoffm.
  " sordaria, Fr.
Dothiseia omanus, Schw.
Erysiphe communis, Schr.
  " ceanothi, Schw.
Phyllactinia guttata, Lev.
Asterina gaultheriae, Curt.
Erineum fagineum, Pers.
  " luteolum, Kze.
  " alnigerum, Kze.
  " aureum, Pers.
Erineum vitis, *DC.*
Sclerotium orobanches, *Schw.*

E.

EDIBLE FUNGI.

Agaricus procerus, *Scop.*
“ rachodes, *Vitt.*
“ melleus, *Vahl.*
“ personatus, *Fr.*
“ nebularis, *Batsch.*
“ radicatus, *Bull.*
“ ostreatus, *Jacq.*
“ prunulus, *Scop.*
“ campestris, *L.*
“ arvensis, *Schaff.*
“ orcella, *Bull.*

Coprinus comatus, *Fr.*
“ aatramentarius, *Bull.*

Lactarius piperatus, *Fr.*
“ angustissimus, *Lasch.*
“ volemus, *Fr.*

Russula alutacea, *Fr.*

Marasmius oreades, *Fr.*

Boletus bovinus, *L.*
“ elegans, *Fr.*
“ scaber, *Bull.*

Polyporus ovinus, *Schaff.*
“ giganteus, *Fr.*
“ sulphureus, *Fr.*

Fistulina hepatica, *Fr.*

Hydnum repandum, *L.*
“ coralloides, *Scop.*

Clavaria botrytis, *Pers.*

Tremella mesenterica, *Retz.*

Bovista plumbea, *Pers.*

Morchella esculenta, *Pers.*

Helvella esculenta, *L.*
Elatine clintoniana, sp. nov.

Slender, erect; leaves cuneate oblong or narrowly obovate; flowers with conspicuous rose-red or purplish, spreading petals; seeds slightly curved, ribbed and pitted.

Stems cespitose, slender, simple, erect, abundantly rooting at the base, 3"–10" high; leaves sessile, varying from oblong to oblanceolate and narrowly obovate, obtuse, tapering to the base, rather fleshy, very obscurely nervèd, entire, minutely whitish glandular-dotted; flowers sessile, single in the axils of the leaves, dimerous; sepals oblong-ovate, obtuse, shorter than the petals and about one-third as broad; petals broadly ovate or suborbicular, obtuse, spreading, twice the length of the ovary, rose-red or purplish; stamens longer than the sepals, scarcely as long as the petals, with globose anthers; stigmas nearly sessile, contiguous, persistent; capsule subglobose often slightly depressed at the apex, usually four to eight seeded; seeds nearly straight, longitudinally ribbed, pitted in rows.

Rocky shores of Bowman's pond, Sandlake, Rensselaer county. July and August.

This plant forms quite extensive and rather dense turfs or patches. The smaller forms have three or four pairs of leaves, narrow and nearly uniform in width, and one or two purplish red flowers, all clustered or closely placed at the top of the stem, the lower part of which is naked, or furnished with long, slender rootlets. The larger plants have the leaves broader, more distantly inserted, more tapering toward the base, the flowers more numerous and paler or rose-red. A cross section of the stem reveals eight tubes formed by thin dissepiments radiating from the center.

The distinctive characters of the species, when compared with E. americana, are found in its more dense, erect mode of growth, smaller size, more slender stems, more narrow leaves, and especially in its conspicuous, spreading, bright-colored petals. The seeds also furnish distinctive but microscopic characters. They are shorter, less curved, more distinctly ribbed longitudinally, less wrinkled transversely, the impressions shorter, more regular in outline and more distantly placed, the interspaces being usually almost as wide as the impressions. In the seeds of E. americana, the interspaces are narrow and more elevated, so that when viewed under the microscope by transmitted light, these elevations or wrinkles appear along the margins of the seed like rows of papillae.

It gives me great pleasure to dedicate this neat little species to my much esteemed friend and active co-laborer in botany, the Hon. G. W. Clinton.
Amorpha fruticosa, L.
Banks of the Hudson below Greenbush. Doubtless escaped from some garden.

Rubus neglectus, sp. nov.
Stems recurved, armed with numerous straight prickles; berries dark red, having a whitish bloom; calyx hispid.

Stems long, recurved, when young covered with a glaueous bloom, armed with numerous rather strong, straight prickles, those on the flowering branches and petioles sometimes recurved; leaves trifoliolate, the leaflets ovate-acuminate, coarsely and doubly serrate, green above, white tomentose beneath, with rather prominent anastomosing veinlets, lateral ones sessile, terminal one often unequally two or three lobed and subcordate; flowers on ascending or erect branches, axillary and subcorymbose, the pedicels armed with unequal slender prickles, intermingled with stiff, glandular hairs; calyx hispid; fruit dark clouded red, with a whitish tomentose bloom. Flowers in June, fruit ripe in July. Sandlake. Not common.

This species is intermediate between R. strigosus and R. occidentalis, and combines to a considerable extent the characters of both. From the former it may be distinguished by its mode of growth (which is exactly like that of R. occidentalis), long recurved stems and stout prickles; from the latter by its more numerous, straight prickles, sessile lateral leaflets and hispid calyx; from both by the color and flavor of its berries. These have a peculiarly agreeable taste, which probably suggested the name "Cream Berries," by which the fruit is known to the inhabitants of the locality above mentioned.

It occurs sparingly in recently cleared lands, associated with its nearly allied species. It is recommended to the attention of gardeners and fruit growers as worthy of cultivation.

It seems to have been previously known to some of our botanists, but was probably considered a sportive form of one or another of its congeneres, in view of which a name has been given indicative of its supposed past treatment.

Calendula officinalis, L.
Newark, Wayne county. E. L. Hankenson. A garden escape.

Vaccinium cæspitosum, Michx.
Summit of Mt. Whiteface, Essex county.

Lamium album, L.

Mentha arvensis, L.
North Greenbush. Introduced.
**Pinus inops**, Ait.

Barren plains west of Keeseville; also, near Wadham’s Mills, Essex county. G. T. Stevens. New Jersey has been considered the northern limit of this species, and its occurrence two hundred and fifty miles farther north without intervening stations is truly remarkable, and affords another instance of remotely isolated stations. There are about a half dozen trees near Wadham’s Mills, from five to eight feet high, some larger ones having been recently cut down.

**Potamogeton oakesianus**, Robbins.

Bowman’s pond, Sandlake. The specimens referred to this species do not quite agree with the description. The stems are not much branched, but nearly or quite simple; yet the leaves and fruit agree so exactly with the characters ascribed to this species that our specimens are referred to it without hesitation.

**Potamogeton amplifolius**, Tuck.

North Elba, Essex county.

**Fagopyrum tartaricum**, Gaert. *(Fagotriticum sibiricum, L.)*

Escaped from cultivation to roadsides and waste places. North Elba.

**Iris ochroleuca. (?)**

The plant here noticed is a large, yellow flowered species; probably a garden escape. Essex county. Dr. Stevens. Near Poughkeepsie. W. R. Gerard.

**Juncus maritimus**, Lam.

Coney Island. The plant under consideration is believed to be the true *J. maritimus*, now found in this country for the first time, the *J. maritimus* of American authors having been shown by Dr. G. Engelmann, in Revision N. A. Junci, to be *J. Rau'merianus*, Scheele. Probably introduced.

**Juncus alpinus var. insignis**, Fries.

Shore of Lake Champlain, near Port Kent. The heads have more flowers than usual, there being 8–12 in each.

**Carex alata**, Torr.

Swamps, Junius, Seneca county. S. H. Wright.

**Danthonia compressa**, sp. nov.

“Stems compressed-trigonal, the narrowest side concave, the others convex, slender (one foot high), decumbent at the base, weak, smooth or minutely roughened below the joints. Leaves very long, narrow and flat, minutely roughened on the margins.
and veins, the sheaths smooth. Ligule with long silky fringes. Spikelets racemose-paniculate, about ten. Glumes $4\frac{1}{2}''-5''$ long, acute, concave, smooth, 3-nerved, with broad white margins, equal. Florets with a tuft of silky hairs at base; lower palet ovate, bifid, the teeth very slender ($1\frac{1}{2}''$ long), clothed with silky hairs in seven lines, and on the margins below (membranaceous and naked above on the margin), awn about twice as long as the palet, flat and twisted below but scarcely colored; inner palet membranaceous, nerveless, ciliate.” *Austin MSS.*


Compared with *Danthonia spicata*, this species differs in its longer leaves,—the upper ones overtopping the panicle,—its looser panicle and more numerous spikelets, the longer teeth of the lower palet and the tuft of hairs at the base of the florets.

