(C.)

REPORT OF THE BOTANIST.

23 Reg Rep

S. B. Woolworth, LL.D.,

Secretary of the Regents:

Sir — The number of species of plants of which specimens have been poisoned, mounted, labeled and placed in the State Herbarium, since the date of my last report, is seven hundred and forty-six. A list of them is given in a paper marked (1).

Seeds of one hundred and sixty-four species have been placed in small paper pockets with mica covers, and attached to their respective species sheets. A list of the species is marked (2).

The number of species of which specimens have been collected, is four hundred and thirteen, of which three hundred and twelve are new to the State, and sixty-eight new or unpublished. A tabular statement and classification is given below. A list of the species is marked (3).

Species Collected.

	Number of species.	New to the State.	New to science.
Fungi	345	290	67
Algæ	8	8	1
Lichenes	6	6	..
Musci	2	1	..
Filices	3	1	..
Cryptogamia	364	306	68
Phænogamia	49	6	..
Total	413	312	68

It will be seen that the greatest number of additions, as well as of new species, is of the fungi. This is due to the facts that there are very many species of them, that they have hitherto been less thoroughly studied and carefully collected than the others, and that special attention has been given to them the past season.

In consequence of the great changes in color and shape that most of the fleshy putrescent fungi undergo in drying, it has been thought best to make colored drawings of them while in the fresh state. The number of species and varieties thus illustrated is two hundred and fifteen. These illustrations will be placed on the species sheets with the dried specimens, and will with the spores, which have been saved from nearly all the species, give a very fair exhibition of the scientific characters of the plant. Selections might be made from these illustrations for publication if deemed desirable.

Descriptions have also been written of most of these fungi while in the fresh state. This was thought best, because of the large number of new species, and the difficulty in getting descriptions of such as may have already been described. It is to be hoped that these descriptions will greatly aid those who may desire to study these singular but really useful and interesting plants. Artificial synopses of the species have been introduced to facilitate their study.

Believing that it would be of interest to many to know what plants grow on the bleak and exposed summit of Mt. Marcy, the most elevated land in the State, a list of such as have been seen by myself on that almost alpine spot has been made. It is marked (4). The distribution of these plants in their several classes and orders is thus: Flowering plants, fifty; Club Mosses, three; Mosses, thirty-two; Liverworts, ten; Lichens, twenty-three; Fungi, two species. The whole number is one hundred and twenty species. Among the flowering plants there are three trees, but they are mere shrubs in size, and not numerous. They are the balsam (*Abies balsamea*), the mountain ash (*Pyrus Americana*) and the paper birch (*Betula papyracea*). The first one, in sunken places, attains the height of two or three feet and bears cones. There are eleven shrubs, five sedges and seven grasses; of the latter, two are now first reported as belonging to our flora. The number of marsh plants growing at this high altitude is remarkable. *Cassandra calyculata*, *Kalmia glauca*, *Ledum latifolium*, *Veratrum viride*, *Habenaria dilatata*, *Sphagnum cymbifolium*, and *S. acutifolium* are examples. The necessary conditions for the growth of marsh plants are afforded by the clouds and fogs that so frequently envelop the top of the mountain.

The number of species represented by specimens contributed by botanists, is four hundred and thirty-eight; of these, however, only one hundred and forty-six are from this State. Of

the latter number, twenty-eight have not been before reported, and are not among my own collections of the past season. These will make the number of species added to our flora by myself and others, three hundred and forty. The names of the contributors and lists of the contributions are given in a paper marked (5).

The number of edible species of fungi found is fifteen. The list is marked (6). One of these so far surpasses most of the others in size and general good qualities, that it is earnestly recommended for cultivation. It is *Lycoperdon giganteum.*

The unusual abundance of fruits, not only cultivated, but also wild, the past season, is perhaps worthy of remark. Berries, of various kinds, have been plentiful. The low-bush Vaccinia, commonly known as *Blue berries*, have been gathered, in some localities, not by quarts, but by bushels. Scores of wagon loads, ranging from eight to fifteen bushels each, were taken from the waste lands lying between North Elba and Saranac lake, during my visit to that region. It appears to me evident that, in other localities less favored in this respect by nature, these fruits might be profitably cultivated on light soils that are of but little value for ordinary crops. The experiment, at least, should be tried. It has been tried in wet soils, with the high-bush blue berry (*Vaccinium corymbosum*), with considerable success.

The species new to our flora, with habitat, locality etc., also descriptions of fleshy fungi, and new species, will be found in a paper marked (7).

(1.)

LIST OF SPECIES OF WHICH SPECIMENS HAVE BEEN MOUNTED.

Clematis verticillaris *DC.*
Anemone cylindrica *Gray.*
A. Pennsylvanica *L.*
Hepatica triloba *Chaix.*
H. acutiloba *DC.*
Thalictrum anemonoides *Michx*
T. purpurascens *L.*
T. cornuti *L.*
Ranunculus acris *L.*
R. fascicularis *Muhl.*
Trollius laxus *Salisb.*
Coptis trifolia *Salisb.*
Brasenia peltata *Pursh.*
Nymphæa tuberosa *Paine.*
N. minor *DC.*
Sarracenia purpurea *L.*
Sanguinaria Canadensis *L.*
Dicentra Canadensis *DC.*
Nasturtium officinale *R. Br.*
N. Armoracia *Fries.*
Dentaria laciniata *Muhl.*
Arabis hirsuta *Scop.*
A. Canadensis *L.*
Barbarea vulgaris *R. Br.*
Lepidium campestre *L.*
Viola rotundifolia *Michx.*
V. blanda *Willd.*
V. cucullata *Ait.*
V. c. *var.* cordata *Gray.*
V. c. *var.* longipes *Peck.*
V. pedata *L.*
V. Canadensis *L.*

Viola pubescens *Ait.*
V. p. *var.* eriocarpa *Nutt.*
V. p. *var.* scabriuscula *T. & G.*
V. tricolor *var.* arvensis *DC.*
Drosera longifolia *L.*
Hypericum Canadense *L.*
H. C. *var.* major *Gr.*
Elatine Clintoniana *Peck.*
Vaccaria vulgaris *Host.*
Silene stellata *Ait.*
Cerastium oblongifolium *Torr.*
Sagina procumbens *L.*
Malva moschata *L.*
Hibiscus Moscheutos *L.*
Flœrkea proserpinacoides *Wd.*
Rhus aromatica *Ait.*
Vitis æstivalis *Michx.*
V. cordifolia *Michx*
Rhamnus alnifolius *L'Her.*
Acer spicatum *Lam.*
Polygala polygama *Walt.*
P. paucifolia *Willd.*
Lupinus perennis *L.*
Trifolium pratense *L.*
Robinia Pseudacacia *L.*
Lespedeza Stuvei *Nutt.*
Vicia Cracca *L.*
V. tetrasperma *L.*
Lathyrus palustris *L.*
Apios tuberosa *Mœnch.*
Cassia Chamæcrista *L.*
C. nictitans *L.*
Prunus maritima *Wang.*
P. pumila *L.*
Spiræa tomentosa *L.*
Potentilla paradoxa *Nutt.*
P. fruticosa *L.*
Fragaria vesca *L.*
Rubus strigosus *Michx.*
R. neglectus *Peck.*
R. occidentalis *L.*
R. hispidus *L.*
Rosa setigera *Michx.*
R. lucida *Ehrh.*
R. rubiginosa *L.*
Cratægus tomentosa *L.*
C. Crus-galli *L.*
Amelanchier Canadensis *T. & G.*
Ribes Cynosbati *L.*
R. hirtellum *Michx.*
Ribes lacustre *Poir.*
Saxifraga Pennsylvanica *L.*
Mitella nuda *L.*
Sedum telephioides *Michx.*
Epilobium hirsutum *L.*
E. palustre *var.* lineare *Gr.*
Ænothera pumila *L.*
Lythrum Salicaria *L.*
Sanicula Canadensis *L.*
S. Marilandica *L.*
Zizia integerrima *D C.*
Apium graveolens *L.*
Cornus Canadensis *L.*
Lonicera oblongifolia *Muhl.*
Viburnum nudum *L.*
V. pubescens *Pursh.*
V. Opulus *L.*
Galium trif. *var.* pusillum *Gr.*
Mitchella repens *L.*
Houstonia purp. *v.* ciliolata *Gr.*
Valeriana sylvatica *Richards.*
Eupatorium teucrifolium *Willd.*
E. hyssopifolium *L.*
Sericocarpus conyzoides *Nees.*
Aster spectabilis *Ait.*
A. concolor *L.*
A. patens *Ait.*
A. miser *L.*
A. flexuosus *Nutt.*
Erigeron annuum *Pers.*
E. Philadelphicum *L.*
E. Canadense *L.*
Diplopappus cornifolius *Darl.*
Solidago bic. *var.* concolor *Gr.*
S. cæsia *L.*
S. Virga-aurea *L.*
S. thyrsoidea *Meyer.*
S. sempervirens *L.*
S. Muhlenbergii *T. & G.*
S. ulmifolia *Muhl.*
Baccharis halimifolia *L.*
Polymnia Uvedalia *L.*
Rudbeckia hirta *L.*
Helianthus annuus *L.*
Bidens frondosa *L.*
B. cernuus *L.*
Leucanthemum vulgare *var.* tubuliflorum *Tenney.*
Gnaphalium polycephalum *Mx.*
Cichorium Intybus *L.*
Krigia Virginica *Willd.*

Hieracium scabrum *Michx.*
Calendula officinalis *L.*
Nabalus albus *Hook.*
N. altissimus *Hook.*
N. Frazeri *D C.*
Tragopogon pratensis *L.*
Lactuca Canadensis *L.*
Sonchus arvensis *L.*
Lobelia Kalmii *L.*
L. Dortmanna *L.*
Campanula aparinoides *Pursh.*
Vaccinium stamineum *L.*
V. Canadense *Kalm.*
V. Pennsylvanicum *Lam.*
V. cæspitosum *Michx.*
Chiogenes hispidula *T. & G.*
Gaultheria procumbens *L.*
Kalmia latifolia *L.*
K. angustifolia *L.*
Azalea nudiflora *L.*
Ledum latifolium *Ait.*
Pyrola rotund. *v.* uliginosa *Gr.*
P. chlorantha *Swartz.*
P. secunda *L.*
P. s. *var.* pumila *Paine.*
Lysimachia thyrsiflora *L.*
L. stricta *Ait.*
Utricularia intermedia *Hayne.*
Epiphegus Virginiana *Bart.*
Linaria vulgaris *Mill.*
Castilleia coccinea *Spreng.*
Pedicularis Canadensis *L.*
Mentha piperita *L.*
M. Canadensis *L.*
Collinsonia Canadensis *L.*
Monarda didyma *L.*
Physostegia Virginiana *Benth.*
Lamium album *L.*
Lithospermum officinale *L.*
L. latifolium *Michx.*
Cynoglossum Morisoni *DC.*
Hydrophyllum Virginicum *L.*
Polemonium cæruleum *L.*
Gentiana Sap. *var.* linearis *Gr.*
Menyanthes trifoliata *L.*
Limnanthemum lacunosum *Gri.*
Asclepias quadrifolia *Jacq.*
A. verticillata *L.*
Asarum Canadense *L.*
Chenopodium hybridum *L.*
C. murale *L.*
C. ambrosioides *L.*
Chenopodium anthelminticum *L.*
Atriplex patula *v.* littoralis *Gr.*
A. arenaria *Nutt.*
Salicornia herbacea *L.*
S. Virginica *L.*
S. ambigua *Michx.*
Suæda maritima *Dumort.*
Salsola Kali *L.*
Amarantus retroflexus *L.*
Polygonum aviculare *L.*
P. articulatum *L.*
Fagopyrum Tartaricum *Gært.*
Rumex orbiculatus *Gray.*
R. obtusifolius *L.*
Euphorbia polygonifolia *L.*
E. platyphylla *L.*
Empetrum nigrum *L.*
Juglans cinerea *L.*
J. regia *Willd.*
Quercus macrocarpa *Michx.*
Q. ilicifolia *Wang.*
Corylus rostrata *Ait.*
Carpinus Americana *Michx.*
Myrica cerifera *L.*
Betula lenta *L.*
B. alba *var.* populifolia *Spa.*
B. papyracea *Ait.*
Alnus serrulata *Ait.*
Populus balsamifera *L.*
Salix tristis *Ait.*
S. humilis *Marshall.*
S. nigra *Marshall.*
S. Babylonica *Tourn.*
S. longifolia *Muhl.*
S. myrtilloides *L.*
Pinus rigida *Miller.*
P. inops *Ait.*
P. resinosa *Ait.*
P. Strobus *L.*
Abies nigra *Poir.*
A. alba *Michx.*
Larix Americana *Michx.*
Arisæma triphyllum *Torr.*
Acorus Calamus *L.*
Wolffia Columbiana *Karsten.*
Sparganium simplex *Hudson.*
Naias flexilis *Rostk.*
Potamogeton Oakesianus *Robb*
P. Claytonii *Tuck.*
P. hybridus *Michx.*
P. amplifolius *Tuck.*

Potamogeton lucens *L.*
P. perfoliatus *L.*
P. pectinatus *L.*
Sagittaria variabilis *Engelm.*
S. heterophylla *Gray.*
S. graminea *Michx.*
Vallisneria spiralis *L.*
Habenaria dilatata *Gray.*
H. rotundifolia *Rich.*
H Hookeri *Torr.*
H. blephariglottis *Hook.*
H. psycodes *Gray.*
Goodyera Menziesii *Lindl.*
Spiranthes Romanzoviana *Ch.*
S. gracilis *Bigel.*
Pogonia ophioglossoides *Nutl.*
Calopogon pulchellus *R. Br.*
Calypso borealis *Salisb.*
Corallorhiza multiflora *Nutt.*
Cypripedium parviflorum *Sal.*
Sisyrinchium Bermudiana *L.*
Smilax glauca *Walt.*
Trillium cernuum *L.*
T. erythrocarpum *Michx.*
Trillium erectum *L.*
Uvularia grandiflora *Smith.*
Streptopus amplexifolius *DC.*
Clintonia borealis *Raf.*
Smilacina stellata *Desf.*
Polygonatum biflorum *Ell.*
Asparagus officinalis *L.*
Juncus maritimus *Lam.*
J. pelocarpus *Meyer.*
J. articulatus *L.*
J. alpinus *Villars.*
J. nodosus *L.*
J. n. *v.* megacephalus *Torr.*
J. Canadensis *Gay.*
Xyris flexuosa *v.* pusilla *Gray.*
Eriocaulon septangulare *With.*
Cyperus phymatodes *Muhl.*
C Grayii *Torr.*
Scirpus pauciflorus *Lightf.*
S. Smithii *Gray.*
Fimbristylis capillaris *Gray.*
Rhynchospora capillacea *Torr.*
Cladium mariscoides *Torr.*
Carex gynocrates *Worms.*
C. scirpoidea *Michx.*
C. siccata *Dew.*
C. teretiuscula *Good.*
C. rosea *Schk.*
Carex retroflexa *Muhl.*
C. stellulata *L.*
C. scoparia *Schk.*
C. lagopodioides *Schk.*
C. straminea *Schk.*
C. alata *Torr.*
C. aquatilis *Wahl.*
C. stricta *Lam.*
C. gynandra *Schw.*
C. laxiflora *Lam.*
C. Emmonsii *Dew.*
C. Pennsylvanica *Lam.*
C. varia *Muhl.*
C. extensa *Good.*
C. Œderi *Ehrh.*
C. trichocarpa *Muhl.*
C. pseudo-cyperus *L.*
C. tentaculata *Muhl.*
C. lupuliformis *Sartwell.*
C. Hartii *Dew.*
C. Tuckermani *Boott.*
Agrostis canina *L.*
Calamagrostis Canadensis *Beauv.*
Aristida purpurascens *Poir.*
Brizopyrum spicatum *Hook.*
Eragrostis reptans *Nees.*
E. pectinacea *Gray.*
Triticum repens *L.*
Danthonia compressa *Aust.*
Hierochloa alpina *R. & S.*
Panicum clandestinum *L.*
Cynosurus cristatus *L.*
Pellæa gracilis *Hook.*
P. atropurpurea *Link.*
Woodwardia Virginica *Smith.*
W. angustifolia *Smith.*
Asplenium ebeneum *Ait.*
Scolopendrium vulgare *Smith.*
Camptosorus rhizophyllus *Link.*
Phegopteris hexagonoptera *Fee.*
Onoclea sensibilis *L.*
Botrychium Virginicum *Swartz.*
B. simplex *Hitchcock.*
Isoetes Engelmanni *Braun.*
I. echinospora *Durien.*
Nitella acuminata *Braun.*
N. mucronata *Braun.*
N. flexilis *Ag.*
Chara coronata *Ziz.*
C. fragilis *Desv.*

Chara fœtida *Braun.*
C. contraria *Braun.*
Sphagnum subsecundum *Nees.*
S. cuspidatum *Ehrh.*
S. recurvum *Beauv.*
S. laricinum *Lindbg.*
S. Girgensohnii *Russow.*
S. acutifolium *Ehrh.*
S. Wulfianum *Girgen.*
S. Lindbergii *Schp.*
S. cymbifolium *Ehrh.*
S. squarrosum *Pers.*
Andræa crassinervia *Bruch.*
Anodus Donianus *Bryol. Eur.*
Dicranum Schreberi *Hedw.*
D. spurium *Hedw.*
Paludella squarrosa *L.*
Astomum Sullivantii *Schp.*
Barbula fragilis *Wils.*
Amphoridium Mougeoti *B. E.*
A. Peckii *Sulliv.*
Encalypta ciliata *Hedw.*
Amblyodon dealbatus *Beauv.*
Mnium stellare *Hedw.*
M. medium *Schp.*
Coscinodon pulvinatus *B. E.*
Homalia trichomanoides *Schp.*
Hypnum gracile *Br. & Sch.*
H. populeum *Hedw.*
H. scorpioides *L.*
Plagiothecium turfaceum *Lind.*
P. Mullerianum *Schp.*
Riccia Sullivantii *Aust.*
Lunularia vulgaris *Mich.*
Marchantia polymorpha *L.*
Fegatella conica *Corda.*
Grimaldia barbifrons *Bisch.*
Metzgeria pubescens *Raddi.*
M. furcata *Nees.*
Aneura palmata *Nees.*
Lophocolea heterophylla *Nees.*
Jungermannia bicuspidata *L.*
J. divaricata *Eng. Bot.*
J. setiformis *Ehrh.*
Plagiochila spinulosa *N. & M.*
P. asplenioides *N. & M.*
Frullania Hutchinsiæ *Nees.*
Radula pallens *Nees.*
Lepidozia reptans *Nees.*
Usnea barbata *L.*
U. longissima *Ach.*
Alectoria jubata *L.*
Evernia prunastri *L.*
E. furfuracea *Mann.*
Ramalina calicaris *Fr.*
Solorina saccata *Ach.*
Peltigera canina *Hoffm.*
P. polydactyla *Hoffm.*
P. aphthosa *Hoffm.*
P. horizontalis *Hoffm.*
Nephroma lævigatum *Ach.*
N. papyraceum *Schaer.*
N. tomentosum *Koerb.*
N. arcticum *Fr.*
N. Helveticum *Ach.*
Sticta sylvatica *Ach.*
S. quercizans *Ach.*
S. glomerulifera *Delise.*
S. pulmonaria *Ach.*
Cetraria cucullata *Ach.*
C. Islandica *Ach.*
C. aculeata *Fr.*
C. ciliaris *Ach.*
C. lacunosa *Ach.*
C. Oakesiana *Tuck.*
Parmelia olivacea *Ach.*
P. stygia *Ach.*
P. conspersa *Ach.*
P. tiliacea *Ach.*
P. perlata *Ach.*
P. crinita *Ach.*
P. saxatilis *Ach.*
P. caperata *Ach.*
P. pertusa *Schaer.*
P. physodes *Ach.*
Pyxine coc. *var.* sorediata *Tuck.*
Theloschistes parietinus *Norm.*
T. chrysophthalmus *Th. Fr.*
Physcia aq. *var.* detonsa *Tuck.*
P. pulverulenta *Fr.*
P. speciosa *Ach.*
P. obscura *Nyl.*
P. stellaris *Wallr.*
P. cæsia *Ach.*
Placodium aurantiacum *Lightf.*
P. cerinum *Ach.*
Lecanora tartarea *Ach.*
L. atra *Ach.*
L. cinerea *Fr.*
L. pallida *Schaer.*
L. pallescens *Schaer.*
L. varia *Ach.*
L. subfusca *Ach.*
L. el. *var.* ochrophæa *Tuck.*

Lecanora muralis *Schaer.*
Lecidea enteroleuca *Ach.*
L. sanguinaria *L.*
L. contigua *Fr.*
Gyalecta lutea *Tuck.*
Urceolaria scruposa *L.*
Bæomyces æruginosus *DC.*
B Ericetorum *DC.*
Pilophoron Fibula *Tuck.*
Stereocaulon tomentosum *Fr.*
S. paschale *L.*
Cladonia Mitrula *Tuck.*
C. degenerans *Fl.*
C. gracilis *Fr.*
C. amaurocræa *Fl.*
C. furcata *Fl.*
C. pyxidata *Fr.*
C. fimbriata *Fr.*
C. squamosa *Hoffm.*
C. rangiferina *Hoffm.*
C. uncialis *Fr.*
C. cornucopioides *L.*
C. cristatella *Tuck.*
Biatora atropurpurea *Tuck.*
B. chlorantha *Tuck.*
B. vernalis *Fr.*
B. rufonigra *Tuck.*
B. sanguineoatra *Fr.*
B. viridescens *Fr.*
Buellia petræa *Tuck.*
B. lactea *Kœrb.*
B. parasema *Kœrb.*
B. myriocarpa *Tuck.*
Umbilicaria Dillenii *Tuck.*
U. hirsuata *Ach.*
U. proboscidea *L.*
U. Muhlenbergii *Ach.*
U. pust. *var.* papulosa *Tuck*
Pannaria lanuginosa *Ach.*
P. microphylla *Mass.*
Conotrema urceolatum *Tuck.*
Pyrenula nitida *Ach.*
Trypethelium virens *Tuck.*
Graphis scripta *Ach.*
Collema nigrescens *Ach.*
C. flaccidum *Ach.*
C. ryssoleum *Tuck.*
Leptogium lacerum *Fr.*
L. chloromelum *Nyl.*
L. tremelloides *L.*
L. saturninum *Dicks.*
Pertusaria pertusa *L.*
Pertusaria Wulfenii *DC.*
P. velata *Nyl.*
P. globularis *Ach.*
Agaricus muscarius *Fr.*
A. procerus *Scop.*
A. Americanus *Pk.*
A. cristatus *Bolt.*
A. melleus *Vahl.*
A. laccatus *Scop.*
A. ochropurpureus *Berk.*
A. radicatus *Bull.*
A. velutipes *Curt.*
A. ostreatus *Jacq.*
A. salignus *Pers.*
A. petaloides *Bull.*
A. atrocœruleus *Fr.*
A. applicatus *Batsch.*
A. semi-captus *B. & C.*
A. Curtisii *Berk.*
A. polychrous *Berk.*
A. campestris *L.*
A. arvensis *Schaeff.*
A. cretaceus *Fr.*
A. sublateritius *Schaeff.*
A. Sphagnorum *Pers.*
Coprinus comatus *Fr.*
Paxillus atro-tomentosus *Fr.*
Hygrophorus ceraceus *Fr.*
H. conicus *Fr.*
Lactarius Indigo *Schw.*
L. volemus *Fr.*
L. subtomentosus *B. & R.*
L. angustissimus *Lasch.*
Russula emetica *Fr.*
Cantharellus crispus *Fr.*
Marasmius plancus *Fr.*
M. androsaceus *Fr.*
M. Rotula *Fr.*
M. velutipes *B. & C.*
Lentinus Lecomtei *Fr.*
Panus stypticus *Fr.*
P. dorsalis *Fr.*
Schizophyllum commune *Fr*
Lenzites betulina *Fr.*
L. sepiaria *Fr.*
L. Cratægi *Berk.*
Polyporus ovinus *Schæff.*
P. luridus *B. & C.*
P. tomentosus *Fr.*
P. perennis *Fr.*
P. Boucheanus *Fr.*
P. elegans *Fr.*

