

REPORT OF THE BOTANIST.

24 Reg. Rep.

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*Secretary of the Board of Regents of the
University of the State of New York:*

SIR.—The following report of work done during the year 1869, toward perfecting the State Herbarium, is respectfully submitted:

Since the date of my last report, specimens of four hundred and twenty-two species of plants have been poisoned, mounted and placed in the Herbarium, three hundred and fifty-four of which were not before represented in it. Sixty-eight are varieties previously unrepresented, or better specimens than had before been obtained. A list of the names is given in a paper marked (1).

Specimens have been collected in the counties of Albany, Rensselaer, Saratoga, Warren, Hamilton, Lewis, Oneida, Otsego, Schoharie, Greene, Putnam and Orange, representing three hundred and one species new to the Herbarium, two hundred and ninety-nine new to the State and eighty-seven new to science, two of them representing two new genera. A list of these is given in a paper marked (2).

Specimens have been contributed, or obtained by exchange or in naming, which were collected in the counties of Suffolk, Richmond, New York, Westchester, Rockland, Ulster, Greene, Oneida, Onondaga and Erie. Of these, seventy-eight are new to the Herbarium and not among my collections of the past season, seventy-six are additions to the flora of the State and three are new species. If these be added to the collected species, the total becomes three hundred and seventy-nine new to the Herbarium, three hundred and seventy-five new to the State, and ninety new species.

A classified tabular statement is given below:

		New to the Herbarium.	New to the State.	New Species.	New Genera.
Plants collected	Ferns	2	....	..	...
	Lichens	11	11	..	...
	Fungi	288	288	87	2
Total . . . . .	.....	301	299	87	2
Plants contributed	Flowering plants	15	13	..	...
	Mosses	2	2	..	...
	Lichens	15	15	..	...
	Fungi	46	46	3	...
Total . . . . .	.....	78	76	3	...
Collected and contrib'ed	.....	379	375	90	2

This statement does not include a large number of contributed specimens of species already represented in the Herbarium, nor unrepresented varieties of such species, neither extra limital ones. Of the latter class there are about thirty species, the specimens being from Rhode Island, New Jersey, Pennsylvania, Illinois, Colorado, California, Mexico, Michigan, Alabama and China. It is a gratifying fact, and one that indicates an increasing interest in botanical studies and investigations, that in no previous year have botanical contributions, communications and inquiries been received in so great numbers, nor from so many persons. Thanks are due to the botanists of this State and of others for their liberal contributions. A list of them is given in a paper marked (3).

New species and their descriptions, previously unreported species, remarkable varieties and observations, are given in a paper marked (4).

Appended to the list of collected plants, marked (2), is a list of edible fungi, collected and contributed; fourteen species in all, making, with those previously reported, about sixty edible species in the State.

Agaricus abortivus has not before been published as edible, but it is now thus classed, after a trial of its edible qualities without

any disagreeable results. Writers differ in their estimate of the qualities of *Agaricus melleus* and *Lactarius piperatus*. The former is said by some to be disagreeable and nauseous and the latter has even been classed with the poisonous species. Aware that tastes differ in such matters, I simply express my own views, after a fair trial of these species, in saying that the former, when well cooked, is decidedly good, and the latter is not only harmless, but scarcely inferior in edible qualities to the much lauded *Lactarius deliciosus*. The unpleasant or acrid taste of these species when raw is perhaps the occasion of hostility to them. *Agaricus ostreatus*, *Cantharellus cibarius* and *Lycoperdon giganteum* afford a very palatable dish, but *Helvella esculenta* and *Hydnum coralloides* have to me a somewhat strong fungoid flavor, but they produce no bad effects, and perhaps by different preparation might furnish agreeable food.

The species of the genera *Clavaria* and *Æcidium* are not in all cases sharply defined, and they therefore present some difficulties to the student. With a view to aid students in their discrimination of the species already found in the State, a synopsis of them is given in a paper marked (5).

The plan of making colored drawings of the fleshy fungi has been followed and in some instances extended so as to include microscopic species. The number of species and varieties thus figured the past season is one hundred and sixty-three. The figures will be placed on the species sheet with the dried specimens, and though not especially artistic, being often of necessity hastily made before the plant should wither, they serve to show the essential characters of the plant, and will be of great aid to those studying the specimens.

The condition of the specimens in the Herbarium is unimpaired. The specimens of fleshy fungi, though especially liable to the attacks of insects, have in no instance, so far as I can see, been at all affected, a good indication of their having been well poisoned. The preparation used consists of the following components:

Corrosive sublimate.....	4 drachms,
Sulphuric ether.....	3 ounces,
Mix and add:	
Spirits of turpentine.....	2 ounces,
Alcohol	3 ounces.

The method employed in drying specimens of fleshy fungi differs somewhat from that laid down in books. They are dried as soon as

possible by exposing them to the full rays of the sun whenever that is practicable. In cloudy weather they must be dried by a fire, care being taken not to heat them so much as to burn them. After they are thoroughly dried they are exposed to the moist atmosphere of a clear summer's night, or a damp day, until they are sufficiently soft and flexible to be pressed into proper shape by the thumb and fingers, after which they are placed in a paper press and dried like other plants.

(1)

SPECIES OF WHICH SPECIMENS HAVE BEEN MOUNTED.

- | | |
|---|--|
| Hepatica acutiloba <i>DC.</i> | Polygonum maritimum <i>L.</i> |
| Ranunculus bulbosus <i>L.</i> | Rumex Britannica <i>L.</i> |
| Aquilegia vulgaris <i>L.</i> | R. verticillatus <i>L.</i> |
| Liriodendron Tulipifera <i>L.</i> | Callitriche verna <i>L.</i> |
| Dicentra cucullaria <i>DC.</i> | Parietaria Pennsylvanica <i>Muhl.</i> |
| Viola cucullata v. palmata <i>Gray.</i> | Quercus obtusiloba <i>Michx.</i> |
| Lechea minor <i>Lam.</i> | Betula glandulosa <i>Michx.</i> |
| Ascyrum Crux-Andree <i>L.</i> | Salix humilis <i>Marshall.</i> |
| Impatiens pallida <i>Nutt.</i> | S. sericea <i>Marshall.</i> |
| Vitis cordifolia <i>Michx.</i> | Taxus Canadensis <i>Willd.</i> |
| Lespedeza violacea <i>Pers.</i> | Scheuchzeria palustris <i>L.</i> |
| Lathyrus maritimus <i>Bigel.</i> | Habenaria bracteata <i>R. Br.</i> |
| Prunus Americana <i>Marshall.</i> | Spiranthes cernua <i>Richard.</i> |
| P. maritima <i>Wang.</i> | Cypripedium parviflorum <i>Salisb.</i> |
| P. Virginiana <i>L.</i> | Trillium cernuum <i>L.</i> |
| Potentilla arguta <i>Pursh.</i> | Scirpus pungens <i>Vahl.</i> |
| Cratægus coccinea <i>L.</i> | Carex fœnea <i>Willd.</i> |
| Œnothera fruticosa <i>L.</i> | C. alata <i>Torr.</i> |
| Thaspium aureum <i>Nutt.</i> | C. Buxbaumii <i>Wahl.</i> |
| Aralia nudicaulis <i>L.</i> | C. grisea <i>Wahl.</i> |
| Eupatorium purpureum <i>L.</i> | C. pubescens <i>Muhl.</i> |
| Helianthus strumosus <i>L.</i> | Bromus racemosus <i>L.</i> |
| Achillea Millefolium <i>L.</i> | B. Kalmii <i>Gray.</i> |
| Nabalus nanus <i>DC.</i> | B. sterilis <i>L.</i> |
| Lobelia Nuttallii <i>R. & S.</i> | Panicum capillare <i>L.</i> |
| L. siphilitica <i>L.</i> | P. virgatum <i>L.</i> |
| Vaccinium vacillans <i>Sol.</i> | Woodsia glabella <i>R. Br.</i> |
| Andromeda polifolia <i>L.</i> | Pellæa gracilis <i>Hook.</i> |
| Veronica peregrina <i>L.</i> | Aspidium cristatum <i>Swartz.</i> |
| Echium vulgare <i>L.</i> | A. acrostichoides <i>Swartz.</i> |
| Nicotiana rustica <i>L.</i> | Osmunda Claytoniana <i>L.</i> |
| Asclepias incarnata <i>L.</i> | Botrychium lunarioides <i>Swartz.</i> |
| Chenopodium murale <i>L.</i> | |
| C. urbicum <i>L.</i> | |
| C. album <i>L.</i> | |
| Atriplex patula <i>L.</i> | |

NEW TO THE HERBARIUM.

- Nymphæa minor *DC.*
Reseda alba *L.*

- Raphanus sativus *L.*
 Silene Armeria *L.*
 Lychnis vespertina *Sibth.*
 Spergularia media *Presl.*
 Althæa rosea *Cav.*
 A. ficifolia *Cav.*
 Malva Alcea *L.*
 Polygala lutea *L.*
 Trifolium procumbens *L.*
 Saxifraga aizoides *L.*
 Sedum ternatum *Michx.*
 Anethum Foeniculum *L.*
 Coriandrum sativum *L.*
 Galium Mollugo *L.*
 Valeriana officinalis *L.*
 Aster azureus *Lindl.*
 Solidago Houghtonii *T. & G.*
 Nabalus Boottii *DC.*
 Tragopogon porrifolius *L.*
 Lactuca sativa *L.*
 Matricaria Chamomilla *L.*
 M. Parthenium *L.*
 Cirsium altissimum *Spreng.*
 Silybinum Marianum *Gaert.*
 Lampsana communis *L.*
 Alyssum calycinum *L.*
 Dianthus Armeria *L.*
 Campanula rapunculoides *L.*
 Rhinanthus Crista-galli *L.*
 Hyssopus officinalis *L.*
 Phlox paniculata *L.*
 Polemonium cœruleum *L.*
 Vinca minor *L.*
 Vincetoxicum nigrum *L.*
 Corispermum Hyssopifolium *L.*
 Amarantus spinosus.
 A. hypochondriacus *L.*
 Polygonum incarnatum *Ell.*
 P. lapathifolium *Ait.*
 Euphorbia Peplus *L.*
 E. Lathyris *L.*
 Juniperus Sabina v. procumbens *Pursh.*
 Sparganium eurycarpum *Eng.*
 Tofieldia glutinosa *Willd.*
 Carex sterilis *Willd.*
 Calamagrostis Pickeringii *Gray.*
 Stipa Richardsonii *Link.*
 Triticum vulgare *Vill.*
 Aspidium fragrans *Swartz.*
- Bruchia flexuosa *Schwagr.*
 Bryum Lescurianum *Sulliv.*
 Dicranum pellucidum *Hedw.*
 Plagiothecium latebricola *B. E.*
 Biatora Hypnophila *Ach.*
 Buellia geographica *L.*
 Coniocybe pallida *Fr.*
 Placodium cerinum *Hedw.*
 Opegrapha varia *Ach.*
 Calicium subtile *Pers.*
 C. Curtisii *Tuck.*
 Arthonia astroidea *Ach.*
 Lecanora ventosa *Ach.*
 Cetraria nivalis *Ach.*
 Mycoporum pycnorum *Tuck.*
 Lyngbya flacca *Ag.*
 Desmarestia aculeata *Lamour.*
 Callithamnion cruciatum *Ag.*
 C. virgultorum *Harv.*
 Enteromorpha intestinalis *Lk.*
 Nematium multifidum *J. Ag.*
 Rhodomela subfusca *Ag.*
 Calothrix confervicola *Ag.*
 Cladophora uncialis *Fl. Dan.*
 Agaricus vernus *Fr.*
 A. Phalloides *Fr.*
 A. cæsareus *Scop.*
 A. vaginatus *Bull.*
 A. Ceciliæ *B. & Br.*
 A. farinosus *Schw.*
 A. clypeolarius *Bull.*
 A. acutesquamosus *Weinm.*
 A. naucinus *Fr.*
 A. granulatus *Batsch.*
 A. vaccinus *Pers.*
 A. variegatus *Scop.*
 A. personatus *Fr.*
 A. alboflavidus *Pk.*
 A. nebularis *Batsch.*
 A. infundibuliformis *Scha.*
 A. carnosior *Pk.*
 A. illudens *Schw.*
 A. Adirondackensis *Pk.*
 A. Poculum *Pk.*
 A. brumalis *Fr.*
 A. ditopus *Fr.*
 A. metachrous *Fr.*
 A. vulgaris *Pers.*
 A. paluster *Pk.*
 A. collariatus *Fr.*

- Agaricus praelongus *Pk.*
 A. galericulatus *Scop.*
 A. purus *Pers.*
 A. Corticola *Schum.*
 A. sanguinolentus *A. & S.*
 A. Familia *Pk.*
 A. dryophilus *Bull.*
 A. stipitarius *Fr.*
 A. Campanella *Batsch.*
 A. Fibula *Bull.*
 A. umbelliferus *L.*
 A. cervinus *Schaeff.*
 A. nanus *Pers.*
 A. leoninus *Schaeff.*
 A. rhodopolius *Fr.*
 A. strictior *Pk.*
 A. serrulatus *Pers.*
 A. adiposus *Fr.*
 A. temnophyllus *Pk.*
 A. Hallianus *Pk.*
 A. curvo-marginatus *Pk.*
 A. scorpioides *Fr.*
 A. semiorbicularis *Bull.*
 A. Lignicola *Pk.*
 A. autumnalis *Pk.*
 A. vernalis *Pk.*
 A. lateritius *Fr.*
 A. ovalis *Fr.*
 A. tener *Schaeff.*
 A. Hypnorum *Batsch.*
 A. rimosus *Bull.*
 A. fastigiatus *Fr.*
 A. subochraceus *Pk.*
 A. flocculosus *Berk.*
 A. geophyllus *Sow.*
 A. sarcophyllus *Pk.*
 A. silvicola *Vitt.*
 A. Hornemanni *Fr.*
 A. Johnsonianus *Pk.*
 A. perplexus *Pk.*
 A. semiglobatus *Batsch.*
 A. stercorarius *Fr.*
 A. spadiceus *Fr.*
 A. cernuus *Mull.*
 A. semilanceolatus *Fr.*
 A. solidipes *Pk.*
 A. retrugis *Batsch.*
 A. campanulatus *L.*
 A. papilionaceus *Bull.*
 A. fimicola *Fr.*
- Agaricus gracilis *Fr.*
 A. atomatus *Fr.*
 A. disseminatus *Pers.*
 Coprinus tomentosus *Fr.*
 C. niveus *Fr.*
 C. micaceus *Fr.*
 C. plicatilis *Fr.*
 C. ephemerus *Fr.*
 Cortinarius caperatus *Fr.*
 C. coloratus *Pk.*
 C. communis *Pk.*
 C. luteofuscus *Pk.*
 C. collinitus *Fr.*
 C. tricolor *Pk.*
 C. argentatus *Fr.*
 C. alboviolaceus *Fr.*
 C. violaceus *Fr.*
 C. subochraceus *Pk.*
 C. autumnalis *Pk.*
 C. Catskillensis *Pk.*
 C. squamulosus *Pk.*
 C. armillatus *Fr.*
 C. castaneoides *Pk.*
 C. biformis *Fr.*
 C. distans *Pk.*
 C. sanguineus *Fr.*
 C. cinnamomeus *Fr.*
 C. castaneus *Fr.*
 C. vernalis *Pk.*
 Hygrophorus chrysodon *Fr.*
 H. congelatus *Pk.*
 H. coccineus *Fr.*
 H. nitidus *B. & C.*
 Lactarius pyrogalus *Fr.*
 L. plumbeus *Fr.*
 L. glyciosmus *Fr.*
 L. platyphyllus *Pk.*
 L. affinis *Pk.*
 L. sordidus *Pk.*
 L. torminosus *Fr.*
 L. subdulcis *Fr.*
 L. camphoratus *Fr.*
 L. rufus *Fr.*
 L. uvidus *Fr.*
 L. piperatus *Fr.*
 Russula decolorans *Fr.*
 R. nitida *Fr.*
 R. foetens *Fr.*
 Cantharellus floccosus *Schw.*
 C. cibarius *Fr.*

- Cantharellus cinnabarinus Schw.
 C. infundibuliformis Fr.
 C. aurantiacus Fr.
 C. dichotomus Pk.
 Marasmius subvenosus Pk.
 M. scorodonius Fr.
 M. oreades Fr.
 Lentinus cochlearis Fr.
 L. lepidus Fr.
 Lenzites Cratægi Berk.
 Boletus luteus L.
 B. collinitus Fr.
 B. albus Pk.
 B. Elbensis Pk.
 B. flavidus Fr.
 B. pictus Pk.
 B. Clintonianus Pk.
 B. spectabilis Pk.
 B. paluster Pk.
 B. Sistotrema Fr.
 B. subtomentosus Fr.
 B. edulis Bull.
 B. cyanescens Bull.
 B. scaber Bull.
 B. retipes B. & C.
 B. auriporus Pk.
 B. strobilaceus Scop.
 Polyporus salicinus Fr.
 Thelephora laciniatus Pers.
 Bovista nigrescens Pers.
 B. plumbea Pers.
 Lycoperdon giganteum Batsch.
 L. cælatum Fr.
 Geaster saccatus Fr.
 Didymium cinereum Fr.
 Æcidium Impatientis Schw.
 Æ. Geranii DC.
 Æ. Limonii Pk.
 Æ. Myricatum Schw.
 Æ. Orobi DC.
 Æ. Fraxini Schw.
 Æ. Violæ Schum.
 Æ. Cænotheræ Pk.
 Æ. pustulatum Curt.
 Æ. Podophylli Schw.
 Æ. Epilobii DC.
 Æ. quadrifidum DC.
 Æ. Ranunculi Schw.
 Æ. Claytoniatum Schw.
 Æ. macrosporum Pk.
 Æcidium Compositarum Mart.
 Æ. Clematidis Schw.
 Ravenelia glanduliformis B. & C.
 Polycystis Ranunculacearum
 Desm.
 Uromyces macrospora B. & C.
 U. Limonii Lev.
 Ustilago segetum Ditm.
 Podisoma macropus Schw.
 Aegma mucronatum Fr.
 Triphragmium clavellousum
 Berk.
 Puccinia Tiarellæ B. & C.
 P. Compositarum Sch.
 P. Helianthi Schw.
 P. Asteris Schw.
 P. Xanthii Schw.
 P. Violarum Lk.
 P. Umbelliferarum DC.
 P. Circææ Pers.
 P. porphyrogenita Curt.
 P. mesomajalis B. & C.
 P. Anemones Pers.
 P. coronata Cd.
 P. Peckianum Howe.
 Uredo Ari-Virginici Schw.
 U. Cichoracearum Lev.
 U. Chærophylli Schw.
 U. Filicum Desm.
 U. Azaleæ Schw.
 U. Rubigo DC.
 U. Vacciniorum Johnst.
 U. pustulata Pers.
 Lecythea cylindrica Strauss.
 L. gyrosa Berk.
 L. Saliceti Lev.
 Cystopus candidus Lev.
 Microthyrium Smilacis De Not.
 Cryptosporium filicinum
 B. & C.
 Coniothecium toruloideum
 B. & C.
 Sphæropsis Candollei B. & Br.
 Stilbospora magna Berk.
 Diplodia Mori Berk.
 Streptothrix atra B. & C.
 Helminthosporium Tiara
 B. & R.
 H. macrocarpon Grev.
 Sporocybe Persicæ Fr.

Fusisporium Buxi *Fr.*
 F. miniaturum *B. & C.*
 Macrosporium Cheiranthi *Fr.*
 Septoria Polygonorum *Desm.*
 S. Gnotheræ *B. & C.*
 S. Rubi *B. & C.*
 S. Toxicodendri *Curt.*
 S. sanguinea *Desm.*
 S. destruens *Desm.*
 S. viride-tingens *Curt.*
 S. Liriodendri *B. & C.*
 S. Vitis *B. & C.*
 S. Plantaginicola *B. & C.*
 S. Pyri *Curt.*
 Ascospora Podophylli *Curt.*
 Labrella Pomi *Mont.*
 Helvella Infula *Schæff.*
 Leotia lubrica *Pers.*
 L. circinans *Pers.*
 Bulgaria rufa *Schw.*
 Rhizina undulata *Fr.*
 Peziza cyathoidea *Bull.*
 P. anomala *Pers.*
 P. coccinea *Jacq.*
 P. Virginea *Batsch.*
 P. floccosa *Schw.*
 Tympanis picastra *B. & C.*
 Hysterium flexuosum *Schw.*
 H. Rubi *Pers.*

Hysterium Fraxini *Pers.*
 Glonium stellatum *Muhl.*
 Cordyceps militaris *Fr.*
 C. purpurea *Fr.*
 Hypoxylon multifforme *Fr.*
 H. nummularium *Fr.*
 H. coprophilum *Fr.*
 Diatrype virescens *Schw.*
 D. Duriæi *Mont.*
 D. haustellata *Fr.*
 D. stigma *Fr.*
 Melogramma Quercuum *Fr.*
 Massaria vomitoria *B. & C.*
 Sphæria aquila *Fr.*
 S. putaminum *Schw.*
 S. morbosa *Schw.*
 S. doliolum *Pers.*
 Microsphaeria Syringæ *Schw.*
 M. Vaccinii *Plk.*
 Erysiphe lamprocarpa *Lev.*
 E. fuscata *B. & C.*
 Uncinula adunca *Lev.*
 Dothidea Robertiani *Fr.*
 Depazea Smilacicola *Schw.*
 D. Pyrolæ *Fr.*
 D. Kalmicola *Schw.*
 D. Fraxinicola *Curt.*
 Asterina Gaultheriæ *Curt.*

(2)

PLANTS COLLECTED NEW TO THE HERBARIUM.