**CHARACEÆ.**

*Nitella flexilis, Ag.*

Ponds and slow flowing streams. Sandlake and North Elba.

*Nitella mucronata var. flabellata, Kutz.*

Lower Saranac Lake.

*Nitella acuminata var. glomerulifera, A. Braun.*

Lower Saranac Lake. Rare.

*Chara coronata, Ziz.*

This species, with its semi-transparent stems and branches, desti-
tute of cortical incrustation, might at first sight be mistaken for a
Nitella. It grows in shallow water in Saranac lake, intermingled
with the two preceding species.

*Chara fragilis, Desv.*

Mud Lake, Herkimer county. A small form with long bracts;
sometimes cinerescent.

*Chara fœtida, A. Braun.*

(*C. vulgaris* of authors, in part.) Common, especially in lime-
stone regions. Our specimens are from Albany, Schenectady and
Herkimer counties.

*Chara contraria, A. Braun.*

Cedar Lake, Litchfield, Herkimer county. Much of the bottom of
the lake is covered with this and the two preceding species, the
plants ranging from a few inches to two or three feet in length. In
no other part of the State have I seen the Charæ so abundant as in
the southern towns of Herkimer county.
Sphagnum girgensohnii, *Russow.*

Sphagnous swamps. Common. July. This moss resembles large forms of *S. acutifolium.* Its branches, however, are generally longer and more distant, the stems thicker, and, when moist, more brittle. When viewed from above in its native swamps it usually presents a more stellate appearance, its five-ranked branches being less condensed at the summit of the stem than they are in that species. I have seen no red specimens, which are so common in *S. acutifolium.* Its inflorescence is dioecious. A form occurs on the moist rocks of the Adirondack Mountains not unlike *S. teres* in general appearance.

Sphagnum wulfianum, *Girgen.*


A species easily recognized by its rigid red stems and numerous short branches, those at the summit of the stem being crowded into a dense subglobose head.

Sphagnum recurvum, *Beauv.*

Swamps and bogs. Common. July. This species has been considered by some to be only a variety of *S. cuspidatum,* but it will probably prove to be a good species. It is not difficult to separate it from the various forms of *S. cuspidatum,* its branches being more uniform in length and curvature, and the leaves evenly ranked and considerably recurved. The spores are yellow.

Sphagnum laricinum, *Lindbg.*

Cranberry marsh, Sandlake; its only known locality in this country. August.

A variety closely resembling *S. cuspidatum.*


Shaded rocks. Little Falls. July. Not yet found elsewhere in this country, but collected by Drummond in British America. It is an extremely small species.

Paludella squarrosa, *L.*

Amphoridium peckii, *sp. nov.*

"Planta subnunciales, compacte crasptose, superne flavidulo-virides, inferne rufescentes, tomento radiculare arcte intertexte. Caulis innovando fastigiato-ramosus. Folia conferta humida erecto-patentia, sicca crispata, lineari-lanceolata sensim acutissima, supra basin perbrevem ovatum concavam subamplexantem leniter constricta delhice carinato-subcomplcicata, margine (ut folii utraque pagina) plus minus minute papilluloso, erecto; costa tereti valida subapicem finiente; areolatione dense gttulata, cellulis basis mediae oblongis margines versus minoribus quadratis. Flores masculi numerosi, singuli vel aggregati, axillares; auttheridiis 5-7, paraphysatis; perigonialibus interiore superne sernilatis. Flores feminei et fructus desiderantes."

—Sullivant MSS.

"In size and general aspect this moss resembles *A. lapponicum* and *A. mougeotii*, but is distinguished by its broader leaf differentely areolated, and with a slight but evident constriction above its base."

Sullivant.

Under overhanging rocks, Catskill Mountains, Greene county. This moss was found growing in a single patch three or four feet in diameter. The growth is quite dense, the stems are simple or fastigiate branching, mostly about one inch high; the leaves are numerous, closely imbricating, the upper ones yellowish green, the lower ones dull reddish brown, intermingled with a short, close, radicular tomentum, all linear lanceolate, rather abruptly sharp pointed, slightly constricted above the base, more or less minutely papillose, densely areolated, the areolae of the middle of the base oblong, towards the margins smaller and quadrate. The foliage is crisped when dry, erect-spreading when moist. It opens under the influence of moisture much more slowly than does that of *A. lapponicum* or of *A. mougeotii*. When moist the greater density of the foliage and the broader leaves give to the plant an appearance quite distinct from the two closely related species, which appearance enables it to be distinguished from them quite readily without a microscopic examination.

Costinodon pulvinatus, *Bryol Europ.*

Exposed surfaces of rocks. Catskill Mountains. New to this country. The specimens are without fruit, and to that extent the species must remain in doubt.

Amblyodon dealbatus, *Beauv.*

Thin soil covering rocks, near Cedarville, Herkimer county.

Bryum conninatum, *Grev.*

Crevices of rocks. Catskill Mountains. Sterile.


Stems slender, irregularly subpinnately branched, prostrate or ascending, bright shining green; branches unequal, more or less [Sen. No. 87.]
distantly placed, often long-attenuated; leaves unequal, loosely imbricating, ovate-oblong, very obtuse, subapiculate, minutely toothed toward the apex, the lower margin slightly excavated, incurved; areolation subrhomboidal, longer in the middle of the base of the leaf; costa obsolete or none. Fruit wanting.

Rocks. Helderberg Mountains. V. Colvin. Sandlake. The stems often appear interruptedly leafy, the leaves being in certain places greatly reduced in size. They are also minute on the attenuated part of the branches. The larger ones are subdistichously arranged, and the areolation is rather large. This plant was first discovered by Mr. T. P. James, who has given the very appropriate specific name under which it is here described.

**Hypnum scorpioides, L.**

Marshes. Litchfield, Herkimer county. I believe the discovery of this species in our State belongs to Rev. J. A. Paine, Jr., by whom the locality was made known to me.

**Plagiothecium turfaceum, Lindbg.**


A species closely resembling *P. muhlenbeckii*, and possibly running into it, though I have noticed no intermediate forms. It is distinguished by the more narrow elongated areolation of the leaves, and the less enlarged cells at their basal angles.

**Plagiothecium piliferum var. brevipilum, Bryol Europ.**

Under overhanging rocks and on thin soil in crevices. Catskill and Adirondack Mountains. Very rare. Sterile. It may prove to be a good species.

**HEPATICE.**

**Riccia sullivantii, Austin in lit. Sp. nov.**

Frond with air cavities, green both sides, orbicular, 5"--8" in diameter, repeatedly dichotomously divided, the laciniae oblong-linear, plane when moist, channeled above when dry, apices obtuse, bilobed; upper surface becoming many-pitted with age, especially toward the base; lower surface bearing copious, long filamentous rootlets; capsule single at or near the furcations, bursting from the lower surface of the frond; spores dark brown, reticulated, about $\frac{1}{5}$ of an inch in diameter.

Low grounds in cultivated fields. New Lots, Long Island, September.

**Jungermannia setiformis, Ehrh.**

Rocks. Top of Mt. McIntyre.

**Jungermannia divaricata, Eng. Bot.**

On mosses. Catskill and Adirondack Mountains.
Radula pallescens, Nee.

Lichens.
Usnea barbata var. florida, Fr.
Trees, especially in mountain woods. Common and fertile.

Usnea barbata var. hirta, Fr.
Old rail and board fences. Common, but sterile.

Usnea barbata var. dasypoga, Fr. Trees on mountains.

Usnea longissima, Ach.
Trees. Adirondack Mountains.
This and the preceding species are plentiful in low woods in North Elba, frequently giving a peculiar gray hue to whole tracts of balsam firs, which trees are especially subject to the attacks of these parasites. The opinion is prevalent among the inhabitants that the "gray moss" causes the death of the tree on which it grows. Certainly no thrifty tree can be found with an abundance of these lichens upon it. All thus infested are either dead or apparently dying, the leaves being limited to the mere extremities of the branches. The inference is that the lichens have induced the death or the diseased condition of the tree. It is probable that this is to some extent true, and yet, on the other hand, the death of the tree from other causes affords conditions favorable to the growth of the lichen. The shore of Lake Placid is in some places bordered by dead trees loaded with these same species of Usnea. These trees were killed by the inundation of their roots, the water of the lake having been raised by a dam at its outlet, and, so far as can be ascertained, they were destitute of these lichens while living.