Polyporus giganteus *Fr.*
P. sulfureus *Fr.*
P. lacteus *Fr.*
P. adustus *Fr.*
P. cerifluus *B. & C.*
P. scutellatus *Schw.*
P. carneus *Nees.*
P. cinnabarinus *Fr.*
P. hirsutus *Fr.*
P. versicolor *Fr.*
P. abietinus *Fr.*
P. Sullivantii *Mont.*
P. Virgineus *Schw.*
P. medulla-panis *Fr.*
P. laceratus *Berk.*
Dædalea cinerea *Fr.*
D. confragosa *Bolt.*
Glœoporus nigropurpurascens *S*
Merulius tremellosus *Schrad.*
Fistulina hepatica *Fr.*
Hydnum repandum *L.*
H. suaveolens *Scop.*
H. coralloides *Scop.*
H. Erinaceus *Bull.*
H. gelatinosum *Scop.*
H. cirrhatum *Pers.*
Irpex Tulipiferæ *Schw.*
I. deformis *Fr.*
I. cinnamomeus *Fr.*
Craterellus cornucopioides *P.*
Thelephora pallida *Schw.*
T. palmata *Fr.*
Stereum fasciatum *Fr.*
S. striatum *Fr.*
S. complicatum *Fr.*
S. purpureum *Pers.*
S. spadiceum *Fr.*
S. ochraceo-flavum *Schw.*
S. bicolor *Fr.*
S. rubiginosum *Schrad.*
S. tabacinum *Fr.*
Corticium Oakesii *B. & C.*
Clavaria stricta *Pers.*
C. inæqualis *Fr.*
C. juncea *Fr.*
Pistillaria Muscicola *Fr.*
Spathularia flavida *Pers.*
Tremella aurantia *Schw.*
T. mesenterica *Retz.*
Exidia Auricula-Judæ *Fr.*
E. glandulosa *Fr.*
E. cinnabarina *B. & C.*
Dacrymyces stillatus *Fr.*
Lycoperdon pyriforme *Schæff.*
L. gemmatum *Batsch.*
L. calvescens *B. & C.*
L. Wrightii *B. & C.*
Bovista plumbea *Pers.*
Geaster hygrometricus *Pers.*
Scleroderma vulgare *Fr.*
Mycrothyrium microscopicum *D.*
Sphæronema consors *B. & C.*
Diplodia Viticola *Desm.*
Sphæropsis insignis *B. & C.*
Vermicularia Liliaceorum *Schw.*
Septoria herbarum *B. & C.*
Stilbospora ovata *Pers.*
S. pyriforme *Hoffm.*
Cytispora rubescens *Fr.*
C. leucosperma *Fr.*
Nemaspora crocea *Pers.*
Myxosporium nitidum *B.& C.*
Torula herbarum *Pers.*
Septonema spilomeum *Berk.*
Argema speciosum *Fr.*
Puccinia aculeata *Schw.*
P. solida *Schw.*
P. graminis *DC.*
P. Waldsteiniæ *Curt.*
P. Junci *Schw.*
P. investita *Schw.*
Uredo Rubigo *DC.*
U. caricina *DC.*
U. epitea *Kz.*
U. Polygonorum *DC.*
U. Solidaginis *Schw.*
U. Potentillæ *DC.*
U. Ruborum *DC.*
U. luminata *Schw.*
U. effusa *Strauss.*
U. Leguminosarum *Lk.*
U. Violarum *DC.*
Uromyces Hyperici *Schw.*
U. apiculosa *Lev.*
U. Lespedezæ-violaceæ.
U. Lesp.-procumbentis.
Ustilago Maydis *Corda.*
U. Junci *Schw.*
U. urceolorum *DC.*
U. utriculosa *Nees.*
Rœstelia lacerata *Sow.*
Æcidium Grossulariæ *DC.*
Æ. Houstoniatum *Schw.*

Æcidium Sambuci *Schw.*
Æ. Hydnoideum *B. & C.*
Æ. Compositarum *Mart.*
Æ. aroidatum *Schw.*
Æ. Gnaphaliatum *Schw.*
Cystopus candidus *Lev.*
Tubercularia vulgaris *Tode.*
T. granulata *Pers.*
Sporocybe calicioides *Fr.*
Polythrincium Trifolii *Kz.*
Cladosporium herbarum *Lk.*
Podosporium rigidum *Schw.*
Penicillium crustaceum *Fr.*
Morchella esculenta *Pers.*
Helvella esculenta *L.*
Geoglossum hirsutum *Pers.*
Peziza macropus *Pers.*
P. scutellata *L.*
P. calycina *Schum.*
P. Agassizii *B. & C.*
P. citrina *Batsch.*
P. lenticularis *Fr.*
P. sanguinea *Pers.*
P. Viticola *Pers.*
P. translucida *B. & C.*
P. herbarum *Pers.*
P. compressa *A. & S.*
Ascobolus conglomeratus *Schw.*
Bulgaria sarcoides *Fr.*
Solenia candida *Pers.*
Sphinctrina turbinata *Fr.*
Eustilbum Rehmianum *Rab.*
Patellaria discolor *Mont.*
P. rhabarbarina *Berk.*
Urnula Craterium *Fr.*
Dermatea fascicularis *Fr.*
Cenangium Pinastri *Fr.*
C. populinum *Schw.*
C. Ribis *Fr.*
Dichæna faginea *Fr.*
Rhytisma Solidaginis *Schw.*
R. acerinum *Fr.*
R. decolorans *Fr.*
R. Vaccinii *Fr.*
R. Prini *Fr.*
R. punctatum *Fr.*
R. salicinum *Fr.*
R. Blakei *Curt.*
Phacidium crustaceum *B. & C.*
Hysterium hiascens *B. & C.*
H. lineare *Fr.*
H. Pinastri *Schrad.*
Xylaria polymorpha *Pers.*
X. Hypoxylon *Ehrh.*
Hypocrea citrina *Fr.*
H. Lactifluorum *Schw.*
Hypoxylon fuscum *Pers.*
H. ustulatum *Bull.*
H. fragiforme *Pers.*
H. cohærens *Pers.*
Diatrype stigma *Fr.*
D. disciformis *Fr.*
Nectria cinnabarina *Fr.*
N. sanguinea *Fr.*
N. cucurbitula *Fr.*
Valsa nivea *Fr.*
V. Americana *B. & C.*
V. constellata *B. & C.*
V. stilbostoma *Fr.*
Sphæria ovina *Pers.*
S. pulvis-pyrius *Pers.*
S. pertusa *Pers.*
S. fissurarum *B. & C.*
S. Saubineti *Mont.*
S. picea *Pers.*
S. Ulmea *Schw.*
S. Lespedezæ *Schw.*
S. rostrata *Fr.*
S. limæformis *Schw.*
S. aculeata *Schw.*
S. acuminata *Sow.*
S. nigrella *Fr.*
S. Verbascicola *Schw.*
S. punctiformis *Pers.*
S. Coryli *Batsch.*
S. fimbriata *Pers.*
S. quercina *Pers.*
S. Desmazierii *B. & Br.*
S. sordaria *Fr.*
Dothidea ornans *Schw.*
Erysiphe Ceanothi *Schw.*
E. Vaccinii *Schw.*
E. communis *Schlecht.*
Phyllactinia guttata *Lev.*
Depazea brunnea *B. & C.*
D. cruenta *Fr.*
Erineum fagineum *Pers.*
E. luteolum *Kz.*
E. alnigerum *Kz.*
E. aureum *Pers.*
E. Vitis *DC.*
Sclerotium Orobanches *Schw.*
S. varium *Pers.*
S. populinum *Pers.*

(2.)

SPECIES OF WHICH SEEDS HAVE BEEN MOUNTED.

Clematis Virginiana *L.*
Thalictrum Cornuti *L.*
Caltha palustris *L.*
Trollius laxus *Salisb.*
Actæa alba *Bigel.*
Ranunculus recurvatus *Poir.*
R. abortivus *L.*
Aquilegia Canadensis *L.*
Corydalis glauca *Pursh.*
Polanisia graveolens *Raf.*
Arabis Canadensis *L.*
A. hirsuta *Scop.*
Cardamine hirsuta *L.*
Viola pedata *L.*
V. pubescens *Ait.*
Drosera rotundifolia *L.*
Hypericum ellipticum *Hook.*
H. Sarothra *Michx.*
Helianthemum Canadense *Mx.*
Lechea minor *Lam.*
L. major *Michx.*
L. thymifolia *Pursh.*
Elodea Virginica *Nutt.*
Mollugo verticillata *L.*
Silene stellata *Ait.*
S. noctiflora *L.*
Lychnis Githago *Lam.*
Malva rotundifolia *L.*
Abutilon Avicennæ *Gærtn.*
Lupinus perennis *L.*
Robinia Pseudacacia *L.*
Amphicarpæa monoica *Nutt.*
Lespedeza violacea *Pers.*
Medicago lupulina *L.*
Baptisia tinctoria *R. Br.*
Melilotus officinalis *Willd.*
M. alba *Lam.*
Rhamnus alnifolius *L'Her.*
Vitis cordifolia *Michx.*
Rhus Toxicodendron *L.*
Geranium maculatum *L.*
Portulaca oleracea *L.*
Prunus Virginiana *L.*
Geum Virginianum *L.*
Agrimonia Eupatoria *L.*
Rubus villosus *Ait.*
R. Canadensis *L.*
Rubus strigosus *Michx.*
R. occidentalis *L.*
Rosa rubiginosa *L.*
R. micrantha *Smith.*
Epilobium hirsutum *L.*
Œnothera biennis *L.*
Penthorum sedoides *L.*
Saxifraga Virginiensis *Michx.*
Mitella diphylla *L.*
M. nuda *L.*
Hamamelis Virginica *L.*
Aralia nudicaulis *L.*
Pastinaca sativa *L.*
Cornus florida *L.*
C. Canadensis *L.*
Lonicera oblongifolia *Muhl.*
Viburnum acerifolium *L.*
V. Opulus *L.*
Mitchella repens *L.*
Valeriana sylvatica *Richards.*
Vernonia Noveboracensis *Willd*
Eupatorium ageratoides *L.*
E. perfoliatum *L.*
Hieracium venosum *L.*
H. scabrum *Michx.*
H. Gronovii *L.*
H. paniculatum *L.*
Bidens bipinnata *L.*
Ambrosia artemisiæfolia *L.*
A. trifida *L.*
Xanthium Strumarium *L.*
Cirsium muticum *Michx.*
C. lanceolatum *Scop.*
C. discolor *Spreng.*
Helianthus strumosus *L.*
H. giganteus *L.*
H. divaricatus *L.*
H. decapetalus *L.*
Iva frutescens *L.*
Taraxacum Dens-leonis *Desf.*
Mulgedium leucophæum *DC.*
Nabalus altissimus *Hook.*
Sonchus oleraceus *L.*
S. asper *Vill.*
Campanula rotundifolia *L.*
Vaccinium cæspitosum *Michx.*
Kalmia latifolia *L.*

Azalea nudiflora *L.*
Chiogenes hispidula *T. & G.*
Gaultheria procumbens *L.*
Epiphegus Virginiana *Bart.*
Gerardia flava *L.*
Verbascum Thapsus *L.*
Collinsonia Canadensis *L.*
Isanthus cæruleus *Michx.*
Trichostema dichotomum *L.*
Solanum Dulcamara *L.*
Physalis viscosa *L.*
Cuscuta Gronovii *Willd.*
Phytolacca decandra *L.*
Polygonum dumetorum *L.*
P. sagittatum *L.*
P. Persicaria *L.*
P. aviculare *L.*
P. Hydropiper *L.*
Lindera Benzoin *Meisner.*
Asclepias Cornuti *Decaisne.*
A. obtusifolia *Michx.*
Chenopodium glaucum *L.*
C. album *L.*
C. hybridum *L.*
Atriplex arenaria *Nutt.*
Euphorbia polygonifolia *L.*
E. platyphylla *L.*
Urtica urens *L.*
Bœhmeria cylindrica *Willd.*
Betula lenta *L.*
B. alba *var.* populifolia *Sp.*
B. papyracea *Ait.*
Abies nigra *Poir.*
Naias flexilis *Rostk.*
Empetrum nigrum *L.*
Scheuchzeria palustris *L.*
Sagittaria variabilis *Engelm.*
Corallorhiza multiflora *Nutt.*
Sisyrinchium Bermudiana *L.*
Smilax tamnoides *L.*
Trillium erectum *L.*
T. erythrocarpum *Michx.*
Clintonia borealis *Raf.*
Smilacina racemosa *Desf.*
Asparagus officinalis *L.*
Lilium Canadense *L.*
Juncus marginatus *Rostk.*
J. maritimus *Lam.*
J. bufonius *L.*
J. tenuis *Willd.*
J. alpinus *Vill.*
J. Canadensis *Gay.*
Cyperus Grayii *Torr.*
C. filiculmis *Vahl.*
Eleocharis obtusa *Schultes.*
Scirpus pauciflorus *Lightf.*
S. planifolius *Muhl.*
S. pungens *Vahl.*
Eriophorum alpinum *L.*
Rhynchospora glomerata *Vahl*
Carex pauciflora *Lightf.*
C. siccata *Dew.*
C. teretiuscula *Good.*
C. vulpinoidea *Michx.*
C. stellulata *L.*
C. scoparia *Schk.*
C. irrigua *Smith.*
C. Emmonsii *Dew.*
C. arctata *Boott.*
C. filiformis *L.*

(3.)

PLANTS COLLECTED.

Anemone nemorosa *L.*
Aquilegia vulgaris *L.*
Dicentra cucullaria *DC.*
Menispermum Canadense *L.*
Liriodendron Tulipifera *L.*
Dianthus Armeria *L.*
Spergularia media *Presl.*
Althæa rosea *Cav.*
Rhus venenata *DC.*
Trifolium procumbens *L.*
Lathyrus maritimus *Bigel.*
Thaspium aureum *Nutt.*
Aralia nudicaulis *L.*
Nabalus nanus *DC.*
N. Boottii *DC.*
Specularia perfoliata *Lam.*
Campanula rotundifolia *L.*
Lobelia Nuttallii *DC.*

Œnothera fruticosa *L.*
Vaccinium vacillans *Solan.*
V. Pennsylvanicum *Lam.*
Azalea viscosa *L.*
Rhinanthus Crista-galli *L.*
Apocynum cannabinum *L.*
Vincetoxicum nigrum *Mœnch.*
Nemopanthes Canadensis *DC.*
Polygonum maritimum *L.*
Parietaria Pennsylvanica *Muhl.*
Quercus obtusiloba *Michx.*
Betula glandulosa *Michx.*
Salix sericea *Marshall.*
Lemna Torreyi *Aust.*
Cypripedium pubescens *Willd.*
Habenaria bracteata *R. Br.*
Goodyera Menziesii *Lindl.*
Spiranthes gracilis *Bigel.*
Erythronium Americanum *Sm.*
Allium tricoccum *Ait.*
Uvularia sessilifolia *L.*
Eleocharis tenuis *Schultes.*
Carex pubescens *Muhl.*
C. fœnea *Willd.*
C. alata *Torr.*
Calamagrostis Pickeringii *Gray*
Stipa Richardsonii *Lk.*
Phleum pratense *L.*
Bromus racemosus *L.*
B. sterilis *Torr.*
Triticum vulgare *Vill.*
Pellæa gracilis *Hook.*
Woodsia glabella *R. Br.*
Aspidium fragrans *Swartz.*
Bruchia flexuosa *Schwægr.*
Schistidium confertum *Funk.*
Placodium cerinum *Ach.*
Buellia geographica *Schær.*
Calicium subtile *Pers.*
C. Curtisii *Tuck.*
Mycoporum pycnocarpum *Tuck.*
Biatora Hypnophila *Tuck.*
Chorda lomentaria *Lb.*
Nemalion multifidum *J. Ag.*
Polysiphonia subcontorta *Peck.*
Callithamnion virgatulum *Har.*
Elachista Fucicola *Fr.*
Cladophora uncialis *Fl. Dan.*
Calothrix Confervicola *Ag.*
Hydrodictyon utriculatum *Rot.*
Agaricus vernus *Fr.*
Agaricus Phalloides *Fr.*
A. muscarius *L.*
A. vaginatus *Bull.*
A. Ceciliæ *B. & Br.*
A. farinosa *Schw.*
A. cristatus *Bolt.*
A. clypeolarius *Bull.*
A. naucinus *Fr.*
A. granulosus *Batsch.*
A. melleus *Vahl.*
A. vaccinus *Pers.*
A. variegatus *Scop.*
A. terreus *Schæff.*
A. personatus *Fr.*
A. albo-flavidus *Peck.*
A. nebularis *Batsch.*
A. carnosior *Peck.*
A. infundibuliformis *Schæff.*
A. Adirondackensis *Peck.*
A. Poculum *Peck.*
A. illudens *Schw.*
A. ditopus *Fr.*
A. brumalis *Fr.*
A. metachrous *Fr.*
A. ochropurpureus *B.*
A. laccatus *Scop.*
A. radicatus *Bull.*
A. dryophilus *Bull.*
A. velutipes *Curt.*
A. stipitarius *Fr.*
A. cirrhatus *Pers.*
A. Familia *Peck.*
A. purus *Pers.*
A. galericulatus *Scop.*
A. collariatus *Fr.*
A. prælongus *Peck.*
A. paluster *Peck.*
A. latifolius *Peck.*
A. epipterygius *Scop.*
A. vulgaris *Pers.*
A. sanguinolentus *A. & S.*
A. subincarnatus *Peck.*
A. pulcherrimus *Peck.*
A. Corticola *Pers.*
A. Oculus *Peck.*
A. chryseus *Peck.*
A. scabriusculus *Peck.*
A. umbelliferus *L.*
A. Campanella *Batsch.*
A. Fibula *Bull.*
A. cervinus *Schæff.*
A. nanus *Pers.*

Agaricus leoninus *Schæff.*
A. rhodopolius *Fr.*
A. strictior *Peck.*
A. serrulatus *Fr.*
A. Prunulus *Scop.*
A. Noveboracensis *Peck.*
A. adiposus *Batsch.*
A. temnophyllus *Peck.*
A. polychrous *Berk.*
A. Hallianus *Peck.*
A. autumnalis *Peck.*
A. vernalis *Peck.*
A. Lignicola *Peck.*
A. scorpioides *Fr.*
A. curvo-marginatus *Peck*
A. semiorbicularis *Bull.*
A. fulvus *Peck.*
A. lateritius *Fr.*
A. tener *Schæff.*
A. ovalis *Fr.*
A. Hypnorum *Batsch.*
A. Sphagnorum *Pers.*
A. rimosus *Bull.*
A. lacerus *Fr.*
A. geophyllus *Sow.*
A. sarcophyllus *Peck.*
A. flocculosus *Berk.*
A. subochraceus *Peck.*
A. campestris *L.*
A. Silvicola *Vitt.*
A. Johnsonianus *Peck.*
A. Hornemanni *Fr.*
A. stercorarius *Fr.*
A. semiglobatus *Batsch.*
A. perplexus *Peck.*
A. velutinus *Pers.*
A. cernuus *Mull.*
A. spadiceus *Schæff.*
A. semilanceolatus *Fr.*
A. solidipes *Peck.*
A. campanulatus *L.*
A. papilionaceus *Bull.*
A. retirugis *Batsch.*
A. Fimicola *Fr.*
A. gracilis *Fr.*
A. atomatus *Fr.*
A. disseminatus *Pers.*
A. sulfureoides *Peck.*
A. serotinoides *Peck.*
Coprinus tomentosus *Fr.*
C. niveus *Fr.*
C. micaceus *Fr.*
C. ephemerus *Fr.*
Coprinus plicatilis *Fr.*
Cortinarius caperatus *Fr.*
C. communis *Peck.*
C. luteo-fuscus *Peck.*
C. coloratus *Peck.*
C. collinitus *Fr.*
C. tricolor *Peck.*
C. autumnalis *Peck.*
C. Catskillensis *Peck.*
C. ochraceus *Peck.*
C. squamulosus *Peck.*
C. violaceus *Fr.*
C. albo-violaceus *Fr.*
C. argentatus *Fr.*
C. cinnamomeus *Fr.*
C. sanguineus *Fr.*
C. armillatus *Fr.*
C. distans *Peck.*
C. biformis *Fr.*
C. castaneoides *Peck.*
C. castaneus *Bull.*
C. vernalis *Peck.*
Hygrophorus chrysodon *Bat.*
H. pratensis *Pers.*
H. conicus *Scop.*
H. congelatus *Peck.*
H. Cantharellus *Schw.*
H. nitidus *B. & C.*
Russula fœtens *Fr.*
R. nitida *Fr.*
R. decolorans *Fr.*
Cantharellus cibarius *Fr.*
C. minor *Peck.*
C. lutescens *Fr.*
C. infundibuliformis *Fr.*
C. aurantiacus *Fr.*
C. floccosus *Schw.*
C. dichotomus *Peck.*
Lactarius torminosus *Fr.*
L. affinis *Peck.*
L. uvidus *Fr.*
L. pyrogalus *Fr.*
L. plumbeus *Fr.*
L. piperatus *Fr.*
L. sordidus *Peck.*
L. platyphyllus *Peck.*
L. chrysorheus *Fr.*
L. deliciosus *Fr.*
L. volemus *Fr.*
L. subtomentosus *B. & R.*
L. distans *Peck.*
L. subdulcis *Fr.*
L. camphoratus *Fr.*