- Aspidium aculeatum *Swartz.*
 A. Thelypteris *Swartz.*
 Cetraria nivalis *Ach.*
 C. Pinastri *Ach.*
 Lecanora ventosa *Ach.*
 Biatora exigua *Fr.*
 B. lucida *Fr.*
 Arthonia astroidea *Ach.*
 Pyrenula leucoplaca *DC.*
 Umbilicaria Pennsylvanica *Hm.*
 Coniocybe furfuracea *Fr.*
 Leptogium pulchellum *Nyl.*
 Ephebe pubescens *Fr.*
 Agaricus rubescens *Pers.*
 A. volvata *Pk.*
 A. equestris *L.*
 A. Schumacheri *Fr.*
 A. Trentonensis *Pk.*
 A. chrysenderoides *Pk.*
 A. Sienna *Pk.*
 A. Hoffmani *Pk.*
 A. ectypoides *Pk.*
 A. Calathus *Buab.*
 A. marmoreus *Pk.*
 A. fragrans *Sow.*
 A. zonatus *Pk.*
 A. clusilis *Fr.*
 A. spinulifer *Pk.*
 A. simillimus *Pk.*
 A. Leaianus *Berk.*
 A. hæmatopus *Pers.*
 A. Tintinabulum *Paul.*
 A. leptophyllus *Pk.*
 A. Fibuloides *Pk.*
 A. lilacinus *Pk.*
 A. pyxidatus *Fr.*
 A. ulmarius *Fr.*
 A. porrigens *Pers.*
 A. admirabilis *Pk.*
 A. sericellus *Fr.*
 A. Grayanus *Pk.*
 A. Woodianus *Pk.*
 A. abortivus *B. & C.*
 A. Seymourianus *Pk.*
 A. asprellus *Fr.*
 A. scabrosus *Fr.*
- Agaricus conicus *Pk.*
 A. Clintonianus *Pk.*
 A. delicatulus *Pk.*
 A. cuspidatus *Pk.*
 A. salmoneus *Pk.*
 A. flammans *Fr.*
 A. squarrosus *Mull.*
 A. heteroclitus *Fr.*
 A. aggericola *Pk.*
 A. Highlandensis *Pk.*
 A. illicitus *Pk.*
 A. excedens *Pk.*
 A. Ascophorus *Pk.*
 A. mutatus *Pk.*
 A. dorsalis *Pk.*
 A. mollis *Schaff.*
 A. variabilis *Pers.*
 A. haustellaris *Fr.*
 A. Greigensis *Pk.*
 A. eximius *Pk.*
 A. limicola *Pk.*
 A. odoratus *Pk.*
 Coprinus radiatus *Bolt.*
 C. silvaticus *Pk.*
 C. semilanatus *Pk.*
 Bolbitius nobilis *Pk.*
 Cortinarius corrugatus *Pk.*
 C. olivaceus *Pk.*
 C. bolaris *Fr.*
 C. asper *Pk.*
 C. evernius *Fr.*
 Gomphidius viscidus *Fr.*
 Hygrophorus puniceus *Fr.*
 H. miniatus *Fr.*
 H. lætus *Fr.*
 H. psittacinus *Schaff.*
 Lactarius serifluus *DC.*
 L. cinereus *Pk.*
 L. fumosus *Pk.*
 L. trivialis *Fr.*
 L. insulsus *Fr.*
 L. Chelidonium *Pk.*
 Russula virescens *Fr.*
 R. Mariæ *Pk.*
 R. rubra *Fr.*
 R. simillimus *Pk.*

- Paxillus involutus *Batsch.*
 Cantharellus cinereus *Fr.*
 Plicatura Alni *Pk.*
 Marasmius candidus *Fr.*
 M. perforans *Fr.*
 M. pulcherripes *Pk.*
 M. papillatus *Pk.*
 M. filopes *Pk.*
 M. striatipes *Pk.*
 M. anomalus *Pk.*
 M. decurrens *Pk.*
 Panus salicinus *Pk.*
 Boletus bicolor *Pk.*
 B. gracilis *Pk.*
 Polyporus poripes *Fr.*
 P. glomeratus *Pk.*
 P. rubiginosus *Rostk.*
 P. marginatus *Fr.*
 P. fumosus *Fr.*
 P. betulinus *Fr.*
 P. cæsius *Fr.*
 P. zonatus *Fr.*
 P. velutinus *Fr.*
 P. elongatus *Berk.*
 P. Viticola *Fr.*
 P. Vaillantii *Fr.*
 P. vesiculosus *B. & C.*
 P. corticola *Fr.*
 Trametes sepium *Berk.*
 Hydnum ferrugineum *Fr.*
 H. zonatum *Batsch.*
 H. pithyophilum *B. & C.*
 Kneiffia setigera *Fr.*
 K. candidissima *B. & C.*
 Odontia fimbriata *Fr.*
 Phlebia radiata *Fr.*
 P. zonata *B. & C.*
 Guepinia spathularia *Fr.*
 Craterellus lutescens *Fr.*
 Stereum albobadium *Schw.*
 S. Curtissii *Berk.*
 S. rugosum *Fr.*
 Corticium incarnatum *Fr.*
 C. Liquidambaris *B. & C.*
 C. scutellatum *B. & C.*
 C. salicinum *Fr.*
 C. Auerberianum *Mont.*
 C. Rubicola *B. & C.*
 Thelephora coralloides *Fr.*
 Thelephora tuberosa *Grev.*
 T. caryophyllæa *Fr.*
 T. sebacea *Fr.*
 Clavaria argillacea *Fr.*
 C. fragilis *Holmsk.*
 C. mucida *Pers.*
 C. ligula *Fr.*
 C. tetragona *Schw.*
 C. flava *Fr.*
 C. cinerea *Bull.*
 C. trichopus *Pers.*
 C. Kunzei *Fr.*
 C. spinulosa *Pers.*
 C. apiculata *Fr.*
 C. crispula *Fr.*
 Calocera cornea *Fr.*
 C. palmata *Fr.*
 C. viscosa *Fr.*
 Tremella foliacea *Pers.*
 Exidia repanda *Fr.*
 Nematelia nucleata *Fr.*
 N. atrata *Pk.*
 Cyphella fulva *B. & R.*
 Phallus impudicus *Fr.*
 Corynites Ravenelii *Berk.*
 Geaster minimus *Schw.*
 Lycoperdon molle *Pers.*
 L. atropurpureum *Vitt.*
 L. subincarnatum *Pk.*
 Scleroderma Bovista *Fr.*
 Stemonitis fusca *Roth.*
 Trichia pyriformis *Hoffm.*
 T. chryso sperma *DC.*
 T. varia *Pers.*
 T. serpula *Pers.*
 Arcyria punicea *Pers.*
 Didymium squamulosum *A. S.*
 Dictydium magnum *Pk.*
 Microthyrium Smilacis *De N.*
 Leptostroma vulgare *Fr.*
 Phoma ampelinum *B. & C.*
 P. Menispermii *Pk.*
 Sphæronema subulatum *Fr.*
 S. pruinatum *Pk.*
 S. Coryli *Pk.*
 S. acerinum *Pk.*
 Sphæropsis pulchella *B. & C.*
 S. Menispermii *Pk.*
 S. anomala *Pk.*

- Vermicularia Dematium Fr.*
V. ovata Schw.
Discosia Artocreas Fr.
Melanconium bicolor Fr.
Discella obscura B. & C.
Coryneum clavæsporium Pk.
Nemaspora aurea Fr.
N. Russellii B. & C.
Septoria Violæ Desm.
S. Erigeronis Pk.
S. Phlyctænoides B. & C.
S. Hippocastani B. & Br.
S. Nabali B. & C.
S. Lobeliæ Pk.
Cytispora melasperma Fr.
C. parva B. & C.
C. coryneoides B. & C.
C. Pinastri Fr.
C. hyalasperma Fr.
Torula populina Pk.
Uredo Aspidiotus Pk.
U. Æcidioides Pk.
Trichobasis Iridicola Pk.
T. suavecolens Lev.
Ustilago longissima Tul.
U. Montagnei Tul.
Uromyces Polygoni Fuckel.
U. Caricis Pk.
Pileolaria brevipes B. & C.
Aregma obtusatum Fr.
Puccinia Noli-tangeris Cd.
P. minutula Pk.
P. Pyrolæ Cooke.
P. Convulvi B. & C.
P. tripustulata Pk.
P. Gerardii Pk.
P. emaculata Schw.
P. striola Lk.
Æcidium Berberidis Pers.
Æ. Erigeronatum Schw.
Æ. tenue Schw.
Æ. Osmorrhizæ Pk.
Æ. Mariæ-Wilsoni Pk.
Ræstelia cornuta Tul.
Stilbum Rhois B. & C.
S. pellucidum Schrad.
S. giganteum Pk.
Fusarium erubescens B. & C.
Tubercularia nigricans DC.
Oidium fructigenum Kze.
- Sepedonium chrysospermum Fr.*
Monotospora triseptata Pk.
Helvella crispa Fr.
H. sulcata Afz.
H. elastica Bull.
H. gracilis Pk.
Leotia circinans Pers.
Geoglossum luteum Pk.
G. glabrum Pers.
Peziza fusca Pers.
P. rubricosa Fr.
P. vinosa A. & S.
P. mollisoides Schw.
P. Erinaceus Schw.
P. echinosperma Pk.
P. æruginosa Fr.
P. hemisphærica Wigg.
P. cariosa Pk.
P. rubra Pk.
P. Tiliæ Pk.
P. comata Schw.
P. Persoonii Moug.
Dermatea furfuracea Fr.
Nodularia balsamicola Pk.
Sphinctrina Cerasi B. & C.
Tympanis alnea Pers.
Cenangium triangulare Schw.
C. Prunastri Fr.
C. Cerasi Fr.
Hysterium pulicare Fr.
H. Smilacis Schw.
H. Azalæ Schw.
H. virgultorum Desm.
Xylaria corniformis Fr.
Rhizomorpha subcorticalis Pers.
Hypocrea floccosa Fr.
Hypoxyton concentricum Bolt.
H. Howeianum Pk.
H. perforatum Schw.
H. argillaceum Fr.
H. Beaumontii B. & C.
H. Morseii B. & C.
H. anthracodes Fr.
Nectria Peziza Fr.
Valsa pulchella Fr.
V. salicina Fr.
V. leucostoma Fr.
V. Pini Fr.
Sphæria aculeans Schw.

Sphæria Tiliæ <i>Fr.</i>	Dothidea Sambuci <i>Fr.</i>
S. longissima <i>Pers.</i>	D. crystallophora <i>B. & C.</i>
S. Coptis <i>Schw.</i>	D. flabella <i>B. & C.</i>
S. Sarraceniae <i>Schw.</i>	D. Pteridis <i>Pers.</i>
S. Solidaginis <i>Schw.</i>	D. Anemones <i>Fr.</i>
S. Taxicola <i>Pk.</i>	Erineum roseum <i>Schultz.</i>
Dothidea Ribesia <i>Pers.</i>	Podosphæria Cerasi <i>Lev.</i>

EDIBLE FUNGI.

Agaricus rubescens <i>Pers.</i>	Russula virescens <i>Fr.</i>
A. ulmarius <i>Sow.</i>	Polyporus poripes <i>Fr.</i>
A. abortivus <i>B. & C.</i>	Clavaria flava <i>Fr.</i>
A. squarrosus <i>Mull.</i>	C. tetragona <i>Schw.</i>
Paxillus involutus <i>Fr.</i>	Helvella crispa <i>Fr.</i>
Lactarius insulsus <i>Fr.</i>	H. sulcata <i>Afz.</i>

Contributed.

Agaricus bombycinus <i>Schæff.</i>	Polyporus frondosus <i>Fr.</i>
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LIST OF CONTRIBUTORS AND THEIR CONTRIBUTIONS.

W. H. LEGGETT, New York.

Clematis ochroleuca <i>Ait.</i>	Frangula Caroliniana <i>Gray.</i>
Thalictrum purpureum <i>L.</i>	Polygala polygama <i>Walt.</i>
Ranunculus ab. v. micrantha <i>Gr.</i>	P. brevifolia <i>Nutt.</i>
R. Cymbalaria <i>Pursh.</i>	P. Nuttallii <i>T. & C.</i>
Corydalis flavula <i>Raf.</i>	Coronilla varia <i>DC.</i>
Nasturtium palustre <i>DC.</i>	Prunus maritima <i>Wang.</i>
N. sylvestre <i>R. Br.</i>	Rubus cuneifolius <i>Pursh.</i>
Barbarea præcox <i>R. Br.</i>	Cratægus parvifolia <i>Ait.</i>
Arabis perfoliata <i>Lam.</i>	Sedum acre <i>L.</i>
Erysimum cheiranthoides <i>L.</i>	Galium Mollugo <i>L.</i>
Alliaria officinalis <i>Ander.</i>	Stylosanthes elatior <i>Swartz.</i>
Lepidium ruderale <i>L.</i>	Galactia mollis <i>Michx.</i>
Draba Caroliniana <i>Walt.</i>	Ludwigia alternifolia <i>L.</i>
Polanisia graveolens <i>Raf.</i>	L. sphærocarpa <i>Ell.</i>
Viola primulæfolia <i>L.</i>	Ammannia humilis <i>Michx.</i>
Lechea Novæ-Cæsareæ <i>Aust.</i>	Lythrum Hyssopifolia <i>L.</i>
Silene inflata <i>Smith.</i>	L. lineare <i>L.</i>
S. Armeria <i>L.</i>	Hydrocotyle interrupta <i>Muhl.</i>
Lychnis vespertina <i>Sibth.</i>	Eclipta pro. v. brachypoda <i>Gr.</i>
Arenaria peploides <i>L.</i>	Eupatorium rotundifolium <i>L.</i>
Cerastium oblongifolium <i>Torr.</i>	E. pubescens <i>Muhl.</i>
Stellaria longifolia <i>Muhl.</i>	Galinsoga parviflora <i>Cav.</i>
Linum striatum <i>Walt.</i>	Liatris scariosa <i>Willd.</i>
Parnassia Caroliniana <i>Michx.</i>	Solidago rigida <i>L.</i>

Melissa officinalis <i>L.</i>	|	Wolffia Columbiana <i>Karst.</i>
Mentha rotundifolia <i>L.</i>	|	Potamogeton hybridus <i>Michx.</i>
M. aqu. v. crispa <i>Benth.</i>	|	Tipularia discolor <i>Nutt.</i>
Ilex opaca <i>Ait.</i>	|	Commelyna Virginica <i>L.</i>
Cuscuta inflexa <i>Engelm.</i>	|	Eleocharis olivacea <i>Torr.</i>
Lemna minor <i>L.</i>	|	Botrychium lanceolatum <i>Angst.</i>

J. S. MERRIAM, New York.

Sesuvium Portulacastrum <i>L.</i>	|	Crepis virens <i>L.</i>
Nabalus racemosus <i>Hook.</i>	|	

S. N. COWLES, Otisco, N. Y.

Carex capillaris *L.*

W. R. GERARD, Poughkeepsie, N. Y.

Æcidium Urticæ <i>DC.</i>	|	Aregma obtusatum <i>Fr.</i>
Æ. Iridis <i>Gerard.</i>	|	Pileolaria brevipes <i>B. & C.</i>
Æ. aroid. v. Caladii <i>Schw.</i>	|	Glonium stellatum <i>Muhl.</i>
Rœstelia cornuta <i>Tul.</i>	|	Hypoxylon concentricum <i>Bol.</i>

G. B. BRAINERD, Brooklyn, N. Y.

Juncus maritimus *Lam.*

E. L. HANKENSON, Newark, N. Y.

Hibiscus Trionum <i>L.</i>	|	Juncus alp. v. insignis <i>Fr.</i>
Claytonia Virginica <i>L.</i>	|	Carex lup. v. gigantea <i>Lord.</i>
Gaylussacia frondosa <i>T. & G.</i>	|	Hierochloa borealis <i>R. & S.</i>
Salix nig. v. amygdalinus <i>And.</i>	|	

RICHARD PRESCOTT, Albany, N. Y.

Sphæropsis anomala *Pk.*

E. C. HOWE, M. D., NEW BALTIMORE, N. Y.

Fedia radiata <i>Michx.</i>	|	Polyporus porosus <i>Fr.</i>
F. umbilicata <i>Sulliv.</i>	|	Æcidium aroid. v. Caladii <i>Schw.</i>
Dicranum spurium <i>Hedw.</i>	|	Erineum quercinum <i>Kze.</i>
Trichobasis Galii <i>Lev.</i>	|	Arthonia Lecideella <i>Nyl.</i>
Lecythea Rosæ <i>Lev.</i>	|	Biatora exigua <i>Fr.</i>
Pileolaria brevipes <i>B. & R.</i>	|	Collema cyrtaspes <i>Tuck.</i>
Uromyces Polygoni <i>Fuekel.</i>	|	

C. S. OSBORN, Rochester, N. Y.

Anemone nemorosa <i>L.</i>	Pyrola secunda <i>L.</i>
Aquilegia Canadensis <i>L.</i>	Chimaphila umbellata <i>Nutt.</i>
Cardamine rhom. v. purpurea <i>Torr.</i>	Couopholis Americana <i>Wallr.</i>
Dentaria laciniata <i>Muhl.</i>	Pedicularis Canadensis <i>L.</i>
Arabis lyrata <i>L.</i>	Mentha viridis <i>L.</i>
Polanisia graveolens <i>Raf.</i>	M. piperita <i>L.</i>
Viola rostrata <i>Pursh.</i>	Asclepias tuberosa <i>L.</i>
Hypericum Kalmianum <i>L.</i>	A. quadrifolia <i>Jacq.</i>
Saxifraga Virginiensis <i>Michx.</i>	A. verticillata <i>L.</i>
Tiarella cordifolia <i>L.</i>	Shepherdia Canadensis <i>Nutt.</i>
Houstonia purp. v. ciliolata <i>Gr.</i>	Comandra umbellata <i>Nutt.</i>
Liatris cylindracea <i>Michx.</i>	Sisyrinchium Bermudiana <i>L.</i>
Aster ptarmicoides <i>T. & G.</i>	Pellaea atropurpurea <i>Lk.</i>
Erigeron bellidifolium <i>Muhl.</i>	Cheilanthes lanuginosa <i>Nutt.</i>
Lobelia Kalmii <i>L.</i>	Camptosorus rhizophyllus <i>Lk.</i>
Arctostaphylos Uva-Ursi <i>Spreng.</i>	Asplenium Trichomanes <i>L.</i>

C. F. AUSTIN, Closter, N. J.

Sticta crocata <i>Ach.</i>	Lecanora rubina <i>Vill.</i>
Ephebe pubescens <i>Fr.</i>	Collema pulposum <i>Ach.</i>

Miss MARY L. WILSON, Buffalo, N. Y.