Alectoria jubata var. chalybeiformis, Ach.
Trees, old fences, and sometimes on rocks. Common, but sterile.

Alectoria jubata var. implexa, Fr.

Evernia prunastri, Ach.
Trees and old fences. Fertile specimens were found on trees and on shrubs in a swamp, Catskill Mountains.

Evernia furfuracea, Mann.
Trees in woods. Common.
Evernia furfuracea var. cladonia, Tuck.

Ramalina calcaris var. fastigiata, Fr.
Trunks and branches of trees, shrubs and old fences. Very common.

Ramalina calcaris var. farinacea, Schäer.
Rocks; sometimes on trees. Sterile.

Ramalina calcaris var. inflata, Tuck.
Trunks of pine trees. Saranac Lake.

Cetraria aculeata, Fr.
Summit of Mt. Whiteface. Sterile.

Cetraria islandica, Ach.
Tops of the high peaks of the Adirondack Mountains. Edible. This is the well-known "Iceland moss," a nutritious, and, in some northern regions, almost a necessary article of food for both man and beast.

Cetraria cucullata, Ach.
Summit of Mount Whiteface.

Cetraria ciliaris, Ach.
Trunks and branches of coniferous trees, old fences, etc. Very common.

Cetraria lacunosa, Ach.
Coniferous trees, dead branches and old rails. Common in mountainous regions.

Cetraria oakesiana, Tuck.
Trees. Catskill Mountains.

Nephroma arcticum, Fr.
Rocks. Adirondack Mountains. A northern species, as its name implies, which will hardly be found south of the Adirondack region.

Nephroma tomentosum, Kær.
Granite rocks and boulders. Sandlake.

Nephroma helveticum, Ach.
Rocks. Sandlake and Catskill Mountains.
Nephroma levigatum, Ach.
Granite rocks. Sandlake and Adirondack Mountains.

Nephroma levigatum var. papyraceum, Schaefer.

Solorina saccata, Ach.
Limestone rocks among mosses. Helderberg Mountains.

Peltigera aphthosa, Hoffm.
Shaded mossy banks, ground and old logs in woods. Extremely common, and easily known by the wart like spots on the thallus.

Peltigera canina, Hoffm.
Ground, rocks and old logs in woods. Very common. A small form occurs on the dry, sandy barrens between Albany and Schenectady.

Peltigera polydactyla, Hoffm.
Rocks and old logs in woods, especially in mountainous districts. Not rare.

Peltigera horizontalis, Hoffm.
Rocks and decaying wood in hilly or mountainous districts. Sandlake, Helderberg and Catskill Mountains.
A large form with crisped margins and under surface uniformly dark brown, except toward the margin, which is whitish, occurs in mountain swamps. Summit Lake.

Sticta pulmonaria, Ach.
Trunks of deciduous trees and on rocks. Fertile specimens have been seen by me only on trees in the woods of the Catskill and the Adirondack Mountains. In the former locality specimens were found with a curiously morbid state of the apothecia. These were scattered abundantly over the upper surface of the thallins and sparingly over the under surface, and had a black disk.
The Lungwort lichen once was held in considerable repute as a remedy in pulmonary complaints, and is used to some extent at the present time. It is also said to have been used as food.

Sticta glomerulifera, Delise.
Trunks of deciduous trees, sometimes on rocks. Very common in woods, and fruits abundantly.

Sticta quercizans, Ach.
Granite rocks. Sandlake. Sterile.
Parmelia perlata, *Ach.*
Trunks of trees and granite rocks. Common.

Parmelia perlata var. olivetorum, *Ach.*
Exposed granite rocks. Sterile.

Parmelia crinita, *Ach.*

Parmelia tiliacea, *Ach.*
Trunks of trees, rarely on old fences. Common.

Parmelia saxatilis, *Ach.*
Trees and old fences. Common.

Parmelia physodes var. enteromorpha, *Tuck.*
Trunks of trees in mountain woods.

Parmelia pertusa, *Schaer.*

Parmelia olivacea, *Ach.*
Trunks of trees. Common.

Parmelia stygia, *Ach.*
Granite rocks. Top of Mount Whiteface.

Parmelia caperata, *Ach.*
Trunks of trees. Common, but sterile.

Parmelia conspersa, *Ach.*
Rocks and boulders. Common everywhere, and fruits abundantly.


Theloschistes parietinus, *Norm.*
Trunks of willow and ailanthus trees, also on old fences. Greenport, L. I.

Theloschistes parietinus var. polycarpus, *Fr.*
Trunks and branches of trees in exposed places. Often associated with *Physcia stellaris* on apple and willow trees. Common.
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**Theloschistes chrysophthalmus, Th. Fr.**
Trunks of trees. Greenport.

**Physcia stellaris, Wallr.**
Trunks and branches of trees, rocks, stone walls, etc. Very common and variable.

**Physcia stellaris var. tribracia, Fr.**
Trunks of juniper, also on stones. Not rare.

**Physcia aquila var. detonsa, Tuck.**
Mossy rocks and about the base of trees. Common.

**Physcia pulverulenta, Fr.**

**Physcia speciosa, Ach.**
Trunks of trees. Jordanville.

**Physcia speciosa var. leucomela, Eschr.**
Trees, mostly in swamps and mountain woods. Sterile.

**Physcia cesia var. angustior, Fr.**
Rocks. Catskill Mountains.

**Physcia obscura, Nyl.**
Trunks of trees in woods. Sandlake.

**Physcia obscura var. erythrocordia, Tuck.**
Rocks. Catskill Mountains.

**Pyxine cocoes var. sorediata, Tuck.**
Rocks and trunks of trees. Sandlake and Adirondack Mountains.

**Pannaria lanuginosa, Ach.**
Rocks. Common on mountains and rocky precipices. Without apothecia, and frequently a mere greyish pulverulent mass.

**Pannaria microphylla, Mass.**
Rocks. Bethlehem, Albany county.

**Placodium aurantiacum, Lightf.**
Old fences. Bethlehem.
Placodium aurantiacum var. flavovirescens, Fr.
Rocks. Troy.

Placodium cinnabarinum, Anz.
Fort Edward. Howe.

Placodium rupestre, Tuck.
Rocks. Helderberg Mountains.

Lecanora pallescens, Schäer.
Trunks of trees. Common.

Lecanora pallida, Schäer.
Trunks of trees. Not rare.

Lecanora tartarea, Ach.
Rocks and trunks of trees. Common in hilly and mountainous districts. The "Cudbear" of commerce, so freely used for coloring purposes.

Lecanora tartarea var. frigida, Ach.
Incrusting mosses. Top of Mount McIntyre.

Lecanora subfuscata, Ach.
Trunks of trees in woods. Very common and quite variable in appearance.

Lecanora varia, Ach.
Trees and old fences. Common.

Lecanora elatina var. ochrophylla, Tuck.
Trunks of balsam firs in mountain woods. Mt. Whiteface.

Lecanora muralis, Schäer. (L. saxicola, of authors.)
Rocks. Catskill Mountains.

Lecanora cinerea, Fr.
Rocks. At a little distance this lichen causes the surface of the rock, on which it grows plentifully, to appear as if bruised or indented by frequent blows of a large hammer. Specimens from the red sandstone of the Catskill Mountains have to some extent the color of those rocks.

Lecanora atra, Ach.
Granite rocks. Poestenkill, Rensselaer county.
Uerceolaria scruposa, Ach.
Rocks. Common.

Gyalecta lutea, Tuck.

Lecidea contigua, Fr.
Rocks. Common.

Lecidea contigua var. albo-cœulescens, Nyl.

Lecidea enteroleuca, Fr.
Trunks of trees. Catskill Mountains.

Lecidea sanguinaria, Ach.
Balsam firs. Mt. Whiteface.

Buellia parasea, Kœrb.
Trunks of trees in woods. Very common.

Buellia lactea, Kœrb.
Rocks. Bethlehem.

Buellia petrea, Tuck.
Rocks. With the preceding and apparently more common.

Buellia myriocarpa, Tuck.
Board fences. Bethlehem.

Biatora atropurpurea, Tuck.
Trunks of trees in mountain woods. Not rare.

Biatora rufo-nigra, Tuck.
Rocks. Bethlehem and Catskill Mountains.