Lactarius rufus *Fr.*
L. griseus *Peck.*
L. glyciosmus *Fr.*
Marasmius oreades *Fr.*
M. plancus *Fr.*
M. velutipes *B. & C.*
M. Rotula *Fr.*
M. androsaceus *Fr.*
M. scorodonius *Fr.*
M. campanulatus *Peck.*
M. subvenosus *Peck.*
Lentinus lepideus *Fr.*
L. cochleatus *Fr.*
Boletus edulis *Bull.*
B. luteus *Fr.*
B. flavidus *Fr.*
B. collinitus *Fr.*
B. albus *Peck.*
B. Clintonianus *Peck.*
B. Elbensis *Peck.*
B. pictus *Peck.*
B. spectabilis *Peck.*
B. scaber *Bull.*
B. auriporus *Peck.*
B. retipes *B. & C.*
B. subtomentosus *L.*
B. paluster *Peck.*
B. vermiculosus *Peck.*
B. strobilaceus *Scop.*
B. Sistotrema *Fr.*
Dædalea confragosa *Bolt.*
Favolus Europæus *Fr.*
Polyporus salicinus *Fr.*
P. ulmarius *Fr.*
Hydnum imbricatum *L.*
H. repandum *L.*
Lenzites Cratægi *Berk.*
Thelephora pallida *Schw.*
T. laciniata *Fr.*
Stereum corrugatum *Berk.*
Exidia cinnabarina *B. & C.*
Tulostoma fimbriatum *Fr.*
Lycoperdon cælatum *Bull.*
L. giganteum *Batsch.*
Geaster saccatus *Fr.*
Æthalium septicum *Fr.*
Leocarpus vernicosus *Lk.*
Didymium cinereum *Fr.*
Stemonitis oblonga *Fr.*
Diachea elegans *Fr.*
Arcyria digitata *Schw.*
Trichia clavata *Pers.*

Leptostroma litigiosum *Desm.*
L. filicinum *Fr.*
Diplodia Mori *Berk.*
Sphæronema Spina *B. & C.*
Sphæropsis insignis *B. & C.*
Septoria Liriodendri *B. & C.*
S. Rubi *B. & C.*
S. *Vitis B. & C.*
S. Ænotheræ *B. & C.*
S. destruens *Desm.*
S. sanguinea *Desm.*
S. viride-tingens *Curt.*
Stilbospora magna *Berk.*
S. pyriformis *Hoffm.*
Septonema spilomeum *Berk.*
Spilocæa Pomi *Fr.*
Coniothecium toruloideum.
Aregma mucronatum *Fr.*
Puccinia Cryptotæniæ *Peck.*
P. Circææ *Pers.*
P. aculeata *Schw.*
P. Helianthi *Schw.*
P. Xanthii *Schw.*
P. solida *Schw.*
P. Graminis *DC.*
P. coronata *Cd.*
P. Violarum *Lk.*
P. Compositarum *Schl.*
P. Tiarellæ *B. & C.*
P. Asteris *Schw.*
P. mesomajalis *B. & C.*
P. Umbelliferarum *DC.*
P. Anemones *Pers.*
P. acuminata *Pk.*
Podisoma macropus *Schw.*
Uredo Rubigo vera *Lev.*
U. caricina *DC.*
U. Azaleæ *Schw.*
U. epitea *Kz.*
U. Vaccinioruм *Pers.*
U. Potentillarum *DC.*
U. Filicum *Desm.*
U. pustulata *Pers.*
U. Chærophylli *Schw.*
U. Cichoracearum *Lev.*
Trichobasis Howei *Peck.*
Lecythea ovata *Strauss.*
L. cylindrica *Strauss.*
L. gyrosa *Berk.*
Uromyces apiculosa *Lev.*
U. macrospora *B. & C.*
U. Limonii *Lev.*

Polycystis Ranunculacearum.
Ravenelia glanduliformis.
Triphragmium clavellosum *Bk.*
Æcidium Podophylli *Schw.*
Æ. Epilobii *DC.*
Æ. Ænotheræ *Peck.*
Æ. Ranunculi *Schw.*
Æ. Geranii *DC.*
Æ. Impatientis *Schw.*
Æ. Violæ *DC.*
Æ. Aroidatum *Schw.*
Æ. quadrifidum *DC.*
Æ. Claytoniatum *Schw.*
Æ. Compositarum *Mart.*
Æ. pustulatum *Curt.*
Æ. Fraxini *Schw.*
Æ. Orobi *DC.*
Æ. Limonii *Peck.*
Æ. Myricatum *Schw.*
Æ. macrosporum *Peck.*
Cystopus candidus *Lev.*
Illosporium carneum *Fr.*
Sporocybe Persicæ *Fr.*
Helminthosporium Tiara.
H. macrocarpon *Grev.*
Cladosporium herbarum *Lk.*
Macrosporium Cheiranthi *Fr.*
Botrytis Viticola *B. & C.*
Streptothrix atra *B. & C.*
Fusisporium miniatum *B. & C.*
Helvella esculenta *L.*
H. Infula *Schæff.*
Mitrulæ paludosa *Fr.*
Leotia lubrica *Pers.*
Peziza cochleata *L.*
P. coccinea *Jacq.*
P. nigrella *Pers.*
P. floccosa *Schw.*
P. anomala *Pers.*
P. virginea *Batsch.*
P. aurantia *Fr.*
P. cyathoidea *Bull.*
Ascobolus conglomeratus *Schw.*
Sphinctrina turbinata *Fr.*
Tympanis picastra *B. & C.*
Glonium stellatum *Muhl.*
Hysterium vulvatum *Schw.*
H. Fraxini *Pers.*
H. Rubi *Pers.*
Cordyceps militaris *Fr.*
C. purpurea *Fr.*
Hypocrea lateritia *Fr.*
Rhizina undulata *Fr.*
Hypoxylon multiforme *Fr.*
H. Clypeus *Schw.*
Diatrype virescens *Schw.*
D. Duriæi *Mont.*
D. haustellata *Fr.*
Bulgaria rufa *Schw.*
Melogramma Quercuum *Fr.*
Nectria cucurbitula *Fr.*
Sphæria aquila *Fr.*
S. elongata *Fr.*
S. confluens *Fr.*
S. doliolum *Pers.*
S. Spraguei *B. & C.*
S. pertusa *Pers.*
S. fimbriata *Pers.*
S. morbosa *Schw.*
S. Graminis *Pers.*
Depazea Kalmicola *Schw.*
D. Pyrolæ *Fr.*
D. Fraxinicola *Curt.*
D. Smilacicola *Schw.*
Dothidea Robertiani *Fr.*
Massaria vomitoria *B. & C.*
Ascospora Podophylli *Curt.*
Erysiphe fuscata *B. & C.*
E. lamprocarpa *Lev.*
E. communis *Schl.*
Microsphæria Syringæ *Fr.*
M. Vaccinii *Peck.*
Uncinula adunca *Lev.*
Phyllactinia guttata *Lev.*
Eurotium herbariorum *Lk.*

(4.)

LIST OF PLANTS FOUND ON THE EXPOSED SUMMIT OF MT. MARCY.

Coptis trifolia *Salisb.*
Arenaria Grænlandica *Spreng.*
Oxalis Acetosella *L.*
Potentilla tridentata *Ait.*
Rubus strigosus *Michx.*
Pyrus Americana *DC.*
Spiræa salicifolia *L.*
Epilobium angustifolium *L.*
Cornus Canadensis *L.*
Linnæa borealis *Gronov.*
Houstonia cærulea *L.*
Solidago thyrsoidea *Meyer.*
S. Virga-aurea *L.*
Nabalus nanus *DC.*
Vaccinium uliginosum *L.*
V. Pennsylvanicum *Lam.*
Chiogenes hispidula *T. & G.*
Cassandra calyculata *L.*
Kalmia glauca *Ait.*
Rhododendron Lapponicum *W.*
Ledum latifolium *Ait.*
Rhinanthus Crista-galli *L.*
Melampyrum Americanum *Mx.*
Diapensia Lapponica *L.*
Gentiana Sap. *var.* linearis *Gr.*
Empetrum nigrum *L.*
Betula glandulosa *Michx.*
B. papyracea *Ait.*
Alnus viridis *DC.*
Salix Cutleri *Tuck.*
Abies balsamea *Marshall.*
Juniperus communis *L.*
Habenaria dilatata *Gray.*
Veratrum viride *Ait.*
Streptopus amplexifolius *DC.*
Clintonia borealis *Raf.*
Luzula parviflora *Desv.*
Juncus trifidus *L.*
Scirpus cæspitosus *L.*
Eriophorum vaginatum *L.*
Carex scirpoidea *Michx.*
C. vitilis *Fr.*
C. Bigelovii *Torr.*
Agrostis canina *L.*
Calamagrostis Canadensis *Bv.*
C. Pickeringii *Gray.*
Stipa Richardsonii *Lk.*
Poa laxa *Hænke.*
Aira flexuosa *L.*
Hierochloa alpina *R. & S.*
Lycopodium Selago *L.*
L. annotinum *L.*
L. clavatum *L.*
Sphagnum cymbifolium *Ehrh.*
S. acutifolium *Ehrh.*
S. sedoides *Brid.*
S. Pylæsii *Brid.*
Andræa petrophila *Ehrh.*
Arctoa fulvella *Bry. Eur.*
Dicranum polycarpum *Ehrh.*
D. Blyttii *Bry. Eur.*
D. scoparium *L.*
D. elongatum *Schwaegr.*
D. congestum *Brid.*
Fissidens osmundioides *Hedw.*
Ceratodon purpureus *Brid.*
Barbula tortuosa *W. & M.*
Grimmia ovata *W. & M.*
Schistidium confertum *Br.& Sch.*
Racomitrium fasciculare *Brid.*
R. microcarpum *Brid.*
Conostomum boreale *Swartz.*
Bryum nutans *Schreb.*
Aulacomnion turgidum *Schgr.*
Pogonatum alpinum *Brid.*
Polytrichum juniperinum *Hed.*
P. jun.*var.*alpestre *Bry.Eur*
Myurella julacea *Bry. Eur.*
Hypnum splendens *Hedw.*
H. umbratum *Ehrh.*
H. recurvans *Schwaegr.*
H. Schreberi *Willd.*
H. sarmentosum *Wahl.*
H. Crista-castrensis *L.*
H. rugosum *Ehrh.*
Jungermannia trichophylla *L.*
J. connivens *Dicks.*
J. barb. *var.*attenuata *Mart.*
J. scutata *Web.*
J. Taylori *Hook.*
J. obtusifolia *Hook.*
Scapania nemorosa *Nees.*
Sarcoscyphus Ehrharti *Corda.*
Ptilidium ciliare *Nees.*

Mastigobryum deflexum *Nees.*
Alectoria jubata *Ach.*
Evernia furf. *var.* Cladoniæ *Tk.*
Cetraria islandica *Ach.*
C. ciliaris *Ach.*
C. nivalis *Fr.*
Parmelia conspersa *Ach.*
P. saxatilis *Ach.*
P. stygia *Ach.*
P. physodes *Ach.*
Lecanora tart. *var.* frigida *Ach.*
Bæomyces æruginosus *DC.*
Stereocaulon paschale *Ach.*
Cladonia pyxidata *Fr.*
Cladonia gracilis *Fr.*
Cladonia g. *var.* elongata *Fr.*
C. g. *var.* taurica *Fr.*
C. amaurocræa *Fl.*
C. uncialis *Fr.*
C. rangiferina *Hoffm.*
C. r. *var.* alpestre *Fl.*
C. cornucopioides *L.*
C. cristatella *Tuck.*
Buellia geographica *Schær.*
B. lactea *Kœrb.*
B. petræa *Tuck.*
Umbilicaria proboscidea *DC.*
Agaricus Hypnorum *Batsch.*
A. umbelliferus *L.*

(5.)

NAMES OF CONTRIBUTORS, WITH THEIR CONTRIBUTIONS.

Mrs. E. E. ATWATER, Chicago, Ill.

Dianthus Armeria *L.*
Anemone pat. *v.* Nuttalliana *Gr.*
Dalibarda repens *L.*
Achillea Millefolium *L.*
Sabbatia stellaris *Pursh.*
Spiranthes gram. *v.* Walteri *Gr.*

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

Aquilegia vulgaris *L.*
Nymphæa minor *DC.*
N. tuberosa *Paine.*
Alyssum calycinum *L.*
Sisymbrium canescens *Nutt.*
Lepidium ruderale *L.*
Reseda alba *L.*
Raphanus sativus *L.*
Dianthus Armeria *L.*
Lychnis vespertina *Sibth.*
Silene Armeria *L.*
Malva Alcea *L.*
M. moschata *L.*
Althæa rosea *Cav.*
A. ficifolia *Cav.*
Oxalis corniculata *L.*
Saxifraga aizoides *L.*
Sedum ternatum *Michx.*
Trifolium procumbens *L.*
Prunus Americana *Marshall.*
Prunus Mahaleb *L.*
P. Virginiana *L.*
P. Padus *L.*
Rosa setigera *Michx.*
R. micrantha *Smith.*
Coriandrum sativum *L.*
Anethum graveolens *L.*
A. fœniculum *L.*
Aster azureus *Lindl.*
Solidago Houghtonii *T. & G.*
Matricaria Chamomilla *L.*
M. Parthenium *L.*
Lampsana communis *L.*
Tragopogon porrifolius *L.*
Lactuca sativa *L.*
Cirsium altissimum *Spreng.*
Campanula rapunculoides *L.*
Thymus Serpyllum *L.*
Hyssopus officinalis *L.*
Phlox paniculata *L.*

Cuscuta inflexa *Engelm.*
Vinca minor *L.*
Gentiana Andrewsii *Griseb.*
Chenopodium album *L.*
C. murale *L.*
Corispermum hyssopifolium *L.*
Spinacea oleracea *Mill.*
Roubieva multifida *Moquin.*
Atriplex patula *L.*
Amarantus spinosus *L.*
A. hypochondriacus *L.*
Polygonum orientale *L.*
P. lapathifolium *Ait.*
Polygonum incarnatum *Ell.*
Rumex Brittanica *L.*
Rumex obtusifolius *L.*
Euphorbia Peplus *L.*
E. Lathyris *L.*
Juniperus sab. *v.* procumbens *P.*
Sparganium eurycarpum *Engel.*
Tofieldia glutinosa *Willd.*
Carex sterilis *Willd.*
Agaricus acutesquamosus *Wei.*
A. Americanus *Peck.*
Cantharellus cibarius *Fr.*
Boletus strobilaceus *Scop.*
Cyathus striatus *Hoffm.*
Diachea elegans *Fr.*
Cystopus candidus *Lev.*
Peziza granulata *Bull.*

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

Agaricus procerus *Scop.*
A. dryophilus *Bull.*
Cantharellus cibarius *Fr.*
Boletus strobilaceus *Scop.*
Clavaria fusiformis *Sow.*
Polyporus lucidus *Fr.*

E. C. HOWE, M. D., New Baltimore, N. Y.

Carex Grayii *Carey.*
Favolus Europæus *Fr.*
Uredo Ari-Virginicæ *Schw.*
U. Vacciniorum *Fr.*
U. Cichoraceorum *Lev.*
Ustilago utriculosa *Tul.*
Æcidium Clematitis *Schw.*
Septoria Plantaginicola *B. & C.*
S. Œnotheræ *B. & C.*
S. Pyri *Cast.*
S. Vitis *B. & C.*
S. sanguinea *Desm.*
S. destruens *Desm.*
Cytispora carphosperma *Fr.*
Sphæropsis Candollei *B. & Br.*
Aregma mucronatum *Fr.*
Sporocybe Persicæ *Fr.*
Puccinia Peckiana *Howe.*
Hypoxylon coprophilum *Fr.*
Fusisporium Buxi *Fr.*
Peziza Caulicola *Fr.*
Patellaria congregata *B. & C*
Sphæria putaminum *Schw.*
Erysiphe Vaccinii *Schw.*
Microsphæria penicillata *Lev.*
Uncinula adunca *Lev.*
Labrella Pomi *Mont.*
Physcia stellaris *Wallr.*
Lecanora pallescens *Ach.*
Placodium cerinum *Ach.*
Biatora rubella *Ehrh.*
Pyrenula nitida *Ach.*
Arthonia Lecideëlla *Fr.*
Rinodina sophodes *Ach.*
R. constans *Tuck.*
Pertusaria velata *Nyl.*
Mycoporum pycnocarpum *Tuc*
Theloschistes candelarius *L.*
Parmelia Borreri *Turn.*
Dicranum spurium *Hedw.*

G. B. BRAINERD, Brooklyn, L. I.

Chondria Baileyana *Mont.*
C. tenuissima *Ag.*
Desmarestia aculeata *Lamour.*
Ceramium arachnoideum *Ag.*
Callithamnion Baileyi *Harv.*
Callithamnion cruciatum *Ag.*
Enteromorpha intestinalis *Lk.*
Lyngbya flacca *Ag.*
Cladophora fracta *Fl. Dan.*

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

Eupatorium purpureum *L.*
E. perfoliatum *L.*
Polemonium cæruleum *L.*
Taraxacum Dens-leonis *Desf.*
Lobelia syphilitica *L.*
Aspidium acrostichoides *Sz.*

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

Impatiens pallida *Nutt.*
Anethum fœniculum *L.*
Alyssum calycinum *L.*

D. F. DAY, Buffalo, N. Y.

Valeriana officinalis *L.*
Nicotiana rustica *L.*
Silybum Marianum *Gært.*

H. GILLMAN, Detroit, Mich.

Goodyera Menziesii *Lindl.*
Fragaria Gillmani *Clinton.*

J. S. MERRIAM, New York.

Ascyrum Crux-Andreæ *L.*
Polygala lutea *L.*

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

Galium Mollugo *L.*
Callitriche verna *L.*
Schistidium confertum *Funk.*
Dicranum pellucidum *Hedw.*
Plagiothecium latebricola *B.E*

Rev. J. FOWLER, New Brunswick.

Clematis Virginiana *L.*
Anemone Virginiana *L.*
Thalictrum Cornuti *L.*
Ranunculus recurvatus *Poir.*
R. Pennsylvanicus *L.*
R. Flam. *var.* reptans *Gr.*
Coptis trifolia *Salisb.*
Aquilegia vulgaris *L.*
Berberis vulgaris *L.*
Nuphar advena *Ait.*
N. luteum *var.* pumilum *Gr.*
Corydalis glauca *Pursh.*
Dentaria diphylla *L.*
Cardamine hirsuta *L.*
Sinapis alba *L.*
S. arvensis *L.*
Viola lanceolata *L.*
V. pubescens *Ait.*
V. tricolor *L.*
Hudsonia tomentosa *Nutt.*
Drosera rotundifolia *L.*
D. longifolia *L.*
Hypericum mutilum *L.*
H. Canadense *L.*
Elodes Virginica *Nutt.*
Lychnis Githago *Lam.*
Arenaria lateriflora *L.*
A. serpyllifolia *L.*
Sagina procumbens *L.*
Spergularia rubra *Presl.*
Impatiens fulva *Nutt.*
Oxalis Acetosella *L.*
O. stricta *L.*
Rhus Toxicodendron *L.*
Acer Pennsylvanicum *L.*
A. saccharinum *Wang.*
A. rubrum *L.*
Vicia Cracca *L.*
Lathyris maritimus *Bigel.*
L. palustris *L.*
Medicago lupulina *L.*
Prunus Virginiana *L.*
P. serotina *Ehrh.*
Geum macrophyllum *Willd.*

Geum rivale *L.*
Potentilla tridentata *Ait.*
P. fruticosa *L.*
Fragaria vesca *L.*
Dalibarda repens *L.*
Rubus Chamæmorus *L.*
R. triflorus *Rich.*
R. hispidus *L.*
Rosa Carolina *L.*
R. lucida *Ehrh.*
R. rubiginosa *L.*
Cratægus Oxyacantha *L.*
Pyrus arbutifolia *L.*
P. Americana *DC.*
Amelanchier Can. *v.* oligocarpa.
Ribes rotundifolium *Michx.*
R. lacustre *Poir.*
R. prostratum *L'Her.*
R. rubrum *L.*
Mitella nuda *L.*
Tiarella cordifolia *L.*
Chrysosplenium Americanum.
Sedum Rhodiola *DC.*
Myriophyllum tenellum *Bigel.*
Hippuris vulgaris *L.*
Œnothera pumila *L.*
Circæa alpina *L.*
Hydrocotyle Americana *L.*
Sanicula Marilandica *L.*
Archangelica atropurpurea *Hm.*
Conioselinum Canadense *T. & G.*
Cicuta maculata *L.*
C. bulbifera *L.*
Sium lineare *Michx.*
Heracleum lanatum *Michx.*
Aralia hispida *Michx.*
A. trifolia *Gray.*
Cornus Canadensis *L.*
Linnæa borealis *Gronov.*
Symphoricarpus racemosus *Mx.*
Lonicera ciliata *Muhl.*
L. cærulea *L.*
Viburnum nudum *L.*
V. Opulus *L.*
Galium trifidum *L.*
G. triflorum *Michx.*
G. asprellum *Michx.*
Mitchella repens *L.*
Houstonia cærula *L.*
Eupatorium purpureum *L.*
Nardosmia palmata *Hook.*
Aster acuminatus *Michx.*
Aster corymbosus *Ait.*
A. puniceus *L.*
A. Radula *Ait.*
A. miser *L.*
A. longifolius *Lam.*
A. simplex *Willd.*
Solidago stricta *Ait.*
S. sempervirens *L.*
S. altissimus *L.*
S. bicolor *L.*
Antennaria margaritacea *R. Br*
Erechthites hieracifolia *Raf.*
Senecio aureus *L.*
Cnicus benedictus *L.*
Hieracium Canadense *Michx.*
H. scabrum *Michx.*
Nabalus albus *Hook.*
Lactuca Canadensis *L.*
Mulgedium leucophæum *DC.*
Artemisia Absinthium *L.*
A. Abrotanum *L.*
Lobelia Dortmanna *L.*
Campanula rotundifolia *L.*
Gaylussacia dumosa *T. & G.*
Vaccinium Canadense *Kalm.*
V. Pennsylvanicum *Lam.*
V. macrocarpon *Ait.*
Epigæa repens *L.*
Cassandra calyculata *Don.*
Andromeda polifolia *L.*
Kalmia glauca *Ait.*
Rhodora Canadensis *L.*
Ledum latifolium *Ait.*
Pyrola rotundifolia *L.*
Moneses uniflora *Gray.*
Chimaphila umbellata *Nutt.*
Monotropa uniflora *L.*
Ilex verticillata *Gray.*
Nemopanthes Canadensis *DC*
Plantago maritima *L.*
Statice Limonium *L.*
Trientalis Americana *Pursh.*
Lysimachia thyrsiflora *L.*
L. stricta *Ait.*
Glaux maritima *L.*
Samolus Valerandi *L.*
Utricularia cornuta *Michx.*
U. clandestina *Nutt.*
Linaria vulgaris *Mill.*
Chelone glabra *L.*
Mimulus ringens *L.*
Veronica Americana *Schw.*