Usnea cavernosa <i>Tuck.</i>	Lecidea Russellii <i>Tuck.</i>
Evernia furfuracea <i>Mann.</i>	Pertusaria pustulata <i>Ach.</i>
E. vulpina <i>Ach.</i>	Myriangium Curtisii <i>B. & M.</i>
Ramalina calicaris <i>Fr.</i>	Endocarpum arboreum <i>Schw.</i>
Physcia pulverulenta <i>Fr.</i>	Trypethelium cruentum <i>Mont.</i>
P. cil. v. angustata <i>Tuck.</i>	Leptogium phyllocarpum <i>Nyl.</i>
Pannaria lurida <i>Mont.</i>	L. pulchellum <i>Nyl.</i>
Biatora rub. v. spadicea <i>Tuck.</i>	Collema pyenocarpum <i>Nyl.</i>
B. rub. v. Schweinitzii <i>Tuck.</i>	Cladonia macilenta <i>Hoffm.</i>
Buellia alboatra <i>Schær.</i>	Stereocaulon condensatum <i>Hoffm.</i>
Lecanora cinerea <i>Fr.</i>	Parmelia colpodes <i>Ach.</i>
Gyalecta cupularis <i>Schær.</i>	

S. B. WOOLWORTH, LL.D., Albany, N. Y.

Argemone Mexicana <i>L.</i>	Artemisia frigida <i>Willd.</i>
Liatris Boykinii <i>T. & G.</i>	Chrysopsis villosa <i>Nutt.</i>
Cleome integrifolia <i>Nutt.</i>	

Rev. HENRY A. RILEY, Montrose, Pa.

Verbascum Thapsus *L.* (white flowered.)

M. S. BEBB, Fountaindale, Ill.

Draba brachycarpa <i>Nutt.</i>	|	Castilleia sessiliflora <i>Ph.</i>
D. Car. v. micrantha <i>Bebb.</i>	|	Euphorbia commutata <i>Engelm.</i>
Lithospermum longiflorum <i>Spreng.</i>	|	

Miss SARAH P. MONK, Poughkeepsie, N. Y.

Polypodium vulgare v. Cambricum *L.*

Hon. A. S. JOHNSON, Utica, N. Y.

Agaricus bombycinus *Schæff.* | Lycoperdon cyathiformis-*Bosc.*

HENRY GILLMAN, Detroit, Mich.

Wolffia Columbiana <i>Karst.</i>	|	Lemna minor <i>L.</i>
W. arrhiza <i>L.</i>	|	

S. T. OLNEY, Providence, R. I.

Carex juncea <i>Willd.</i>	|	Carex Olneyi <i>Boott.</i>
C. gynandra <i>Schw.</i>	|	C. polymorpha <i>Muhl.</i>
C. striata <i>Michx.</i>	|	

B. D. GILBERT, Utica, N. Y.

Adiantum Capillus-Junonis *Rupt.* | Cheilanthes argentea *Hook.*

FRANK B. CORNWELL, Vallejo, Cal.

Lecanora ventosa *Ach.*

Hon. G. W. CLINTON, Buffalo, N. Y.

Draba verna <i>L.</i>	|	Æcidium Penstemonis <i>Schw.</i>
Primula Mistassinica <i>Michx.</i>	|	Æ. Thalictri <i>Grev.</i>
Dicranum palustre <i>Brid.</i>	|	Æ. Allenii <i>Clinton.</i>
Orthotrichum psilocarpum <i>James.</i>	|	Æ. Ranunculacearum <i>DC.</i>
Phallus impudicus <i>Fr.</i>	|	Æ. Berberidis <i>Pers.</i>
Tremella mesenterica <i>Retz.</i>	|	Æ. Euphorbiæ-hypericifoliæ, <i>Schw.</i>
T. foliacea <i>Pers.</i>	|	
Phlebia radiata <i>Fr.</i>	|	Æ. Houstoniatum <i>Schw.</i>
Corticium salicinum <i>Fr.</i>	|	Æ. Gnaphaliatum <i>Schw.</i>
Trichia chryso sperma <i>DC.</i>	|	Æ. quadrifidum <i>DC.</i>
T. pyriformis <i>Hoffm.</i>	|	Æ. macrosporium <i>Pk.</i>
Stemonitis fusca <i>Roth.</i>	|	Æ. tenue <i>Schw.</i>
Leptostroma vulgare <i>Fr.</i>	|	Æ. Menthæ <i>DC.</i>
Sphæronema subtile <i>Fr.</i>	|	Æ. Iridis <i>Gerard.</i>

Puccinia Pyrolæ <i>Cooke.</i>	Sphinctrina Cerasi <i>B. & C.</i>
P. Polygonorum <i>Lk.</i>	Cenangium Prunastri <i>Fr.</i>
P. Galiorum <i>Lk.</i>	Nectria appendiculata <i>Curt.</i> x
P. Cryptotæniæ <i>Pk.</i>	Hypoxylon concentricum <i>Bolt.</i>
Uromyces appendiculata <i>Lev.</i>	Xylaria digitata <i>Fr.</i>
U. solida <i>B. & C.</i>	X. Hypox. v. pedata <i>Fr.</i>
U. Junci <i>Schw.</i>	Valsa leucostoma <i>Fr.</i>
Uredo Helianthi <i>Schw.</i>	V. salicina <i>Fr.</i>
U. Potentillarum <i>DC.</i>	Sphæria oötheca <i>B. & C.</i>
U. Æcidioides <i>Pk.</i>	S. gyrosa <i>Schw.</i>
Trichobasis Labiatarum <i>Lev.</i>	S. limæformis <i>Schw.</i>
Pileolaria brevipes <i>B. & R.</i>	Dothidea crystallophora <i>B. & C.</i>
Urnula Craterium <i>Schw.</i>	D. Sambuci <i>Fr.</i>
Peziza æruginea <i>Fr.</i>	D. Ribesia <i>Pers.</i>
Tympanis alnea <i>Pers.</i>	Glonium stellatum <i>Muhl.</i>
Patellaria atrata <i>Fr.</i>	Erineum quercinum <i>Kze.</i>

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PLANTS FOUND GROWING SPONTANEOUSLY IN THE STATE AND NOT BEFORE REPORTED.

CORYDALIS FLAVULA *Raf.*Near Paltz Point, Ulster county. *W. H. Leggett.*FRANGULA CAROLINIANA *Gray.*Roadside between Hunter's Point and Flushing. *Leggett.*LINUM STRIATUM *Walt.*Tottenville, Staten Island. *Leggett.*GALACTIA MOLLIS *Michx.*Washington Heights, N. Y. Isl. *Leggett.*CORONILLA VARIA *DC.*Lake Mohegan, near PEEKSKILL. *Leggett.* Introduced.CRATÆGUS PARVIFOLIA *Ait.*Tottenville, Staten Island. *Leggett.*HIBISCUS TRIONUM *L.*Newark, Wayne county. *E. L. Hankenson.* Introduced.FEDIA RADIATA *Michx.*New Baltimore. *E. C. Howe.*x *incursata B. & Br.*

FEDIA UMBILICATA *Sulliv.*

Growing with the preceding, and scarcely to be distinguished from it except by the fruit. *Howe.*

EUPATORIUM PUBESCENS *Muhl.*

Rossville, Staten Island. *Leggett.*

CREPIS VIRENS *L.*

Greenwood Cemetery, Brooklyn. Apparently well established. *J. S. Merriam.*

SESUVIUM PORTULACASTRUM *L.*

East Hampton, Long Island. *Merriam.*

MENTHA AQUATICA v. CRISPA *Benth.*

Lake Mohegan ; also near Middletown, Orange county. *Leggett.*

CAREX CAPILLARIS *L.*

Otter Creek, Onondaga county. *S. N. Cowles.* A remarkably tall slender variety, with the perigynia two-nerved.

MOSESSES.

DICRANUM PALUSTRE *Brid.*

Whirlpool, Erie county. *G. W. Clinton.*

ORTHOTRICHUM PSILOCARPUM *James.*

Trees. Harlem. *Clinton.*

LICHENS.

CETRARIA PINASTRI *Fr.*

Catskill mountains. Sterile.

CETRARIA NIVALIS *Ach.*

Top of Mount Marcy.

STICTA CROCATA *Ach.*

Shawangunk mountains. *C. F. Austin.*

PANNARIA LURIDA *Mont.*

Trees. Buffalo. *Miss Mary L. Wilson.*

LECIDEA RUSSELLII *Tuck.*

Rocks. Niagara Falls. *Miss Wilson.*

PARMELIA COLPODES *Ach.*

Buffalo. *Miss Wilson.*

LECANORA VENTOSA *Ach.*

Rocks. Top of Mounts Marey and of Whiteface.

LECANORA RUBINA *Ach.*

Rocks. Haverstraw, Rockland county. *Austin.*

BIATORA LUCIDA *Fr.*

Roots of overblown trees. Sandlake, Rensselaer county. A rare species.

BIATORA EXIGUA *Fr.*

Bark of living trees. Very common.

BUELLIA ALBOATRA *Schw.*

Bark of trees. Buffalo. *Miss Wilson.*

CLADONIA MACILENTA *Hoffm.*

Eighteen-mile Creek. *Miss Wilson.*

PERTUSARIA PUSTULATA *Ach.*

Trees. Buffalo. *Miss Wilson.*

PYRENULA LEUCOPLACA *DC.*

Trees. Helderberg mountains.

ARTHONIA ASTROIDEA *Ach.*

Trees. New Baltimore. *Howe.* Albany and Sandlake.

ARTHONIA LECIDEELLA *Nyl.*

Trees. New Baltimore. *Howe.*

ENDOCARPON ARBOREUM *Schw.*

Trees. Buffalo. *Miss Wilson.*

UMBILICARIA PENNSYLVANICA *Hoffm.*

Rocks. Garrison's Station, Putnam county. Several species of Umbilicaria grow in great profusion on the exposed rocks of the Highlands.

CONIOCYBE FURFURACEA *Ach.*

Roots of overblown trees. Sandlake.

COLLEMA PYCNOCARPUM *Nyl.*

Mossy trunks of trees. Buffalo. *Miss Wilson.*

COLLEMA PULPOSUM *Ach.*

Rocky banks, Herkimer county. *Austin.*

COLLEMA CYRTASPES *Tuck.*

Rocks. New Baltimore. *Howe.*

LEPTOGIUM PULCHELLUM *Nyl.*

Rocks and trees. Buffalo. *Miss Wilson.* New Baltimore, *Howe.* Catskill mountains.

MYRIANGIUM CURTISII *B. & M.*

Branches of *Cratægus*, Buffalo. *Miss Wilson.*

EPHEBE PUBESCENS *Fr.*

Rocks. Haverstraw. *Austin.* Top of Mount Marcy.

STEREOCAULON CONDENSATUM *Hoffm.*

Niagara Falls. *Miss Wilson.*

GYALECTA CUPULARIS *Schar.*

Rocks. Niagara Falls. *Miss Wilson.*

FUNGI.

AGARICUS RUBESCENS *Pers.*

Grassy ground in open woods. Greenbush. July. The change of color in the flesh when bruised is not well marked in our specimens.

AGARICUS (AMANITA) VOLVATUS *n. sp.*

Pileus fleshy, convex, at length expanded, striate on the margin, sprinkled with small floccose scales, whitish, the disk pale brown; lamellæ close, free, white; stem equal or slightly tapering upward, stuffed, minutely floccose-scaly, ringless, whitish; volva large, firm, loose; spores subelliptical $\frac{1}{2500}$ of an inch long. Plant 2-3 inches high, pileus as broad, stem 3-4 lines thick.

Damp ground in open woods. Greenbush. July.

A species well marked by the absence of the annulus and the presence of a large, thick, bulb-like volva, whose free margin is more or less lobed. The lamellæ in the dried specimens have assumed a pale cinnamon hue.

AGARICUS SCHUMACHERI *Fr.*

Ground in woods. Greig, Lewis county. September. This plant when old assumes the appearance of a large *Clitocybe*.

AGARICUS EQUESTRIS *L.*

Ground in pine woods. Bethlehem, Albany county. November.

This is the form with a white stem. The lamellæ in our specimens are not entirely free, but deeply emarginate and attached to the stem by a very narrow part.

AGARICUS (TRICHOLOMA) TRENTONENSIS *n. sp.*

Pileus thin, convex or expanded, often irregular, smooth or subvirgate, hygrophanous, slightly striatulate on the margin when moist, dingy white, the disk generally brown; lamellæ very narrow, crowded, obscurely emarginate, white inclining to yellowish; stem short, equal, solid, slightly striate, white.

Plant 1.5'-2' high, pileus 1'-2' broad, stem 3''-5'' thick.

Ground and rotten wood in woods. Trenton Falls. September. Gregarious or subcæspitose, sometimes closely crowded.

AGARICUS (TRICHOLOMA) SIENNA *n. sp.*

Pileus rather thin, convex, then expanded or slightly depressed, smooth, hygrophanous, obscurely striatulate on the extreme margin when moist, yellowish red; lamellæ moderately close, whitish; stem equal, smooth, hollow, concolorous with the pileus.

Plant 2'-3' high, pileus 1'-2' broad, stem 3''-4'' thick.

Ground in woods. Greig. September.

The pileus has the color of burnt sienna, and the coloration of the whole plant resembles that of *Hydnum repandum*.

AGARICUS (TRICHOLOMA) CHRYSENTEROIDES *n. sp.*

Plant light yellow; pileus fleshy, convex or expanded, firm, smooth, dry; lamellæ close, attached, slightly ribbed along the upper margin with transverse veinlets; stem firm, equal, smooth, solid; spores elliptical, $\frac{1}{2} \frac{1}{5} \frac{1}{6}$ ' long.

Plant 2'-4' high, pileus 1'-2' broad, stem 3''-4'' thick.

Ground in woods. Greig. September.

Perhaps too near *A. chrysenderus*, but the lamellæ are attached to the stem, not free, and the pileus is without any umbo.

AGARICUS (CLITOCYBE) HOFFMANI *n. sp.*

Pileus fleshy, thin, convex, then funnel-form, umbilicate, hygrophanous, watery yellow when moist, yellow when dry; lamellæ

broad, distant, decurrent, bright yellow, interspaces rugose; stem equal, smooth, stuffed or hollow, yellow; spores elliptical, $\frac{1}{2} \frac{1}{5} \frac{1}{5}$ ' long.

Plant 1'-2' high, pileus 8"-18" broad, stem 1" thick.

On much decayed wood in woods. Greig. September.

It differs from *A. bellus* by its smooth pileus and decurrent lamellæ. I wish this pretty little plant to bear the name of Gov. John T. Hoffinan, because of his high appreciation of Natural History and his just regard for its interests.

AGARICUS FRAGRANS *Sow.*

Ground in woods. Greig. September.

AGARICUS CALATHUS *Buxb.*

Low grounds in woods. Sandlake. Well marked by the peculiar violaceous colored lamellæ.

AGARICUS (CLITOCYBE) MARMOREUS *n. sp.*

Pileus fleshy, firm, convex, smooth, white, mottled with darker watery spots; lamellæ close, narrow, arcuate, unequally decurrent, white; stem firm, solid, long, generally curved and slightly thicker at the base, white, pruinose; spores globose, $\frac{1}{8} \frac{1}{5} \frac{1}{5}$ ' long.

Plant caespitose, 4'-6' high, pileus 2'-4' broad, stem 6"-10" thick.

On old logs in woods. Greig. September.

This species is allied to *A. illudens*, but is very different in color and is destitute of an umbo.

AGARICUS (CLYTOCYBE) ECTYPOIDES *n. sp.*

Pileus fleshy, thin, broadly umbilicate or funnel-form, with a spreading margin, finely virgate with close-pressed blackish fibrils, and squamulose-punctate, the black points seated on the radiations, varying in color from watery-gray to dull watery-yellow; lamellæ close, narrow, long decurrent, some of them forked, yellowish; stem equal, firm, solid, colored like the pileus, with a white mycelium at the base.

Plant about 2' high, pileus 1'-2' broad, stem 1"-2" thick. Subcaespitose.

Rotten logs and stumps in woods. Sandlake and Catskill mountains. July and August.

The pileus is sometimes lobed, sometimes eccentric.

AGARICUS (COLLYBIA) ZONATUS *n. sp.*

Pileus thin, fleshy, convex, then expanded or slightly depressed, umbilicate, hairy-tomentose, tawny with obscure darker zones;

lamellæ narrow, close, white, free; stem equal, firm, hollow, tomentose-fibrillose, brownish-tawny; spores subelliptical, $\frac{1}{5} \frac{1}{10} \frac{1}{10}$ ' long.

Plant caespitose, 1.5'-2' high, pileus 6"-12" broad, stem 1" thick. Base of an elm tree. Albany. August.

Allied to *A. stipitarius*, but a much larger plant with a different mode of growth. Under a lens the pileus is seen to be clothed with rather coarse, densely matted, subfasciculate, prostrate, tawny hairs. In the dried specimens the darker zones are less clear, and the pileus has become concentrically sulcate. A minute umbo or papilla is seen in the umbilicus in some specimens.

AGARICUS CLUSILIS *Fr.*

Burnt ground in woods. Greig. September.

AGARICUS (COLLYBIA) SPINULIFER *n. sp.*

Pileus fleshy, thin, convex, smooth, hygrophanous, alutaceous tinged with pink and slightly striatulate on the margin when moist, paler when dry; lamellæ narrow, close, rounded behind and free, pale cinnamon colored; stem slender, tough, smooth, shining, hollow, reddish-brown, paler above, with a whitish mycelium at the base; spores subelliptical, $\frac{1}{4} \frac{1}{10} \frac{1}{10}$ ' long.

Plant caespitose, 2'-3' high, pileus 1'-1.5' broad, stem 1" thick.

Old logs and ground among leaves in woods. Greig. September. (Plate 1, figs. 4-9.)

The lamellæ are clothed with minute spines or setæ, of a dull cinnamon color, about $\frac{3}{10} \frac{1}{10} \frac{1}{10}$ ' long, thickest near the base and gradually tapering to the point. These give to the lamellæ their peculiar hue. In young plants the stem is whitish nearly to the base.

AGARICUS (COLLYBIA) SIMILLIMUS *n. sp.*

Size and habit exactly as in the preceding species for which it is liable to be mistaken. The pileus becomes lighter colored (almost white) in drying, the lamellæ are white, attached to the stem and destitute of the spine-like processes which form such a remarkable feature in its near ally, and the stem is of a uniform reddish-brown color.

Greig. September.

AGARICUS LEAIANUS *Berk.*

Decaying beech logs and branches in woods. Buffalo. Clinton. Sandlake, Helderberg and Adirondaek mountains. July, September.

An extremely beautiful plant when young and fresh, but it loses its color in drying. It grows in dense tufts, and when young,

both pileus and stems are sprinkled with a yellow pulverulent coating. When old, the plant becomes much faded. The fingers are stained in handling it. The lamellæ in our specimens were yellow with an orange-colored edge. Spores elliptical, $\frac{1}{2500}$ ' long.

AGARICUS HÆMATOPUS *Pers.*

Old logs in woods. Garrisons. Greig, etc. June, September.

AGARICUS TINTINNABULUM *Fr.*

On an old beech stump. Knowersville, Albany county. May.

AGARICUS (MYCENA) LEPTOPHYLLUS *n. sp.*

Pileus thin, campanulate or convex, subpapillate, smooth, striatulate when moist, pale reddish-yellow, the disk brighter colored; lamellæ close, narrow, widest at the middle, pointed at the outer extremity, sharply uncinuate at the inner, whitish or yellow with a flesh-colored tint; stem slender, tough, hollow, smooth, whitish.

Plant 1'-1.5' high, pileus 3"-5" broad, stem .5" thick.

Old mossy logs and rotten wood in woods. Greig. September. The papilla of the pileus is sometimes absent.

AGARICUS (OMPHALIA) FIBULOIDES *n. sp.*

Pileus fleshy but thin, convex, deeply umbilicate, smooth, hygrophanous, dull orange-colored and striatulate when moist, paler when dry; lamellæ rather close, arcuate, long-decurrent, venose-connected, white; stem equal, smooth, hollow, nearly the same color as the pileus, with a white mycelium at the base; spores sub-elliptical, $\frac{1}{3000}$ ' long.

Plant 1'-2' high, pileus 6"-10" broad, stem scarcely 1" thick.

Burnt mossy ground in a pasture. Greig. September.

It resembles *A. Fibula* in its coloration, but its larger size, short stem, and venose-connected lamellæ readily distinguish it.

AGARICUS (OMPHALIA) LILACINUS *n. sp.*

Pileus submembranaceous, convex, deeply umbilicate, smooth, viscid, hygrophanous, dull yellow with a slight greenish tinge and striatulate when moist, bright sulphur-yellow when dry; lamellæ rather close, arcuate, decurrent, pale lilac; stem equal, smooth, hollow, viscid, yellowish with a pale lilac-colored mycelium at the base.

Plant about 1' high, pileus 6"-9" broad, stem .5" thick.

Old logs in woods. Trenton Falls. Sept. (Plate 1, figs. 10-13.)

A very distinct species, remarkable for the peculiar hue of the lamellæ and the mycelium. The color of the latter is retained in the dried specimens before me.

AGARICUS PYXIDATUS *Fr.*

Ground in pastures. Greig. September.

AGARICUS ULMARIUS *Fr.*

Elm trees. Trenton Falls. September.