Biatora sanguineo-atra, Fr.
Ground and mosses in mountainous districts. Helderberg Mountains.

Biatora chlorantha, Tuck.
Trunks of trees. Catskill Mountains.

Biatora viridescens, Fr.
Rotten wood and ground. Not rare.

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Bia
tora vernalis, *Fr*.
Trunks of trees and inerusting mosses. Catskill Mountains and North Elba.

Bia
tora rubella, *Tuck*.

Bæomyces æruginosus, *DC* (*Bia
tora icnadophila, Auct.*)
Rotten wood and earth in woods. Near Summit Lake, Otsego county.

Bæomyces ericetorum, *DC*.
Ground in woods. Sandlake.

Pi
lophoron fibula, *Tuck*.

Ster
eocaulon paschale, *Ach*.
Rocks on mountains. Catskill and Adirondack Mountains.

Ster
eocaulon tomentosum, *Fr*.
Rocks and thin soil in rocky places. Adirondack Mountains.

Cladon
ia caespiticia, *Fl*.

Cladon
ia pyxidata, *Fr*.
Rocky ground. Very common.

Cladon
ia pyxidata var. symphicarpa, *Fr*.
Catskill Mountains.

Cladon
ia gracilis, *Fr*.
Rocky ground. Extremely common and variable.

Cladon
ia gracilis var. hybrida, *Fr*.
Rocks and old logs. Catskill and Helderberg Mountains.

Cladon
ia gracilis var. elongata, *Fr*.
Ground. High peaks of the Adirondack Mountains.

Cladon
ia gracilis var. taurica, *Auct*.
Summit of Mount Whiteface.

Cladon
ia degenerans var. cariosa, *Fr*.
Dry sandy soil, near West Albany.
Cladonia fimbriata, *Fr*.
Rocky soil. Saranae Lake.

Cladonia fimbriata var. adspersa, *Tuck*.
Ground. West Albany and Helderberg Mountains.

Cladonia squamosa, *Hoffm*.
Rocky, mossy ground. Very common.

Cladonia squamosa var. delicata, *Fr*.
Rotten logs. Sandlake.

Cladonia furcata, *Fl*.
Rocky ground. Common and variable.

Cladonia furcata var. racemosa, *Fl*.
Ground and old logs in woods.

Cladonia furcata var. subulata, *Fl*.
Rocky ground. Catskill Mountains.

Cladonia rangiferina, *Hoffm*.
Ground and thin soil covering rocks. Very common.

Cladonia rangiferina var. sylvatica, *Fl*.
With the typical form.

Cladonia rangiferina var. alpestris, *Fl*.
The "Reindeer moss" is one of the most useful of lichens, and has long been famous as the food of the animal whose name it bears.

Cladonia uncialis var. turgescens, *Fr*.
Ground. Top of Mount Whiteface.

Cladonia mitrula, *Tuck*.
Ground. Near Greenwood Cemetery, L. I.

Cladonia cornucopioides, *Fr*.
Rocky soil in exposed places. Adirondack and Catskill Mountains.

Cladonia cristatella, *Tuck*.
Ground, rotten logs and stumps. Common in hilly and mountainous districts.
Umbilicaria pustulata var. papulosa, *Tuck.*
Rocks. Not rare on mountains.

Umbilicaria proboscidea, *DC.*
Rocks. Mount Whiteface.

Umbilicaria muhlenbergii, *Tuck.*
Rocks. Sandlake and Catskill Mountains.

Umbilicaria hirsuta, *Ach.*
Rocks. Catskill Mountains.

Umbilicaria dillenii, *Tuck.*
Rocks in mountainous districts. Common but sterile.

Graphis scripta, *Ach.*
Bark of trees. Very common and variable.

Ofegrapha varia, *Pers.*

Coniocye pallida, *Fr.*
Bark of oak trees. Fort Edward. Howe. Very rare. To Dr. Howe belongs the discovery of this species in our State.

Endocarpon miniatum var. muhlenbergii, *Nyl.*
Fort Edward. Howe.

Pertusaria pertusa, *Ach.*
Trees. Common.

Pertusaria pertusa var. areolata, *Fr.*
Rocks, especially on mountains.

Pertusaria velata, *Nyl.*
Trees: sometimes on rocks. Common.

Pertusaria velata var. multipuncta, *Nyl.*
Trees in woods.

Pertusaria wulfenii, *Dec.*
Trees. Catskill Mountains.

Pertusaria globularis, *Ach.*
Incrustating twigs and mosses. Catskill Mountains.
Conotremat urceolatum, Tuck.
Trees in woods. Common.

Pyrenula nitida, Ach.
Trees in woods. Common.

Trypethelium virens, Tuck.
Bark of trees. Catskill Mountains.

Collema flaccidum, Ach.
Rocks. Sandlake.

Collema nigrescens, Ach.
Trees. Catskill and Adirondack Mountains.

Collema ryssoleum, Tuck.
Rocks. Catskill Mountains.

Leptogium tremelloides, Fr.
Rocks. Catskill Mountains.

Leptogium lacerum, Fr.
Mossy rocks. Common.

Leptogium chlororhenum, Nyl.
Rocks and trunks of trees. Catskill Mountains.

Leptogium saturninum, Nyl.
Rocks and trunks of trees. Common but sterile.

Algae.

Sargassum vulgare, Ag.
Pebbles and small stones near low-water mark. Peconic Bay, at Greenport.

Sargassum montagnei, Bail.
With the preceding. Also near Orient.

Sargassum bacciferum, Ag.
Glencove, L. I. G. B. Brainerd. This is the famous "Gulf weed" of the ocean, and its occurrence in our waters is interesting.

Fucus nodosus, L.
Rocks between tide marks. Found on almost all the rocky shores of Long Island and Staten Island; especially abundant near College Point.
Fucus vesiculosus, L.
Same range as the preceding species, and quite as plentiful. These two species may be found on almost any part of our coast, growing freely on the rocky shores and cast up by the tide on the sandy ones. The inhabitants of some parts of Long Island use these plants, with Zostera and other rejectamenta of the sea, as fertilizers of the soil.

Fucus ceranoides, L.

Fucus scorpioides, Fl. Dan.
Left by the tide. Fort Hamilton and Canarsie Bay.

Cladostephus spongiosus, Ag.

Asperococcus echinatus, Grev.

Dictyosiphon feniiculaceus, Grev.

Stilophora rhizodes, J. Ag.
Thrown up by waves and tide. Greenport and Orient Point. September.

Desmarestia viridis, Lamour.
Low tide. College Point. June. This species has a peculiar property, causing the rapid decomposition of red algae that may be placed in a vessel with it.

Chordaria flagelliformis, Ag.
Thrown up by the tide. Orient Point. September.

Chordaria divaricata, Ag.

Mesogloia vermicularis, Ag.?

Chorda filum, Stack.
Rocks near low-water mark and extending into deep water. Orient Point. September.
Leathesia tuberiformis, Gray.
Thrown up by the tide. Coney Island and Canarsie Bay. June.

Ectocarpus viridis, Harv.
Coney Island and Canarsie Bay. June.

Ectocarpus littoralis, Lyngb.
Fort Hamilton and Canarsie Bay. June.

Ectocarpus Durkeei, Harv.

Laminaria fascia, Ag.
Rocks, woodwork of docks, etc. Common.

Laminaria saccharina, Lamour.
Thrown up from deep water in great abundance at Orient Point. September. It varies exceedingly in size, some specimens having been reported to me as being thirty feet in length. A singular form was picked up at College Point in June. The frond, which is about three feet long and three inches broad, divides toward the apex into two equal branches, each about eight inches long and one and a half inches broad, slightly incurved and truncate at the apex.

Punctaria latifolia, Grev.
Floating in Canarsie Bay. June.

Punctaria tenuissima, Grev.
On wild grass, etc. Coney Island. Brainerd. April.

Chondria dasyphylla, Ag.

Chondria baileyana, Mont.
Stones near low-water mark. Fort Hamilton. September.

Chondria tenuissima, Ag.

Gelidium corneum, Lamour.

Polysiphonia formosa, Suhr.
Polysiphonia surtilissima, Mont.
On Zostera, old shells, etc. Greenport. September.

Polysiphonia olneyi, Harv.

Polysiphonia harveyi, Bail.

Polysiphonia fibrillosa, Grev.

Polysiphonia variegata, Ag.
Thrown up by the tide in many places. Bay Ridge, Astoria, College Point, Greenport, etc. Very common and variable. September.