Veronica agrestis *L.*
Rhinanthus Crista-galli *L.*
Mentha sativa *L.*
Lycopus Europ. *v.* sinuatus *Gr.*
Nepeta Cataria *L.*
N. Glechoma *Benth.*
Leonurus Cardiaca *L.*
Calamintha Clinopodium *Benth.*
Myosotis arvensis *Hoffm.*
M. palustris *With.*
Convolvulus arvensis *L.*
Hyoscyamus niger *L.*
Menyanthes trifoliata *L.*
Apocynum androsæmifolium *L.*
Fraxinus Americana *L.*
Salicornia herbacea *L.*
Suæda maritima *Dumort.*
Salsola Kali *L.*
Polygonum maritimum *L.*
P. Hydropiper *L.*
P. Convolvulus *L.*
Rumex orbiculatus *Gray.*
Quercus tinctoria *Bartram.*
Fagus ferruginea *Ait.*
Myrica Gale *L.*
Betula lenta *L.*
B. papyracea *Ait.*
B. lutea *Michx.*
B. pumila *L.*
Alnus viridis *DC.*
Salix humilis *Marshall.*
S. discolor *Muhl.*
S. myrtilloides *L.*
S. cordata *Muhl.*
S. rostrata *Rich.*
S. lucida *Muhl.*
Populus balsamifera *L.*
Pinus Banksiana *Lamb.*
Juniperus communis *L.*
J. Sab. *v.* procumbens *Ph.*
Arisæma triphyllum *Torr.*
Calla palustris *L.*
Acorus Calamus *L.*
Sparganium simplex *Huds.*
Zannichellia palustris *L.*
Zostera marina *L.*
Ruppia maritima *L.*
Sagittaria graminea *Michx.*
Potamogeton Claytonii *Tuck.*
P. pauciflorus *Pursh.*
Triglochin maritimum *L.*
Habenaria tridentata *Hook.*
Habenaria psycodes *Gray.*
Goodyera repens *R. Br.*
Spiranthes Romanzoviana *Cha.*
Listera convallarioides *Hook.*
Pogonia ophioglossoides *Nutt.*
Calopogon pulchellus *R. Br.*
Corallorhiza multiflora *Nutt.*
Cypripedium acaule *Ait.*
Sisyrinchium Bermudiana *L.*
Trillium cernuum *L.*
Medeola Virginica *L.*
Uvularia sessilifolia *L.*
Streptopus roseus *Michx.*
Clintonia borealis *Raf.*
Smilacina racemosa *Desf.*
S. trifolia *Desf.*
Lilium Canadense *L.*
Luzula campestris *DC.*
Juncus effusus *L.*
J. Balticus *Dethard.*
Eriocaulon septangulare *With.*
Eleocharis obtusa *Schultes.*
E. palustris *R. Br.*
E. tenuis *Schultes.*
E. acicularis *R. Br.*
E. pygmæa *Torr.*
Scirpus cæspitosus *L.*
S. Eriophorum *Michx.*
Eriophorum vaginatum *L.*
E. Virginicum *L.*
E. russoleum *Fr.*
E. polystachyon *L.*
E. gracile *Koch.*
Carex teretiuscula *Good.*
C. stellulata *L.*
C. canescens *L.*
C. vulgaris *Fr.*
C. aquatilis *Wahl.*
C. torta *Boott.*
C. stricta *Lam.*
C. maritima *Vahl.*
C. limosa *L.*
C. aurea *Nutt.*
C. pallescens *L.*
C. gracillima *Schw.*
C. Emmonsii *Dew.*
C. varia *Muhl.*
C. scabrata *Schw.*
C. arctata *Boott.*
C. debilis *Michx.*
C. flexilis *Rudge.*
C. flava *L.*

Carex Œderi *Ehrh.*
C. filiformis *L.*
C. lanuginosa *Michx.*
C. riparia *Curt.*
C. Pseudo-Cyperus *L.*
C. utriculata *Boott.*
C. Tuckermani *Boott.*
C. miliaris *Michx.*
Leersia oryzoides *Swartz.*
Alopecurus aristulatus *Michx.*
Agrostis alba *L.*
Calamagrostis Canadensis *Bv.*
Spartina cynosuroides *Willd.*
Glyceria Canadensis *Trin.*
G. elongata *Trin.*
G. fluitans *R. Br.*
G. maritima *Wahl.*
Triticum caninum *L.*
Hordeum jubatum *L.*
Elymus Virginicus *L.*
Aira cæspitosa *L.*
Hierochloa borealis *R. & S.*
Setaria viridis *Beauv.*
Equisetum hyemale *L.*
E. arvense *L.*
E. sylvaticum *L.*
E. limosum *L.*
Asplenium thelypteroides *Mx.*
Aspidium marginale *Swartz.*
Struthiopteris Germanica *Willd.*
Lycopodium complanatum *L.*
L. dendroideum *Michx.*
L. lucidulum *Michx.*
L. inundatum *L.*

(6.)

EDIBLE FUNGI.

Agaricus cæsareus *Scop.*
Cortinarius cinnamoneus *Fr.*
C. castaneus *Fr.*
Lactarius deliciosus *Fr.*
L. subdulcis *Fr.*
Cantharellus cibarius *Fr.*
Lycoperdon cælatum *Fr.*
L. giganteum *Batsch.*
Boletus luteus *L.*
B. flavidus *Fr.*
B. collinitus *Fr.*
B. subtomentosus *L.*
B. edulis *Bull.*
Hydnum imbricatum *L.*
Helvella Infula *Schœff.*

(7.)

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

OXALIS CORNICULATA *L.*

In Conservatories, Buffalo. *G. W. Clinton.*

VALERIANA OFFICINALIS *L.*

Buffalo. *D. F. Day.* Escaped from gardens.

SPERGULARIA MEDIA *Presl.*

Shore of Shelter Island opposite Greenport. July.

NABALUS BOOTII *D C.*
Summit of Mt. Whiteface. August.

RHINANTHUS CRISTA-GALLI *L.*
Summit of Mt. Marcy. August.

CUSCUTA ARVENSIS *Beyrich.*
Rockland county. *C. F. Austin.*

CUSCUTA COMPACTA *Juss.*
Near Tappantown. *Austin.*

VINCETOXICUM NIGRUM *Mœnch.*
Waste places about Albany. Introduced.

CALAMAGROSTIS PICKERINGII *Gray.*
Summit of Mt. Marcy. August. In our specimens, the lower palet is two-toothed at the apex, and the panicle is about one-fourth the length of the culm.

STIPA RICHARDSONII *Lk.*
Summit of Mt. Marcy. August.

ASPIDIUM FRAGRANS *Swartz.*
Crevices of rocks at Lake Avalanche, near the trap dyke. August.

Mosses.

BRUCHIA FLEXUOSA *Schwœgr.*
Sandy fields. West Albany. June.

DICRANUM PELLUCIDUM *Hedw.*
Ravines. Marathon. *Austin.* Sterile.

PLAGIOTHECIUM LATEBRICOLA *Bry. Eur.*
Swamps at Slate Hill, where it is plentiful. *Austin.*

Lichens.

PLACODIUM CERINUM *Ach.*
Bark of hickory and poplar trees. New Baltimore. *E. C. Howe.* Albany and Center.

THELOSCHISTES CANDELARIUS *L.*
Bark of trees. New Baltimore. *Howe.*

RINODINA SOPHODES *Ach.*
Bark of hickory trees. New Baltimore. *Howe.*

RINODINA CONSTANS *Tuck.*
Bark of pine trees. New Baltimore. *Howe.*

ARTHONIA LECIDEELLA *Fr.*
Bark of hickory trees. New Baltimore. *Howe.*

BIATORA HYPNOPHILA *Tuck.*
Incrusting mosses. Helderberg Mts.

BUELLIA GEOGRAPHICA *Schaer.*
Rocks. Summit of Mt. Marcy and of Mt. Whiteface.

CALICIUM SUBTILE *Pers.*
On old hemlock trunks. Helderberg Mts.

CALICIUM CURTISII *Tuck.*
Bark of sumach, *Rhus typhina.* Helderberg Mts.

MYCOPORUM PYCNOCARPUM *Tuck.*
Bark of trees. New Baltimore. *Howe.* Sandlake.

Algæ.

CHORDA LOMENTARIA *Lb.*
Rocks near low tide limits. Long Island Sound at Green port and Orient. July.

DESMARESTIA ACULEATA *Lamour.*
Flushing Bay. March. *G. B. Brainerd.*

ELACHISTA FUCICOLA *Fr.*
On Fuci. Long Island Sound at Greenport and Plum Island.

POLYSIPHONIA SUBCONTORTA *n. sp.*
Tufts rigid, two to three inches high, loosely entangled, dark red; filaments slender, naked below, alternately and subdistantly branched above; branches short, subequal, naked at the base, much branched above and expanded into a rigid, subsquarrose bushy tuft of ramuli which are subfusiform and more or less curved or contorted; tubes four, surrounding a small central one; articulations of the leading filaments six to ten times, of the branches two to four times their breadth, those of the ramuli shorter than broad; tetraspores in the swollen part of the ramuli.

The filaments are about as thick as hog bristles, nearly equal in thickness throughout, constituting a leading stem, with its

articulations distinct and very long toward the base, and giving out its branches, which are four or five lines long, at intervals of three or four lines. The plant becomes blackish in drying, and does not adhere closely to paper. In size, consistency and coloration, this species resembles *P. fastigiata*, but in ramification, number of tubes, length of articulations, etc., it is far removed from that species.

Rocks near low-water mark. Long Island Sound at Greenport and Orient. July.

NEMALION MULTIFIDUM *J. Ag.*

Rocks near low-water mark. Long Island Sound at Greenport and Orient. July.

CALLITHAMNION CRUCIATUM *Ag.*

Brooklyn Basin and Fort Hamilton. November–February. *Brainerd.*

CALLITHAMNION VIRGATULUM *Harv.*

On Zostera. Shelter Island. July.

CLADOPHORA UNCIALIS *F. Dán.*

Rocks near low-water mark. Long Island Sound at Green port and Orient. July.

CALOTHRIX CONFERVICOLA *Ag.*

On algæ. Greenport. July.

LYNGBYA FLACCA *Ag.*

Astoria. April. *Brainerd.*

HYDRODICTYON UTRICULATUM *Ag.*

Hudson River below Albany. September.

Fungi.

FAVOLUS EUROPÆUS *Fr.*

On dead branches. Fort Edward. *Howe.* Greenbush. June. It resembles *Polyporus Boucheanus.*

POLYPORUS SALICINUS, *Fr.*

On prostrate trunks of white birches. Helderberg Mts. June.

POLYPORUS ULMARIUS *Fr.*

On the trunks of birches. Sandlake. April.

HYDNUM IMBRICATUM *L.*

Ground in open woods and groves. New Baltimore. *Howe.* Sandlake. July and August. Edible.

THELEPHORA LACINIATA *Pers.*

Mossy marshy places. Sandlake.

STEREUM CORRUGATUM *Berk.*

On dead saplings. North Greenbush and Knowersville. June.

CLAVARIA FUSIFORMIS *Sow.*

Utica. *A. S. Johnson.* Poughkeepsie. *W. R. Gerard.*

CLAVARIA PISTILLARIS *L.*

Poughkeepsie. *Gerard.*

TULOSTOMA FIMBRIATUM *Fr.*

Sandy soil. Center. May.

LYCOPERDON CÆLATUM *Bull.*

Grassy ground. West Albany. June. Edible.

LYCOPERDON GIGANTEUM *Batsch.*

Pastures. Bethlehem and Greenbush. October. Edible. The edible qualities of this magnificent fungus, though highly extolled, have been by no means overestimated. It affords a most palatable and nutritious diet; it is free from the attacks of insects, grows to a large size, and is easily known by its brown surface cracking into rather large angular areas. It should be procured for the table while the flesh is yet white. It is to be regretted that it is not more common, and it is desirable that efforts should be made to cultivate it. (Plate 1, fig. 1).

GEASTER SACCATUS *Fr.*

On the ground among leaves and woods. Helderberg Mts. June.

LEOCARPUS VERNICOSUS *Lk.*

Bark of hemlock trunks. Helderberg Mts. June.

DIDYMIUM CINEREUM *Fr.*

On stems of grass. Center. June.

ARCYRIA DIGITATA *Schw.*

On dead wood. Greenbush. June.

STEMONITIS OBLONGA *Fr.*

On living stems of bladder nut, *Staphylea trifolia.* Helderberg Mts. June.

DIACHEA ELEGANS *Fr.*

Sticks and leaves, either living or dead, on or near the ground. Buffalo. *Clinton.* Sandlake. August.

CYATHUS STRIATUS *Hoffm.*

Poughkeepsie. September. *Gerard.* Buffalo. *Miss Mary L. Wilson.*

LEPTOSTROMA LITIGIOSUM *Desm.*

Dead stems of *Pteris aquilina.* Greenbush. May.

LEPTOSTROMA FILICINUM *Fr.*

Dead stems of *Pteris aquilina.* Sandlake. April.

SPHÆRONEMA SPINA *B. & C.*

Dead branches of ash trees, *Fraxinus Americana.* Sandlake and Greenbush. May.

DIPLODIA MORI *Berk.*

Dead branches of mulberry, *Morus rubra.* Greenbush. May.

SPHÆROPSIS CANDOLLEI *B. & Br.*

Leaves of box, *Buxus sempervirens.* New Baltimore. *Howe.*

SEPTORIA PLANTAGINICOLA *B. & C.*

On leaves of plantain, *Plantago lanceolata.* New Baltimore. *Howe.*

SEPTORIA LIRIODENDRI *B. & C.*

Leaves of the tulip tree, *Liriodendron Tulipifera.* Sandlake. August.

SEPTORIA RUBI *B. & C.*

Leaves of the low blackberry, *Rubus Canadensis.* Common. July, October.

SEPTORIA PYRI *Cast.*

Leaves of apple trees, *Pyrus Malus.* New Baltimore. *Howe.*

SEPTORIA VITIS *B. & C.*

Leaves of grape vine. New Baltimore. *Howe.* Greenport. July.

SEPTORIA ŒNOTHERÆ *B. & C.*

Leaves of *Œnothera biennis.* Common. July.

SEPTORIA DESTRUENS *Desm.*

Leaves of mallows, *Malva rotundifolia.* New Baltimore. *Howe.* West Albany. June.

SEPTORIA SANGUINEA *Desm.*

Leaves of cherry trees. New Baltimore. *Howe.* Riverhead. July.

SEPTORIA VIRIDE-TINGENS *Curtis in lit. n. sp.**

Spots obscure, vague, confluent, mostly tinged with green; perithecia very abundant, minute, of a waxy appearance, dull amber colored, rarely becoming black; spores thread-like, not septate, $\frac{1}{1000}'$—$\frac{1}{800}'$ long.

On leaves of the wild leek, *Allium tricoccum.* Helderberg Mts. May.

The leaves attacked by this parasite turn yellow as if dying, with a motling, in a confused manner, of a dull green. The perithecia are more abundant on these greenish spots, but not at all limited to them, for they occur upon nearly the whole of the upper surface of the leaf and sparingly on the lower surface. The larger spots often have an arid central space, either wholly or partially retaining the greenish border.

STILBOSPORA MAGNA *Berk.*

Dead branches of ash trees. West Albany. June.

CYTISPORA CARPHOSPERMA *Fr.*

Fallen twigs of plum trees. New Baltimore. *Howe.*

CONIOTHECIUM TORULOIDEUM *B. & C.*

Dead branches of willows. Albany. May.

SPILOCÆA POMI *Fr.*

On apples. Common.

AREGMA MUCRONATUM *Fr.*

Leaves of rose bushes. New Baltimore. *Howe.* Green bush. October.

The specimens of Dr. Howe, as well as those of my own collecting, have the spores 8—10-septate, not 5—7-septate, as described. Still I hesitate to consider them any thing more than an American variety of the species.

TRIPHRAGMIUM CLAVELLOSUM *Berk.*

Leaves of sarsaparilla, *Aralia nudicaulis.* Jordanville and North Elba.

---

* This, and other names similarly referred, were given by Rev. M. A. Curtis, to whom specimens were sent for identification; but, having drawn up the descriptions myself, I must be responsible for their accuracy.

PUCCINIA CRYPTOTÆNIÆ *n. sp.*

Spots indistinct, scarcely discolored; sori minute, subcircinating, at length subconfluent; spores about $\frac{1}{800}'$ long, $\frac{1}{1500}'$ broad, irregular, with a slight blunt point or umbo at the apex; pedicel very short.

Under surface of leaves of *Cryptotænia Canadensis*. North Greenbush. June.

PUCCINIA UMBELLIFERARUM *DC.*

Leaves of various umbelliferous plants. North Greenbush. June. New to this country.

PUCCINIA CIRCÆÆ *Pers.*

Leaves of *Circæa Lutetiana* and *C. alpina*. Common. August.

PUCCINIA HELIANTHI *Schw.*

Leaves of *Helianthus divaricatus*. Albany. September.

PUCCINIA XANTHII *Schw.*

Leaves of the cocklebur, *Xanthium strumarium*. West Albany. September.

PUCCINIA VIOLARUM *Lk.*

Leaves of violets. West Albany. September.

PUCCINIA COMPOSITARUM *Schl.*

Leaves of Canada thistle, *Cirsium arvense*. Sandlake. August.

PUCCINIA TIARELLÆ *B. & C.*

Leaves of *Tiarella cordifolia*. Sandlake and North Elba. August and September.

PUCCINIA ASTERIS *Schw.*

Leaves of various species of Aster. Sandlake and North Elba. July and August.

PUCCINIA ANEMONES *Pers.*

Leaves of *Anemone nemorosa* and *Thalictrum Cornuti*. Greenbush and Center. May–August.

PUCCINIA CORONATA *Corda.*

Leaves of oats. North Greenbush. July.

PUCCINIA MESOMAJALIS *B. & C.*

Leaves of *Clintonia borealis*. North Elba. August.

PUCCINIA PECKIANA *Howe n. sp.*

Spots small, concealed by the tomentum of the leaf, yellowish and confluent on the opposite side; spore clusters small, scattered plentifully over the lower surface of the leaf, partly concealed by its tomentum; spores broadly elliptical, rarely subpyriform, scarcely constricted in the middle, brown, $\frac{1}{700}'$ to $\frac{1}{500}'$ long, $\frac{1}{1000}'$ broad, pedicel short, separable.

On leaves of cultivated *Rubus occidentalis*. New Baltimore. August. *Howe.*

Many of the spores, when scraped from the leaf and placed under the microscope, will be seen to have no pedicel, or only a slight remnant of one; others not yet mature have it entire.

PUCCINIA ACUMINATA *n. sp.*

Spots orbicular, purplish; spore clusters confluent, the larger ones forming a circle about a free central space, surrounded by the ruptured epidermis of the leaf; spores oblong, constricted in the middle, pointed at the apex; pedicel shorter than, or equaling the spore, which is $\frac{1}{500}'$ or more in length, and about $\frac{1}{1500}'$ broad.

On the lower surface of leaves of *Cornus Canadensis*. Sandlake and North Elba. August.

The acumination at the apex of the spore is often oblique, sometimes very abrupt and short, sometimes quite long and almost beak-like. Related to *P. Waldsteiniæ*.

PODISOMA MACROPUS *Schw.*

Branches of *Juniperus Virginiana*. Helderberg Mts. and Bethlehem. May.

UREDO AZALEÆ *Schw.*

Leaves of *Azalea nudiflora*. Sandlake. August.

UREDO VACCINIORUM *Johnst.*

Leaves of *Vaccinium corymbosum*. New Baltimore. *Howe.* West Albany. September.

UREDO ARI-VIRGINICI *Schw.*

Leaves of *Arisæma triphyllum* and *Peltandra Virginica*. Common. July.

UREDO CHÆROPHYLLI *Schw.*

Leaves of sweet cicely, *Osmorrhiza brevistylis*. N. Greenbush and Guilderland. June and July.

UREDO CICHORACEARUM *Lev.*

Leaves of dandelion, *Taraxacum Dens-leonis*. New Baltimore. *Howe.* Greenbush. May–August.

UREDO FILICUM *Desm.*

On ferns. North Elba. August.

UREDO PUSTULATA *Pers.*

Leaves of *Epilobium hirsutum.* Albany. September.

TRICHOBASIS HOWEI *n. sp.*

Spore clusters scattered or subconfluent, hypogenous, surrounded by the ruptured epidermis, from one-half to one line in diameter; spores brown, subglobose, roughened with slight indentations, $\frac{1}{1200}' - \frac{1}{1000}'$ in diameter.

On leaves of the milkweed, *Asclepias Cornuti.* North Greenbush. September.

The spore clusters are sometimes sparingly, sometimes profusely scattered over the under surface of the leaf, or over a part of it. The spores are sometimes a little longer than broad, sometimes subpyriform, and occasionally furnished with a slight pedicel.

LECYTHEA OVATA *Strauss.*

Leaves of *Populus grandidentata.* Greenbush. September.

LECYTHEA CYLINDRICA *Strauss.*

Leaves of *Populus monilifera.* Albany. September.

LECYTHEA GYROSA *Berk.*

On the upper surface of leaves of *Rubus hispidus.* Sandlake. August.

UROMYCES MACROSPORA *B. & C.*

Leaves of *Lespedeza capitata.* Albany. September.

UROMYCES LIMONII *Lev.*

Leaves of sea lavender, *Statice Limonium.* Greenport. July.

POLYCYSTIS RANUNCULACEARUM *Desm.*

Leaves of the liverwort, *Hepatica acutiloba*, and of *Anemone Pennsylvanica.* Helderberg Mts. and Greenbush. May and June. New to this country.

RAVENELIA GLANDULIFORMIS *B. & C.*

Leaves and stems of *Tephrosia Virginiana.* Center. October.

ÆCIDIUM EPILOBII *DC.*

Leaves of the evening primrose, *Œnothera biennis.* West Albany. July.

ÆCIDIUM AROIDATUM *Schw.*

Leaves of Indian turnip, *Arisæma triphyllum.* Common. June.

ÆCIDIUM CLAYTONIATUM *Schw.*

Leaves of the Spring beauty, *Claytonia Caroliniana.* Knowersville. May.

ÆCIDIUM QUADRIFIDUM *DC.*

Radical leaves of the wind flower, *Anemone nemorosa.* Center. May. New to this country.

ÆCIDIUM GERANII *DC.*

Leaves of *Geranium maculatum.* North Greenbush. June.

ÆCIDIUM IMPATIENTIS *Schw.*

Leaves of *Impatiens pallida.* Helderberg Mts. July. Poughkeepsie. *Gerard.*

ÆCIDIUM VIOLÆ *DC.*

Leaves of violets. West Albany. June.