I have what appears to be a form of this species, with the pileus destitute of spots and the lamellæ deeply emarginate. It grows in large tufts from the roots of maple trees.

AGARICUS PORRIGENS *Fr.*

Rotten wood in woods. Common in the North woods. September, October.

AGARICUS (PLUTEUS) ADMIRABILIS *n. sp.*

Pileus rather thin, convex, broadly umbonate, glabrous, rugose-reticulated, hygrophanous, obscurely striatulate on the margin when moist, bright yellow; lamellæ close, broad, remote, dull yellowish, then flesh colored; stem slender, smooth, hollow, equal or slightly thickened at the base, yellow, with a white mycelium; spores subglobose, $\frac{1}{4000}$ long.

Plant 1.5'-2' high, pileus 6"-10" broad, stem scarcely 1" thick. Old logs in woods. Greig. September.

Near *A. chrysophlebius* from which it is separated by the umbonate, hygrophanous, uniformly yellow pileus, differently colored, lamellæ and stem not enlarged above.

AGARICUS SERICELLUS *Fr.*

Ground in woods. Catskill mountains. July.

AGARICUS (ENTOLOMA) GRAYANUS *n. sp.*

Pileus fleshy, convex, frequently wavy or irregular, hygrophanous, dull watery yellow when moist, smooth, shining and nearly white when dry; lamellæ plane, close, flesh colored; stem equal, firm, solid, white; spores subglobose, irregular $\frac{1}{3000}$ long.

Plant gregarious, 2'-3' high, pileus 1.5'-2' broad, stem 3"-5" thick. Ground in old roads. Sandlake. August.

Dedicated to Prof. A. Gray, in view of his eminent position as a botanical writer.

AGARICUS (ENTOLOMA) CUSPIDATUS *n. sp.*

Pileus thin, conical or subcampanulate, smooth, shining, bearing an elongated papilla or cusp at the apex, the margin often irregu-

lar; lamellæ broad, subdistant, narrowed toward the stem, slightly emarginate and attached, more or less denticulate on the edge, usually terminating a little before the margin; stem equal, hollow, fibrous, often twisted; spores subglobose, irregular, $\frac{1}{2000}$ ' in diameter.

Plant pale yellow throughout, 3'-5' high, pileus 9"-12" broad, stem 1"-1.5" thick.

Swamps and sphagnous marshes. Sandlake. August. (Plate 2, figs. 14-18.)

Apparently closely allied to *A. Murraii*, but the pileus is not striate, and is distinguished by a remarkable cusp. The spores are a little larger than in *A. Murraii*.

AGARICUS (ENTOLOMA) SALMONEUS *n. sp.*

Pileus thin, conical or campanulate, subacute, rarely with a minute papilla at the apex, smooth, of a peculiar soft ochraceous color, slightly tinged with salmon or flesh color; lamellæ and stem colored like the pileus.

Low grounds, under spruce trees and in swamps. Sandlake. August. (Plate 4, figs. 6-9.)

It is with some hesitation that this is proposed as a species, its resemblance to the preceding one is so close. The only difference is found in its color and in the absence of the prominent cusp of that plant. In both species the pileus is so thin, that in well dried specimens, slender, dark, radiating lines on it, mark the position of the lamellæ beneath, although in the living plants these are not visible.

AGARICUS (CLITOPILUS) WOODIANUS *n. sp.*

Pileus fleshy, thin, convex or expanded, umbilicate or centrally depressed, hygrophanous, striatulate on the margin when moist, whitish or yellowish-white and shining when dry, the margin often wavy or flexuous; lamellæ close, adnate-decurrent, whitish, then flesh colored; stem equal, flexuous, shining, colored like the pileus, solid or hollow from the erosion of insects; spores subglobose, irregular, $\frac{1}{3500}$ ' long.

Plant 3' high, pileus 1'-2' broad, stem 2" thick.

Ground and old logs in woods. Greig. September.

It resembles *A. Grayanus* in color, but is easily distinguished from it by the more slender habit and the character of the lamellæ. Dedicated to Prof. A. Wood, in view of his exalted position as a botanist, and of the many acts of kindness the writer has received from him.

AGARICUS ABORTIVUS *B. & C.*

Ground in woods and copses. Greig and Greenbush. September and October.

The lamellæ are arcuate and long-decurrent in some specimens, nearly plane and adnate-decurrent in others. They are at first grayish with a flesh colored tint, at length bright flesh colored; some of them are forked. The odor is like that of fresh meal, the taste not unpleasant. I have partaken of it without any injurious effects, and deem it edible, though not as pleasant as some. The abortive form sometimes grows intermingled with the others, sometimes alone.

AGARICUS (CLITOPILUS) SEYMOURIANUS *n. sp.*

Pileus fleshy, thin, broadly convex, sometimes a little depressed, smooth, pruinose, whitish with a dark lilac tinge; lamellæ narrow, crowded, decurrent, some of them forked at the base, whitish with a dull flesh colored tint; stem equal, silky-fibrillose, hollow; spores globose, minute, $\frac{1}{7000}$ ' long.

Plant gregarious, 2'-3' high, pileus 1'-2.5' broad, stem 3"-4" thick. Ground in woods. Greig. September. The pileus is sometimes lobed and excentric.

I take pleasure in naming this species for Hon. Horatio Seymour, in view of the interest he has manifested in the study of fungi.

AGARICUS ASPRELLUS *Fr.*

Swamps and sphagnous marshes. Sandlake. August.

AGARICUS SCABROSUS *Fr.*

Swamps. Sandlake. August.

AGARICUS (NOLANEA) CONICUS *n. sp.*

Pileus submembranaceous, conical, at length expanded, with a minute umbo or papilla, hygrophanous, dull watery cinnamon color and striatulate when moist, silky shining, subzonate and pale grayish cinnamon when dry; lamellæ close, rather narrow, nearly free, terminating before the margin of the pileus, bright flesh color; stem slender, straight, hollow, brown with white mycelium at the base; spores subovate, irregular, $\frac{1}{3000}$ ' long.

Plant 2' high, pileus 4"-10" broad, stem .5" thick. Among moss and on rotten wood in swamps. Sandlake. August.

AGARICUS (NOLANEA) DELICATULUS *n. sp.*

Pileus submembranaceous, convex, then expanded, smooth, hygrophanous, striatulate when moist, silky when dry, pinkish

white; lamellæ subdistant, rather broad, ventricose, slightly attached, white, then flesh-colored; stem long, slender, smooth, hollow, subpellucid, white, spores subelliptical, irregular, $\frac{1}{2500}$ ' long.

Plant fragile, 2'-3' high, pileus 6" broad, stem .5" thick. Sphagnum swamps. Sandlake. August.

AGARICUS (NOLAÑEA) CLINTONIANUS *n. sp.*

Pileus submembranaceous, broadly conical, sometimes expanded and wavy-margined, a little scabrous-squamulose on the disk, striate on the margin, whitish or light gray, the disk sometimes a little darker; lamellæ narrow, close, nearly free or easily separating from the stem, whitish, becoming pale flesh-colored; stem slender, equal, smooth, hollow, white, sometimes slightly tinged with yellow, with an abundant white mycelium at the base; spores subelliptical, irregular, $\frac{1}{2500}$ ' long.

Plant 2'-4' high, pileus 1'-1.5' broad, stem scarcely 1" thick. Swamps. Sandlake. August.

I take pleasure in naming this apparently rare species for Hon. G. W. Clinton, one of the most energetic and enthusiastic botanists of the State.

AGARICUS FLAMMANS *Fr.*

Old logs in woods. Greig. September. A most beautiful plant, preserving its color well in drying.

AGARICUS SQUARROSUS *Mull.*

Prostrate trunks of deciduous trees. Sandlake. August and September.

AGARICUS HETEROCLITUS *Fr.*

On an old beech log. Greig. September.

AGARICUS (PHOLIOTA) AGGERICOLA *n. sp.*

Pileus convex, at length slightly depressed, smooth, viscid in wet weather, slightly striatulate on the margin when moist, dark brown; lamellæ subdistant, decurrent-toothed, grayish; stem equal or slightly tapering upward, fibrous, solid, usually curved at the base, lighter colored than the pileus, white above the membranous annulus; spores elliptical, $\frac{1}{2500}$ ' long.

Plant 2'-3' high, pileus 1'-2' broad, stem 3"-5" thick. Banks by roadsides. Greig. September.

AGARICUS (NAUCORIA) HIGHLANDENSIS *n. sp.*

Pileus convex, sometimes expanded, smooth, viscid, yellowish-red, often paler on the margin; lamellæ close, rounded behind,

sometimes with a slight decurrent tooth, at length pale cinnamon color; stem equal, hollow, minutely floecose-scaly, yellowish; spores $\frac{1}{3000}$ ' long.

Plant gregarious, 1'-1.5' high, pileus 6"-12" broad, stem 1" thick. Burnt ground. Top of one of the "Highlands," near Highland Falls. June.

Allied to *A. semiorbicularis*, but easily separated from it by its more viscid pileus, paler lamellæ, squamulose stem and smaller spores.

AGARICUS (HEBELOMA) ILLICITUS *n. sp.*

Pileus fleshy, firm, broadly convex or expanded, smooth, hygrophanous, very dark brown when moist, a little paler when dry; lamellæ close, broad, tapering outwardly, plane or ventricose, rounded behind with a very slight decurrent tooth, pale dingy brown; stem firm, equal, hollow, scabrous, distinctly striate at the top, paler than the pileus, with a white mycelium; spores subelliptical, $\frac{1}{4000}$ ' long.

Plant compact, gregarious or cæspitose, 1.5'-2' high, pileus 1'-1.5' broad, stem 2" thick. Rotten sticks and logs in woods. Greig. September. (Plate 4, Figs. 1-5.) The habitat is unusual for species of this subgenus.

AGARICUS (HEBELOMA) ASCOPHORUS *n. sp.*

Pileus convex, smooth, viscid, pale alutaceous, often with a brighter colored disk; lamellæ moderately broad, close, emarginate, attached, pallid or subolivaceous, stem equal, short, stuffed or hollow, slightly fibrillose, paler than the pileus; spores produced in fragile, globose asci borne on a thick, tapering, penetrating peduncle, elliptical, $\frac{1}{3500}$ ' long.

Plant 1' high, pileus 6"-12" broad, stem scarcely 1" thick. Burnt ground in pastures. Greig. September. (Plate 3, Figs. 1-6.)

A species remarkable for the peculiar manner in which the spores are produced. There are a dozen or more in each ascus. Under slight pressure on the slide of the microscope the enveloping membrane bursts and separates from its peduncle which is of a firmer structure and bears some resemblance in size, shape and color to the spinules on the lamellæ of *A. spinulifer*. The viscid pellicle of the pileus is separable when dry.

AGARICUS (HEBELOMA) EXCEDENS *n. sp.*

Pileus thin, convex, gibbous or broadly umbonate, pale alutaceous inclining to russet; lamellæ rather broad, close, deeply emarginate, terminating before the margin, minutely eroded on the

edge, pallid, then brownish; stem equal, solid, silky-fibrillose, colored like the pileus; spores subelliptical, $\frac{1}{3500}$ ' long.

Plant 2' high, pileus 1' broad, stem 1"-2" thick. Sandy soil about pine trees. Saratoga. October.

Readily known by the thin margin extending beyond the lamellæ. It has the taste and odor of radishes.

AGARICUS (HEBELOMA) MUTATUS *n. sp.*

Pileus thin, firm, convex or broadly conical, gibbous or broadly umbonate, rough with squarrose fasciculate, floccose scales, which at length disappear except on the disk, dark brown; lamellæ broad, close, rounded and very deeply emarginate behind, attached by the extreme upper part only, dark ferruginous brown, edge whitish; stem slender, equal, solid, firm, floccose-scaly, often curved at the base, colored like the pileus; spores elliptical, $\frac{1}{2500}$ ' long.

Plant 2'-3' high, pileus 6"-12" broad, stem 1" thick. Damp ground in woods. Catskill mountains. July.

The changed appearance produced by the disappearance of the scales suggests the specific name.

AGARICUS (CREPIDOTUS) DORSALIS *n. sp.*

Pileus fleshy, sessile, dimidiate or subreniform, flat or slightly depressed behind, with a decurved slightly striate margin, slightly fibrillose-tomentose, distinctly tomentose at the point of attachment, reddish yellow; lamellæ close, ventricose, rounded behind, subemarginate, converging to a whitish, villous, lateral space, pale ochraceous brown; spores globose, $\frac{1}{4000}$ ' in diameter.

Pileus 8"-15" broad. Old logs in woods. Greig. September.

Allied to *A. putrigena* B. & C., but it is not imbricated, and differs in color, size of spores, etc. In general appearance it bears some resemblance to *Panus dorsalis*.

AGARICUS MOLLIS *Schæff.*

Old logs and rotten wood. Common. July, September.

AGARICUS VARIABILIS *Pers.*

Dead trunks of mountain maple, *Acer spicatum*. Indian Lake, Hamilton county. October.

AGARICUS HAUSTELLARIS *Fr.*

On prostrate trunks of poplars. Thurman, Warren county. October. A small form.

AGARICUS (CREPIDOTUS) GREIGENSIS *n. sp.*

Pileus submembranaceous, convex, dimidiate, hygrophanous, grayish cinnamon color and striatulate when moist, silky-fibrillose

when dry; lamellæ subdistant, free, grayish or pallid becoming dingy flesh-colored; stem lateral, short, solid, curved, fibrillose toward the base, springing from an abundant, white, radiating mycelium which sometimes creeps over the matrix to a considerable distance; spores subglobose, irregular, flesh-colored, about $\frac{1}{3000}$ ' long.

Pileus 5"-10" broad, stem scarcely more than 1" long. Very rotten, mossy logs in woods. Greig. September.

The short stem is sometimes compressed in the middle so that it appears to be enlarged both above and below. This species belongs to the second division of the subgenus *Crepidotus* as characterized by Fries in the *Epicrisis*, and to the subgenus *Clardopus* proposed by W. G. Smith, except that the lamellæ are free, neither sinuate nor decurrent. It is manifestly related to *A. byssisedus*.

AGARICUS (PILOSACE) EXIMIUS *n. sp.*

Pileus fleshy, thin, convex or broadly campanulate, at length expanded and subumbonate, smooth, dark sooty brown; lamellæ close, broad, ventricose, rounded behind, free, dull red or brownish pink, then brown; stem slender, hollow, a little thicker at the base, dull red; spores elliptical, $\frac{1}{4000}$ ' long.

Plant 1' high, pileus 3"-6" broad, stem .5" thick. Old stumps in woods. Greig. September. Rare.

I am not aware that a representative of this subgenus has before been found in this country, and none is yet known to belong to the flora of England.

AGARICUS (PSILOCYBE) LIMICOLA *n. sp.*

Pileus thin, convex, then expanded, smooth, hygrophanous, dark watery brown and striatulate on the margin when moist, pale ochraceous brown and corrugate-wrinkled when dry; lamellæ close, rounded behind, attached, cinnamon-brown, becoming darker; stem slender, equal, brittle, silky, hollow above with a distinct separable pith below, whitish; spores elliptical-cymbiform, $\frac{1}{2500}$ ' long.

Plant subcaespitose, 2' high, pileus 6"-12" broad, stem scarcely 1" thick. Damp muck soil in woods. Greig. September. (Plate 2, figs. 9-13.)

Related to *A. cernuus*, but more slender and fragile, with a different habitat, larger spores, etc.

AGARICUS (PSATHYRELLA) ODORATUS *n. sp.*

Pileus thin, fragile, ovate-convex, at length expanded, smooth, hygrophanous, dark reddish brown or chestnut colored and stria-

tulate on the margin when moist, dirty white or clay colored with a pinkish tinge, subatomaceous and radiately wrinkled when dry; lamellæ close, broad, attached, with a slight spurious decurrent tooth, dingy flesh color, then rosy brown, finally black with a whitish edge; stem pallid, equal, hollow, slightly enlarged at the base, slightly mealy and striate at the top, subfibrillose when young, with a white mycelium at the base; spores elliptical cymbiform, $\frac{1}{1700}$ ' long.

Plant 2'-3' high, pileus 1'-2' broad, stem 1"-2" thick. About manure heaps. West Albany. May.

It is gregarious or subcæspitose, and has a strong odor resembling that of the "poison elder," *Sambucus pubens*. The pileus is sometimes split on the margin and occasionally cracked on the surface.

COPRINUS RADIATUS Bolt.

Horse dung. Sandlake. August.

COPRINUS SILVATICUS n. sp.

Pileus membranaceous, with a thin fleshy disk, convex, plicate-striate on the margin, dark brown, the depressed striæ paler; lamellæ subdistant, narrow, attached to the stem, brownish; stem fragile, slender, smooth, hollow, white; spores gibbous-ovate, $\frac{1}{2000}$ ' long.

Plant 2' high, pileus 6"-10" broad, stem .5" thick. Ground in woods. Greig. September. (Plate 4, figs. 10-14.)

The striæ extend about half way up the pileus. Allied to *C. plicatilis* and *C. ephemeris*.

COPRINUS SEMILANATUS n. sp.

Pileus submembranaceous, broadly conical, then expanded and strongly revolute, with the margin sometimes split, farinaceo-atomaceous, finely and obscurely rimose-striate, pale grayish brown; lamellæ narrow, close, free; stem elongated, fragile, hollow, slightly tapering upward, white, the lower half clothed with loose cottony flocci which rub off easily, the upper half smooth or slightly farinaceous; spores broadly elliptical, $\frac{1}{2000}$ ' long,

Plant very fragile, 4'-6' high, pileus 8"-12" broad, stem 1" thick at the base. Rich ground and dung. Sandlake. August. (Plate 4, figs. 15-18.) Allied to *C. coöpertus*.

BOLBITIUS NOBILIS n. sp.

Pileus thin, fleshy on the disk, ovate, then campanulate, smooth, plicate-striate, pale yellow, the disk tinged with red, the margin at

length recurved and splitting; lamellæ sub-distant, tapering outwardly, attached, the alternate ones more narrow, pale yellow with a darker edge; stem long, equal, smooth, striate at the top, hollow, white.

Plant cæspitose, 3'-5' high, pileus 1' broad, stem 1" thick. Ground in woods. Greig. September. (Plate 2, figs. 1-4.)

A fine large species but probably rare.

CORTINARIUS (PHLEGMACIUM) CORRUGATUS *n. sp.*

Pileus fleshy, broadly campanulate or convex, smooth, viscid, coarsely reticulate-rugose, bright yellow, the margin incurved; lamellæ close, a little narrowed behind, attached, minutely eroded on the edge, pallid, then pale cinnamon; stem stout, cylindrical, smooth, hollow, bulbous, whitish or pale yellow, the bulb viscid and colored like the pileus; spores subglobose or broadly elliptical, echinulate, $\frac{1}{2} \frac{1}{100}' - \frac{1}{2} \frac{1}{100}'$ long.

Plant 3'-5' high, pileus 2'-3' broad, stem 6"-8" thick. Ground among leaves under *Kalmia latifolia*. Highlands. June.

The flesh is white; the bulb immarginate, in some specimens almost obsolete. A very distinct, noble species.

CORTINARIUS (PHLEGMACIUM) OLIVACEUS *n. sp.*

Pileus fleshy, convex, then expanded, smooth, viscid, dark brown with a greenish or olivaceous tinge; lamellæ close, rather broad, at length ventricose, dark olivaceous, then cinnamon colored; stem equal, bulbous, silky, stuffed or hollow, white-violaceous; spores elliptical, with a transparent nucleus, $\frac{1}{2} \frac{1}{100}'$ long.

Plant 3'-4' high, pileus 2' broad, stem 4"-6" thick. Ground in woods. Greig. September.

The flesh of the stem is violaceous, of the pileus grayish.

CORTINARIUS BOLARIS *Fr.*

Ground in woods. Greig. September.

CORTINARIUS (INOLOMA) ASPER *n. sp.*

Pileus fleshy, firm, hemispherical, then convex, rough with minute, erect, brown scales, ochraceous; lamellæ close, rounded behind and slightly emarginate, dull violaceous, then pale cinnamon; stem equal, bulbous, solid, fibrillose-scaly, colored like the pileus but smooth and violaceous at the top, the bulb white with an abundant mycelium; spores broadly elliptical, with a pellucid nucleus, $\frac{1}{3} \frac{1}{100}'$ long.

Plant 3'-4' high, pileus 2'-3' broad, stem 3"-5" thick. Ground in cleared places. Greig. September. (Plate 1, figs. 1-3.) A fine species. The flesh of the stem is violaceous.