Polysiphonia nigrescens, Grev

Polysiphonia fastigiata, Grev.

Botrychia rivularis, Harv.
Rocks near high-water mark. College Point and Astoria. September.

Cystoclonium purpurascens, Kutz.

Dasya elegans, Ag.

Champia parvula, Harv.
Floating and thrown up by the tide in many places. Coney Island, Canarsie Bay, Peconic Bay, etc. September.

Corallina officinalis, L.

Grinnellia americana, Harv. (Delesseria americana, Ag.)
Floating. Bay Ridge, Fort Hamilton, College Point, etc. September.
Delesseria sinuosa, Lamour.
Thrown up by the tide. Orient. September.

Delesseria leprieurei, Mont.
McComb’s Dam, Harlem River. Brainerd. September.

Gracilaria multipartita, J. Ag.
Thrown up by the tide. Coney Island, Fort Hamilton, College Point, etc. September. An abundant and variable species. Edible.

Solieria chordalis, J. Ag.
Thrown up on all the shores of Long Island. Dredged in Canarsie Bay (in water four to six feet deep), where it grows in great abundance. September.

Polyides rotundus, Grev.
Thrown up by the tide. Orient. September.

Rhodymenia palmata, Grev.
Orient. September.

Phyllophora brodelei, J. Ag.
Orient. September.

Anifelitia plicata, Fr.
Among rejectamenta. Orient. September.

Chondrus crispus, Lyngh.
Orient. September.
This is the “Irish moss” of the shops. It is used by the inhabitants of Orient with no expense or trouble save that of collecting and preparing.

Chylocladia baileyana, Harv.

Spyridia filamentosa, Harv.

Rhodomela rochei, Harv.

Ceramium rubrum, Ag.
Ceramium diaphanum, *Roth.*

Ceramium fastigiatum, *Harv.*

Ceramium arachnoideum, *Ag.*

Griffithsia corallina var. tenus, *Harv.*

Callithamnion baileyi, *Harv.*

Callithamnion byssonideum, *Arn.*

Callithamnion corymbosum, *Ag.*

Callithamnion americanum, *Harv.*

Callithamnion seirospermum, *Griff.* (Seirospora griffithsiana, *Htv.*
Peconic Bay, Mrs. Bush.

Bryopsis plumosa, *Lamour.*

Porphyra vulgaris, *Ag.*

Ulva latissima, *Lin.*
Rocks. Extremely abundant on all our rocky coasts.

Ulva linza, *L.*
Floating. Coney Island.

Enteromorpha intestinalis, *Link.*
Rocks. Fort Hamilton.
Enteromorpha compressa, Grev.

Enteromorpha clathrata, Grev.
Muddy or sandy shores. Canarsie Bay and Coney Island.

Hormotrichium younganum, Dillw.

Chætomorpha tortuosa, Dillw.

Chætomorpha linum, Kutz.
Dredged in water four to six feet deep. Canarsie Bay. September. Mr. Brainerd has found fronds of this plant in the same locality that were eleven feet in length, a fact truly remarkable, when we consider that the diameter of the frond is less than one line.

Cladophora glomerata, L.
Stones and rocks in rapid fresh water streams. A pretty and apparently common species. Buffalo. G. W. Clinton. North Greenbush, Helderberg Mountains, Van Hornesville, etc.

Cladophora fracta, Fl. Dan.
In quiet water, either fresh, brackish or salt. Albany, Canarsie Bay, Flushing and Greenport.

Cladophora refracta, Roth.
Coney Island and Canarsie Bay. A well-marked, beautiful species.

Cladophora arcta, Dillw.

Cladophora glaucescens, Griff.
Coney Island.

Rhizoclonium riparium, Roth.
Wood-work of docks. Greenport.

Chætophora pisiformis, Ag.
Attached to sticks and grass in fresh water. Greenwood, Brainerd. Guilderland, Albany county; also near Canarsie. Probably common in the State. June.
Chætophora endivefolia, *Ag.*


Draparnaldia glomerata, *Ag.*

Attached to sticks and grass in fresh water streams. Guilderland, Sandlake, Canarsie, Staten Island. June, July.

Batrachospermum moniliforme, *Roth.*


Lemanea fluviatilis, *Ag.*

On rocks in the Cauterskill, Catskill Mountains. Collected by the writer in 1864. This plant has not, to my knowledge, been found elsewhere in this country. It is not a rare species in Europe.

Nostoc commune, *Vauch.*

Ground. Appearing in wet weather, especially in spring and autumn. Troy. Howe. Bethlehem. Probably common. An allied species has been used as diet for invalids, and this species is recommended by Harvey for trial for the same purpose.

Fungi.

Agaricus mappa, *Batsch.*


Agaricus procerus, *Scop.*


Agaricus rachodes, *Vitt.*


Agaricus cristatus, *Bolt.*


Agaricus melleus, *Vahl.*

Woods and open fields, on the ground and about the base of stumps. Sept., Oct. Edible.

Writers differ in their estimate of the qualities of this species, some pronouncing it most delicious food, others calling it inferior.

Agaricus personatus, *Fr.*

Agaricus nebularis, *Batsch.*

Agaricus laccatus, *Scop.*

Agaricus radicatus, *Bull.*
Woods. Summer and autumn. Common. Edible. This species is remarkable for the long, root-like extension of the stipe, which penetrates into the earth about as far as the proper stipe extends upwards in the air.

Agaricus velutipes, *Curt.*

Agaricus ochropurpureus, *Berk.*

Agaricus galericulatus, *Scop.*

Agaricus epipterygius, *Scop.*

Agaricus campanella, *Batsch.*

Agaricus ostreatus, *Jacq.*
Old logs and dead trees. Fort Edward. Howe. Abundant on the Catskill Mountains. Autumn. Edible. A thick, firm species, quite variable in color but easily recognized after it has been once seen. Said to be excellent food.

Agaricus salignus, *Pers.*

Agaricus petaloides, *Bull.*

Agaricus atrocceruleus, *Fr.*
Agaricus applicatus, Batsch.

Agaricus semi-captus, B. & C.

Agaricus curtisi, Berk.

Agaricus prunulus, Scop.

Agaricus polychrous, Berk.

Agaricus semiorbicularis, Bull.

Agaricus campestris, L.
Fields. Fort Edward. Howe. Albany. Summer and autumn. Edible. This species is the one usually cultivated, and, therefore, it is probably used to a greater extent than any other. It should not, however, be inferred from this that it is superior to all others for edible purposes. Several are said to surpass it in flavor, and even the wild ones of this same species, freshly gathered from the fields, are considered by many, superior to the cultivated ones. The young plants are called “Button mushrooms.”
The species is quite variable, and, in some of its forms, approaches the following one quite closely. It does not appear to be abundant with us, though more plentiful some seasons than it is others.

Agaricus arvensis, Schaeff.

Agaricus cretaceus, Fr.

Agaricus sublateritius, Schaeff.

Agaricus epixanthus, Paul.
Agaricus orcella, *Bull.*

Agaricus subinvolutus, *Batsch.*

Agaricus clypeatus, *L.*

Agaricus sphagnorum, *Pers.*
Among Sphagnum in marshes. Sandlake.

Coprinus comatus, *Fr.*

Coprinus atramentarius, *Bull.*
This and other allied species, by the deliquescence of the lamellae, furnish a fluid which may be used as ink.

Coprinus domesticus, *Pers.*
Streets and yards of Albany. Spring and summer.

Coprinus plicatilis, *Curt.*

Paxillus atro-tomentosus, *Fr.*

Hygrophorus cinnabarinus, *Fr.*

Hygrophorus conicus, *Fr.*

Hygrophorus ceraceus, *Fr.*

Lactarius torminosus, *Fr.*
Lactarius piperatus, Fr.

Lactarius indigo, Fr.

Lactarius angustissimus, Lasch.

Lactarius volemus.

Lactarius subtomentosus, B. & R.


Russula emetica, Fr.

Russula alutacea, Fr.

Cantharellus tubiformis, Bull.

Cantharellus crispus, Fr.

Marasmius oreades, Fr.

Marasmius plancus, Fr.
Dead leaves and sticks in woods. Common. Summer.

Marasmius rotula, Fr.
Sticks and leaves in woods. Common. Summer.

Lentinus lecontei, Fr.
Old logs and stumps, mostly in open places. Common.
Panus stypticus, Fr.
Dead wood. Common.