ÆCIDIUM FRAXINI *Schw.*

Leaves of ash trees, *Fraxinus Americana.* Bethlehem. June.

ÆCIDIUM OROBI *DC.*

Leaves and petioles of white clover, *Trifolium repens.* Sandlake. September.

ÆCIDIUM RANUNCULI *Schw.*

"*A Ranunculi* (abortivi). Frequens in foliis rotundis radicalibus, expers fere macula."—*Syn. Fung. Car. Sup.* p. 41.

Spots none, the upper surface of the leaf rugose; peridia sub-crowded or loosely scattered over the lower surface, short; spores orange subglobose, $\frac{1}{1500}'$ in diameter; spermogonia abundant, scattered over the lower surface of the same or of different leaves.

On the radical leaves, rarely on the stem leaves of *Ranunculus abortivus.* Greenbush. May.

ÆCIDIUM PODOPHYLLI *Schw.*

Spots large, subconfluent, yellow, not always thickened; peridia very short, hypogenous, crowded; spores bright orange, subglobose, $\frac{1}{1200}'$—$\frac{1}{1000}'$ in diameter; spermogonia few, scattered on the upper suface.

On leaves of the mandrake, *Podophyllum peltatum*. Bethlehem. June.

The spots occur most often at or near the base of the leaf lobes, where they are frequently confluent.

ÆCIDIUM PUSTULATUM *Curtis in lit., n. sp.*

Spots small, yellowish, sometimes stained with red, thickened, often concave above, convex below; peridia short, subcrowded, often forming a circle about a free central space; spores pale orange, subglobose, $\frac{1}{1500}'-\frac{1}{1200}'$ in diameter.

On leaves of toad flax, *Comandra umbellata*. Center. June.

ÆCIDIUM ŒNOTHERÆ *n. sp.*

Spots orbicular, scarcely thickened, reddish purple, sometimes stained with yellow; peridia short, crowded, generally with a small free central space; spores pale orange, subglobose, small, $\frac{1}{2000}'$ in diameter.

On leaves of the evening primrose, *Œnothera biennis*. Knowersville. June.

Not unfrequently a reddish purple dash extends from the spot to the margin of the leaf. The cups sometimes occur sparingly on the upper surface of the leaf. The free central space appears umbilicus-like, and, when present, is a noticeable feature.

ÆCIDIUM MYRICATUM *Schw.*

Spots dark red, much thickened, scattered, very variable in size and shape, often angular; peridia short, subimmersed, scattered or subcrowded; spores very bright orange, subglobose, large, $\frac{1}{1000}'-\frac{1}{800}'$ in diameter; spermogonia on the upper surface.

On leaves of the wax-myrtle, *Myrica cerifera*. Riverhead. July.

The white cups, filled with brilliant orange colored spores, and sitting upon their dark red or chestnut colored bed, present a beautiful appearance. A few cups sometimes occur on the upper surface. Small spots with but two or three cups have the subiculum distinctly thickened. The species is related to *Æcidium Berberidis*, but is distinguished by its shorter cups and larger spores. I have not found it growing on the petioles of the leaves. After a considerable time the spores fade to a pale yellow.

ÆCIDIUM LIMONII *n. sp.*

This is a species closely related to the preceding one, occurring in thickened spots on the leaves (and their midribs) of *Statice Limonium*, at Greenport. The cups occur upon both surfaces of the leaf, but more sparingly on the upper surface.

Our specimens were too old, when collected, for a full description.

ÆCIDIUM MACROSPORUM *n. sp.*

Spots small, orbicular, yellowish, not thickened; peridia elongated, cylindrical, few, generally forming a circle about a free central space; spores yellow or pale orange, minutely roughened, nearly globose, very large, $\frac{1}{600}'-\frac{1}{500}'$ in diameter; spermogonia numerous, distinct, on the upper surface of the leaf.

On leaves of *Smilax rotundifolia*. Riverhead. July.

There is seldom more than one spot on a leaf, and generally not more than one or two on a plant. The species is quite distinct from *Æcidium Smilacis* Schw., and is related to *Æcidium Hydnoideum* B. & C., from which it differs in its larger spores, fewer cups growing close to the margin of the spot, and in its more distinct spermogonia.

ÆCIDIUM CLEMATITIS *Schw.*

On virgin's bower, *Clematis Virginiana*. New Baltimore. *Howe.*

ILLOSPORIUM CARNEUM *Fr.*

On lichens, *Peltigera aphthosa*. Helderberg Mts.

SPOROCYBE PERSICÆ *Fr.*

On the bark of peach trees. New Baltimore. *Howe.* Also on the wild cherry tree, *Prunus Pennsylvanica*. Sandlake. August.

HELMINTHOSPORIUM TIARA *B. & R.*

Dead branches on the ground. Greenbush. May.

MACROSPORIUM CHEIRANTHI *Fr.*

On dead herbs. Common. May and June.

BOTRYTIS VITICOLA *B. & C.*

Leaves of grape vines. Shelter Island. July.

STREPTOTHRIX ATRA *B. & C.*

On bark of *Juniperus Virginiana*. Bethlehem. June.

FUSISPORIUM BUXI *Fr.*

Leaves of box, *Buxus sempervirens*. New Baltimore. *Howe.*

FUSISPORIUM MINIATUM *B. & C.*

On sap-moistened stumps of deciduous trees. Helderberg Mts. June.

HELVELLA INFULA *Schæff.*
Old trunks and stumps. Catskill Mts. October. Edible.

MITRULA PALUDOSA *Fr.*
On decaying wood and sticks in damp places. Sandlake. August.

LEOTIA LUBRICA *Pers.*
Mossy ground in woods. Sandlake and North Elba. Aug.

PEZIZA COCHLEATA *L.*
Ground in woods. Helderberg Mts. and Greenbush. June.

PEZIZA COCCINEA *Jacq.*
Half buried sticks. Sandlake and Helderberg Mts. April and May.

PEZIZA NIGRELLA *Pers.*
Ground in pine woods. Sandlake. April.

PEZIZA FLOCCOSA *Schw.*
Sticks and branches on the ground. Greenbush. July.

PEZIZA AURANTIA *Fr.*
About the roots of stumps. Greenbush. October. A showy species.

PEZIZA GRANULATA *Bull.*
In flower pots. Buffalo. March. *G. W. Clinton.*

PEZIZA ANOMALA *Pers.*
On dead branches of the water beech, *Carpinus Americana.* Bethlehem. May.

PEZIZA VIRGINEA *Batsch.*
Dead sticks. Greenbush. July.

BULGARIA RUFA *Schw.*
Ground among leaves in woods. Sandlake. August.

RHIZINA UNDULATA *Fr.*
Ground in woods. Adirondack Mts. August.

TYMPANIS PICASTRA *B. & C.*
Dead trunk of red maple, *Acer rubrum.* Sandlake. April.

PATELLARIA CONGREGATA *B. & C.*
On chestnut log. Moreau. *Howe.*

Glonium stellatum *Muhl.*
Rotton stumps in woods. Helderberg Mts. May.

Hysterium vulvatum *Schw.*
Dead branches of poplar trees, *Populus tremuloides.* Albany. June.

Hysterium Fraxini *Pers.*
Dead branches of ash trees. Greenbush. May.

Hysterium Rubi *Pers.*
Dead stems of raspberry, *Rubus strigosus.* Greenbush. June.

Labrella Pomi *Mont.*
Skin of apples. New Baltimore. *Howe.*

Cordyceps militaris *Fr.*
On dead pupæ. Sandlake. August.

Cordyceps purpurea *Fr.*
On panicles and spikes of grasses and rye. Common. Sterile. This is the well-known *ergot.* Spore-bearing specimens are rarely found.

Hypocrea lateritia *Fr.*
On the gills of *Lactarius uvidus.* North Elba. August.

Hypoxylon coprophilum *Fr.*
On dung of cows. New Baltimore. *Howe.*

Diatrype haustellata *Fr.*
On old trunks of water beech, *Carpinus Americana.* Bethlehem. May.

Diatrype virescens *Schw.*
Dead branches of the beech, *Fagus sylvatica.* Sandlake. April.

Diatrype Duriæi *Mont.*
Dead branches of poison sumach, *Rhus venenata.* Guilderland. May.

Melogramma Quercuum *Fr.*
Dead twigs of oak. Center. June.

Sphæria aquila *Fr.*
Fallen branches. Greenbush. May.

SPHÆRIA ELONGATA *Fr.*

Dead branches of the locust tree, *Robinia Pseudacacia*. Greenbush. May.

SPHÆRIA CONFLUENS *Fr.*

Dead branches of poplars. Sandlake. April.

SPHÆRIA DOLIOLUM *Pers.*

Dead stems of herbs. Common. May.

SPHÆRIA GRAMINIS *Pers.*

Leaves of grasses. Common. September.

SPHÆRIA SPRAGUEI *B. & C.*

Bark of pine trees, *Pinus Strobus*. West Albany. May.

SPHÆRIA MORBOSA *Schw.*

On the branches of plum and cherry trees. Very common and injurious. This fungus is commonly called "*black knot.*" It is apparently native on our indigenous cherry trees, and, having escaped from them, it has attacked the cultivated one (*Prunus Cerasus*) in some localities with such vigor as to destroy it, and make "cherry raising" an unprofitable business. Cutting away the affected branches and burning them, early in the season, before the fungus has matured its seed, has been recommended. This should be done as early as May, for I have found the spores developed in June. Among our indigenous species of cherry trees, I have found the choke cherry (*Prunus Virginiana*) and the wild cherry (*Prunus Pennsylvanica*) especially liable to the attacks of this fungus. This pest is scarcely less injurious to plum trees.

DEPAZEA KALMICOLA *Schw.*

Leaves of the laurel, *Kalmia latifolia*. Greenport and Catskill Mountains. July, October.

DEPAZEA PYROLÆ *Fr.*

Leaves of prince's pine, *Chimaphila umbellata*. Helderberg Mts. May.

DEPAZEA SMILACICOLA *Schw.*

Leaves of smilax. Riverhead. July.

DEPAZEA FRAXINICOLA *Curtis in lit. n. sp.*

Spots arid, suborbicular, sometimes with a brownish border, one-fourth to one-half an inch in diameter; perithecia black: those well developed are concave above, with a slight central elevation; asci subfusiform, containing four to eight spores apiece: spores densely packed in the asci, oblong or narrowly ellip-

tical, having a little nucleus near each end, $\frac{1}{2000} - \frac{1}{1500}$ long, about one-third as wide.

On ash leaves, *Fraxinus Americana.* Albany. September.

Ascospora Podophylli *Curtis in lit. n. sp.*

Spots arid, rather small, suborbicular, numerous, brown; perithecia minute, black; spores oblong, simple.

Leaves of the mandrake, *Podophyllum peltatum.* Bethlehem. June.

Dothidea Robertiani *Fr.*

Leaves of *Geranium Robertianum.* Helderberg Mts. May and June.

Massaria vomitoria *B. & C.*

Dead branches of ash and red maple. Sandlake and Greenbush. May and June.

Erysiphe fuscata *B. & C.*

Leaves of *Bidens connata.* North Greenbush. September. A Sphærotheca.

Erysiphe lamprocarpa *Lev.*

Leaves of species of Aster, Solidago, Artemisia, Inula, etc. Common. September.

Erysiphe Vaccinii *Schw.*

Leaves of trailing arbutus, *Epigæa repens.* New Baltimore. *Howe.* Sandlake. September.

Uncinula adunca *Lev.*

Leaves of willows. Very common. September.

Microsphæria Friesii *Lev.*

Leaves of the lilac, *Syringa vulgaris.* Albany. September.

Microsphæria Vaccinii *n. sp.*

Conceptacles small, globose; sporangia six to eight, ovate, each containing four to six elliptical spores; appendages ten to twenty, white, very long, length more than twice the diameter of the conceptacles.

On both sides of leaves of *Vaccinium vacillans.* West Albany. October.

Eurotium herbariorum *Lk.*

On dried plants. Albany.

* ORDER—AGARICINI.

Hymenium inferior, spread over the surface of distinct gill-like processes, which are easily divisible into two plates. *Berk. Outl.* p. 89.*

The Agaricini are cellular, flowerless plants, consisting essentially of an expanded suborbicular part (*pileus or hymenophorum*) bearing on its lower surface thin vertical plates (*lamellæ or gills*) radiating from a central or marginal point, and either attached to its place of growth by a part of its margin, or supported upon a central or lateral stem (*stipe*). The lamellæ or gills consist of two separable membranes (*hymenium*) applied, one on either side, to an intermediate stratum (*trama*) and producing minute reproductive bodies (*spores*) on their exterior surfaces.† They may be attached by their inner extremity to the stem and extend a little distance down it (*decurrent*), nearly or quite reach the stem without being attached to it (*free*), or terminate at a considerable distance from it (*remote*). They may have the edge broadly curved, so that they appear bent like a bow (*arcuate*), or shortly curved near the inner extremity, and at the same time be slightly decurrent, so as to appear hook-like (*uncinate*), or they may have the edge rough with little projections or teeth (*serrate*), or simply notched near the inner extremity (*emarginate*).

The stem may be of the same diameter in every part (*equal*), or be thicker in the middle, tapering toward either extremity (*ventricose*). It may be hollow, or have its center of different texture from its exterior (*stuffed*), the center in such case being either cottony or spongy, or it may be of uniform texture throughout its diameter (*solid*). Its base may be coated or fringed with minute entangled filaments (*mycelium*), the immediate product of the spores, while toward its top there is often seen a flabby, lacerated, membranaceous ring (*annulus*) girding it. Sometimes the young plant is completely enveloped by a submembranaceous wrapper (*volva*) which it bursts as it increases in size, and in other cases the envelope may be only partial, and even composed of little flocks or fibres which are scarcely conspicuous. Both the stem and the pileus may be wholly or partially sprinkled with fine, meal-like powder (*farinaceous*), or coated with little fibres (*fibrillose*), or rough, with distinct scales or scale-like tufts of fibres (*squamose*), which are sometimes quite minute (*squamulose*). The surface of the pileus in some species is sticky to the touch (*viscid*), in others it may be in moist weather covered with a gelatinous substance (*glutinous*). The flesh of some, when moist, presents a more watery appearance and a greater depth of coloring than

* This and the generic and subgeneric characters hereinafter given are taken from *Berkeley's Outlines of British Fungology.*

† The lamellæ are rarely branched, and in a few instances reduced to obtuse vein-like elevations.

when dry (*hygrophanous*), and in such species, in the moist state, fine, radiating, parallel lines may sometimes be seen on the margin (*striatulate*). The Agaricini comprise by far the greater number of the larger, conspicuous, umbraculiform, fleshy fungi. Individual plants are generally of short duration, growing up in a few hours or days, and decaying as rapidly as they grow. They are more abundant toward the end of the season than in the beginning, and in wet weather than in dry. In long continued dry weather, almost none can be found unless they be sought in deep wet marshes. In some seasons, therefore, they grow much more profusely than in others, and in deep woods and mountainous regions more abundantly than in open cultivated districts.

Unlike most other plants, they are seldom of a green color; red, brown, white and yellow, in an almost infinite variety of shading and blending, being the prevailing hues. The great beauty and variety of their colors, their singular and manifold forms (all, however, variations of a single type), their strangely peculiar habits, perishable nature and remarkable properties, all combine to make them objects of great interest.

Many of them afford very savory and nutritious food, but some are reputed poisonous. Some that are acrid or nauseous in the raw state become pleasant and edible by cooking. Vinegar is known to have the power of abstracting the poisonous properties of the deleterious ones, so that from these two facts it is not improbable that, with proper preparation, nearly all our species may be made edible.

SYNOPSIS OF THE GENERA.

Edge of the lamellæ obtuse ..... vii. CANTHARELLUS.
Edge of the lamellæ acute ..... A.
A. Plant fleshy, with a milky (rarely colored) juice ..... v. LACTARIUS.
A. Plant destitute of a milky juice ..... B.
B. Lamellæ of a waxy texture, with a watery juice ..... iv. HYGROPHORUS.
B. Lamellæ dissolving into an inky fluid ..... ii. COPRINUS.
B. Lamellæ dry, persistent ..... C.
C. Pileus fleshy, putrescent ..... D.
D. Trama vesiculose; spores white or yellow * ..... vi. RUSSULA.
D. Trama filamentous; spores various ..... i. AGARICUS.
D. Trama floccose; spores reddish ochre ..... iii. CORTINARIUS.
C. Pileus firm, coriaceous or subcoriaceous, persistent ..... E.
E. Lamellæ entire ..... viii. MARASMIUS.
E. Lamellæ serrate, thin ..... ix. LENTINUS.

Genus — AGARICUS *L.*

Gills membranaceous, persistent (not melting); trama filamentous, continuous with the substance of the pileus; edge acute. *Fleshy putrescent Fungi.—Berk. Outl.*

---

*The color of the spores may be determined by cutting a well-developed pileus from its stem and placing it in its natural position on white paper. In a few hours enough spores will descend upon the paper to show their color. White spores show best on black paper. Should the atmosphere be dry or the pileus thin, invert a goblet over the pileus.

The genus Agaricus is a large one, and is divided, by the color of the spores, into five series, which are again divided into sub genera, distinguished by characters of minor importance.

Series 1 — LEUCOSPORI.

Spores white, rarely whitish or yellowish.

Subgenus — Amanita.

Veil universal, distinct from the cuticle of the pileus. Hymenophorum distinct from the stem.—*Berk. Outl.*

Terrestrial species of moderate or large size, at first entirely enveloped in the volva, which is burst by the growing plant, a part being carried up by the pileus and forming evanescent patches or scattered, persistent, wart-like elevations upon its surface; the other part evanescent, or persistent, and attached to the base of the stem. The pileus at length becomes nearly horizontally expanded or slightly depressed, with the margin even or sulcate-striate. The stem is generally rather long, firm, fleshy and stuffed. The spores are subglobose. Most of the species are deemed poisonous.

SYNOPSIS OF THE SPECIES.

Stem annulate	a.
a. Margin of the pileus striate	b.
b. Volva loose, sheathing at the base, lamellæ yellow	1.
b. Volva connate, ruptured at the base into concentric scales	2.
a. Margin of the pileus even	c.
c. Volva appressed at the base	3.
c. Volva loose, forming a margin to the bulb	4.
Stem with no annulus	d.
d. Pileus smooth, volva sheathing	5.
d. Pileus warty, volva evanescent	6.
d. Pileus pulverulent, volva evanescent	7.

1. AGARICUS CÆSARIUS *Scop.*

Pileus hemispherical, then expanded, striate on the margin, naked, yellow; flesh yellow under the cuticle; lamellæ free, yellow; stipe slightly tapering upward, annulate, sheathed at the base by the volva, stuffed. Utica. *A. S. Johnson.* (v. s.)

This is one of the few edible species of this subgenus.

2. AGARICUS MUSCARIUS *L.*

Pileus at first slightly viscid, hemispherical, then convex, expanded or even slightly depressed, substriate on the margin, warty, rarely naked, red, yellow, or nearly white; flesh yellow under the separable cuticle; lamellæ free, white; stipe cylindrical or slightly tapering upward, annulate,

ovate-bulbous and concentrically scaly at the base, stuffed, farinaceous, white, rarely yellow.

Height 6′–8′, breadth of pileus 3′–5′.

Common in open woods and in pastures. August-October.

A beautiful but very variable species. Reputed poisonous, and said to possess intoxicating properties. The color of the pileus varies from orange to white, being commonly yellow, and becoming paler with age. Two varieties are worthy of mention; one, var. *minor*, with the pileus bright orange, 1′–2′ broad, lamellæ tinged with yellow, stipe yellow and not scaly at the base, occurring in woods from June to October; the other, var. *major*, very large, nearly one foot high, with the pileus 8′–10′ in diameter, and with the thick bulb above the surface of the ground, its upper part being often split into thick appressed truncate rays. I have met with this variety but once. Catskill Mountains. October.

3. AGARICUS VERNUS *Bull.*

Pileus at first ovate and slightly viscid, then expanded, smooth, with the margin even; lamellæ free; stipe stuffed, annulate, bulbous, smooth; volva sheathing, appressed.

Height 3′-6′, breadth of pileus 2′-3′.

Found in woods and open places. July. Sag Harbor and Sandlake.

It has a strong odor and is white throughout. The stem is sometimes lacerated.

4. AGARICUS PHALLOIDES *Fr.*

Pileus at first campanulate, and when moist slightly viscid, then expanded with the margin even, smooth, or innately fibrillose; lamellæ white, free; stipe stuffed, annulate, whitish or pallid, bulbous, the bulb large, flattened above, and narrowly margined with the remains of the volva.

Height 4′-6′, breadth of pileus 2′-4′.

In woods. North Elba, West Albany, and Catskill Mountains. August–October.

Pileus white, brown or blackish-brown. I have seen no specimens with a greenish pileus, though such are not rare in Europe. White specimens are easily confounded with the preceding, if the character of the volva and bulb is not noticed. Fragments of the veil may be found on the young pileus.

5. AGARICUS VAGINATUS *Bull.*

Pileus thin, sulcate-striate on the margin, at first ovate campanulate, then expanded, smooth; lamellæ white, free, rather broad and rounded at the outer extremity; stipe whitish, slightly tapering upward, minutely squamulose or

mealy, hollow or loosely stuffed with cottony fibres, not annulate, sheathed at the base with the persistent volva.

Height 3′–6′ breadth of the pileus 1′–4′.

Common in woods. August.

The color of the pileus is various, but commonly a livid or grayish-brown. I have seen the white variety, *A. nivalis* Grev., on sterile grassy banks in Keene, Essex county. Patches of the torn volva may be seen on the young pileus.

6. AGARICUS CECILIÆ *B. & Br.*

Pileus sulcate-striate on the margin, grayish-brown, warty, at first ovate and slightly viscid, then broadly convex, expanded or even slightly depressed; lamellæ broad, white, free; stipe white, slightly tapering upward, minutely squamulose, hollow or stuffed with cottony fibres, not annulate; the volva soon disappearing.

Height 4′–6′, breadth of pileus 2′–3′.

Grassy borders of a grove at Greenport. July.

This species is closely related to the preceding one, but easily separated by the warty pileus and evanescent basal portion of the volva. I do not find the stem more densely stuffed than it is in *A. vaginatus*.

7. AGARICUS FARINOSUS *Schw.*

Pileus sulcate-striate on the margin, livid-brown, pulverulent coated; lamellæ whitish, free; stipe pallid, cylindrical, becoming hollow, farinaceous, subbulbous, not annulate; volva evanescent or none.

Height 2′, breadth of the pileus 1′–2′.

In open woods. Greenbush. July.

The powdery or dust-like coating of the pileus is more abundant on the disk, where it is collected in heaps or patches capable of being rubbed off. The plant might easily be mistaken for a species of *Russula*.