CORTINARIUS EVERNIUS *Fr.*

Low wet grounds in woods. Sandlake. August. Our specimens do not quite agree with the description, the stem being silky-fibrillose, not scaly.

GOMPHIDIUS VISCIDUS *Fr.*

Ground in pine woods. Sandlake and West Albany. October.

HYGROPHORUS PUNICEUS *Fr.*

Ground in woods. Greig. September.

HYGROPHORUS LETUS *Fr.*

Ground in cleared places, growing under *Pteris aquilina*. Greig. September.

HYGROPHORUS PSITTACINUS *Fr.*

Ground in open places. Greig. September.

LACTARIUS INSULSUS *Fr.*

Damp ground in open woods. Greenbush. July.

LACTARIUS TRIVIALIS *Fr.*

Ground in woods. Poughkeepsie. *W. R. Gerard*. Greig. September.

Our plant does not agree rigidly with the description, the pileus being sometimes zonate and the stem rather slender and not always hollow. The lamellæ and flesh slowly change to a greenish or olivaceous color when wounded, though the milk is unchangeable. Future observation may show it to be a distinct species, but at present I prefer to consider it an aberrant form of *L. trivialis*.

LACTARIUS CINEREUS *n. sp.*

Pileus fleshy, at length expanded, centrally depressed, usually umbilicate, smooth, viscid, light gray with the disk sometimes a little darker; lamellæ narrow, close, white; stem equal or slightly tapering upward, smooth, stuffed, colored like the pileus; spores $\frac{1}{3500}$ '- $\frac{1}{3000}$ ' in diameter. Flesh and milk white, unchangeable, taste acid.

Plant 2'-3' high, pileus 1'-2' broad, stem 3"-4" thick. Ground in woods. Sandlake and Greig. August and September. Allied to *L. vietus*.

LACTARIUS SERIFLUS DC.

Swamps in woods. Sandlake and Greig. Our plant has a hollow stem and the color of burnt sienna—particulars in which it disagrees with the description of *L. seriflus*; but the scanty watery or serum-like milk is well shown by it. This is a large but very fragile species, and much subject to the attack of insects. When dry it has a decided but agreeable odor.

LACTARIUS CHELIDONIUM n. sp.

Pileus fleshy, firm, centrally depressed, smooth, slightly viscid, of a grayish-green color with blue and yellow tints and a few narrow zones on the margin; lamellæ close, narrow, forked and wavy at the base, sometimes anastomosing, grayish yellow; stem short, subequal, smooth, hollow, colored like the pileus; spores yellowish, $\frac{1}{3000}$ ' in diameter.

Plant 2' high, pileus 2' broad, stem 4"-6" thick. Sandy soil about pine trees. Saratoga. October.

Taste mild, milk sparse, of a yellowish color resembling the juice of Celandine or the liquid secreted from the mouth of grasshoppers. The flesh when wounded is at first stained with a color like the milk, then changes to blue and finally to green. Closely allied to *L. deliciosus*, from which it differs in its more narrow lamellæ, differently colored milk, smaller spores, etc.

LACTARIUS FUMOSUS n. sp.

Pileus firm, convex, then expanded and slightly depressed in the center, smooth, dry, smoky brown, or sordid white; lamellæ close, adnate or slightly rounded behind, white, then yellowish; stem firm, short, smooth, stuffed, generally tapering downward; spores distinctly echinulate, yellow, $\frac{1}{2500}$ ' in diameter; flesh and milk white; taste at first mild, then acrid.

Plant 1.5'-2' high, pileus 1.5'-2.5' broad, stem 3"-5" thick. Grassy ground in open woods. Greenbush. July.

The peculiar smoky hue of the pileus and yellow spores enable this species to be easily recognized. The flesh when wounded slowly changes to a dull pinkish color. Related to *L. fuliginosus*.

RUSSULA VIRESCENS Fr.

Grassy ground. Albany and Greenbush. June and July.

RUSSULA RUBRA Fr.

Ground in a wooded ravine. Albany Rural Cemetery. July.

RUSSULA MARLE n. sp.

Pileus fleshy, convex, subumbilicate, at length expanded and centrally depressed, minutely pulverulent, bright pink red (crimson

lake), the disk a little darker, margin even; lamellæ rather close, reaching the stem, some of them forked, venose-connected, white, then yellowish, stem equal, solid, colored like the pileus except the extremities which are usually white; spores globose, nearly smooth, $\frac{1}{3000}$ ' in diameter; flesh of the pileus white, red under the cuticle, taste mild.

Plant 2' high, pileus 1.5'-2' broad, stem 3"-6" thick. Dry ground in woods. Catskill mountains. July.

The minute colored granules, which give the pileus a soft pruinose appearance, are easily rubbed off on paper; and water put upon the fresh specimens is colored by them.

RUSSULA SIMILLIMA n. sp.

Pileus hemispherical or convex, then expanded, slightly depressed, at first or when moist viscid, the margin at length tuberculate-striate, pale ochraceous yellow, the disk usually a little brighter colored; lamellæ subequal, reaching the stem, some of them forked behind, venose-connected, yellowish from the first; stem equal or slightly tapering upward, spongy within, rarely hollow, colored like the pileus, sometimes a little paler; spores $\frac{1}{3000}$ ' in diameter; taste acid.

Plant 2'-4' high, pileus 1'-3' broad, stem 4"-9" thick. Ground in woods. Greig. September.

Allied very closely to *R. fætens*, from which it differs by the absence of any marked odor and the margin not so widely striate. I have never seen it cæspitose nor growing in cleared lands.

PAXILLUS INVOLUTUS Batsch.

Ground in woods. Greig and North Elba. August and September.

CANTHARELLUS CINEREUS Fr.

Ground in woods and shaded ravines. Albany Rural Cemetery and Greig. July, September. The form growing in the latter locality is nearly black.

PLICATURA nov. gen.

Hymenophorum descending into the trama. *Hymenium* continuous, pliciform; folds irregular or wavy, edge obtuse.

Plants of a firm coriaceous texture, reviving on the application of moisture.

This genus is related, by the obtuse edge of the folds, to *Cantharellus* on one hand, and by its texture and continuous hymenium to *Marasmius* on the other. From *Xerotus* it is separated by the irregular character of the folds. The only species at present known to me in this genus is the epiphytal species here described,

though it seems to me that *Cantharellus crispus* should find a place in it as that species certainly is closely related and revives on the application of moisture.

PLICATURA ALNI *n. sp.*

Pileus thin, coriaceous, resupinate-reflexed, generally imbricated, silky-tomentulose, brownish-tawny, the margin sterile; folds narrow, irregular, interrupted, wavy or crisped, angular, white. Pileus 8"-12" broad.

On trunks of alders. Indian Lake and Center. October.

In color and habit this plant has some resemblance to *Cantharellus crispus*. It is somewhat flabby, and in drying, the folds to some extent disappear, but they soon assume their original size and shape on the application of moisture.

MARASMIUS STRIATIPES *n. sp.*

Pileus convex, smooth, even, pale alutaceous; lamellæ rather broad, subdistant, rounded behind, attached, white; stem equal or slightly thickened at the base, firm, hollow, distinctly striate, pruinose-tomentose, whitish with an abundant white mycelium.

Plant 2'-4' high, pileus 2' broad, stem 2"-3" thick. Ground among leaves in woods. Greig. September.

MARASMIUS ANOMALUS *n. sp.*

Pileus thin, convex, smooth, reddish-gray; lamellæ close, narrow, rounded behind and united with each other, free, whitish or pallid; stem equal, hollow, smooth or slightly pruinose, pallid, reddish brown at the base.

Plant 1'-2' high, pileus .5'-1' broad, stem 1" thick. Sticks among leaves in woods. Catskill. July.

It resembles *M. plancus* from which it may be separated by its smooth stem and free lamellæ.

MARASMIUS PERFORANS *Fr.*

Fallen leaves of spruce trees, *Abies nigra*. Sandlake and Greig. August and September.

MARASMIUS CANDIDUS *Fr.*

Fallen leaves. Greenbush. July.

MARASMIUS PAPILLATUS *n. sp.*

Pileus submembranaceous, convex, then expanded, with a small umbo or papilla, obscurely striate on the margin, dirty white or gray, sometimes with a pinkish hue; lamellæ narrow, close, attached, with a slight decurrent tooth, white or yellowish; stem

slender, firm, hollow, colored like the pileus, pruinose, deeply rooting.

Plant 1'-2' high, pileus 4"-10" broad, stem .5" thick. On rotten, mossy logs in woods. Sandlake and Greig. September.

MARASMIUS DECURRENS *n. sp.*

Pileus thin, convex, minutely tomentulose, grayish or tawny; lamellæ arcuate-decurrent, subdistant, narrow, tapering toward each end, whitish with discolored edge, interspaces rugose-reticulated; stem slender, firm, equal, gray, minutely tomentulose.

Plant subcæspitose, 1'-2' high, pileus 4"-6" broad, stem .5" thick. Ground in a shaded ravine. Albany Rural Cemetery. July.

A species remarkable for the peculiar characters of the lamellæ. It is apparently allied to *M. claviformis*.

MARASMIUS PULCHERRIPES *n. sp.*

Pileus membranaceous, campanulate, obtuse, distantly striate, dry, smooth, of a soft maroon or vinous red color; lamellæ few, distant, narrow, ascending, free; stem tough, smooth and shining, brownish-black, clear red at the top.

Plant 1'-1.5' high, pileus 2"-4" broad, stem not half a line thick.

Sticks and acerose leaves among moss in woods. Garrisons. June. (Plate 4, figs. 19-22.)

The transition from the black to the red portion of the stem is sudden and well defined. The free space at the inner extremity of the lamellæ is red like the apical part of the stem.

MARASMIUS FILOPES *n. sp.*

Pileus membranaceous, convex, distantly and obscurely radiate-striate, subumbilicate, white; lamellæ few, distant, attached, white; stem smooth, elongated, thread-like, flexuous, inserted, whitish, sometimes brownish at the base.

Plant gregarious, 1'-1.5" high, pileus about 1" broad, stem scarcely thicker than hog bristles.

Fallen leaves of balsam trees, *Abies balsamea*. Indian Lake. October. (Plate 4, figs. 27-29.)

A remarkably slender and delicate species. There are about a half dozen lamellæ with now and then an intermediate short one.

PANUS SALICINUS *n. sp.*

Pileus firm, thin, convex, deflexed or subpendant, hygrophanous, minutely farinaceo-tomentose, pinkish-gray; lamellæ moderately broad and close, converging to an excentric point, dark ferruginous; stem very short or obsolete, obliquely attached to the vertex of the pileus.

Plant gregarious, pileus 4"-6" broad. Trunks of dead willows, *Salix discolor*. Center. October.

BOLETUS BICOLOR *n. sp.*

Pileus fleshy, firm, convex, dry, nearly smooth or pruinose-tomentose, dark red, tubes plane, attached, small, angular, sub-compound, short, bright yellow becoming ochraceous, slightly changing to blue when wounded; stem subequal, firm, solid, dark red, sometimes yellow at the top; spores narrowly elliptical, $\frac{1}{2} \frac{1}{10} \frac{1}{10}$ ' long; flesh bright yellow, unchanging when wounded; taste pleasant.

Plant closely gregarious 2' high, pileus 2' broad, stem 4"-6" thick. Ground in open woods. Sandlake. August. (Plate 2, figs. 5-8.)

The tubes are not more than 1" long in our specimens Allied to *B. sulfureus*, but very different in color.

BOLETUS GRACILIS *n. sp.*

Pileus convex, dry, smooth or most minutely tomentose, ochraceous-brown; tubes plane, subfree or depressed about the stipe, small, subrotund, whitish then pale flesh-colored; stem slender, equal or slightly tapering upward, solid, marked with slender, elevated lines which anastomose and form very long narrow reticulations; spores flesh-colored, $\frac{1}{2} \frac{1}{10} \frac{1}{10}$ ' long.

Plant 4'-6' high, pileus 2' broad, stem 3"-4" thick. Ground in woods. Garrisons and Greig. June. September.

Closely allied to *B. felleus*, but the plant is much more slender, and the character of the reticulations is quite different.

POLYPORUS PORIPES *Fr.*

Ground. New Baltimore, *Howe*. Sandlake. August. A large tufted species with the pores running far down on the stipe.

POLYPORUS FRONDOSUS *Fr.*

Buffalo. *Clinton*.

POLYPORUS GLOMERATUS *n. sp.*

Pileus of a corky texture, densely imbricated, nearly plane, uneven, minutely velvety-tomentose, dark tawny, similarly colored within and obscurely zonate, united behind in a large irregular mass; pores nearly plane, small, angular, greenish-yellow with purple tints, the mouths whitish inclining to yellow, at length dentate-lacerate; spores bright yellow, globose, $\frac{1}{5} \frac{1}{10} \frac{1}{10}$ ' in diameter.

Plant forming masses a foot long and 2' or 3' thick, the pilei- 1'-1.5' long, 2' or more broad.

On a prostrate trunk of a maple tree, *Acer saccharinum*. Indian Lake. October.

The central mass was much eaten by the larvæ of insects.

POLYPORUS RUBIGINOSUS *Rostk.*

Trunks of deciduous trees. Indian Lake. October.

POLYPORUS MARGINATUS *Fr.*

Stumps and old trunks of trees. Indian Lake. October.

POLYPORUS FUMOSUS *Fr.*

Old stumps. Hoosick Falls, Rensselaer county and Indian Lake. September and October.

POLYPORUS BETULINUS *Fr.*

Trunks of dead birches. Common in swamps and mountainous districts. September, November.

The lower surface or hymenium is frequently rough with numerous acicular projections, making the plant look like a *Hydnum* when viewed horizontally.

POLYPORUS CÆSIUS *Fr.*

On dead shrubs. Indian Lake. October.

POLYPORUS ZONATUS *Fr.*

Dead branches. Greenbush. The specimens are very dark colored.

POLYPORUS VELUTINUS *Fr.*

Old stumps. Greig. September.

POLYPORUS ELONGATUS *Berk.*

Prostrate poplar trunks. Thurman. October. It resembles *P. laceratus*.

POLYPORUS VITICOLA *Fr.*

Dead grape-vines. Greenbush. October.

POLYPORUS VAILLANTII *Fr.*

On wood in cellars. Albany. November and December. Our specimens, when fresh, have a strong odor.

POLYPORUS VESICULOSUS *B. & C.*

Old logs. Johnsburgh, Warren county. October.

POLYPORUS CORTICOLA *Fr.*

Rotten wood. Center. October.

TRAMETES SEPIUM *Berk.*

Oak fence rails. Greenbush. October.

HYDNUM FERRUGINEUM *Fr.*

Ground. Sandlake. August.

HYDNUM ZONATUM *Batsch.*

Fallen branches. Albany and Trenton Falls. September.

HYDNUM PITHYOPHILUM *B. & C.*

Rotten wood. Johnsburgh. October.

KNEIFFIA SETIGERA *Fr.*

Dead branches of alders. Center. October.

KNEIFFIA CANDIDISSIMA *B. & C.*

Rotten wood. Indian Lake. October.

ODONTIA FIMBRIATA *Fr.*

Dead grape vines. Greenbush. October.

PHLEBIA RADIATA *Fr.*

Beech logs in woods. Buffalo. *Clinton*. Greig and Indian Lake. September, October.

PHLEBIA ZONATA *B. & C.*

On poplar trunks. Greenbush. October.

TREMELLA FOLIACEA *Pers.*

Stumps and old logs. Buffalo. *Clinton*. Greenbush. July.

GUEPINIA SPATHULARIA *Fr.*

Beech logs. Greig. Buffalo. *Clinton*.

STEREUM ALBOBADIUM *Schw.*

Stumps and trees. Greenbush. October.

STEREUM CURTISII *Berk.*

Oak trees and branches. Greenbush. October.

STEREUM RUGOSUM *Fr.*

Prostrate trunks of trees. Sandlake and Johnsburgh. August, October.

CORTICIUM INCARNATUM *Fr.*

Dead trunks and branches of trees. Greenbush. October.

CORTICIUM LIQUIDAMBARIS *B. & C.*

Poplar trunks and branches. Greenbush and Center. October.

CORTICIUM SALICINUM *Fr.*

Dead trunks and branches of willows, especially *Salix discolor*. Buffalo. Clinton. Center and Indian Lake. October.

One of the prettiest species of the genus. Large specimens sometimes have the hymenium reticulated with vein-like elevations.

CORTICIUM SCUTELLATUM *B. & C.*

Branches of trees. Fort Edward. Howe. Greenbush. July.

CORTICIUM RUBICOLA *B. & C.*

Stems of the blackberry. Greenbush. October.

CORTICIUM AUBERIANUM *Mont.*

Bark of dead pine trees. Greenbush. October.

CRATERELLUS LUTESCENS *Fr.*

Swamps. Sandlake and Greig. August and September.

It is sometimes so much lobed and imbricated on the margin that it has a roseate appearance.

THELEPHORA CORALLOIDES *Fr.*

Ground in open woods. Greenbush. July.

THELEPHORA TUBEROSA *Grev.*

With the preceding.

THELEPHORA CARYOPHYLLÆA *Fr.*

Damp shaded ground in a ravine. Albany Rural Cemetery. July.

THELEPHORA SEBACEA *Fr.*

Incrusting grasses, leaves and small plants. Catskill mountains. July.

CLAVARIA FLAVA *Fr.*

Ground in woods. Albany Rural Cemetery. July.

CLAVARIA CINEREA *Bull.*

With the preceding. July.

CLAVARIA KUNZEI *Fr.*

Damp soil near swamps or streams. Sandlake and Greig. August and September.

CLAVARIA APICULATA *Fr.*

Very rotten mossy hemlock logs. Sandlake and Greig. August and September.

CLAVARIA CRISPULA *Fr.*

Rotten wood of deciduous trees. Greig. September.

CLAVARIA TRICHOPUS *Pers.*

Sphagnous swamps. Sandlake. August.

Fries considers this a variety of *C. cristata*, but it seems to me to be very distinct and well marked by the hairy stem, not confluent with the hymenium.

CLAVARIA TETRAGONA *Schw.*

Ground in shaded places. Sandlake and Greig. Poughkeepsie, Gerard. August and September.

CLAVARIA FRAGILIS *Holmsk.*

Shaded ground in ravines. Albany Rural Cemetery. July.

CLAVARIA ARGILLACEA *Fr.*

Ground. Catskill mountains. July.

CLAVARIA MUCIDA *Pers.*

Soft moist rotten wood. Buffalo. Clinton. Indian Lake. October. A green confervoid stratum overspreads the wood where it grows.

CLAVARIA SPINULOSA *Pers.*

Ground under pine trees. Sandlake and West Albany. August, October.

CLAVARIA LIGULA *Fr.*

Ground in woods among fallen leaves. Helderberg mountains.

CALOCERA CORNEA *Fr.*

Rotten wood and fallen branches. North Greenbush and Greig. Buffalo. Clinton. July, September.

CALOCERA PALMATA *Fr.*

Old beech logs. Greig and Indian Lake. September and October.

CALOCERA VISCOSA *Fr.*

Rotten stumps in woods. Sandlake. August.

EXIDIA REPANDA *Fr.*

Dead branches of deciduous trees. Common. Spring and autumn.

NEMATELIA NUCLEATA *Fr.*

Decaying trunks and branches of deciduous trees. Johnsburgh and Center. October.

NEMATELIA ATRATA *n. sp.*

Flat, effused, pallid or brownish, at length black; nuclei numerous, scattered or close, rather large, often rugose and umbilicate soon black.

Dead branches of bass wood, *Tilia Americana*. Helderberg mountains and Greenbush. May.

Very distinct by reason of the black nuclei.

CYPHELLA FULVA *B. & R.*

Dead branches of alders. Common. October and November.

PHALLUS IMPUDICUS *Fr.*

Ground among leaves. Buffalo. *Clinton*. Thurman. October.

CORYNTES RAVENELII *Berk.*

Ground. Albany Rural Cemetery.

Our plant has a very strong odor and is not at all attenuated toward the base—particulars in which it does not agree with the description, but they are scarcely to be regarded of specific importance.

A species of *Coryntes*, possibly the same as this, has been found near Utica by Judge A. S. Johnson and Hon. Horatio Seymour, but I have seen no specimens.

GEASTER MINIMUS *Schw.*

Grassy ground. Knowersville, Albany county. May.

LYCOPERDON ATROPURPUREUM *Vitt.*

Grassy ground. West Albany, October. A single specimen.

LYCOPERDON MOLLE *Pers.*

Swamps. Sandlake. August. This is thought by some to be a variety of *L. gemmatum*, but it appears to me to be quite distinct.