Panus dorsalis, Fr.
Old logs. Catskill Mountains.

Schizophyllum commune, Fr.
Dead wood. Very common.

Lenzites betulina, Fr.
Old stumps and logs. Common.

Lenzites sepiaria, Fr.

Lenzites crategi, Berk.

Lenzites bicolor, Fr.

Boletus elegans, Fr.

Boletus granulatus, L.

Boletus bovinus, L.
In or near pine woods. Center station, between Albany and Schenectady; also Sandlake. Summer. A large species. Edible.

Boletus scaber, Bull.

Boletus felleus, Bull.

Polyporus ovinus, Schaff.

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Polyporus brumalis, Fr.

Polyporus tomentosus, Fr.
Low ground in woods, North Elba, where it is quite abundant, but I have not seen it elsewhere.

Polyporus perennis, Fr.
Shaded ground and banks by roadsides in hilly districts. Common.

Polyporus boucheanus, Fr.
Dead sticks and branches lying on or near the ground. Common.

Polyporus luridus, B. & C.

Polyporus elegans, Fr.

Polyporus lucidus, Fr.
Old logs, stumps and roots. Common.

Polyporus giganteus, Fr.

Polyporus sulfureus, Fr.
Old logs in woods. Fort Edward. Howe. North Elba. Edible. Sometimes attains a very large size, and is also conspicuous by reason of its color, the upper surface being bright orange, the lower, clear sulphur yellow.

Polyporus lacteus, Fr.

Polyporus gilvus, Fr.
Trunks of trees. Sandlake.

Polyporus adustus, Fr.

Polyporus labyrinthicus, Fr.
Polyporus cerifluus, *B. & C.*
Base of trees and old logs in woods. Adirondack Mountains.

Polyporus resinosus, *Fr.*

Polyporus applanatus, *Fr.*
Old logs and trees, mostly in woods. Common.

Polyporus fomentarius, *Fr.*
Stumps, trunks and old logs. Common.

Polyporus igniarius, *Fr.*

Polyporus scutellatus, *Schw.*

Polyporus subfuscus, *Fr.*

Polyporus carolinensis, *B. & C.*

Polyporus carneus, *Nees.*
Old logs in woods and open places. Common. Dr. Howe finds a resupinate form.

Polyporus cinnabarinus, *Fr.*
Old logs, etc. Common. A highly colored and somewhat variable species.

Polyporus radiatus, *Fr.*

Polyporus biflormis, *Kl.*
Old logs. Catskill Mountains.

Polyporus hirsutus, *Fr.*
Trees, stumps, etc. Very common.

Polyporus hirsutus, *Schw.*
Dead branches and sticks. Catskill Mountains.
Polyporus laceratus, Berk.
Old logs and trees. Very common.

Polyporus versicolor, Fr.
Old logs, sticks and posts. Everywhere.

Polyporus abietinus, Fr.

Polyporus sullivantii, Mont.

Polyporus virgineus, Schw.

Polyporus occidentalis, Kl. Old logs, Sandlake.

Polyporus medulla-panis, Fr.

Polyporus vaporarius, Fr.

Dædalea cinerea, Fr.

Dædalea confragosa, Bolt.

Glæoporus nigropurpurascens, Schw.

Merulius tremellosus, Schrad.

Fistulina hepatica, Fr.
Base of chestnut and oak trees. Fort Edward. Howe. Sandlake. Edible. This fungus is pronounced by some writers to be an excellent substitute for beef-steak, and the juice to be equal to beef gravy. It is stated by M. C. Cooke in his “British Fungi” that specimens sometimes attain a weight of thirty pounds. It is at once known by its liver-red color, red juice and yellow under surface. Unfortunately for those who would like to make use of it for food, it is rare with us.
H*nyrum repandum, L.

Hydnum suaveolens, Scop.

Hydnum graveolens, Delast.

Hydnum adustum, Schw.

Hydnum coralloides, Scop.

Hydnum erinaceus, Bull.

Hydnum gelatinosum, Scop.
Rotten wood in woods. Catskill Mountains.

Hydnum cirrhatum, Pers.
Trunks of trees in woods. Adirondack Mountains. Sometimes grows very large—a foot or more in diameter.

Hydnum ochraceum, Pers.

Hydnum himantia, Schw.

Hydnum mucidum, Pers.

Hydnum leticolor, B. & C.

Irpex tulipiferæ, Schw.

Irpex deformis, Fr.
Old stumps and trees. Helderberg Mountains.
IRPEX CINNAMOMEUS, *Fr.*
Dead trees and branches lying on the ground. Common.

CRATERELLUS CORNUCOPIOIDES, *Pers.*

THELEPHORA PALLIDA, *Schw.*
Fields and woods. Fort Edward. Howe. Port Kent

THELEPHORA PALMATA, *Fr.*

THELEPHORA TERRESTRIS, *Ehrh.*

STEREUM FASCIATUM, *Fr.*
Dead wood. North Greenbush.

STEREUM STRIATUM, *Fr.*

STEREUM COMPLICATUM, *Fr.*
Trees, stumps and branches. Common.

STEREUM PURPUREUM, *Pers.*
Trunks and branches. Common.

STEREUM SPADICEUM, *Fr.*
Old stumps and trees. Common.

STEREUM HIRSUTUM, *Fr.*

STEREUM OCHRACEO-FLAVUM, *Schw.*
Dead trees. Catskill Mountains.

STEREUM BICOLOR, *Fr.*
Old logs. Catskill Mountains.

STEREUM RUBIGINOSUM, *Schrad.*

STEREUM TABACINUM, *Fr.*
Dead trees and old logs. Catskill Mountains.
Stereum imbricatum, *Schw.*

Stereum frustulosum, *Fr.*

Stereum acerinum, *Fr.*

Corticium oakeshi, *B. & C.*

Corticium cinereum, *Fr.*

Cyphella capula, *Fr.*

Cyphella musicola, *Fr.*
Among mosses about the base of trees. Fort Edward. Howe, the first to detect it in this country.

Clavaria botrytis, *Pers.*

Clavaria aurea, *Schaff.*

Clavaria juncea, *Fr.*
Dead leaves. Fort Edward. Howe, the first to find it in this country.

Clavaria stricta, *Pers.*

Clavaria inaequalis, *Fr.*

Spathularia flavida, *Pers.*
Woods in hilly and mountainous districts. Common.

Pistillaria musicola, *Fr.*
Mosses, most often on *Climacium americanum* and *Hypnum delicatulum.*
Tremella aurantia, Schwe.
Old stumps. Sharon Springs.


Tremella sarcoïdes, With.

Exidia auricula-juda, Fr.

Exidia glandulosa, Fr.

Exidia truncata, Fr.

Exidia cinnabarina, B. & C.

Dacrymyces stillatus, Fr.

Dacrymyces tortus, Fr.

Lycoperdon gemmatum, Batsch.
Ground and old stumps in woods and fields. Common.

Lycoperdon pyriforme, Schaff.
Ground, old stumps and logs. Common. I have partaken of this species without any unpleasant results, but cannot recommend it as especially delicious, and forbear to class it among the edible species.

Lycoperdon calvescens, B. & C.
Ground in open woods. Bethlehem.

Lycoperdon wrightii, B. & C.
Helderberg Mountains.

Bovista plumbea, Pers.

Bovista cyathiformis, Bosc.
Geaster hygrometricus, *Pers.*
Sandy ground. Fort Edward. Howe. Center Station.

Scleroderma vulgare, *Fr.*
Ground and old logs. Common.

Lycogala epidendrum, *L.*
Rotten wood. Common.

Æthalium septicum, *Fr.*
Old logs and stumps. Common.

Diderma globosum, *Pers.*
On moss. Sandlake.


Didymium fulvipes, *Fr.*
On *Hyphnum triquetrum.* Fort Edward. Howe, who first detected it in this country.

Physarum nutans, *Pers.*

Stemonitis ferruginea, *Ehrh.*
Dead and rotten wood. Common.

Dictydium microcarpum, *Schrad.*

Cribraria purpurea, *Schrad.*
Rotten wood. Catskill Mountains. Rare.

Cribraria intricata, *Schrad.*
Rotten wood. Jordanville.

Arcyria cinerea, *Fl. Dan.*
Rotten wood in woods. Sandlake.

Trichia rubiformis, *Pers.*
Rotten wood. North Elba.