Subgenus—Lepiota.

Veil universal, concrete with the cuticle of the pileus. Hymenophorum distinct from the stem.—*Berk. Outl.*

The species of this subgenus are generally smaller than those of the preceding, and the most of them have the pileus rough with tufts or scales formed by the breaking up of the cuticle with the concrete veil. This frequently gives them a beautiful variegated appearance.

SYNOPSIS OF THE SPECIES.

Pileus scaly	a.
a. Annulus movable	8.
a. Annulus not movable	b.

b. Scales acute, erect ..... 9.
b. Scales appressed ..... c.
c. Stipe with an elongated bulbous base ..... 10.
c. Stipe not bulbous, floccose ..... 11.
c. Stipe not bulbous, smooth ..... 12.
Pileus smooth, annulus large ..... 13.
Pileus granulose, annulus small ..... 14.

*8. AGARICUS PROCERUS *Scop.*

Pileus at first ovate, then broadly convex or expanded, strongly umbonate,† spotted with broad brownish scales, the margin deflexed, fibrillose; lamellæ remote, whitish or flesh colored; stipe long, cylindrical, hollow, bulbous, squamulose, annulate with a firm movable ring.

Height 6′–10′, breadth of pileus 3′–5′.

Fields, pastures and roadsides. Utica. *A. S. Johnson.* West Albany. Aug.–Sept.

An edible species of a dingy whitish color.

9. AGARICUS ACUTESQUAMOSUS *Weinm.*

Pileus convex, obtuse or very broadly subumbonate, rough with small erect acute scales which are more numerous on the disk; lamellæ narrow, free, yellowish; stipe equal, annulate, bulbous; annulus whitish, not movable.

Height 3′–4′, breadth of the pileus 2′–3′.

In a grapery at Buffalo. *G. W. Clinton.* November.

The pileus is tawny on the disk, elsewhere whitish, with subconcentrically-arranged tawny scales.

*10. AGARICUS AMERICANUS *n. sp.*

Pileus convex, distinctly umbonate, squamose, with the margin obscurely striate; lamellæ free; stipe slender, smooth, annulate, stuffed or hollow, gradually enlarged below into a long subventricose bulb-like base; annulus thin, subpersistent, fixed.

Height 3′–5′, breadth of pileus 1.5′–3′ or more.

Grassy ground by roadsides. August. Buffalo. *G. W. Clinton.*

The whole plant in drying becomes of a dull pinkish-red color. This plant was noticed in a previous report as *A. rachodes*, but upon further investigation I am satisfied it is a species distinct by its umbonate, not depressed pileus, substriate margin, fixed annulus, and peculiar elongated bulbous base.

---

* Species marked with the asterisk have been before reported, but are repeated for the sake of the description.

† Having an abrupt obtuse elevation or boss in the center.

11. AGARICUS CLYPEOLARIUS *Bull.*

Pileus subcampanulate or convex, umbonate, at first uniformly brownish-coated, then whitish, thickly set with small brownish scales, the margin sometimes obscurely striate; lamellæ white, free; stipe slender, hollow, floccose-scaly below the slight evanescent annulus.

Height 2′-3′, breadth of pileus .5′-1.5′.

In woods. North Elba. August.

Some specimens are much darker colored than others. The cuticle does not break up on the disk, which in consequence remains brown. The plant has a pleasant odor, even after it has been kept a long time in the herbarium.

*12. AGARICUS CRISTATUS *Fr.*

Pileus convex, at first reddish-brown then, from the breaking up of the cuticle, whitish, spotted with reddish-brown scales, which are larger and closer toward the disk where the cuticle is unbroken; lamellæ white, free; stipe slender, smooth, hollow, slightly bulbous, annulate; annulus at length disappearing.

Height about 2′, breadth of pileus 1′-1.5′.

Ground along the borders of woods. Guilderland. July.

This plant has a strong odor, by which, with its smooth stipe, it is best distinguished from the preceding one.

13. AGARICUS NAUCINUS *Fr.*

Pileus at first subglobose, then convex, fleshy, soft, even, smooth, white; lamellæ close, narrower toward the inner extremity, white, then dirty flesh-colored, free; stipe white, smooth, equal, stuffed, bulbous, annulate, with a rather large white ring.

Height 2′-3′, breadth of pileus 1′-3′.

Grassy places in pastures. Knowersville. September and October.

I have seen no specimens with the cuticle broken up into granules. Without observing the color of the spores, this plant might be taken for a species of *Psalliota*, especially since the lamellæ assume a brownish hue in drying.

14. AGARICUS GRANULOSUS *Batsch.*

Pileus thin, convex or subcampanulate, often umbonate, sometimes corrugated (radiately wrinkled), granulose; lamellæ white, reaching the stem, sometimes attached to it, sometimes free; stipe slender, stuffed or hollow, floccose-squamulose below the evanescent ring.

Height 1.5′-3′, breadth of pileus about 1′.

In woods and open places. August. October. Common. A variable species. Var. *Carcharius* Pers. has the pileus white and the granules darker, or almost black. Catskill Mountains.

Var. *amianthinus* Scop. has the pileus generally umbonate, with the margin at first scalloped or crenate, and the stem elongated. In mossy places in woods. North Elba. The prevailing color of the pileus is a bright ochraceous yellow. The stem is generally colored like the pileus.

III Subgenus—Armillaria.

Veil partial, annular. Hymenophorum confluent with the stem.—*Berk. Outl.*

As yet we have found but a single species of this subgenus.

*16. Agaricus melleus *Vahl.*

Pileus fleshy, expanded, sprinkled with minute, erect, hair-like scales, dull honey color; lamellæ rather broad, whitish, slightly sinuate at the inner extremity and subdecurrent; stipe nearly equal, whitish, fibrous, rarely squamose, solid, annulate.

Height 3′-6′, breadth of pileus 1′-4′.

Ground in woods and in pastures. August–October. Common.

A variable species, deemed edible, but having an acrid nauseous taste when raw.

A large solitary form, of a darker color, and with the margin striate when moist, occurs in woods; a cæspitose form grows in cleared land about the roots of stumps; and a smaller more yellow form is gregarious in grassy places.

IV Subgenus—Tricholoma.

Stem fleshy; gills with a sinus behind. Veil obsolete, or, if present, floccose, and adhering to the margin of the pileus. —*Berk. Outl.*

The species of this subgenus are mostly easily recognizable by their stout fleshy appearance and emarginate lamellæ. The pileus may be viscid, moist, or dry and scaly. Nearly all the species grow on the ground. The stem is never annulate.

Synopsis of the Species.

Pileus dry, scaly ..... a.
a. Pileus with a purplish-red tomentum ..... 17.
a. Pileus dull rufous-brown ..... 18.
a. Pileus dark livid-brown, bluish tinged ..... 19.
Pileus moist, smooth ..... b
b. Pileus subviolaceous ..... 20.
b. Pileus white ..... 21.

17. AGARICUS VARIEGATUS *Scop.*

Pileus fleshy, convex, at length expanded or slightly depressed, variegated with a red squamulose tomentum; lamellæ narrow, close, pale yellow or whitish; stipe equal, stuffed, tomentose like the pileus.

Height 2′, breadth of pileus 2′, diameter of stipe 3″-6″.

About the roots of old stumps. Albany and Sandlake. June.

The flesh of the pileus is whitish, inclining to yellow. The color of the tomentum varies in intensity. It is usually paler, as well as less dense, on the stem than on the pileus.

18. AGARICUS VACCINUS *Pers.*

Pileus fleshy, rather thin, except the disk, at first ovate-convex, then subcampanulate or expanded, generally broadly umbonate, dull reddish-brown with innate blackish fibres or scales, generally rough squamose from the breaking up of the cuticle; lamellæ whitish, at length becoming spotted and margined with dull rufous, close or subdistant, slightly or deeply emarginate; stipe concolorous with the pileus, whitish and pruinose at the top, fibrous-scaly, equal or subventricose, stuffed or hollow.

Height 2′-3′, breadth of pileus 2′-3′, diameter of stipe 4″-6″.

Ground under balsam trees in pastures. Catskill Mountains. October.

A very variable species, not agreeing rigidly with the description of *A. vaccinus*, but I am unwilling to found a new species on the slight differences exhibited by so variable a plant. Two principal forms are noticeable; one, with the pileus smooth, expanded, not umbonate, the margin smooth, marked at little intervals with slight, short, polished elevations, and the lamellæ close; the other, with the pileus convex-campanulate broadly umbonate, rimose-squamose, the margin when young slightly tomentose, and the lamellæ subdistant, often wavy and marked with little transverse lines. The latter form is the more common one. The color inclines to cinnamon-brown.

19. AGARICUS TERREUS *Schæff.*

Pileus fleshy on the disk, elsewhere rather thin, convex, then expanded, with a short broad umbo, densely squamulose, dark or livid-brown, the floccose scales blackish, often bluish tinged; lamellæ whitish, subdistant, thick, ventricose, deeply emarginate or subrounded at the inner extremity, with a slight decurrent tooth; stipe equal or slightly tapering

upward, firm, solid, fibrillose, slightly mealy-squamulose at the top, whitish or subconcolorous.

Height 1′-2′, breadth of pileus 6″-18″, diameter of stipe 2″-3″. Under pine trees. Albany. October and November.

A gregarious plant, with a meal-like flavor. The margin of the pileus sometimes has a paler appearance than the rest, from the absence or diminished density of the squamulæ.

*20. AGARICUS PERSONATUS *Fr.*

Pileus thick, fleshy, convex, even, smooth, moist, pallid or cinereous, tinged with pale violet or lilac; lamellæ close, narrow, rounded at the inner extremity, narrowed outwardly, whitish, often tinged with pink or violet; stipe stout, solid, whitish or concolorous fibrillose, slightly thickened at the base.

Height 2′-4′, breadth of pileus 2′-5′, diameter of stipe 6″ or more.

Open woods. West Albany and Catskill Mountains. October. Edible.

21. AGARICUS ALBOFLAVIDUS *n. sp.*

Pileus at first convex, with the margin incurved, then expanded or slightly depressed, moist, smooth, even, white, in exposed places becoming yellowish; lamellæ close, narrow, thin, emarginate and decurrent with a tooth; stipe whitish, equal, solid, striate-fibrillose, with a thin, tough cuticle.

Height 3′-4′, breadth of pileus 2′-3′, stipe about 3″ thick.

Ground in woods and open fields. Sandlake and North Elba. August.

The pileus is sometimes slightly and broadly umbonate.

Subgenus — Clitocybe.

Stem elastic, with a fibrous outer coat; gills decurrent, or acutely adnate.—*Berk. Outl.*

The form of the pileus in this subgenus is commonly that of an inverted cone, or, from the depression of the center in the thin species, of a funnel. The lamellæ are decurrent or acutely attached to the stem, which is of a soft or spongy texture within, and destitute of an annulus. The veil, which is marginal and more or less perceptible in the preceding subgenus, in this is seldom noticeable.

SYNOPSIS OF THE SPECIES.

Stem not hollow ..... a
a. Plant not hygrophanous ..... b.
b. Lamellæ not branched ..... c.
c. Pileus not funnel-form ..... 22.
c. Pileus funnel-form ..... 23.
b. Lamellæ (at least some of them) branched ..... d.
d. Pileus brown ..... 24.
d. Pileus yellow ..... 25.
a. Plant hygrophanous ..... e.
e. Pileus funnel-form, white ..... 27.
e. Pileus funnel-form, brown ..... 28.
e. Pileus convex or expanded ..... 29.
Stem hollow ..... f.
f. Pileus umbilicate, white ..... 30.
f. Pileus not umbilicate, plant odorous ..... 31.
f. Pileus not umbilicate, plant inodorous ..... 32.

*22. AGARICUS NEBULARIS *Batsch.*

Pileus fleshy, firm, at first convex, obtuse or subumbonate, then expanded or slightly depressed, smooth, grayish-white; lamellæ close, narrow, subarcuate, slightly decurrent, whitish; stipe thick, stuffed, concolorous, sometimes a little tapering upward.

Height 2′-4′, breadth of pileus 2′-4′, diameter of stipe 6″-12″.

Pine woods. West Albany. October.

A thick, fleshy, dingy-white or grayish species. Edible.

23. AGARICUS INFUNDIBULIFORMIS *Schœff.*

Pileus thin, fleshy, at first convex, umbonate, minutely tomentose, then funnel-form, with the margin slightly decurved, dull pale reddish-buff; lamellæ whitish, not crowded; stipe whitish or subconcolorous, soft, elastic, slightly tapering upward.

Height 2′-3′, breadth of pileus 1.5′-2′, stipe 2″-4″ thick.

Pine woods. North Greenbush and Sandlake. June.

24. AGARICUS CARNOSIOR *n. sp.*

Pileus thick, fleshy, obconic, at first convex, then plane or slightly depressed, subumbonate, brown, the margin at first involute, at length expanded, thin; lamellæ white, not crowded, some of them forked; stipe concolorous with the pileus, fibrillose, slightly tapering upward.

Height 2′-4′, breadth of pileus 1′-3′, stipe 3″-6″ thick.

Pine woods. West Albany and Sandlake. September and October.

The flesh is moist, soft and white. The plant is sometimes cæspitose. Taste pleasant.

25. AGARICUS ILLUDENS *Schw.*

Pileus fleshy, convex or expanded, smooth, generally with a small umbo; lamellæ not crowded, unequally decurrent, some of them branched, narrowed toward each end, the edge, in dry specimens, discolored; stem firm, solid, long, smooth, tapering at the base.

Height 5′-8′, breadth of pileus 4′-6′, stipe 6″-8″ thick.

Generally growing on rotten wood. Common.

The plant is of a bright saffron yellow color, and grows in dense clusters or tufts, so that the pileus is often irregular or excentric from its crowded mode of growth. The cuticle sometimes cracks in areas, and the color, when old, becomes brownish. The large bright-colored tufts form a conspicuous object, and catch the eye at a considerable distance.

27. AGARICUS ADIRONDACKENSIS *n. sp.*

Pileus thin, submembranaceous, funnel form, with the margin decurved, nearly smooth, hygrophanous, white, the disk often darker; lamellæ white, very narrow, scarcely broader than the thickness of the flesh of the pileus, crowded, long decurrent, subarcuate, some of them forked; stipe slender, subequal, not hollow, whitish, mycelio-thickened at the base.

Height 1′-3′, breadth of pileus 1′-2′, diameter of stipe 1″-2″.

Among leaves in woods. August.

I have seen this pretty species in the Adirondack region only. The lamellæ are sometimes tinged with yellow. The margin of the pileus is occasionally wavy.

28. AGARICUS POCULUM *n. sp.*

Closely related to the preceding, being of the same size and shape, but differing in being of a grayish-brown color, having the lamellæ less crowded, twice as broad, and darker colored.

Woods. North Elba and West Albany. August–October.

29. AGARICUS LACCATUS *Scop.*

Pileus thin, fleshy, convex, sometimes expanded, even or slightly umbilicate, smooth or minutely tomentose-scaly, hygrophanous, when moist, dull reddish-yellow or reddish-flesh-colored, sometimes striatulate; when dry, pallid or pale dull ochraceous; lamellæ broad, rather thick and distant, attached, not decurrent, flesh-colored; stipe slender, firm, fibrous, stuffed, equal, concolorous.

Height 1′-6′, breadth of pileus 6″-2′. Common.

June–October.

An extremely variable and abundant species occurring almost everywhere throughout the season.

30. AGARICUS BRUMALIS *Fr.*

Pileus thin, at first convex, then expanded or depressed, umbilicate, smooth, hygrophanous; lamellæ narrow, close, slightly decurrent; stipe slender, smooth, equal, hollow.

Height 1′-2′, breadth of the pileus 8″-18″, stipe 1″-2″ thick.

Pine woods. West Albany. October.

The plant is watery gray when moist, dull white when dry. I do not find it deeply funnel form.

31. AGARICUS DITOPUS *Fr.*

Pileus thin, submembranaceous, convex, rarely with a small umbo, smooth, hygrophanous, brown when young and moist, grayish-white when dry; lamellæ grayish, close, thin, attached, not decurrent; stipe slender, equal, smooth, hollow.

Height 1′-2′, breadth of pileus 6″-18″, stipe 1″-2″ thick

Pine woods. West Albany. October.

The plant has the odor and taste of new meal. I have seen no specimens with the pileus depressed.

32. AGARICUS METACHROUS *Fr.*

Separated from the preceding by its thicker, depressed pileus, its thicker, less close lamellæ, and the absence of odor.

Pine woods. West Albany. October.

Subgenus — Collybia.

Stem cartilaginous externally. Margin of pileus at first involute. Gills not decurrent.—*Berk. Outl.*

The pileus is generally convex or expanded, not obconic or depressed, as in the preceding subgenus. The lamellæ reach the stem, but are not decurrent, though sometimes emarginate as in *Tricholoma*. The stipe is firm and cartilaginous, without any annulus.

SYNOPSIS OF THE SPECIES.

Stipe with a long tapering root..... 33.
Stipe with no conspicuous root, nor with tubers..... a.
a. Stipe smooth, plant terrestrial..... 34.
a. Stipe smooth, plant lignatile..... 35.
a. Stipe not smooth, plant lignatile..... b.
b. Pileus viscid..... 15.
b. Pileus not viscid..... 36.
Stipe having small tubers at the base, pileus umbilicate..... 37.
Stipe having small bay or brown tubers, pileus umbonate..... 38.

*33. AGARICUS RADICATUS *Relh.*

Pileus thin, convex, then expanded, subumbonate, often radiately wrinkled, smooth, glutinous when moist, grayish brown; lamellæ white, subdistant, rather broad, emarginate, attached to the stipe; stipe long, firm, smooth, stuffed, slightly tapering upward, subconcolorous, having a root-like prolongation extending deep into the earth.

Height 4′-8′, breadth of pileus 2′-3′, stipe 2″-3″.

Woods and open places. Common. June–August. Edible.

34. AGARICUS DRYOPHILUS *Bull.*

Pileus fleshy, not thick, convex or expanded, rarely slightly depressed, smooth; lamellæ narrow, crowded, white, sometimes pale yellow, rounded or emarginate at the inner extremity, subfree; stipe equal, slender, smooth, hollow, concolorous, mostly mycelio-enlarged at the base.

Height 1′-2′, breadth of pileus 1′-1.5′, stipe 1″-2″ thick.

Very common in woods and pastures, growing among leaves and decaying vegetable matter. June–November.

*15. AGARICUS VELUTIPES *Curt.*

Pileus fleshy, thin on the margin, convex, sometimes irregular, smooth, very viscid, pale dull yellow with a brownish disk or bright reddish-yellow; lamellæ close, rounded behind, nearly or quite free, yellowish; stipe equal or slightly tapering upward, hollow or stuffed, generally velvety and brown, sometimes pale yellow and pruinose.

Plant cæspitose, 1′-2′ high, pileus 6″-15″ broad.

On stumps, trunks of trees, etc. April–October.

This plant was first found by me growing on a stump which had been cut close to the ground. Its pale pileus with a brownish disk, yellowish hollow stem with its pubescence scarcely perceptible, looking like a slight pruinosity, were all so unlike the characters assigned to *A. velutipes* in the description, that I was disposed to regard our plant as distinct. Further observation, however, convinces me that it is a mere variety, but one so marked that I have thought it worthy of illustration. (Plate 5, figs. 12–17.)

35. AGARICUS FAMILIA *n. sp.*

Pileus thin, hemispherical or convex, smooth, whitish, often tinged with yellow, the disk darker; lamellæ narrow, crowded, reaching the stem, rounded at the inner extremity, almost free; stipe slender, white, smooth, hollow; plant cæspitose.

Height 2′–3′, breadth of pileus 6″–12″, stipe 1″ thick.

Grows in dense tufts of individuals of various sizes, on old logs in woods. Adirondack Mountains. August.

The disk is clouded with brown. The plant becomes dark colored in drying.

36. AGARICUS STIPITARIUS *Fr.*

Pileus thin, submembranaceous, convex or expanded, umbilicate, minutely scaly; lamellæ rather broad, separating from the stem, white; stipe tough, hollow, hairy-fibrillose, slender.

Height 1′–2′, breadth of pileus 3″–6″.

On twigs, etc., under trees. Knowersville and Sandlake. July and August.

Sometimes a minute papilla is visible in the center of the umbilicus. In dry weather the pileus withers, appears thickly coated with tawny fibrous scales, and is sometimes constricted below the apex and a little striated or furrowed.

37. AGARICUS CIRRHATUS *Schum.*

Pileus thin, expanded, umbilicate or slightly depressed, white or grayish, with a faint reddish tinge; lamellæ very narrow, crowded, white, attached to the stem; stipe very slender, whitish, subflexuous, hollow, generally with little yellowish tubers at the base.

Height about 1′, breadth of pileus 1″–4″.

On decaying vegetable matter in woods and open places. Common. June–September.

38. AGARICUS TUBEROSUS *Bull.*

Closely related to the preceding, having the same size and color, but the pileus umbonate, and the tubers of a bay or brownish color. Poughkeepsie. *Gerard.* Knowersville. June.

Less common than the preceding. The last three species are easily preserved, and appear to be related to the *Marasmii.*

Subgenus — Mycena.

Stem externally cartilaginous. Margin of pileus (which is mostly campanulate) at first straight and pressed to the stem.—*Berk. Outl.*

The species are all small, slender, having the pileus thin, generally striate or striatulate, smooth, or only clothed with a few silky fibres, obtusely conical or bell-shaped. The lamellæ are seldom crowded, not strictly decurrent, but often uncinate and

attached, from which they appear subdecurrent. The stipe is smooth and hollow, often villous at the base, but not strictly bulbous. The species are subhygrophanous, with no veil, hence the stipe is never annulate.

SYNOPSIS OF THE SPECIES.

Plant neither viscid nor having a colored juice ..... a.
a. Pileus brown (fuscous) or grayish-brown ..... b.
b. Lamellæ uncinate, distinct ..... c.
c. Pileus obtusely conical or bell-shaped ..... 39.
c Pileus narrowly conical; stipe very long ..... 40.
c. Pileus convex; stipe rather short ..... 41.
b Lamellæ united at the stipe ..... 42.
b Lamellæ not uncinate ..... d.
d. Plant growing on peat moss (Sphagnum) ..... 43.
d. Plant growing on trunks of trees ..... 50.
a. Pileus purplish or lilac ..... 44.
a. Pileus yellow; lamellæ yellow ..... 45.
a. Pileus pallid, whitish, yellowish or flesh-colored; lamellæ flesh-colored .... 46.
Plant viscid; stipe yellow ..... 47.
Plant viscid; stipe not yellow ..... 48.
Plant not viscid; having a colored juice ..... 49.

*39. AGARICUS GALERICULATUS *Scop.*

Pileus obtusely conical or bell-shaped, sometimes umbonate, long striate, variable in color, but some shade of brown or cinereous; lamellæ not crowded, uncinate, decurrent-toothed, abruptly pointed at the outer extremity, venose-connected, distinct at the stipe, white or flesh-colored; stipe firm, smooth, hollow, with white filaments at the base.