LYCOPERDON SUBINCARNATUM *n. sp.*

Peridium globose, sessile, bursting at the apex by a circular aperture, rough, with equal, close, subpyramidal, persistent brown-

ish scales or granules; spores greenish-ochre, filling almost the entire cavity.

Plant 6"-10" in diameter, generally of a pinkish-brown color, with but little cellular tissue at the base. The peridium is more thin than it is in *L. pyriforme*, but not so brittle.

Rotten wood in woods. Sandlake and Greig. August and September.

SCLERODERMA BOVISTA *Fr.*

Grassy ground. Greenbush and Albany. July.

STEMONITIS FUSCA *Roth.*

Rotten wood. Buffalo. Clinton. Helderberg mountains. June. Darker colored than *S. ferruginea*.

ARCYRIA PUNICEA *Pers.*

Rotten wood. Greenbush. July.

TRICHIA PYRIFORMIS *Hoffm.*

Rotten wood and bark. Buffalo. Clinton. Center. October.

TRICHIA CHRYSOSPERMA *DC.*

Among mosses. Sandlake. August.

TRICHIA VARIA *Pers.*

Bark of an old log. Helderberg mountains. May.

TRICHIA SERPULA *Pers.*

Rotten wood, etc. Buffalo. Clinton. Center. October.

DIDYMIUM SQUAMULOSUM *A. & S.*

Bark of dead branches. Sandlake.

DICTYDIUM MAGNUM *n. sp.*

Peridium globose, thin, fragile, irregularly reticulated, purplish-blue, pruinose; stem elongated, filiform, whitish or straw color; spores globose, black, $\frac{1}{25000}$ ' in diameter.

On some effete Polyporus and wood impregnated with its mycelium. Center. October.

The stems are 4"-6" long, and in the dry specimens they become twisted and entangled so that it is difficult to separate a plant from the cluster. The peridia are about $\frac{1}{16}$ ' in diameter, rupture irregularly, are iridescent and look like small clusters of miniature grapes or little blue berries.

MICROTHYRIUM SMILACIS De Not.

Dead stems of Smilax. Sag Harbor, L. I. and Garrisons. June and July.

LEPTOSTROMA VULGARE Fr.

Dead stems of herbs. Buffalo. Clinton. Greenbush. June.

PHOMA AMPELINUM B. & C.

Dead stems of grape vines. Sandlake and Greenbush. June and July.

PHOMA LIBERATUM B. & C.

On fallen pine leaves. Center. October.

PHOMA MENISPERMI n. sp.

Perithecia small, scattered, elevated, black, shining, seated on the inner bark, bursting through the epidermis, spores minute.

Dead stems of *Menispermum Canadense*. Greenbush. November.

Little white spots remain where the perithecia are broken away. Sometimes, in a favorable light, little elevated lines may be seen extending from one perithecium to another.

SPHERONEMA SUBTILE Fr.

Rotten wood. Buffalo. Clinton.

SPHERONEMA SUBULATUM Fr.

Decaying Agarics. Helderberg mountains. June.

SPHERONEMA PRUINOSUM n. sp.

Perithecia scattered, seated on the inner bark, erumpent through the epidermis, elongated-conical or short spiniform, blunt, black, pallid or yellowish at the base, more or less pruinose: globule hyaline; spores large, oblong, $\frac{1}{1000}$ ' long.

Dead branches of *Amelanchier Canadensis*. Garrisons. June.

The branch is roughened by the projecting perithecia, which are sometimes so pruinose that it appears to be dotted with little white spots.

SPHERONEMA CORYLI n. sp.

Perithecia innate in the exterior bark, very numerous, minute, slightly elevated, truncated, black, easily separating from the matrix; spores oblong or elliptical, $\frac{1}{1300}$ ' in length.

Dead branches of *Corylus Americana*. West Albany. July.

The perithecia are rather fragile, and when moist are easily compressed on the slide of the microscope, so that the jointed filaments which enter into their structure are plainly discernible.

SPHÆRONEMA ACERINUM *n. sp.*

Perithecia innate in the bark, bursting through the epidermis, conico-hemispherical below, with a long, slender, more or less flexuous or curved point above, black or brownish black; spores elliptical, generally with one or two pellucid nuclei.

Dead trunks and branches of the red maple, *Acer rubrum*. Greenbush, Sandlake and Indian Lake. April, October.

The perithecia are numerous and somewhat seriatly placed. Their bristle-like points give to the branch a hispid or strigose appearance.

SPHÆROPSIS PULCHELLA *B. & C.*

Dead branches of sumach, especially of *Rhus glabra*.

SPHÆROPSIS ANOMALA *n. sp.*

Perithecia cæspitose, black, seated on the inner bark and bursting through transverse chinks, ostiole papillate; spores oblong, $\frac{1}{1200}$ ' long.

Bark of dead cherry trees. Albany. *R. Prescott*.

The aspect of this species is that of *Tympanis conspersa* Fr., but the fructification is that of a Sphæropsis.

SPHÆROPSIS MENISPERMI *n. sp.*

Perithecia numerous, prominent, black, at first covered by the epidermis, which at length bursts, revealing the apex of the perithecia; spores oblong, $\frac{1}{1500}$ ' long.

Dead stems of *Menispermum Canadense*. Greenbush. November. Buffalo. *Clinton*.

The stem is roughened by the prominent perithecia, and the epidermis of the bark gives them a shining appearance.

VERMICULARIA DEMATIUM *Fr.*

Dead stems of herbs. West Albany. May.

VERMICULARIA OVATA *Schw.*

Dead stems of herbs. Greenbush. May.

DISCOSIA ARTOCREAS *Fr.*

Fallen oak leaves. Greenbush.

MELANCONIUM BICOLOR *Nees.*

Dead branches of the white birch, *Betula populifolia* Center. June.

DISCELLA OBSCURA *B. & C.*

Dead branches of *Acer spicatum*. Knowersville. July.

CORYNEUM CLAVESPORIUM *n. sp.*

Spores long, slightly curved, club-shape, obtuse, multiseptate, seated on a hard, subglobose, black disk.

Dead branches of ash trees, *Fraxinus Americana*. Knowersville. May.

The spores easily break from the disk, which then might be taken for a *Sclerotium*. The articulations of the club sometimes contain paler subquadrate spaces within which is a globule or nucleus.

NEMASPORA AUREA *Fr.*

Dead branches of *Carpinus Americana*. Greenbush. May. The spores in our specimens form a globule rather than tendrils.

NEMASPORA RUSSELLII *B. & C.*

Dead branches of locust trees, *Robinia pseudacacia*. Albany. June.

SEPTORIA VIOLE *Desm.*

Leaves of *Viola cucullata*. West Albany. May.

SEPTORIA PHLYCTENOIDES *B. & C.*

Dead stems of *Asparagus officinalis*. Knowersville. June.

SEPTORIA HIPPOCASTANI *B. & Br.*

Leaves of *Aesculus Hippocastanum*. Albany. June.

SEPTORIA NABALI *B. & C.*

Early or radical leaves of *Nabalus*. Buffalo. Clinton. Greenbush and Sandlake. May.

SEPTORIA ERIGERONIS *n. sp.*

Spots small, orbicular, distinct, rarely confluent, arid, surrounded by a dark brown or blackish line; perithecia minute, black on the upper surface of the leaf; spores thread-shaped, simple, $\frac{1}{1000}$ ' long or more.

Leaves of *Erigeron annuum*. Greenbush. July. The spots are 1'-2" in diameter.

SEPTORIA LOBELLE *n. sp.*

Spots orbicular, frequently confluent, arid, of a pallid or pale cream color, surrounded by a broad, blackish or brownish-purple margin; perithecia minute, numerous, close, black, appearing on both sides of the leaf; spores thread-shaped, simple, $\frac{1}{1500}$ '- $\frac{1}{1000}$ ' long.

Leaves of *Lobelia spicata*. Nassau, Rensselaer county. June.
The spots are generally 1"-2" in diameter. The colored margin is usually paler as it recedes from the spot.

CYTISPORA MELASPERMA *Fr.*

Dead branches of birches. Sandlake. May.

CYTISPORA PARVA *B. & C.*

Dead branches of *Robinia pseudacacia*. Garrisons. June.

CYTISPORA CORYNEOIDES *B. & C.*

Dead grape-vines. Greenbush. July.

CYTISPORA HYALOSPERMA *Fr.*

Dead branches of *Acer rubrum*. Sandlake. May.

TORULA POPULINA *n. sp.*

Spore threads aggregated in minute tufts, situated on the under surface of the leaf, on arid, orbicular, distinct or sub-confluent brown spots, with one to three strictures, breaking up into oblong-elliptical, subacute spores.

Leaves of *Populus grandidentata*. Luzerne, Warren county. June.

The spots have a dark, well defined margin and a reddish-brown color on the upper surface of the leaf. At first sight, they suggest the idea of a *Depazea* or a *Septoria*.

UREDO HELIANTHI *Schw.*

Leaves of Helianthus. Buffalo. Clinton.

UREDO ASPIDIOTUS *n. sp.*

Spots yellow or greenish-yellow, oblong, acute at the ends, often slightly curved, usually distinct and limited by veinlets, sometimes confluent; sori small, rotund, a little elevated, one to three on each spot, on the upper surface of the frond; spores yellow, ovate or pyriform, $\frac{1}{800}$ ' long, a little more than half as wide.

Fronds of *Phegopteris Dryopteris*. Catskill mountains. July. (Plate 1, figs. 18-20.)

At a little distance the fronds on which this fungus grows appear as if infested by a yellow scale insect, so exactly do the spots resemble the shape of some species of *Aspidiotus*. *U. Filicum* has subglobose spores and the sori occur on the under surface of the frond.

UREDO ECIDIROIDES *n. sp.*

Spots obliterated, sori amphigenous, bullate, small, scattered or close; spores globose, at first covered by the epidermis, then sur-

rounded by its ruptured remains, bright yellow or orange, $\frac{1}{1200}$ ' in diameter.

Leaves, petioles and stems of *Amphicarpæa monoica*. Common. June and July.

When the sori are evacuated, the rather firm epidermis walls remain, forming a little cup with a narrow mouth and resembling the cups of some species of *Æcidium*.

TRICHOBASIS IRIDICOLA *n. sp.*

Sori amphigenous, rotund, oval or oblong, rarely linear, a little elevated, surrounded by the ruptured remains of the epidermis; spores globose, minutely echinulate, brown, $\frac{1}{1000}$ ' in diameter.

On both sides of living and half dead leaves of *Iris versicolor*, frequently occupying nearly the whole surface of the leaf. Sand-lake. September. (Plate 3, figs. 17-19.)

Uredo Iridis Schw. is described as having yellow-ferruginous spores, and is placed in his section "Rubigines," whereas, our species would belong to his section "Fuscescentes et Nigredines."

TRICHOBASIS GALII *Lev.*

Leaves of some *Galium*. New Baltimore. June. *Howe*.

TRICHOBASIS LABIATARUM *Lev.*

Leaves of *Calamintha Clinopodium*. Buffalo. *Clinton*.

TRICHOBASIS SUAVEOLENS *Lev.*

Leaves of Canada thistle. Common. June and July.

USTILAGO LONGISSIMA *Tul.*

Leaves of *Poa aquatica*. West Albany. June and July.

Our specimens are not as dark colored as the European ones we have seen, and the spores are a very little larger.

USTILAGO MONTAGNEI *Tul.*

Spikes of *Rhynchospora alba*. Sandlake. August.

LECYTHEA ROSÆ *Lev.*

Leaves of rose bushes. New Baltimore. *Howe*.

UROMYCES POLYGONI *Fuekel.*

Stems of *Polygonum aviculare*. New Baltimore. *Howe*. Sandlake. November.

The species is remarkable for the long thick pedicel, which is sometimes four or five times the length of the spore. A central nucleus is generally visible in the spore.

UROMYCES CARICIS *n. sp.*

Sori small, rotund or oval, generally scattered and distinct; spores varying from globose to elliptical or oblong pyriform, brown, $\frac{1}{1300}$ '— $\frac{1}{1000}$ ' long; pedicel usually very long, slender.

Under surfaces of leaves of *Carex stricta*. Center. November.

UROMYCES APPENDICULATA *Lev.*

Pea leaves. Buffalo. Clinton.

UROMYCES SOLIDA, *B. & C.*

Leaves of *Desmodium*. Buffalo. Clinton.

PILEOLARIA BREVIPES *B. & C.*

Leaves of poison ivy, *Rhus Toxicodendron*. Common. July, September.

I have received specimens of this species from *Howe*, *Gerard*, and *Clinton*.

AREGMA OBTUSATUM *Fr.*

Leaves of *Potentilla Canadensis*. Poughkeepsie. *Gerard*. Saratoga. September and October.

PUCCINIA NOLI-TANGERIS *Cd.*

Leaves of *Impatiens pallida*. Cherry Valley. Otsego county. October.

PUCCINIA GALIORUM *Lk.*

Leaves of *Galium*. Buffalo. Clinton.

PUCCINIA POLYGONORUM *Lk.*

Leaves of *Polygonum amphibium*. Buffalo. Clinton.

PUCCINIA EMACULATA *Schw.*

Leaves of *Panicum capillare*. Greenbush. October.

PUCCINIA STRIOLA *Lk.*

Leaves of *Scirpus Eriophorum*. West Albany. October.

PUCCINIA CONVULVULI *B. & C.*

Leaves of *Calystegia sepium*. Poughkeepsie. *Gerard*. Buffalo. Clinton. North Greenbush and Sandlake. September and October.

PUCCINIA PYROLÆ *Cooke.*

Under surface of leaves of *Polygala paucifolia*. Buffalo. Clinton. Sandlake. May.

The sori sometimes occupy the whole under surface of the leaf. Their black color contrasts beautifully with the light color of the spot.

PUCCINIA TRIPUSTULATA n. sp.

Spots very small, angular, distinct, yellowish; sori hypogenous, few, distinct; spores broadly ovate or sub-triangular, tripustulate, scarcely constricted, brown, $\frac{1}{700}$ ' long, about $\frac{1}{1000}$ ' in diameter; pedicel short or obsolete.

Under surface of leaves of the blackberry, *Rubus villosus*. Greig. September. (Plate 3, figs. 14-16.)

A remarkably distinct species. There are usually from one to five sori on each spot. There are three prominent points or angles to each spore, one at the apex, two at the base of the spore. To one of the latter points the pedicel is attached. The other is sometimes considerably removed from its neighbor, so that it appears to be almost lateral. A little pellucid pustule usually crowns these points, and sometimes two may be seen on the apical prominence.

PUCCINIA MINUTULA n. sp.

Spots suborbicular, scattered or confluent, yellow, with a purple or brown center; sori situated on the center of the spot, very small, crowded, black, covered by the epidermis; spores oblong, acute or acuminate, rarely obtuse, slightly constricted, $\frac{1}{600}$ '- $\frac{1}{500}$ ' long; pedicel generally shorter than the spore.

Under surface of leaves of *Solidago altissima*. Catskill mountains. July.

The sori under a lens look like some small Sphæria. Allied to *P. virgaureæ*.

PUCCINIA GERARDII n. sp.

Spots orbicular, distinct or sub-confluent, yellow, depressed above, bullate below; sori crowded, matted together, or confluent, tawny or amber-brown; spores oblong-clavate, distinctly constricted, obtuse, $\frac{1}{700}$ ' long, pedicel nearly as long as the spore.

Under surface of leaves of *Aster simplex*. Poughkeepsie. Gerard. Greenbush. July.

The different color and matted appearance of the sori separate this species from *P. Asteris* Schw.. Sometimes the sori are quite plentiful on the superior surface of the leaf.

ÆCIDIUM BERBERIDIS Pers.

Leaves of barbery, *Berberis vulgaris*. Buffalo. Clinton. Catskill. July.

ÆCIDIUM ERIGERONATUM Schw.

Leaves of *Erigeron strigosum*. Center.

ÆCIDIUM TENUE Schw.

Leaves of *Eupatorium ageratoides*. Catskill mountains. July.
Peridia sometimes beautifully circinating.

ÆCIDIUM PENSTEMONIS Schw.

Leaves of *Penstemon pubescens*. Buffalo. Clinton. June.

ÆCIDIUM THALICTRI Grev.

Leaves of some Ranunculaceous plant. Buffalo. Clinton. This species is as beautiful as it is rare. June.

ÆCIDIUM RANUNCULACEARUM DC.

Leaves of some Anemone or Ranunculus. Buffalo. Clinton. July. This is clearly distinct from *Æ. Ranunculi* Schw.

ÆCIDIUM EUPHORBIE-HYPERICIFOLIE Schw.

Leaves of *Euphorbia hypericifolia*. Buffalo. Clinton. July.

ÆCIDIUM URTICÆ DC.

Leaves of *Urtica dioica*. Poughkeepsie. Gerard.

ÆCIDIUM OSMORRHIZÆ n. sp.

Spots yellowish, frequently on the midveins; peridia hypogenous, clustered or seriated along the veins, slightly elevated, with the margin subentire, incurved; spores subglobose, yellow, becoming pale, $\frac{1}{1000}'$ in diameter; spermatogonia central, on the same side.

Leaves of *Osmorrhiza brevistylis*. North Greenbush. June.

The peridia are visible on the opposite side in the form of little tubercles as in *Æ. tenue*.

ÆCIDIUM MARIE-WILSONI n. sp.

Spots orbicular, yellow; subiculum not thickened nor excavated; peridia small, slightly elevated, subcircinating, numerous, the margin distinctly scalloped and reflexed; spores subglobose, orange becoming pale, $\frac{1}{1800}'$ — $\frac{1}{1600}'$ in diameter.

Under surface of leaves of *Viola cucullata*. West Albany. June. Dedicated to Miss Mary L. Wilson.

This species is quite distinct from *Æ. Viola* in the character of the subiculum, smaller spores, peridia, etc. The latter species is common on *V. pubescens*.

ÆCIDIUM MENTHÆ DC.

Leaves of some Labiate plant. Buffalo. Clinton.

ÆCIDIUM IRIDIS Gerard in lit., n. sp.

Spots oval or suborbicular, yellow; peridia amphigenous, short, seriatly placed: spores bright orange, $\frac{1}{12000}$ '— $\frac{1}{10000}$ ' in diameter; spermogonia abundant, central, amphigenous.

Leaves of *Iris versicolor*. Poughkeepsie. Gerard. Buffalo. Clinton.

The peridia are equally abundant on both sides of the leaf, and are mostly arranged in lines between the veinlets of the leaf, characters by which this species may be easily known.

ÆCIDIUM ALLENII Clinton in lit., n. sp.

Spots large, indefinite, yellowish; peridia hypogenous, elongated, cylindrical, white, nestling among the tomentum of the leaf; spores bright orange, subglobose, $\frac{1}{10000}$ ' in diameter.

Leaves of *Shepherdia Canadensis*. Buffalo. Clinton. June.

A fine species, dedicated to Dr. T. F. Allen. The spots are visible on the upper surface of the leaf, but are concealed by the tomentum on the lower surface.

RÆSTELIA CORNUTA Tul.

Leaves of *Crataegus*, *Amelanchier Canadensis* and *Pyrus Americana*. Poughkeepsie. Gerard. Greenbush.

STILBUM RHODIS B. & C.

Branches of *Rhus glabra*. Garrisons and Greenbush. June, October.

STILBUM PELLUCIDUM Schrad.

Rotten wood of deciduous trees. Indian Lake. October.

STILBUM GIGANTEUM n. sp.

Stem firm, stout, black, equal or slightly tapering upward, single or caespitose, surmounted by a soft, viscid, whitish, subglobose head; spores minute, elliptical, about $\frac{1}{12000}$ ' long.

Old logs in woods. Buffalo. Clinton. Catskill mountains and Greig. September and October. (Plate 3, figs. 7-9.) The stems are 3'-5" high.

FUSARIUM ERUBESCENS B. & C.

Dead branches. Center. October.

TUBERCULARIA NIGRICANS DC.

Dead branches of apple tree, elder, etc. Center. October.

OIDIUM FRUCTIGENUM Kze.

On old plums. Sandlake. October.

SEPEDONIUM CHRYSOSPERMUM ^mFr.

On some species of Boletus. Indian Lake. October.

MONOTOSPORA TRISEPTATA *n. sp.*

Stem erect, straight, septate, gradually tapering upward, surmounted by a single broadly elliptical triseptate black spore; the two central spore cells colored, the two outer ones smaller and colorless or diaphanous.

Rotten wood. Greenbush. June. (Plate 1, figs. 14-17.)

To the naked eye the wood occupied by this plant appears to be coated with minute black setæ.

HELVELLA CRISPA Fr.

Ground among fallen leaves in woods. Greig. September. Buffalo. Clinton.