Trichia clavata, *Pers.*
Trichia turbinata, *With.*

Cyathus campanulatus, *Fr.*
Dung in fields. Bethlehem.

Cyathus crucibulum, *Pers.*

Ptychogaster albus, *Corda.*
In rotten logs. Fort Edward. Howe.

Microthyrium microscopicum, *Desm.*

Spheronema consors, *B. & C.*

Diplodia viticola, *Desm.*

Sphaleropsis insignis, *B. & C.*

Vermicularia liliacearum, *Schw.*

Septoria herbarium, *B. & C.*

Stilbospora ovata, *Pers.*

Stilbospora pyriforme, *Hoffm.*

Cytispora rubescens, *Fr.*
Dead bark of mountain ash. Poestenkill. Howe.

Cytispora leucosperma, *Fr.*

Nemaspora crocea, *Pers.*

Myxosporium nitidum, *B. & C.*
Torula herbarum, *Pers.*

Septonema spilomeum, *Berk.*

Aregma speciosum, *Fr.*

Puccinia aculeata, *Schw.*
Living leaves of *Podophyllum peltatum.* Fort Edward. Howe.

Puccinia solida, *Schw.*

Puccinia graminis, *DC.*

Puccinia waldsteiniae, *Curt.*
Living leaves of *Waldsteinia fragarioides.* Fort Edward. Howe, by whom it was first discovered. Closely allied to *Puccinia solida,* from which it differs in color—giving a purple hue to the leaf tissues.

Puccinia juncei, *Schw.*

Puccinia investita, *Schw.*

Uredo rubigo, *DC.*
Living leaves of rye. Fort Edward. Howe. This and other species of *Uredo* are commonly called "Rust."

Uredo caricina, *DC.*

Uredo epitea, *Kunze.*

Uredo polygonorum, *DC.*

Uredo solidaginis, *Schw.*
Uredo potentille, *DC*.

Uredo ruborum, *DC*.

Uredo luminata, *Schw*.
Leaves of Rubus. Common.

Uredo effusa, *Strauss*.

Uredo leguminosarum, *Link*.
Leaves of *Amphicarpaea monoica*. North Greenbush.

Uredo pyrole, *Strauss*.

Uredo saliceti, *Schlect*.

Uredo violarum, *DC*.

Uromyces lespedeza-violacea, *Schw*.

Uromyces lespedeza-procumbentis, *Schw*.

Uromyces hyperici, *Schw*.

Uromyces apiculosa, *Lev*.

Ustilago segetum, *Pers*.
Heads of oats. Fort Edward. Howe. The species of *Ustilago* are popularly known by the name of "Smut". Those that attack the cultivated grains are detrimental to the interests of the farmer, often materially diminishing the quantity and quality of his crops.

Ustilago maydis, *Corda*. (*Ustilago zee, Schw.*)
Flowers, fruit, etc., of Indian corn. Albany and Sandlake. The *Corn Smut* is sometimes a serious pest. A field of corn came under my observation the past season in which almost every hill
had been attacked, and at least one out of every four ears. This field of corn, just before flowering time, appeared as thrifty and promising as any in the county.

Ustilago junct, Schw.

Ustilago urceolorum, DC.
    Seeds of Carex pensylvanica. Center Station.

Ustilago utriculosa, Nees.
    Seeds of Polygonum. Albany.

Roestelia lacerata, Sw.
    Leaves and twigs of the thorn,—Crataegus crus-galli. North Greenbush.

Æcidiurn grossularia, DC.
    Leaves of gooseberry, Ribes cynosbati. Sandlake.

Æcidiwm compositarum, Mart.

Æcidiun gnaphalium, Schw.

Æcidiurn houstonianum, Schw.
    Leaves of Houstonia. Bethlehem.

Æcidiwm sambuci, Schw.
    Petioles of elder,—Sambucus canadensis. West Albany and Sandlake.

Æcidiurn hydnoideum, B. & C.

Cystopus candidus, Lev.

Epicoccum micropus, Corda.

Tubercularia granulata, Pers.
    Dead bark. Troy. Howe.

Tubercularia vulgaris, Tode.
    Dead sticks and branches. Common.
Tubercularia confluens, *Pers*.
Dead bark of currant. Troy. Howe.

Sporocybe calicioides, *Fr*.
Dead bark. Troy. Howe.

Helminthosporium macrocarpon, *Grev*.

Helminthosporium rectum, *B. & C*.

Podosporium rigidum, *Schw*.

Polythrinicum trifoli, *Kunze*.
Living leaves of clover. Common.

Cladosporium herbarum, *Link*.
Dead leaves and stems of herbs. Fort Edward. Howe.

Penicillium crustaceum, *Fr*.

Morchella esculenta, *Pers*.

Geoglossum hirsutum, *Pers*.

Geoglossum difforme, *Fr*.

Peziza macropus, *Pers*.
Ground in woods. Bethlehem and Adirondack Mountains.

Peziza scutellata, *L*.

Peziza calycina, *Schum*.
Peziza viticola, Pers.
Dead grape vines in woods. Fort Edward. Howe. Rare.

Peziza lenticularis, Bull.
Bark of white oak. Fort Edward. Howe. Rare.

Peziza translucida, B. & C.
Fort Edward. Howe.

Peziza cyathoidea, Bull.

Peziza agassizii, B. & C.
Trunks of trees—balsam firs. Mt. McIntyre.

Peziza citrina, Batsch.

Peziza herbarum, Pers.

Peziza compressa, A. & S.

Peziza flexella, Fr.

Peziza turbinata, Curt.
Chestnut bark. Fort Edward. Howe, by whom it was first found in this country.

Solenia candida, Pers.

Ascobolus conglomeratus, Schw.

Bulgaria inquinans, Fr.

Bulgaria sarcoides, Fr.
Rotten wood. Catskill Mountains.

Sphinctrina turbinata, Fr.
Patellaria discolor, Mont.

Patellaria rhabarbarina, Berk.

Urnela craterium, Fr.

Dermatea fascicularis, Fr.

Cenangium seriatim, Fr.
Dead bark of white birch. Fort Edward. Howe, the first to find it in this country.

Cenangium pinastri, Fr.

Cenangium populinum, Schw.

Cenangium ribis, Fr.

Dichelena faginea, Fr.
Bark of beech trees. Common.

Rhytisma solidaginis, Schw.
Leaves of Solidago. Common.

Rhytisma acerinum, Fr.
Leaves of red maple. Common.

Rhytisma decolorans, Fr.
Leaves of Andromeda ligustrina. Sandlake.

Rhytisma vaccini, Fr.

Rhytisma pruni, Fr.
Leaves of Prinos. Sandlake.

Rhytisma punctatum, Fr.

*Rhytisma salicinum, Fr.*

*Rhytisma Blakei, Curt.*

*Phacidium coronatum, Fr.*

*Phacidium crustaceum, B. & C.*
Dead branches of pines. Fort Edward. Howe.

*Hysterium elongatum, Wahl.*

*Hysterium hiascens, B. & C.*

*Hysterium lineare, Fr.*

*Hysterium pinastri, Schrad.*

*Xylaria polymorpha, Pers.*
Rotten wood. Common and variable.

*Xylaria hypoxylon, Ehrh.*

*Hypocrea lactifluorum, Schw.*

*Hypocrea citrina, Fr.*

*Hypocrea rufa, Pers.*

*Hypocrea richardsonii, B. & M.*

*Hypoxylon ustulatum, Bull.*

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Hypoxylon nummularium, *Bull.*

Hypoxylon clypeus, *Schwe.*

Hypoxylon multiforme, *Fr.*

Hypoxylon coherens, *Pers.*

Hypoxylon fusco, *Pers.*

Hypoxylon fragiforme, *Pers.*

Hypoxylon rubiginosum, *Pers.*

Hypoxylon serpens, *Pers.*

Diatrype stigma, *Fr.*

Diatrype disciformis, *Fr.*
Trunks of trees and dead sticks. North Greenbush and Catskill Mts.

Valsa nivea, *Fr.*
Dead Populus. Catskill Mts.

Valsa stilbostoma, *Fr.*

Valsa americana, *B. & C.*

Valsa constellata, *B. & C.*

Nectria cinnabarini, *Fr.*
Bark and dead branches of trees—also parasitic on *Tubercularia confluens.* Troy. Howe.