Height 2′–4′, breadth of pileus 6″–18″.

On old logs, decaying sticks, etc., in woods. Common. July–October. Sometimes cæspitose.

40. AGARICUS PRÆLONGUS *n. sp.*

Pileus at first subcylindrical, then narrowly conical, inclining to bell shape, striate, blackish-brown with a plumbeous or leaden tint; lamellæ narrow, white, uncinate and slightly decurrent-toothed; stipe very long, firm, smooth, hollow, paler than the pileus, generally tinged with red, villous at the base.

Height 5′-7′, breadth of pileus 4″-8″.

Sphagnous marshes. Sandlake. June. Gregarious.

The pileus, as in most of the species of a dark brown color, becomes paler in drying and the striæ disappear.

41. AGARICUS LATIFOLIUS *n. sp.*

Pileus convex, rarely somewhat umbonate, striatulate, grayish-brown; lamellæ white, broad, uncinate, decurrent-toothed;

stipe slender, smooth, hollow, subconcolorous, white-villous at the base.

Height 1′-1.5′, breadth of pileus, 4″-6″. Stipe .5″ thick.

Under pine trees. Center. October.

A small species with quite broad lamellæ, growing among the fallen leaves of pine trees. Gregarious. (Plate 6, figures 8–14.)

42. AGARICUS COLLARIATUS *Fr.*

Pileus subcampanulate becoming convex, striatulate, brown, sometimes with a pinkish tinge; lamellæ numerous, uncinate, united at their inner extremity, whitish, sometimes with a flesh-color, sometimes with a yellowish tinge; stipe slender, rather firm, hollow, smooth, subconcolorous, villous at the base.

Height about 2′, breadth of pileus 5″-10″.

Old stumps and rotten logs in woods. Sandlake. June.

This species is distinguished from *A. galericulatus* by the lamellæ being united with each other at the stipe as if in a collar, and in not being venose-connected.

43. AGARICUS PALUSTER *n. sp.*

Pileus convex, becoming expanded, umbonate, striatulate, grayish-brown; lamellæ not uncinate, rather broad, subventricose, nearly free, sordid white; stipe slender, smooth, hollow, equal or slightly narrowed upward, villous at the base, pallid.

Height 3′-4′, breadth of pileus 5″-9″.

Growing on Sphagnum in cranberry marshes. Sandlake. June.

I have found this plant in but one locality. It is quite distinct from all other *Mycenæ* known to me, by its broadly convex or expanded umbonate pileus. The umbo is small and subacute. The pileus becomes of a whitish-gray color in drying, and appears to be covered with numerous whitish fibrils. The lamellæ reach the stem, but are slightly attached to it and easily separated from it. (Plate 5, figs. 6–11.)

44. AGARICUS PURUS *Pers.*

Pileus convex, smooth, striatulate, pinkish-purple or lilac; lamellæ rather broad, sometimes rounded, sometimes sinuated at the inner extremity, connected by numerous veins, colored like the pileus; stipe firm, smooth, hollow, concolorous; plant odorous.

Height about 2′, breadth of pileus 6″–12″.

Pine woods. West Albany and Sandlake. October.

The plant has the odor of radishes. It becomes paler in drying. I have seen no umbonate specimens.

45. Agaricus pulcherrimus *n. sp.*

Pileus subcampanulate or convex, rarely subumbonate, striatulate, dull yellow, the disk a little darker; lamellæ broad, subventricose, attached to the stem, not uncinate, yellowish; stipe slender, hollow, concolorous, white, villous at the base; plant gregarious.

Height 1′–1.5′, breadth of pileus 3″–5″.

Under pine trees. Center. October.

Related to *A. acicula*, but that has a smaller scarlet-colored pileus.

46. Agaricus subincarnatus *n. sp.*

Pileus hemispherical, convex or expanded, striatulate, of a pale yellow or flesh-colored hue, becoming whitish; lamellæ subincarnate, uncinate, decurrent-toothed; stipe slender, hollow, white-villous at the base; plant gregarious.

Height 1′-1.5′, breadth of pileus 3″-6″.

Under pine trees. Center and Sandlake. October.

Near the preceding, but at once distinguished by the color of the pileus and the form and color of the lamellæ. The latter are sometimes nearly white, but tinged with flesh-color.

*47. Agaricus epipterygius *Scop.*

Pileus bell-shaped or hemispherical, sometimes convex, striate, viscid, grayish-yellow, the disk brownish; lamellæ white or yellowish, sharply uncinate and decurrent-toothed; stipe yellow, shining, viscid, white-villous at the base.

Height 1′–2′, breadth of pileus 2″–5″.

Not rare. In woods and groves, especially of pine. October.

48. Agaricus vulgaris *Pers.*

Pileus convex or expanded, substriate, viscid, cinereous or brown; lamellæ uncinate, decurrent-toothed, white; stipe firm, hollow, viscid, grayish.

Height 1′, breadth of pileus 2″–5″.

Common in pine woods. July–October.

The pileus is described as having a small umbo or papilla. I have seen no such specimens. On the other hand, it is occasionally slightly umbilicate.

49. Agaricus sanguinolentus *A. & S.*

Pileus subcampanulate, umbonate, striatulate, brownish,

with a dark reddish tinge; lamellæ uncinate, decurrent toothed, white, tinged with pink, the edge dark vinous-red; stipe very slender, paler than the pileus, villous at the base, containing a reddish juice.

Height 1′–1.5′, breadth of pileus 3″–4″.

At the mossy base of trees. Greenbush. June.

All my specimens have the pileus umbonate, and were cæspitose, in which particulars they do not agree with published descriptions; still, I am unwilling to make a new species on such slight differences.

50. AGARICUS CORTICOLA *Schum.*

Pileus hemispherical or convex, subumbilicate, striate, brown, sometimes with a purplish tint, and sometimes having a grayish mealy appearance; lamellæ few, distant, subdecurrent, and broadly attached to the stipe; stipe short, curved, stuffed or hollow, subconcolorous.

About 6″ high, pileus 2″-3″ broad.

Among moss and lichens, on trunks of elm trees. Albany. September.

Subgenus — Omphalia.

Stem cartilaginous. Gills truly decurrent.—*Berk. Outl.*

The species of this subgenus are closely related to those of the preceding one, from which they differ chiefly in the decurrent lamellæ, which, though sometimes arcuate, are scarcely uncinate. The pileus is often umbilicate.

SYNOPSIS OF THE SPECIES.

Pileus, or stem, minutely scaly ..... a.
a. Pileus not yellow ..... 51.
a. Pileus yellow; stem smooth ..... 52.
a. Pileus yellow; stem scaly ..... 53.
Pileus smooth ..... b.
b. Stem pale yellow, short ..... 54.
b. Stem brown ..... 55.
b. Stem orange, very long ..... 56.

51. AGARICUS OCULUS *n. sp.*

Pileus thin, convex, umbilicate, generally with a small umbo or papilla in the umbilicus, minutely squamulose, dingy white, the umbilicus blackish-brown; lamellæ white, narrow, close, subarcuate; stipe whitish, minutely squamulose or furfuraceous, hollow, often curved, easily splitting.

Height 1′-2′, breadth of pileus 6″-12″, stipe 1″ thick.

On prostrate trunks in woods. Adirondack Mountains. August.

The dark colored disk is a prominent feature.

52. AGARICUS CHRYSEUS *n. sp.*

Pileus thin, convex, at length plane or slightly depressed, umbilicate, striatulate, minutely squamulose; lamellæ not crowded, rather narrow, yellow; stipe nearly smooth, stuffed or hollow, sometimes curved.

Height 1′-1.5′, breadth of pileus 8″-12″, stipe 1″ thick.

Old logs in woods. Adirondack Mountains. August.

The whole plant is yellow.

53. AGARICUS SCABRIUSCULUS *n. sp.*

Pileus thin, broadly convex or expanded, striate, yellow; lamellæ distant, broad, subtriangular, connected by numerous veins, white or pale yellow; stipe firm, yellow, minutely squamulose, stuffed or solid.

Height 1.5′-2′, breadth of pileus 6″-12″.

Mossy prostrate trunks in woods. Adirondack Mts. August.

A firm species, quite distinct from the preceding one. The numerous connecting veins between the lamellæ give a wrinkled appearance to the striated margin of the pileus.

54. AGARICUS UMBELLIFERUS *L.*

Pileus thin, fleshy on the disk, convex or expanded, obconic, subumbilicate, striate, pale yellow; lamellæ broad, distant, white, subtriangular; stipe smooth, solid, often curved, concolorous.

Height 1′, breadth of pileus 6″-8″.

Mossy places in swamps, and in vegetable mold on the top of high mountains. North Elba and Mts. Marcy and Whiteface. August.

A fragile species, soon decaying when collected. The color is said to be variable.

*55. AGARICUS CAMPANELLA *Batsch.*

Pileus thin, convex, umbilicate, smooth, striatulate, hygrophanous, dull reddish-yellow; lamellæ narrow, yellowish, venose-connected, arcuate; stipe slender, firm, hollow, often curved, brown, a little paler at the top, tawny-villous at the base.

Height 1′-1.5′, breadth of pileus 4″-12″.

On rotten logs and stumps in woods and open places. May–October. Very common.

56. AGARICUS FIBULA *Bull.*

Pileus thin, convex, umbilicate, smooth, yellow or pale orange, striatulate; lamellæ narrow, arcuate, long decurrent, whitish; stipe elongated, slender, smooth, hollow, concolorous.

Height 1′-2′, breadth of pileus 1″-3″.

On mossy ground in fields and groves. June–October. Common.

The pileus becomes brighter colored in drying.

Subgenus — Pleurotus.

Stem eccentric, lateral or wanting. Mostly growing on wood.—*Berk. Outl.*

In this subgenus the pileus is either destitute of a stem or has it attached to the margin or to some point outside of the center. The texture is more firm, the plant of slower growth and longer duration than in any of the preceding subgenera.

SYNOPSIS OF THE SPECIES.

58. AGARICUS SULFUREOIDES *n. sp.*

Pileus rather thin, fleshy, convex, umbonate, subsquamulose or smooth, sulphur-yellow; lamellæ moderately close, rather broad, rounded or slightly emarginate at the inner extremity, easily separating from the stipe, pale yellow; stipe firm, equal, slightly fibrillose, stuffed or hollow, generally curved and eccentric, rarely central, a little mealy-tomentose at the top.

Height 1′-1.5′, breadth of pileus 1′-2′, stipe 2″-3″ thick.

On old logs in woods. Catskill Mountains. October.

The pileus becomes paler in drying. The minute scales are brown, but often wanting. It resembles *A. sulfureus*, but from its firm texture and eccentric stipe it must be placed with the *Pleuroti*.

59. AGARICUS SEROTINOIDES *n. sp.*

Pileus fleshy, thick, firm, convex above, minutely punctate-tomentose, slightly viscid when young or moist, the margin usually incurved; lamellæ close, determinately ceasing, some of them forked, white or yellowish; stipe lateral, short, thick, scarcely distinct when viewed from above, yellow and tomentose beneath.

Plant cæspitose-imbricating or solitary, 1′-3′ broad. Trunks of deciduous trees in woods. Common. October and November.

The color of the pileus is a peculiar grayish-brown, variously modified with yellow and greenish or olivaceous hues. The edge of the lamellæ is sometimes discolored and slightly floccose.

Series 2 — Hyporhodii.

Spores salmon-colored.

Subgenus — Pluteus.

Hymenophorum distinct from the stem. Veil none.—*Berk. Outl.*

In this subgenus the lamellæ are generally free, and at length flesh-colored, the pileus convex and the stem solid.

Synopsis of the Species.

Pileus brown; lamellæ narrower toward the stipe..... 60.
Pileus brown; lamellæ broader toward the stipe..... 61.
Pileus not brown, more or less yellow..... 62.

60. Agaricus cervinus *Schæff.*

Pileus fleshy, at first campanulate, then expanded, fibrillose, grayish-brown, sometimes splitting into cracks or chinks; lamellæ moderately distant, rather broad, a little narrowed toward the stipe, free, white, changing to flesh-color; stipe equal or slightly tapering upward, firm, solid, striated-fibrous, blackish-brown or whitish.

Height 3′-6′, breadth of pileus 2′-4′, stipe 3″-6″ thick.

On or about old stumps in open places, groves and borders of woods. Common. May–October.

Sometimes the stipe is nearly smooth and white, at others it is quite dark and fibrous or scaly.

61. Agaricus nanus *Pers.*

Pileus convex, rather thin, fibrillose or somewhat mealy, brown; lamellæ rather broad, a little narrower outwardly, white, becoming pale flesh-color, free; stipe white, firm, striate, solid.

Height 1′-2′, breadth of pileus about 1′.

On decaying wood in groves. West Albany. October.

62. Agaricus leoninus *Schæff.*

Pileus thin, submembranaceous, convex, becoming expanded, smooth, subhygrophanous, striatulate on the margin; lamellæ rather broad, free, at length flesh-colored; stipe white, solid, firm, slightly striate, equal.

Height 2′, breadth of pileus 1′-2′. Woods. North Elba. August.

The color of the pileus in our specimens was a pale watery cinnamon, changing to yellow.

Subgenus—Entoloma.

Hymenophorum continuous with the fleshy or fibrous stem; gills sinuato-adnexed, or parting from the stem.—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Pileus umbonate.....63.
Pileus not umbonate.....64.

63. AGARICUS STRICTIOR *n. sp.*

Pileus thin, submembranaceous, broadly convex or expanded, umbonate, smooth, shining, hygrophanous, striatulate, grayish-brown; lamellæ rather broad, rounded or deeply emarginate at the stipe, pale flesh-colored; stipe straight, equal or very slightly tapering upward, nearly smooth, hollow, with a dense white mycelium at the base.

Height 2′-4′, breadth of pileus 1′-2′, stipe 1″-2″ thick.

Ground in groves and their borders. Albany. October.

The umbo is small but distinct, the stipe is quite straight, and the aspect of the whole plant is beautifully regular and symmetrical. It differs from *A. Elodes* in being hygrophanous, destitute of odor, etc. (Plate 2, figures 6–9.)

64. AGARICUS RHODOPOLIUS *Fr.*

Pileus thin, campanulate or convex becoming expanded, scarcely umbonate, grayish-brown, hygrophanous, the margin wavy; lamellæ attached, slightly emarginate, whitish, becoming flesh-colored; stipe white, silky, pruinose above, hollow.

Height 3′–4′, breadth of pileus 2′–3′. North Elba. September.

Subgenus—Clitopilus.

Hymenophorum confluent with the fleshy or fibrous stem; gills decurrent.—*Berk. Outl.*

The decurrent gills enable the species of this subgenus to be readily known.

SYNOPSIS OF THE SPECIES.

Plant large, subcæspitose.....65.
Plant small, gregarious.....66.

65. AGARICUS PRUNULUS *Scop.*

Pileus fleshy, firm, convex, then expanded or slightly depressed, often irregular or wavy, whitish or cinereous;

lamellæ rather narrow and close, tapering toward each end decurrent, whitish, becoming tinged with flesh-color; stipe short, subequal, solid, concolorous, often eccentric.

Height 2′–3′, breadth of pileus 2′–4′, stipe 3″–6″ thick.

Ground in groves and open places. Often cæspitose. Albany and Catskill. October. Edible.

66. AGARICUS NOVEBORACENSIS *n. sp.*

Pileus fleshy, thin, convex, then expanded or slightly depressed, with the margin decurved, dingy white, the surface cracking into areas or concentrically rivulose, sometimes obscurely zonate; lamellæ close, narrow, long-decurrent, some of them forked, white, at length dingy, tinged with yellow or flesh-color; stipe concolorous with the pileus, equal, solid, smooth, with white mycelium and brittle branching white rootlets.

Height 1′–2′, breadth of pileus 1′–2′, stipe 1″–2″ thick.

In woods and pastures. North Elba and Albany. August–October.

Gregarious or subcæspitose. Odor of new meal; taste very bitter; spores globose, pale flesh-colored.

Subgenus—Leptonia.

Stem with a cartilaginous bark. Margin of pileus at first incurved; gills separating from the stem.—*Berk. Outl.*

67. AGARICUS SERRULATUS *Pers.*

Pileus thin, submembranaceous, convex, umbilicate, squamulose or streaked with dark fibrils, color various, grayish-brown, cinereous, etc.; lamellæ not crowded, attached to but easily separating from the stem, pale flesh-colored, the edge blackish and serrulate; stipe equal, smooth, hollow, mostly a little paler than the pileus.

Height 1′–1.5′, breadth of pileus 6 –12″.

Banks by the roadside. North Elba. September.

Easily known by the dark-colored serrulate edge of the lamellæ.

Series 3—DERMINI.

Spores ferruginous, sometimes tawny or brownish.

The spores in this series are not as uniform in color as in the foregoing ones. They must be carefully observed in connection with the veil and other parts, that the species be not confused with those of the genus *Cortinarius*.

Subgenus—Pholiota.

Stem furnished with a ring.—*Berk. Outl.*

[Assem. No. 133.] 12.

SYNOPSIS OF THE SPECIES.

Pileus scaly..... 68
Pileus smooth..... 69

68. AGARICUS ADIPOSUS *Fr.*

Pileus fleshy, firm, conical, then convex or expanded, glutinous when moist, squamose, with dark or reddish scales, the margin slightly surpassing the gills, yellow; lamellæ broad, attached, yellow, at length ferruginous; stipe firm, solid or stuffed, slightly enlarged at the base, scaly below the slight fugacious annulus, with a slight floccose collar at the top, yellow.

Height 3′–4′, breadth of pileus 2′–3′, stipe 4″–6″ thick.

Base of trees. Greenbush. November. Poughkeepsie. *Gerard.* The plant is cæspitose.

69. AGARICUS TEMNOPHYLLUS *n. sp.*

Pileus fleshy, hemispherical, then convex, smooth, dull yellow; lamellæ very broad, attached, obliquely truncate at the inner extremity, brownish-ferruginous; stipe equal, smooth, white, hollow, annulate; the annulus membranaceous, white, dusted with the brownish-ferruginous spores.

Height 2′–4′, breadth of pileus 1.5′–2′, stipe 3″–4″ thick.

Grassy ground by roadside. Sandlake. June.

This species resembles *A. semiorbicularis* so closely in color, taste, etc., that in the absence of the annulus it might be taken for a large form of that species.

II Subgenus—Flammula.

Stem fleshy; gills adnate or decurrent.—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Stem hollow..... 70
Stem solid..... 71

70. AGARICUS HALLIANUS *n. sp.*

Pileus thin, hemispherical or convex, smooth, hygrophanous, watery cinnamon with the margin obscurely striatulate when moist, dull yellow when dry; lamellæ close, subarcuate, slightly decurrent, tapering to a narrow point at the outer extremity and ceasing before the margin, cinnamon color; stipe equal, slightly fibrillose, hollow, with a slight annulus, reddish-brown.

Height 2′-3′, breadth of pileus 1′-2′, stipe 2″-3″ thick.

Pastures. Bethlehem. November.

Taste a little bitter. The annulus is very thin, membranaceous and stained with the spores.

Dedicated to Professor James Hall, a most earnest promoter and eminent patron of the natural sciences.

*71. AGARICUS POLYCHROUS *Berk.*

Pileus fleshy, convex, smooth, viscid, yellow, the disk reddish or brownish, the margin sometimes wavy; lamellæ close, emarginate and decurrent-toothed, yellow, then ferruginous; stipe firm, solid, equal, often curved, yellow; plant gregarious or cæspitose.

Height 1′-2′, breadth of pileus 9″-18″.

Ground and rotten wood in pastures and woods. Very common. August–November.

The veil is webby, fugacious.

III Subgenus—Naucoria.

Stem cartilaginous externally; margin more or less convex; pileus inflexed.—*Berk. Outl.*

The spores are ferruginous, or brownish-ferruginous. The color of the pileus is some shade of yellow. The stipe is not distinctly annulate, but sometimes a slight spore-stained band marks the place of the obsolete annulus.

SYNOPSIS OF THE SPECIES.

Pileus umbonate ..... a.
a. Stem hollow, tapering toward the base ..... 72.
a. Stem hollow, equal ..... 73.
a. Stem solid ..... 74.
Pileus not umbonate ..... b.
b. Stem hollow ..... c.
c. Pileus hygrophanous ..... 75.
c. Pileus not hygrophanous ..... 76.
b. Stem solid or stuffed ..... d.
d. Stem solid, margin of pileus recurved ..... 77.
d. Stem containing a pith ..... 78.

72. AGARICUS VERNALIS *n. sp.*

Pileus thin, fleshy, convex, then a little depressed, with a deflexed margin, umbonate, hygrophanous, dull yellow, darker when moist; lamellæ narrow, attached, cinnamon-color; stipe long, flexuous, striate-sulcate, hollow, tapering downward, white-villous at the base, brownish.

Height 2′, breadth of pileus 8″-12″, stipe 1″ thick.

On rotten wood. Greenbush. May.

73. AGARICUS LIGNICOLA *n. sp.*

Pileus thin, convex, umbonate, smooth or slightly fibrillose, hygrophanous, watery cinnamon and the margin striatulate

when moist, dull yellow when dry; lamellæ narrow, close, attached, cinnamon-color; stipe slender, equal, hollow, slightly fibrillose, firm, mostly curved, reddish-brown.

Height 1′–2′, breadth of pileus 6″–12″.

On old logs in woods. Sandlake. June.

74. AGARICUS FULVUS *n. sp.*

Pileus thin, convex, then expanded, umbonate, tawny yellow, darker when moist; lamellæ broad, emarginate, decurrent-toothed, cinnamon-colored; stipe equal, solid, subflexuous, a little paler than the pileus.

Height 1′-1.5′, breadth of pileus 4″-8″.

Ground in pine woods. Bethlehem. November.

75. AGARICUS AUTUMNALIS *n. sp.*

Pileus thin, fleshy, convex, smooth, hygrophanous, watery cinnamon and marginally striatulate when moist, dull yellow when dry; lamellæ close, slightly emarginate, spuriously decurrent-toothed, easily separating from the stipe, yellowish, then cinnamon-color; stipe slender, equal, hollow, fibrillose, paler than the pileus; plant often cæspitose.

Height 1′-2′, breadth of pileus 6″-12″

On rotten wood in woods. North Greenbush. November.

Sometimes a trace of an annulus may be seen on the stem. The taste resembles that of *A. semiorbicularis.*

76. AGARICUS SCORPIOIDES *Fr.*

Pileus fleshy, thin, short conic, obtuse or subumbonate, smooth, reddish-yellow, the margin incurved and paler, lamellæ attached, pale yellow, becoming darker with age; stipe long, slender, equal, wavy, silky, white or yellowish, hollow.

Height 3′-5′, breadth of pileus 5″-8″.