HELVELLA SULCATA Afz.

Among moss at the base of a tree. Greig. September. Only a single specimen was found.

HELVELLA ELASTICA Bull.

Rotten wood in woods. Greig. September.

HELVELLA GRACILIS *n. sp.*

Pileus thin, somewhat irregular, slightly depressed in the center, entirely free from the stem, pale yellow above, white and rugose-reticulated beneath; stem long, firm, solid, nearly straight, wavy-uneven, slightly tapering at the top, whitish or dull cream color, with white mycelium at the base; spores elliptical.

Ground in open woods. Catskill mountains. July.

Allied to *H. Infula*, but a more graceful species, with simple spores. In *H. Infula* the spores have each two nuclei.

LEOTIA CIRGINANS Pers.

Ground in woods. North Elba. August.

GEOGLOSSUM LUTEUM *n. sp.*

Club distinct from the stem, smooth, compressed, generally with a groove on one side, luteous, often becoming brown at the apex; stem equal or slightly enlarged above, stuffed, luteous, minutely scaly; spores oblong, slightly curved, in a double row, $\frac{1}{1000}$ ' - $\frac{1}{800}$ ' long.

Among moss, on and about rotten stumps in swamps or damp woods. Sandlake. August. (Plate 3, figs. 20-24.)

PEZIZA FUSCA *Pers.*

Rotten wood and dead branches in damp places. Helderberg mountains and Greenbush. June.

PEZIZA RUBRICOSA *Fr.*

Ground. Highlands. June.

PEZIZA VINOSA *A. & S.*

Rotten wood. Greenbush. June.

PEZIZA MOLLISIOIDES *Schw.*

Base of *Vaccinium corymbosum*. Greenbush. October.

PEZIZA ERINACEUS *Schw.*

Rotten maple trunk. Indian Lake. October.

PEZIZA COMATA *Schw.*

Fallen leaves in a swamp. Sandlake. August.

PEZIZA HEMISPHERICA *Wigg.*

Damp ground and rotten wood. Catskill mountains. July.

PEZIZA ERUGINOSA *Fr.*

Rotten wood of deciduous trees. Buffalo. *Clinton*. Sandlake. August.

PEZIZA ECHINOSPERMA *n. sp.*

Cups slightly concave, sometimes irregular, orange, becoming paler, whitish externally, smooth, 1"-2" in diameter, spores globose, echinulate; paraphyses slender, orange.

Damp ground in pastures. West Albany. June. (Plate 3, figs. 10-13.)

PEZIZA RUBRA *n. sp.*

Cup subglobose, at length hemispherical; mouth narrow, often irregular; spores broadly elliptical, without any nucleus; plant smooth, red throughout, 2"-3" in diameter.

Burnt ground. Top of the Highlands. June. (Plate 2, figs. 19-21.)

PEZIZA CARIOSA *n. sp.*

Closely gregarious; cup sessile, thin, flattened, slightly concave, smooth, black, dark brown with a reddish tinge when moist; margin distinct, flexuous or angular in large individuals; spores, simple, oblong.

Plant scarcely half a line broad. Rotten wood. Catskill mountains. July.

PEZIZA TILLÆ *n. sp.*

Gregarious, minute, cup sessile, concave, externally densely white villous, the disk pale yellow or cream colored, often concealed by the inflexed hairs.

Dead branches of *Tilia Americana*. Knowersville. July. Very different from *P. tiliacea* Fr. The largest cups are scarcely half a line broad.

PEZIZA PERSOONII *Moug.*

Stems of *Equisetum hyemale*. Center. November and May.

Our plant is generally sessile and often crowded or tufted in its mode of growth. When moist it is much expanded and flattened on the disk. Further observation may show it to be a distinct species.

NODULARIA *nov. gen.*

Receptacle fleshy, margined; disk dusted with the spores; asci large, fixed; paraphyses present, nodose or sub-moniliform.

This genus is intermediate between *Peziza* and *Patellaria*. From the former it is separated by the dusted hymenium and nodulose paraphyses, from the latter by the presence of paraphyses. The name is derived from the Latin *nodulus*, and is given in allusion to the little knots of the paraphyses.

NODULARIA BALSAMICOLA *n. sp.*

Cups flattened, sessile, scattered or somewhat confluent, often irregular, with a distinct, more or less flexuous, incurved margin, externally pinkish white, slightly silky-villous; disk luteous, inclining to reddish or orange, whitish-dusted under a lens; asci large, clavate, obtuse, somewhat irregular or flexuous; paraphyses sub-flexuous, with two or three moniliform nodes at the top; spores globose, echinulate.

Dead branches of the balsam fir, *Abies balsamea*. Indian Lake. October. (Plate 4, figs. 23-26.)

The cups are 1"-2" in diameter and are attached by a little point which penetrates the bark.

DERMATEA FURFURACEA *Fr.*

Branches of alders. Center. October and November.

PATELLARIA ATRATA *Fr.*

Rotten wood. Buffalo. Clinton.

TYMPANIS ALNEA *Pers.*

Dead branches of alders. Buffalo. *Clinton*. Sandlake. June.

SPIHINCTRINA CERASI *B. & C.*

Gum of cherry trees. Buffalo. *Clinton*. Sandlake. June.

CENANGIUM CERASI *Fr.*

Dead trunks and branches of cherry trees, especially *Prunus Pennsylvanica*. Sandlake and Center. June, November.

CENANGIUM TRIANGULARE *Schw.*

Dead oak branches. Greenbush.

CENANGIUM PRUNASTRI *Fr.*

Dead branches of plum and cherry trees. Buffalo. *Clinton*. Sandlake. June.

HYSTERIUM PULICARE *Fr.*

Denuded wood. Buffalo. *Miss Wilson*. Dead grape vines. Greenbush. July.

HYSTERIUM SMILACIS *Schw.*

Dead stems of Smilax. Garrisons. June.

HYSTERIUM AZALEÆ *Schw.*

Dead stems and branches of *Azalea nudiflora*. Sandlake and Center. June.

HYSTERIUM VIRGULTORUM var. ACERIS *Desm.*

Dead branches of *Acer spicatum*. Helderberg mountains. May.

XYLARIA CORNIFORMIS *Fr.*

Mossy maple log in woods. Greig. September.

XYLARIA DIGITATA *Fr.*

Conservatories. Buffalo. *Clinton*.

RHIZOMORPHA SUBCORTICALIS *Pers.*

Under bark of dead trees, etc. Buffalo. *Clinton*. Greig and Helderberg mountains.

HYPOCREA FLOCCOSA *Fr.*

Under surface of the pileus of *Lactarius torminosus*. Greig. September.

HYPOXYLON CONCENTRICUM *Bolt.*

Rotten wood and dead branches. Common.

HYPOXYLON HOWEIANUM *n. sp.*

Globose sessile, covered with a bright red crust, which is thickly punctate with minute black papillate ostiola, at length dull yellow or black, 3"-6" in diameter; perithecia peripheric, crowded, ovate, black, shining; stroma dense, blackish-bronze, shining, not at all or only very obscurely zonate, radiate-fibrous.

Fallen branches of some deciduous tree. Center. November.

Allied to *H. fragiforme* in its red crust and ovate perithecia, but it differs in its larger size, punctate, not tuberculose, surface, smaller spores, etc.

HYPOXYLON PERFORATUM *Schw.*

Dead branches of birch trees. Catskill mountains. July.

HYPOXYLON ARGILLACEUM *Fr.*

Trunks of beech trees. Sandlake. June. Buffalo. Clinton.

HYPOXYLON BEAUMONTII *B. & C.*

Denuded wood of acerose trees. Helderberg mountains. May.

HYPOXYLON MORSEII *B. & C.*

Dead branches of alders. Sandlake and Center. Spring and autumn.

HYPOXYLON ANTHRACODES *Fr.*

On a prostrate trunk of *Tilia Americana*. Trenton Falls. September.

NECTRIA PEZIZA *Fr.*

Old stumps and rotten wood. Greig and Indian Lake. September and October.

NECTRIA INAURATA *B. & Br.*

Stem of *Celastrus scandens?* Buffalo. Clinton.

VALSA PULCHELLA *Fr.*

Dead trunks of cherry trees. Sandlake. June.

A pretty species, but nearly concealed by the epidermis of the bark.

VALSA SALICINA *Fr.*

Dead branches of willows. Buffalo. Clinton. West Albany. May.

VALSA LEUCOSTOMA *Fr.*

Dead branches of apple trees. Buffalo. Clinton. Sandlake. October.

VALSA PINI *Fr.*

Dead branches of pine trees. Sandlake. June.

SPHÆRIA ACULEANS *Schw.*

Dead branches of sumach. Sandlake. June.

SPHÆRIA TILLÆ *Fr.*

Dead branches of *Tilia Americana*. Helderberg mountains. May.

SPHÆRIA OÖTHIECA *B. & C.*

Denuded wood. Buffalo. *Clinton*.

SPHÆRIA GYROSA *Schw.*

Buffalo. *Clinton*.

SPHÆRIA COPTIS *Schw.*

Leaves of *Coptis trifolia*. Sandlake. June.

SPHÆRIA SARRACENIÆ *Schw.*

Leaves of *Sarracenia purpurea*. Sandlake. August.

SPHÆRIA SOLIDAGINIS *Schw.*

Leaves of various species of *Solidago*. Center. October.

SPHÆRIA LONGISSIMA *Pers.*

Dead stems of pigweed, *Chenopodium album*. Buffalo. *Clinton*. Albany. June.

SPHÆRIA TAXICOLA *n. sp.*

Perithecia minute, close, black, shining, slightly elevated, at first covered by the epidermis, then erumpent; spores oblong, in a single series, triseptate.

Occupying the whole upper surface of dead leaves of *Taxus Canadensis*. Sandlake. May.

DOTHIDEA RIBESIA *Pers.*

Dead stems of currant. Buffalo. *Clinton*. Bethlehem and Sandlake. May.

DOTHIDEA SAMBUCI *Fr.*

Dead stems of elder, *Sambucus Canadensis*. Buffalo. *Clinton*. Center. October.

DOTHIDEA CRYSTALLOPHORA *B. & C.*

Dead stems of the Osage orange. Buffalo. *Clinton*. Albany and Riverhead. May and July.

DOTHIDEA FLABELLA *B. & C.*

Upper surface of fronds of *Pteris aquilina*. Center. October.

DOTHIDEA PTERIDIS *Pers.*

Under surface of fronds of *Pteris aquilina*. Center and Catskill mountains. June, October.

DOTHIDEA ANEMONES *Fr.*

Leaves of *Anemone cylindrica*. Center. October.

PODOSPHERIA CERASI *Lev.*

Leaves of cherry trees. Sandlake. August.

ERINEUM ROSEUM *Schult.*

Leaves of birches. Buffalo. Clinton. Helderberg mountains and Nassau. June.

ERINEUM QUERCINUM *Kze.*

Oak leaves. Buffalo. Clinton. New Baltimore. Howe.

NEW STATIONS OF RARE PLANTS, REMARKABLE VARIETIES AND OBSERVATIONS.

HEPATICACUTILOBA *DC.*

I find the young leaves of this species much more fully developed at flowering time, than those of *H. triloba*. They are also subject to the attacks of a fungus, *Polycystis Ranunculacearum*, but I have never found those of *H. triloba* thus affected, even when growing in the same locality.

DIANTHUS ARMERIA *L.*

Roadsides. Nassau.

HIBISCUS TRIONUM *L.**

Newark, Wayne county. *E. L. Hankenson.*

CLAYTONIA VIRGINICA *L.*

Specimens from Newark, sent by Mr. Hankenson, have alternate leaves.

NABALUS RACEMOSUS *Hook.*

Scarsdale, Westchester county. Extremely bitter. *J. S. Merriam.*

LOBELIA CARDINALIS *L.*

Mr. Merriam finds the white-flowered form on Long Island. No specimens sent.

*This plant was erroneously mentioned on page 56.

PRIMULA MISTASSINICA *Michx.*Portage. *Clinton.*FRAGARIA VESCA *L.*

The white-fruited form of this species is abundant in Skaneateles. *S. N. Cowles.* It also occurs in Nassau, Rensselaer county, and in Bethlehem, Albany county. By cultivation, the appearance of the plant is considerably changed. The flowering stems become elongated and dichotomously branched above, the primary division is subtended by a well developed leaf and the fruit is produced throughout the season. It would make a fine addition to the ordinary varieties cultivated by gardeners.

JUNCUS ALPINUS V. INSIGNIS *Fr.*Sodus Point, Lake Ontario. *Hankenson.*DANTHONIA COMPRESSA *Aust.*

Mr. Cowles sends specimens exactly intermediate between this species and *D. spicata*, whence it is probable that the former is a variety of the latter dependent on locality.

POLYPODIUM VULGARE V. CAMBRICUM *L.*

"Indian Brook," near Cold Spring. *Miss Sarah P. Monk.* A sterile but most interesting variety.

ASPIDIUM ACULEATUM V. BRAUNI *Koch.*

Stony Clove, Catskill mountains. Discovered there by *J. H. Redfield.* This locality is evidently very favorable to the growth of ferns. In July last, the following nineteen species were observed while passing along the road, about the distance of half a mile, and in no case going more than four rods from it.

Polypodium vulgare <i>L.</i>	Aspidium spinulosum <i>Swartz.</i>
Adiantum pedatum <i>L.</i>	A. marginale <i>Swartz.</i>
Pteris aquilina <i>L.</i>	A. acrostichoides <i>Swartz.</i>
Asplenium thelypteroides <i>Mx.</i>	A. aculeatum <i>Swartz.</i>
A. Filix-femina <i>Bernh.</i>	Struthiopteris Germanica <i>Willd.</i>
Phegopteris polypodioides <i>Fee.</i>	Onoclea sensibilis <i>L.</i>
P. Dryopteris <i>Fee.</i>	Woodsia Ilvensis <i>R. Br.</i>
Cystopteris bulbifera <i>Bernh.</i>	Dicksonia punctilobula <i>Kze.</i>
C. fragilis <i>Bernh.</i>	Botrychium Virginicum <i>Swartz.</i>
Aspidium Thelypteris <i>Swartz.</i>	

The whole number of species now known to belong to the State is forty-four, excluding the doubtful inhabitant *Lygodium palmatum.* It will thus be seen that nearly half our species occur in the "Stony Clove."

BOTRYCHIUM LANCEOLATUM *Angst.*This rare fern occurs on an island in Lake Mohegan. *Leggett.*

SPHAGNUM WULFIANUM *Girgen.*

Fertile specimens were found in August.

DICRANUM RUFESCENS *Turn.*

This species occurs as far north as Johnsburgh, Warren county.

HOMALIA GRACILIS *James.*

Mount Seward. *V. Colvin.*

GRIMMIA OLNEYI *Sulliv.*

Top of the Highlands.

CETRARIA ISLANDICA v. DELISTÆI *Schar.*

Top of Mount Marcy. It approaches *C. aculeata* in appearance.

PHYSCIA CILIARIS v. ANGUSTATA *Tuck.*

Goat Island. *Miss Wilson.*

BIATORA RUBELLA v. SPADICEA *Tuck.*

Buffalo. *Miss Wilson.*

BIATORA RUBELLA v. SCHWEINITZII *Tuck.*

Balsam firs. Buffalo. *Miss Wilson.* Indian Lake.

AGARICUS MUSCARIUS *Fr.*

A white variety, with the pileus thickly studded with sharp warts, occurs in Albany Rural Cemetery. July.

AGARICUS GRANULOSUS *Batsch.*

A large firm variety, with a well developed, persistent annulus and attached lamellæ, grows on old logs in woods. Greig. September.

AGARICUS MELLEUS *Vahl.*

Very abundant in the woods of Greig, growing in large tufts and eaten by some animal, probably deer.

AGARICUS CAMPANELLA *Batsch.*

Two varieties are found in the woods about Moose River Settlement. One has a yellow pileus, the other is papillate, scarcely umbilicate, and has the stem slightly sprinkled with yellowish dust.

COPRINUS ATRAMENTARIUS *Bull.*

A variety with both pileus and stem somewhat scaly, and the former quite viscid was found in an alley in Albany. It occurs also in cellars.

LENTINUS LECOMTEI *Fr.*

I have never seen this plant with the edge of the lamellæ serrated or eroded, whence it would seem to belong rather to the genus *Panus*. The trama also is clearly present in it.

BOLETUS EDULIS *Bull.*

A singular form was found in Greenbush with the pileus deeply lacunose, the tubes not rounded at the stem, but forcibly torn away from it by the expansion of the pileus and the stem of a dull lilac color with distinct reticulations. Is it specifically distinct?

RÆSTELIA LACERATA *Sow.*

Fine specimens were found on the leaves, fruit and young twigs of *Amelanchier Canadensis*. June.

AREGMA SPECIOSUM *Fr.*

Dead stems of wild rose. Greenbush.

AREGMA MUCRONATUM *Fr.*

Leaves of *Rubus odoratus*. Trenton Falls. September.

CYSTOPUS CANDIDUS *Lev.*

This species is found on the leaves of *Capsella Bursa-pastoris*, *Sisymbrium officinalis*, *Lepidium Virginicum*, *Dentaria diphylla*, *Portulacca oleracea*, and *Amarantus retroflexus*.

PODOSPORIUM RIGIDUM *Schw.*

Dead stems of *Ampelopsis quinquefolia*. Schoharie. June.

PEZIZA AURANTIA *Fr.*

Abounds on black muck soil in woods at Moose River. September.

HYPOCREA RICHARDSONII *B. & M.*

Common on dead branches of poplar trees, but always sterile with us.

HYPOXYLON MULTIFORME *Fr.*

This very rarely occurs on bark.

(5)

Genus—CLAVARIA L.

Plant fleshy, erect, homogeneous, simple or branched; hymenium dry, occupying nearly or quite the whole surface.

The name of the genus is derived from the Latin *clava*, a club. Some of the species are club-shaped, others are branched above in such a manner as to resemble a miniature tree or shrub. The following is a synopsis of the species at present known to occur in the State.

a. Stems branched.

- | | |
|---|------------|
| 1. Spores white..... | 2 |
| 2. Plant yellow (luteous, ochraceous, etc.)..... | 3 |
| 3. Stem stout, much and irregularly branched.. | 4 |
| 4. Apices of the branches red..... | BOTRYTIS |
| 4. Apices of the branches yellow..... | FLAVA |
| 3. Stem slender, dichotomously branched..... | TETRAGONA |
| 2. Plant white or cinereous (no shade of yellow).. | 5 |
| 5. Stem smooth, color cinereous..... | 6 |
| 6. Apices of the branches obtuse (concolorous) | CINEREA |
| 6. Apices crested, acute (at length brown).. | CRISTATA |
| 5. Stem hairy, apices of the branches acute.... | TRICHOPUS |
| 5. Stem smooth, color white..... | KUNZEI |
| 1. Spores ochraceous (plant some shade of yellow or ochre)..... | 7 |
| 7. Plant terrestrial (growing on the ground or among leaves)..... | 8 |
| 8. Apices of the branches obtuse, concolorous.. | AUREA |
| 8. Apices acute or acicular, white..... | SPINULOSA |
| 7. Plant epiphytal (growing on rotten wood, logs, etc.)..... | 9 |
| 9. Axils concolorous (i.e., ochraceous like the rest of the plant)..... | 10 |
| 10. On wood of acerose trees, branches straight..... | APICULATA |
| 10. On wood of frondose trees, branches flexuous..... | CRISPULA |
| 9. Axils becoming cinnamon colored, branches straight..... | STRICTA |
| b. Stems simple (rarely once divided, or with one or two branches.) | |
| 11. Growing in tufts or clusters..... | 12 |
| 12. Plant yellow..... | 13 |
| 13. Club hollow, mostly regular..... | FUSIFORMIS |
| 13. Club stuffed, irregular or compressed..... | INEQUALIS |
| 12. Plant white or whitish..... | 14 |
| 14. Club and stem distinct, color dingy..... | ARGILLACEA |
| 14. Club and stem confluent, color pure..... | FRAGILIS |

11. Growing singly or scattered.....	15	
15. Plant terrestrial.....	16	
16. Club fleshy, obtuse.....	17	
17. Naked at the base, 6"-12" thick.....		PISTILLARIS
17. White mycelium at the base, 2"-4" thick,		LIGULA
16. Club filiform, acute.....		JUNCEA
15. Plant epiphytal.....		MUCIDA

All the white-spored branched species given in the preceding table are terrestrial. *C. trichopus* I have found only among sphagnum. *C. cristata* rarely occurs with branches obtuse, and not crested. *C. spinulosa* rarely may be found without white tips to the branches, but in every instance of such exceptional forms coming under my observation, they have been associated with a great abundance of the normal form. *C. inequalis* grows especially in swamps and sometimes singly. It is quite fragile. *C. mucida* is remarkable for the green confervoid stratum that covers the moist rotten wood on which it grows.