**Nectria cucurbitula, Fr.**

**Spileria ovina, Pers.**

**Spileria pulvis-pyrius, Pers.**

**Spileria myriocarpa, Fr.**

**Spileria papilla, Schw.**

**Spileria pertusa, Pers.**

**Spileria fissurarum, B. & C.**

**Spileria saubineti, Mont.**

**Spileria picea, Pers.**

**Spileria ulmea, Schw.**

**Spileria lespedezae, Schw.**

**Spileria rostrata, Fr.**

**Spileria limiformis, Schw.**
Bark of oak and chestnut. Fort Edward. Howe.

**Spileria aculeata, Schw.**

**Spileria acuminata, Sow.**

**Spileria nigrella, Fr.**
Sphæria verbascicola, Schw.

Sphæria potentille, Schw.

Sphæria punctiformis, Pers.

Sphæria fusca, Pers.

Sphæria disciformis, Hoffm.

Sphæria coryli, Batsch.

Sphæria fimbriata, Pers.

Sphæria quercina, Pers.
   Fort Edward. Howe.

Sphæria epidermidis var. microscopica, Desm.

Sphæria desmazierii, B. & Br.
   Under side of branches lying on the ground. Fort Edward. Howe.

Sphæria sordaria, Fr.

Microsphæria penicillata, Lev.

Dothidea omans, Schw.

Dothidea betulina, Fr.
Erysiphe communis, Schlect.

Erysiphe ceanothi, Schw.

Asterina gaultheriæ, Curt.

Erineum fagineum, Pers.

Erineum luteolum, Kunze.

Erineum alnigerum, Kunze.

Erineum aureum, Pers.

Erineum vitis, DC.

Sclerotium orobanches.
Dead stems of Epiphegus virginiana. Fort Edward. Howe. Rare.

Sclerotium varium.

Sclerotium populinum, Pers.

Eustilbum rehmanum, Rabenh.
Gum spots on bark of spruce trees. Catskill Mountains.

Depazea brunnea, B. & C.
Leaves of maple. Jordanville.

Depazea cruenta, Fr.
Leaves of Solomon's seal—Smilacina racemosa. North Green-bush.
NEW STATIONS OF RARE PLANTS—REMARKABLE VARIETIES
AND OBSERVATIONS.

**Thalictrum purpurascens, L.**
Plentiful on the sandy barrens between Albany and Schenectady.

**Dentaria maxima, Nutt.**
Angola, Erie county. G. W. Clinton.

**Viola cucullata var. cordata, Gray.**
North Greenbush.

**Viola cucullata var. longipes.**
Cedar swamps of South Herkimer county. Gilbert. In accordance with the suggestion of Mr. Gilbert I have ventured to give this variety a name. It is characterized by its very long scapes (8'-12' in length) much surpassing the small, thick leathery leaves, and by its large flowers, nearly always white or variegated.

**Viola pubescens var. scabriuscula, T. & G.**

**Viola tricolor var. arvensis, DC.**
Mr. Gerard finds this plant on a hill near Poughkeepsie, apparently native there.

**Hypericum canadense var. major, Gray.**
Shore of Bowman's pond, Sandlake.

**Malva moschata, L.**
Meadows. Sandlake. Roadsides, southern towns of Herkimer county; quite plentiful there, and oftener with white than with rose-colored flowers.

**Potentilla fruticosa, L.**
Newburgh. Gerard.

**Lonicera sempervirens, Ait.**
Bald Mountain, near Lansingburgh. Brainerd.

**Sedum telephoides, Michx.**
West shore of Seneca Lake. Wright. Not a new station but one previously involved in some doubt.

**Krigia virginica, Willd.**
Bethlehem.
Linaria vulgaris var. peloria.
   Poughkeepsie. Gerard.

Lobelia syphilitica, L.
   Poughkeepsie; with white flowers. Gerard.

Rhododendron maximum, L.

Physostegia virginiana, Benth.
   Shore of Lake Champlain, one mile south of Westport.

Echium vulgare, L.
   Becoming too common in the eastern part of the State. Farmers would do well to look upon this showy but rough plant as an unwelcome intruder on their lands.

Gentiana saponaria var. linearis, Gray.
   Common in the Adirondack region, where it occasionally bears white flowers.

Statice limonium, L.
   Astoria. A white-flowered variety.

Wolffia columbiana, Karsten.
   Near Catskill. T. F. Allen.

Zannichellia palustris, L.
   Lake Champlain at Westport.

Goodyera menziesii, Lindl.

Cypripedium arietinum, R. Brown.
   Swamp near Summit Lake, bearing pure white flowers. Gilbert.

Juncus articulatus, L.
   Wet places, West Albany.

Xyris flexuosa var. pusilla, Gray.
   Cranberry marsh, Sandlake.

Cyperus grayii, Torr.
   Port Kent, on the farm of Hon. W. C. Watson. Dr. Howe sends from Fort Edward a variety without rays, the spikes being all in a single sessile head.
Carex gynocrates var. substaminata.

Cedar swamps, Jordanville. In this form a single perigynium occurs at the base of the staminate spike. Specimens were found with the spikes wholly staminate, but none were seen wholly pistillate.

Carex scirpoidea, Michx.

This rarely produces an additional small spike at the base of the principal one.

Carex siccata, Dew.

Plentiful on the top of Bald Mountain, Rensselaer county.

Calamagrostis canadensis, Beauv.

Specimens bearing ergot were found at the base of Mt. McIntyre, eight miles from any cleared land, from which it is probable that the production of ergot is independent of any influence from cultivation.

This grass grows abundantly in the low grounds and on the "beaver meadows" of Essex and Franklin counties, and is cut for hay to the extent of many tons.

Onoclea sensibilis var. obtusilobata, Torr.

A form closely approaching this rare variety was found in Sandlake by Dr. Howe. The pinnae of one side of the frond are more contracted than those of the other side; all are sinuate pinnatifid, but the pinnules are broadest at the base. The fruit is not well developed.

Asplenium ebeneum var. incisum, Howe.

Poestenkill. Howe. In this form the pinnae are about one inch long, and all except the extreme upper and lower ones are deeply incised—pinnatifid; the pinnules are rather strongly 3–5 crenate toothed. I have thought best to give it the name suggested by its discoverer.

Isoetes echinospora var. braunii, Engelm.

Poestenkill. Howe.

Sphagnum cymbifolium var. congestum, Bryol Europ.

On all the high peaks of the Adirondack Mts. Its compact growth and numerous dense branches probably serve in some measure to protect it from the rude assaults of the violent winds to which it is exposed. The same mode of growth and dense ramification is also observed in S. acutifolium and other species growing in these elevated exposed situations.

Dicranum rufescens, Turn.

Banks by roadsides. Catskill Mts.
Dicranum schreberi, Hedw.
   Banks near Little Falls. Austin.

Dicranum spurium, Hedw.
   Woods. Poestenkill.

Fissidens exigus, Sulliv.
   Danube, Herkimer county. Austin.

Barbula fallax, Bryol Europ.
   Little Falls. Austin.

Orthotrichum obtusifolium, Schrad.
   Stone walls. Herkimer county.

Ptychomitrium incurvum, Schwegr.
   Peckskill. (M. Leroy legit.) Austin.

Hypnum nitens, Schreb.
   Fort Edward, Howe. A remarkable form with curved branches
   and secund-falcate leaves.

Duvalia rupestris, Nees.
   Rocks. Little Falls.

Grimaldia barbifrons, Raddi.
   Bethlehem.

Lunularia vulgaris, Mich.

Reboulia hemispilertica, Raddi.
   Ravines near Albany.

In concluding this report grateful acknowledgments are rendered to Profs. A. Braun, W. S. Sullivant, E. Tuckerman and Rev. M. A. Curtis for much aid in the determination, by duplicate specimens, of species belonging to the orders which they have respectively made a specialty. It is also added, by request of Dr. Howe, that the specimens of fungi contributed by him have all passed, by duplicate, under the inspection of Dr. Curtis.

It is desirable that any interesting observations on the flora of our State be promptly communicated, and that good specimens of any new species or marked varieties be forwarded for the Herbarium.

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In the preceding list, when no name is annexed to the station or stations, the plant has been found therein by the writer.

Dates given in the list of mosses signify the time of maturing the fruit; in the lists of algae and fungi, the time of collecting; and, to some extent, therefore, they indicate the time of the occurrence of the species. Much observation is yet necessary to enable us to determine their time of maturity fully and accurately. Most of the lichens, some algae and many fungi, may be found at all seasons.

Respectfully yours,

C. H. PECK.

Albany, Jan. 9th, 1869.