Genus—ÆCIDIUM Pers.

Peridia tubular or cup-shaped, at length open at the top with the margin lobed or lacerated; spores subglobose, colored.

The peridia normally occupy the lower surface of the leaves of plants, sometimes scattered over the whole of that surface, but more often collected in little orbicular clusters. They open at the top, revealing the globose or ovate, yellow or orange-colored spores within, and are not inaptly termed "*Cluster cups*." The margin of the cup or peridium is generally fringed or scalloped with little rounded, reflexed lobes. The subiculum or spot on which the cups are seated is usually more or less discolored, yellow and red being the prevailing hues. The spermogonia, minute pustules which occur with the cups and are thought to be the male plant, are not always readily detected. They usually occupy the center of the spot on one or both sides of the leaf. More than thirty species of Æcidium have been found in the State, of which the following is a synopsis.

a. Peridia scattered over the whole under-surface of the leaf, or over indefinite portions of it.

1. Peridia short, naked.....	2	
2. Mouth with a few (3-5) distinct lobes.....		QUADRIFIDUM
2. Mouth entire, indistinctly or many lobed....		3
3. Leaf green above, scarcely discolored....		4
4. Spermogonia numerous, distinct.....		5
5. Mouth wide, lobed; leaf rugulose above.....		RANUNCULI
5. Mouth at first narrow, with an incurved, sub-entire margin; leaf not rugulose.....		AROIDATUM
4. Spermogonia few, indistinct or none....		6

6. Mouth of the numerous equal peridia distinctly lobed.....	EPILOBII
6. Mouth of the few unequal peridia not distinctly lobed.....	EUPHORBIE- HYPERICIFOLIE
3. Leaf plainly discolored.....	7
7. Leaf yellowish, not thickened; peridia large...	CLAYTONIATUM
7. Leaf brownish, generally thickened; peridia not large.....	HOUSTONIATUM
1. Peridia elongated, nestling in the tomentum of the leaf.....	8
8. Peridia few, crowded or scattered.....	GNAPHALIATUM
8. Peridia numerous, not crowded.....	ALLENII
b. Peridia in definite spots or clusters.	
9. Elongated.....	10
10. Seated on a thickened subiculum.....	11
11. Spots brown or chestnut-colored.....	FRAXINI
11. Spots red.....	BERBERIDIS
10. Subiculum not thickened.....	12
12. Peridia extending to the margin of the spot..	13
13. Many, in dense roundish clusters.....	THALICTRI
13. Few, loosely placed on orbicular spots...	MACROSPORUM
12. Peridia central on a yellow spot with sterile margin.....	HYDNOIDEUM
9. Short or sub-immersed.....	14
14. On a thickened subiculum.....	15
15. Spots distinct, yellow.....	16
16. Small on the leaves, larger and most often on the petioles, which are thickened and distorted.....	SAMBUCI
16. Most often on the leaves, and as large as on the slightly thickened petioles.....	VIOLE
15. Spots more or less red or purple, not clear yellow.....	17
17. Pale red, stems or petioles sometimes thickened.....	CLEMATITIS
17. Chestnut-colored or reddish-brown.....	18
18. Peridia extending to the margin.....	MYRICATUM
18. Peridia central.....	LIMONII
17. Yellowish stained with red or purple....	PUSTULATUM
15. Spots obliterated.....	19
19. Petioles often attacked and much distorted,	URTICÆ
19. Petioles not distorted.....	20
20. Peridia wide-mouthed, crowded.....	RANUNCULACEARUM
20. Peridia narrow-mouthed, spores elliptical.....	MENTHÆ.
14. Subiculum not thickened.....	21
21. Spots yellow, with no tinge of red or purple.....	22

22. Peridia mostly in series ; on both sides of the leaf	IRIDIS
22. Peridia not in series ; on the under side of the leaf	23
23. Spots large and generally confluent ...	24
24. Peridia crowded	PODOPHYLLI
24. Peridia not crowded, irregular placed,	ERIGERONATUM
23. Spots small or medium, generally distinct	25
25. Peridia central.....	26
26. Crowded, leaf not pustulate on the opposite side	HELIANTHI
26. Loosely placed, leaf distinctly pustulate on the opposite side	TENUIS
25. Peridia extending to the margin.....	27
27. Peridia distinctly lobed on the margin,	MARIE-WILSONI
27. Peridia indistinctly lobed, mostly seriated along the mid-rib.....	OSMORRHIZÆ
27. Peridia indistinctly lobed, not seriated,	OROBIS
21. Spots more or less stained with purple or red.....	28
28. Spots large, pustulate, the center purple or brown.....	IMPATIENTIS
28. Spots medium or small, scarcely pustulate ...	29
29. Centrally red or purplish.....	30
30. Mostly on the margin of the leaf or of its lobes,	GERANII
30. On any part of the leaf.....	31
31. Peridia crowded, extending to the margin	GROSSULARIÆ
31. Peridia central, few, mostly less than twenty	COMPOSITARUM
31. Peridia central, many, mostly more than twenty.....	PENSTEMONIS
29. With a red dash extending from the spot to the margin of the leaf; peridia numerous, crowded	CENOTHERÆ

Some of the foregoing species are variable and will not in all cases rigidly agree with the characters here given, but a few explanations and a list of the plants on which the species are found, will remove nearly or quite all difficulties in tracing them.

Æcidium Berberidis sometimes has short peridia. I have seen but a single dried specimen of *Æ. Clematidis* which is on a thickened petiole or stem. The color of the spot is taken from the description. I have seen but few poor specimens of *Æ. Orobis*, and am not quite sure that they are rightly referred. *Æ. Impatiensis* sometimes has the spots entirely yellow, and the same is true of *Æ. Geranii* and *Æ. Compositarum*. *Æ. Geranii* also rarely has a purplish or yellow dash extending to the margin of the leaf.

Æcidium quadrifidum DC.	grows on ..	Anemone nemorosa.
Æ. Ranunculi Schw.	" ..	Ranunculus abortivus.
Æ. Aroidatum Schw.	" ..	Arisæma triphyllum.
var. Caladii Schw.	" ..	Peltandra Virginica.
Æ. Epilobii DC.	" ..	Ænothera biennis.
Æ. Euphorb.-hypericifoliæ	" ..	Euphorbia hypericifolia.
Æ. Claytoniatum Schw	" ..	Claytonia Caroliniana.
Æ. Houstoniatum Schw.	" ..	Houstonia purpurea.
Æ. Gnaphaliatum Schw.	" ..	Gnaphalium decurrens, etc.
Æ. Allenii Clinton,	" ..	Shepherdia Canadensis.
Æ. Fraxini Schw.	" ..	Fraxinus Americana.
Æ. Berberidis Pers.	" ..	Berberis vulgaris.
Æ. Thalictri Grev.	" ..	Ranunculaceæ.
Æ. macrosporum Pk.	" ..	Smilax rotundifolia.
Æ. hydroidem B. & C.	" ..	Dirca palustris.
Æ. Sambuci Schw.	" ..	Sambucus Canadensis.
Æ. Violæ Schum.	" ..	Viola pubescens.
Æ. Clematidis Schw.	" ..	Clematis Virginiana.
Æ. Myricatum Schw.	" ..	Myrica cerifera.
Æ. Limonii Pk.	" ..	Statice Limonium.
Æ. pustulatum Curt.	" ..	Comandra umbellata.
Æ. Urticæ DC.	" ..	Urtica dioica.
Æ. Ranunculacearum DC.	" ..	Ranunculaceæ.
Æ. Menthæ DC.	" ..	Labiatae.
Æ. Iridis Gerard.	" ..	Iris versicolor.
Æ. Podophylli Schw.	" ..	Podophyllum peltatum.
Æ. Erigeronatum Schw.	" ..	Erigeron strigosus.
Æ. Helianthi Schw.	" ..	Helianthus.
Æ. tenue Schw.	" ..	Eupatorium ageratoides.
Æ. Mariæ-Wilsoni Pk.	" ..	Viola cucullata.
Æ. Osmorrhizæ Pk.	" ..	Osmorrhiza brevistylis.
Æ. Orobi DC.	" ..	Trifolium repens.
Æ. Impatiens Schw.	" ..	Impatiens fulva.
Æ. Geranii DC.	" ..	Geranium maculatum.
Æ. Grossulariæ DC.	" ..	Ribes.
Æ. Compositarum Mart.	" ..	Compositæ.
Æ. Penstemonis Schw.	" ..	Penstemon pubescens.
Æ. Ænotheræ Pk.	" ..	Ænothera biennis.

In the paper marked (4), when no name is added to the station or stations, the plant has been found therein by the writer. Dates signify the time of collecting the specimens, and therefore indicate to some extent the time of occurrence of the plant.

A continuation of the coöperation of the Botanists of the State, in the investigation of our Flora, is earnestly solicited.

Respectfully submitted.

CHAS. H. PECK.

ALBANY, January 11th, 1871.

PLATES AND EXPLANATIONS.

PLATE I.

CORTINARIUS (INOLOMA) ASPER Pk.

Page 72.

- Fig. 1. A specimen of ordinary size.
Fig. 2. Vertical section of a pileus of a young plant.
Fig. 3. Spores magnified.

AGARICUS (COLLYBLA) SPINULIFER Pk.

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- Figs. 4, 5. Specimens of ordinary size; one with a young plant attached to its base.
Fig. 6. Vertical section of a pileus.
Fig. 7. Transverse section of a stem.
Fig. 8. Spine-like processes of the lamellæ, magnified.
Fig. 9. Spores magnified.

AGARICUS (OMPHALIA) LILACINUS Pk.

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- Figs. 10, 11. Specimens of ordinary size.
Fig. 12. Vertical section of a pileus.
Fig. 13. Transverse section of a stem.

MONOTOSPORA TRISEPTATA Pk.

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- Fig. 14. A piece of wood bearing a patch of plants.
Fig. 15. Two fertile plants magnified.
Fig. 16. A sporeless plant magnified.
Fig. 17. A plant with its spore more highly magnified.

UREDOSPORA ASPIDIOTUS Pk.

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- Fig. 18. Part of a frond of *Phegopteris Dryopteris* bearing *Uredo Aspidiotus*.
Fig. 19. A spot and sorus magnified.
Fig. 20. Spores magnified.

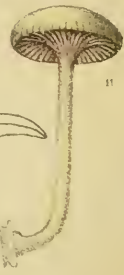
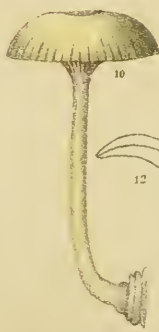
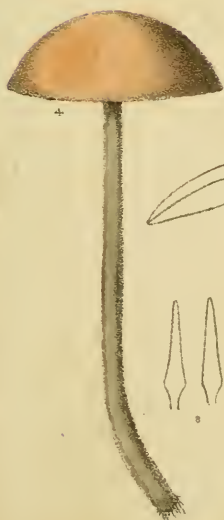
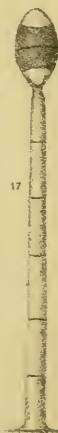
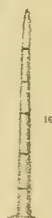
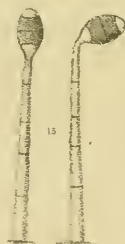
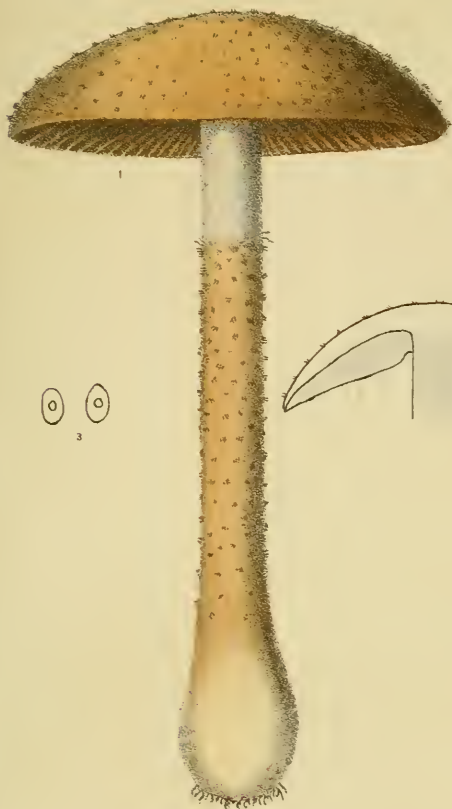


PLATE II.

BOLBITIUS NOBILIS *Pk.*

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- Figs. 1, 2. Specimens of ordinary size; one with a young plant attached to its base.
Fig. 3. Vertical section of a pileus.
Fig. 4. Transverse section of a stem.

BOLETUS BICOLOR *Pk.*

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- Fig. 5. A specimen of ordinary size.
Fig. 6. Vertical section of a pileus.
Fig. 7. Mouths of tubes magnified.
Fig. 8. Spores magnified.

AGARICUS (PSILOCYBE) LIMICOLA *Pk.*

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- Figs. 9, 10. Specimens of ordinary size; one with a young plant attached to its base.
Fig. 11. Vertical section of a pileus.
Fig. 12. Transverse section of a stem.
Fig. 13. Spores magnified.

AGARICUS (ENTOLOMA) CUSPIDATUS *Pk.*

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- Figs. 14, 15. Specimens of ordinary size.
Fig. 16. Vertical section of a pileus.
Fig. 17. Transverse section of a stem.
Fig. 18. Spores magnified.

PEZIZA RUBRA *Pk.*

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- Fig. 19. Specimens of ordinary size.
Fig. 20. A paraphysis and an ascus with its spores, magnified.
Fig. 21. Spores more highly magnified.



PLATE III.

AGARICUS (HEBELOMA) ASCOPHORUS Pk.

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- Figs. 1, 2. Specimens of ordinary size.
Fig. 3. Vertical section of a pileus.
Fig. 4. Transverse section of a stem.
Fig. 5. A sack with its spores, magnified.
Fig. 6. Spores magnified.

STILBUM GIGANTEUM Pk.

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- Fig. 7. A tuft of plants of ordinary size.
Fig. 8. A fertile and sterile plant, magnified
Fig. 9. Spores magnified.

PEZIZA ECHINOSPERMA Pk.

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- Fig. 10. A lump of earth bearing five plants.
Fig. 11. A plant magnified.
Fig. 12. A paraphysis and an ascus with its spores, magnified.
Fig. 13. A spore more highly magnified.

PUCCINIA TRIPUSTULATA Pk.

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- Fig. 14. A leaflet of *Rubus villosus* bearing *Puccinia tripustulata*.
Fig. 15. A spot and two sori magnified.
Fig. 16. Spores magnified.

TRICHOBASIS IRIDICOLA Pk.

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- Fig. 17. Part of a leaf of *Iris versicolor* bearing *Trichobasis Iridicola*.
Fig. 18. A sorus magnified.
Fig. 19. Spores magnified.

GEOGLOSSUM LUTEUM Pk.

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- Figs. 20, 21. Specimens of ordinary size showing opposite faces of the club.
Fig. 22. Transverse section of a club.
Fig. 23. Transverse section of a stem.
Fig. 24. A paraphysis and an ascus with its spores, magnified.

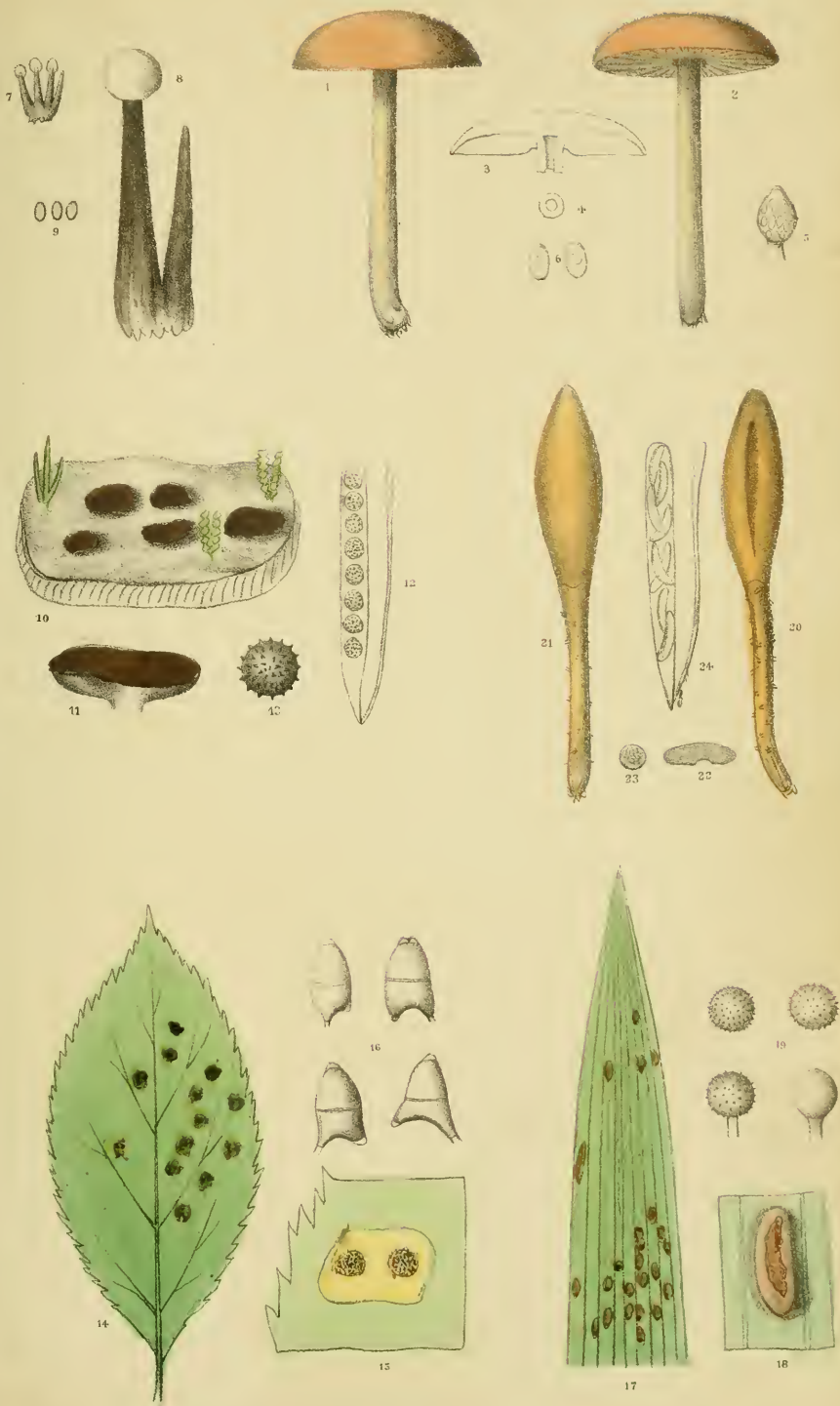




PLATE IV.

AGARICUS (HEBELOMA) ILLICITUS Pk.

Page 68.

- Figs. 1, 2. Specimens of ordinary size.
Fig. 3. Vertical section of a pileus.
Fig. 4. Transverse section of a stem.
Fig. 5. Spores magnified.

AGARICUS (ENTOLOMA) SALMONEUS Pk.

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- Fig. 6. A specimen of ordinary size.
Fig. 7. Vertical section of a pileus.
Fig. 8. Transverse section of a stem.
Fig. 9. Spores magnified.

COPRINUS SILVATICUS Pk.

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- Figs. 10, 11. Specimens of ordinary size.
Fig. 12. Vertical section of a pileus.
Fig. 13. Transverse section of a stem.
Fig. 14. Spores magnified.

COPRINUS SEMILANATUS Pk.

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- Fig. 15. A specimen of ordinary size.
Fig. 16. Vertical section of a pileus.
Fig. 17. Transverse section of a stem.
Fig. 18. Spores magnified.

MARASMIUS PULCHERRIPES Pk.

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- Figs. 19, 20. Specimens of ordinary size.
Fig. 21. Vertical section of a pileus, magnified.
Fig. 22. Transverse section of a stem, magnified.

NODULARIA BALSAMICOLA Pk.

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- Fig. 23. A piece of bark bearing several plants.
Fig. 24. A plant magnified.
Fig. 25. Paraphyses and asci with partly formed spores, magnified.
Fig. 26. Spores magnified.

MARASMIUS FILOPES Pk.

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- Fig. 27. Specimens of ordinary size.
Fig. 28. A plant magnified.
Fig. 29. Vertical section of a pileus magnified.