Among moss in woods. North Elba. August.

77. AGARICUS CURVO-MARGINATUS *n. sp.*

Pileus thin, convex, smooth, reddish-yellow, the margin paler, reflexed, extending beyond the lamellæ; lamellæ subventricose, emarginate, decurrent-toothed, pale yellow or whitish, with a flesh-colored tinge; stipe equal, solid. wavy with a whitish silky luster.

Height 2′-3′, breadth of pileus 4″-6″.

In mossy places in woods. North Elba. August.

This and the preceding have a darker color when moist, but they are scarcely hygrophanous. The solid stem and up-

curved margin separate this from the preceding species. (Plate 2, figures 1–5.)

*78. Agaricus semiorbicularis *Bull.*

Pileus thin, fleshy, hemispherical, at length expanded, smooth, subviscid, dull yellow; lamellæ close, broad, attached, at length dark ferruginous; stipe slender, equal, firm, stuffed with a distinct whitish pith, yellowish.

Height 1′–2′, breadth of pileus 6″–12″.

Fields and manured grounds. West Albany. June.

It is sometimes cæspitose. The pileus sometimes cracks into areas. It has an oily flavor, resembling that of beech nuts.

Subgenus—Galera.

Stem externally subcartilaginous; pileus more or less campanulate; margin straight. —*Berk. Outl.*

The spores are generally bright ferruginous. The pileus is thin, obtusely conical or bell-shaped, and the stem is hollow, rather long and slender, so that in aspect the species correspond to those of the subgenus *Mycena* in the first series. All of our species, so far as known, are hygrophanous.

Synopsis of the Species.

Pileus at length expanded	a.
a. Plant growing in fields or on dung; pileus not umbonate	79.
a. Plant growing in marshes; pileus generally umbonate	82.
Pileus not expanded	b.
b. Plant growing in fields or groves	c.
c. Pileus dark ferruginous	80.
c. Pileus pale yellow	81.
b. Plant growing in woods among moss	83.

79. Agaricus lateritius *Fr.*

Pileus thin, submembranaceous, fragile, conical, at length expanded, closely and finely striate on the margin, grayish-yellow, darker when moist; lamellæ close, narrow, nearly or quite free, yellow-ferruginous; stipe long, white, fragile, easily splitting, pruinose or farinaceous above, slightly tapering upward.

Height 3′–4′, breadth of pileus, 1′–2′.

On dung heaps. West Albany. June.

Sometimes there is a slight pinkish tinge to the pileus and stem.

80. AGARICUS OVALIS *Fr.*

Pileus thin, submembranaceous, conical or bell-shaped, obtuse, smooth, brownish-ferruginous and obscurely striatulate when moist, dark ferruginous when dry; lamellæ broad, subventricose, nearly free, ferruginous; stipe slender, nearly straight, slightly striate, subconcolorous.

Height 3′–4′, breadth of the pileus 6″–12″.

In a pine grove. West Albany. June.

This is *A. campanulatus* Bull, in the Epicrisis of Fries, p. 205. The cuticle of the pileus sometimes cracks and scales off in irregular patches.

81. AGARICUS TENER *Schæff.*

Pileus submembranaceous, oval or obtusely conical, sometimes campanulate, smooth, watery, tawny and striatulate when moist, yellowish-white when dry; lamellæ close, quite broad, slightly attached, cinnamon-color; stipe slender, smooth, colored like the pileus.

Height 2′–3′, breadth of pileus 4″–8″.

On dung, manured ground and in rich pastures. West Albany and North Elba. June–October.

*82. AGARICUS SPHAGNORUM *Pers.*

Pileus thin, fleshy, fragile, broadly conical or convex, then expanded, generally with a small umbo, striatulate on the margin, pale watery cinnamon, becoming ochraceous-yellow when dry; lamellæ broad, attached, dull cinnamon-color; stipe long, fragile, flexuous or straight, subconcolorous, silky fibrillose, whitish-villous at the base.

Height 4′–6′, breadth of pileus 6″–12″.

In peat marshes, among Sphagnum. Sandlake. June–September.

Fries considers this a variety of the next species. It appears to me to be quite distinct.

83. AGARICUS HYPNORUM *Batsch.*

Pileus submembranaceous, obtusely conical, hemispherical or convex, with or without a small papilla at the apex, ferruginous-yellow and marginally striatulate when moist, yellow and substriate when dry; lamellæ broad, attached, pale cinnamon-color; stipe long, slender, subconcolorous.

Height 2′–4′, breadth of pileus 3″–5″.

Mossy places in woods. North Elba. August.

Subgenus—Hebeloma.

Veil, if present, floccose, not interwoven; stem fleshy; gills sinuated.—*Berk. Outl.*

The pileus is thin, but fleshy, generally fibrillose or scaly; the gills are most often of a dingy or olivaceous color, and emarginate; the stipe is fleshy, more or less fibrous, and, in our species, solid or stuffed. The color of the spores is generally olivaceous, or brownish-ochraceous.

Synopsis of the Species.

Pileus splitting and cracking into fibres ..... a.
a. Stipe subbulbous ..... 84.
a. Stipe not bulbous ..... 85.
Pileus entire, scaly, not white ..... b.
b. Pileus ochraceous ..... 86.
b. Pileus brown ..... 87.
Pileus entire, smooth, white ..... c.
c. Lamellæ deeply emarginate ..... 88.
c. Lamellæ slightly emarginate ..... 89.

84. Agaricus rimosus *Bull.*

Pileus fleshy, thin, conical or campanulate, then expanded, sometimes umbonate, longitudinally cracking, fibrous, dull reddish-brown, the margin sometimes uneven, often splitting; lamellæ narrow, close, tapering toward the stipe, subfree, whitish, becoming darker; stipe equal or slightly tapering upward, fibrous, solid, white, rarely brownish, bulbous, the bulb flattened.

Height 2′–3′, breadth of pileus 1′–2′.

Roadsides in woods. North Elba. August.

85. Agaricus lacerus *Fr.*

Pileus thin, fleshy, conical or campanulate, then convex or expanded, fibrous, longitudinally cracking, the margin splitting, color pale yellowish-brown; lamellæ not broad, tapering toward the stem, nearly free, brownish-yellow; stipe equal, firm, solid, fibrous, white; spores rough.

Height 2′, breadth of pileus 6″–18″.

Grassy grounds in fields and open woods. Greenbush. June.

The cuticle of the disk sometimes breaks up into scales.

86. Agaricus subochraceous *n. sp.*

Pileus thin, conical or convex, sometimes expanded, generally umbonate, fibrillose-squamulose, pale ochraceous-yellow; lamellæ rather broad, attached, emarginate, whitish,

becoming brownish-yellow; stipe equal, whitish, slightly fibrillose, solid.

Height 1′–2′, breadth of pileus 9″–18″.

Ground in groves and open places. Sandlake and West Albany. June – October.

In very wet weather the pileus sometimes splits on the margin.

87. AGARICUS FLOCCULOSUS *Berk.*

Pileus thin, fleshy, convex or subcampanulate, umbonate, squamulose, grayish-brown; lamellæ broad, subventricose, attached, pale brownish, tinged with red; stipe firm, solid, fibrillose, a little paler than the pileus.

Height 1′–2′, breadth of pileus 6″–12″.

Ground in fields and by roadsides. North Elba and West Albany. September and October.

88. AGARICUS SARCOPHYLLUS *n. sp.*

Pileus fleshy, short and obtusely conical or convex, smooth, white, the margin incurved; lamellæ broad, not crowded, attached, deeply emarginate, dingy flesh-color; stipe equal, smooth, white, firm, stuffed, mealy-squamulose above, spores smooth, very dark ferruginous.

Height 1′–2′, breadth of pileus 6″–18″.

Wet grassy ground. Greenbush. June.

Taste slightly bitter. The edge of the lamellæ is slightly eroded. Their deep emargination and peculiar color make this a strongly marked species. At first sight, it looks like a small *Psalliota.* (Plate 1, figs. 7-11.)

89. AGARICUS GEOPHYLLUS *Sow.*

Pileus fleshy, thin, conical, then convex or expanded, broadly umbonate, silky, smooth, white; lamellæ close, not broad, slightly emarginate, attached, whitish, becoming dingy brownish; stipe firm, equal, rather long, white, solid or stuffed.

Height 2′–3′, breadth of pileus 6″–9″.

Ground in woods and open places. North Elba and Greenbush. August – October.

Series 4 — PRATELLÆ.

Spores brownish-purple or brown.

Subgenus — Psalliota.

Veil fixed to the stem, forming a ring. — *Berk. Outl.*

The species of this subgenus are easily recognized, though not always easily distinguished from each other. The pileus is generally white or yellowish, the lamellæ at length brown or blackish, and the stipe generally rather stout, fleshy and annulate.

Synopsis of the Species.

Stem hollow or stuffed ..... a.
a. Pileus thick, fleshy; stem stout ..... b.
b. Stem not bulbous ..... 90.
b. Stem bulbous ..... 91.
a. Pileus thin; stem slender ..... c.
c. Stem hollow ..... 94.
c. Stem stuffed with a pith ..... 95.
Stem solid, scaly ..... 92.
Stem solid, smooth ..... 93.

* 90. Agaricus campestris *L.*

Pileus thick, fleshy, convex, smooth or slightly silky, white, the margin surpassing the gills; lamellæ close, rounded, free, bright flesh-colored, then blackish-brown; stipe short, stout, white, stuffed, annulate, not bulbous; annulus white, single.

Height about 2′, breadth of pileus 1′–3′, stipe 4″–6″ thick.

Grassy ground in fields. Albany. September.

Not abundant. Edible. This is the species commonly cultivated, and generally know by the indefinite term *Mushroom.*

91. Agaricus Silvicola *Vitt.*

Pileus fleshy, campanulate, becoming convex, smooth, white or yellowish, the margin scarcely exceeding the gills and often purplish-stained; lamellæ whitish, then pinkish brown, narrower toward either end, rounded and free; stipe rather long, stout, stuffed or hollow, bulbous, annulate, white; annulus thick, double, the outer part often splitting into rays.

Height 4′–6′, breadth of pileus 3′–5′.

Ground in pine woods. West Albany. October.

This species is sometimes called a variety of *A. campestris;* but it appears to me to be clearly distinct. The bulb of the stem is flattened. The exterior of the annulus is sometimes stained with yellow, and the pileus becomes more yellow by bruising.

92. Agaricus Hornemanni *Fr.*

Pileus fleshy, convex, becoming expanded, smooth, viscid when moist, pale yellow; lamellæ moderately broad, attached,

subdecurrent, whitish, then purplish-brown; stipe stout, solid, rough, with squarrose scales below the annulus, slightly striate above, white or pale yellow; spores purplish-brown.

Height 4′–6′, breadth of pileus 2′–4′, stipe 6″ thick.

Ground in woods. Sandlake and Catskill Mountains. October. A fine species.

93. AGARICUS JOHNSONIANUS *n. sp.*

Pileus fleshy, soft, brittle, broadly convex or expanded, smooth, white, the disk yellowish, the margin thin, sometimes purplish-stained, and, when moist, striatulate; lamellæ close, rounded at the inner extremity, nearly free, white, then brown; stipe equal, smooth, annulate, solid, slightly striate at the top; annulus white, tumid, stained by the brown spores.

Height 2′–4′, breadth of pileus 2′–4′, stipe 3″–5″ thick.

Grassy ground in pastures. Knowersville. September. It has a sweetish nutty flavor.

Dedicated to Hon. A. S. Johnson, a worthy patron of natural science, who has communicated to me specimens of some fine species of fungi. (Plate 3, figs. 4–6.)

94. AGARICUS SEMIGLOBATUS *Batsch.*

Pileus thin, hemispherical, sometimes convex, smooth, glutinous when moist, white or pale yellow; lamellæ very broad, loose, attached, becoming black; stipe slender, smooth, tall, hollow, concolorous, annulate, viscid; the annulus slight, stained by the purplish-black spores, at length disappearing.

Height 3′–5′, breadth of pileus 6″–12″.

On dung. Very common. May–September.

95. AGARICUS STERCORARIUS *Fr.*

Pileus thin, fleshy, convex, then expanded, smooth, viscid, yellow; lamellæ broad, attached, brownish or brownish-black; stipe firm, viscid when moist, stuffed with a whitish pith.

Height 2′–3′, breadth of pileus 6″–9″.

On dung and rich soil. West Albany. June.

Differs from the preceding by its stuffed stem, and expanded pileus.

II Subgenus — Hypholoma.

Veil woven into a fugacious web, which adheres to the margin of the pileus. — *Berk. Outl.*

In this subgenus the stem is not annulate.

SYNOPSIS OF THE SPECIES.

96. AGARICUS PERPLEXUS *n. sp.*

Pileus fleshy, convex, then expanded, often broadly subumbonate, smooth, yellow, the disk red or brownish-red, the margin paler; lamellæ not broad, rounded at the inner extremity, easily separating from the stipe, pale yellow, then greenish-tinged, finally purple-brown; stipe subequal, firm, slightly fibrillose, hollow, yellow, reddish at the base; flesh white; spores purplish-brown.

Height 2′–3′, breadth of pileus 2′–3′, stipe 2″–3″ thick.

About stumps in woods or open places. Common. Sandlake, Albany and Catskill Mountains. September and October.

The plant has a mild taste and no marked odor. It grows singly or in dense tufts. It is closely related to *A. sublateritius*, *A. epixanthus* and *A. fascicularis*, but as it does not agree with the description of either of them, I have no alternative but to describe it as a new species.

97. AGARICUS VELUTINUS *Pers.*

Pileus fleshy, thin, convex or expanded, brittle, minutely tomentose-scaly, becoming smooth, hygrophanous, yellow with the disk reddish; lamellæ rather broad, attached, tapering toward the outer extremity, dark brown tinged with red, the edge whitish-beaded; stipe equal, rather slender, hollow, fibrillose, subconcolorous, white-mealy and slightly striate at the top; spores black.

Height about 2′, breadth of pileus 1′–1.5′.

Roadsides. Albany Cemetery. September. The pileus sometimes cracks transversely.

III Subgenus — Psilocybe.

Veil, if present, not forming a ring. Margin of pileus at first incurved.—*Berk. Outl.*

The species of this subgenus are smaller, and have the pileus thinner than those preceding.

SYNOPSIS OF THE SPECIES.

98. AGARICUS SPADICEUS *Schæff.*

Pileus thin, submembranaceous, hemispherical, then convex or expanded, smooth, hygrophanous, pale grayish-brown and striatulate when moist, white or yellowish when dry; lamellæ narrow, close, attached, easily separating from the stipe, at first whitish, then brown, tinged with flesh-color; stipe straight, equal, hollow, smooth, white.

Height 1′–2′, breadth of pileus 1′–1.5′, stipe 1″–2″ thick.

Grassy ground in yards and fields. Albany. June. Gregarious or cæspitose. The pileus is fragile, the spores are brown.

99. AGARICUS CERNUUS *Mull.*

Pileus thin, slightly fleshy, convex, smooth, hygrophanous, dark watery brown and marginally striatulate when moist, yellowish or pale ochraceous and more or less rugose-wrinkled when dry; lamellæ close, narrow, attached, whitish, then dark brown; stipe smooth, shining, white, hollow, sometimes wavy; spores brown.

Height 1′–2′, breadth of pileus 8″–18″.

About or on old stumps and logs in woods. Sandlake and Catskill Mountains. September and October.

In drying, the pileus begins to change color on the disk, leaving the margin dark for a little time.

100. AGARICUS SEMILANCEOLATUS *Pers.*

Pileus thin, submembranaceous, smooth, conical and acute, or convex and obtuse, sometimes with a small acute umbo, viscid when moist, and sometimes obscurely striatulate, whitish or pale yellow; lamellæ rather broad, loose, attached, slightly emarginate, purple-black, the edge white; stipe slender, subflexuous, smooth, pruinose at the top, stuffed with a pith or hollow, white-villous at the base.

Height 2′–3′, breadth of pileus 6″–10″.

On dung in pastures. Bethlehem. November.

Series 5 — COPRINARIUS.

Spores black; gills never becoming purple or brown.

Subgenus — Panæolus.

Veil, when present, interwoven. Pileus rather fleshy, without striæ; margin at first extending beyond the gills, which are clouded.—*Berk. Outl.*

The pileus is thin, seldom expanded; the lamellæ are ascending, becoming clouded, at length black with spores, not dissolving, the edge often white; the stipe is smooth, rather long and firm, generally hollow.

SYNOPSIS OF THE SPECIES.

Stem solid ..... 101.
Stem hollow ..... a.
a. Pileus with an obscure marginal band ..... 102.
a. Pileus with no marginal band ..... b.
b. Pileus reticulated ..... 103.
b. Pileus not reticulated ..... c.
c. Whitish-gray or yellowish-white ..... 104.
c. Brownish, subshining ..... 105.

101. AGARICUS SOLIDIPES *n. sp.*

Pileus firm, at first hemispherical, then subcampanulate or convex, smooth, whitish, the cuticle at length breaking up into dingy-yellowish, rather large, angular scales; lamellæ broad, slightly attached, whitish, becoming black; stipe firm, smooth, white, solid, slightly striate at the top; spores very black with a bluish tint.

Height 5′–8′, breadth of pileus 2′–3′, stipe 2″–4″ thick.

Dung heaps. West Albany. June.

A large species, remarkable for its solid stem. The scales on the pileus are larger on the disk, becoming smaller toward the margin. The upper part of the stipe is sometimes beaded with drops of moisture. (Plate 4, figs. 1–5.)

102. AGARICUS FIMICOLA *Fr.*

Pileus subcampanulate or convex, smooth, moist, pale grayish-brown tinted with ochre, girt with a narrow darker marginal band; lamellæ broad, attached, becoming blackish with a grayish-purple tinge; stipe hollow, pallid, pruinose above.

Height 2′–4′, breadth of pileus 10″–18″.

Dung heaps. West Albany. June.

The plant is sometimes cæspitose. The pileus is often darker on the disk and sometimes spotted or scaly there. The marginal zone is more distinct in young and moist specimens, becoming obsolete or even disappearing in old or dry ones.

103. AGARICUS RETIRUGIS *Batsch.*

Pileus at first subglobose, at length hemispherical and broadly subumbonate, reticulate-veined, grayish-white, the margin subfringed with the appendiculate veil; lamellæ broad, attached, becoming grayish-black; stipe long, firm, hollow, pruinose, pinkish-tinged.

Height 3′–4′, breadth of pileus 6″–12″.

Pastures. Knowersville. September.

104. AGARICUS PAPILIONACEUS *Bull.*

Pileus subhemispherical, sometimes subumbonate, smooth, or with the cuticle breaking up into scales, whitish-gray, often tinged with yellow; lamellæ very broad, attached, becoming black; stipe slender, firm, hollow, pruinose above, whitish, sometimes tinged with red or yellow, slightly striate at the top and generally stained by the spores.

Height 3′–5′, breadth of pileus 6″–18″.

On dung and rich soil. Common. May and June.

A small form occurs with the pileus nearly white, scarcely half an inch in diameter, and the cuticle not cracking.

105. AGARICUS CAMPANULATUS *L.*

Pileus oval campanulate or obtusely conical, sometimes umbonate, smooth, somewhat shining, brownish, with a peculiar gray or lead-colored tint, sometimes becoming reddish tinted, the margin often scolloped or fringed with the appendiculate veil; lamellæ not broad, attached, becoming grayish-black; stipe long, slender, hollow, reddish, pruinose and slightly striate at the top, at length dusted with the spores.

Height 4′–6′, breadth of pileus 6″–12″.

On horse dung and rich soil. June and July. Common.

In very wet weather the cuticle of the pileus sometimes cracks into scales or areas.

Subgenus — Psathyrella.

Veil not interwoven; pileus membranaceous, margin not reaching beyond the gills. — *Berk. Outl.*

The species in this subgenus are more fragile than those in the preceding, the pileus thinner, often hygrophanous and striatulate, and the gills extend to its margin.

SYNOPSIS OF THE SPECIES.

106. AGARICUS GRACILIS *Fr.*

Pileus submembranaceous, conical, smooth, hygrophanous, watery-brown and striatulate when moist, yellowish or cream-colored when dry; lamellæ broad, not close, attached, becoming grayish-black; stipe slender, straight, smooth, hollow, whitish.

Height 4′–6′, breadth of pileus 9″–12″.

Rich grassy ground. Knowersville. September.

The straight tall stem and regular conical pileus make this a beautiful species. The margin of the pileus first begins to decay.

107. AGARICUS ATOMATUS *Fr.*

Pileus membranaceous, subcampanulate, obtuse, smooth hygrophanous, brownish, tinged with pink or ochre and striatulate when moist, paler and with sparkling atoms when

dry; lamellæ broad, attached, dusky-brown, stipe whitish, hollow, fragile, mealy above.

Height 2′, breadth of pileus 6″–10″

Grassy ground. West Albany. June.

108. AGARICUS DISSEMINATUS *Pers.*

Pileus membranaceous, ovate or subcampanulate, obtuse, sulcate-striate, grayish; lamellæ few, distant, not broad, whitish, then pinkish-purple, finally black; stipe slender, hollow, fragile, white; plant cæspitose.

Height about 1′, breadth of pileus 3″–4″.

On decaying sticks. Albany Rural Cemetery. September.

It resembles the small sulcate-striate *Coprini*, but the lamellæ do not dissolve.

Genus—COPRINUS *Fr.*

Gills membranaceous, deliquescent, spores black.—*Berk. Outl.*

The species of this genus are readily known by the lamellæ soon dissolving into an inky fluid. They are quite ephemeral, many of them not continuing beyond a single day. Specimens are preserved with difficulty, these plants being fragile as well as perishable. The inky fluid from the lamellæ, after being boiled, is sometimes used as ink. The larger species may also be made into a catsup.

SYNOPSIS OF THE SPECIES.

Stem annulate ..... 1.
Stem not annulate ..... a.
a. Pileus not at all or only closely striate ..... b.
b. Pileus with an evanescent floccose covering ..... 2.
b. Pileus with a persistent floccose covering ..... 3.
b. Pileus naked, or nearly so ..... 4.
a. Pileus distantly sulcate-striate ..... c.
c. Lamellæ attached to a collar ..... 5.
c. Lamellæ attached to the stem ..... 6.

*1. COPRINUS COMATUS *Fr.*

Pileus thin, cylindrical, then campanulate, rough with broad rather distant fibrous scales, whitish, the margin soon discolored revolute and lacerated; lamellæ linear, crowded, free, white, then pink, finally black; stipe nearly equal, fibrillose, hollow, annulate, the annulus movable, the cavity of the stem containing a gossamer-like web.

Height 6′–8′, breadth of pileus 2′–3′, stipe 3″–4″ thick.

Manured grounds. Common. September and October. Edible. Our largest species.

2. COPRINUS TOMENTOSUS *Fr.*

Pileus very thin, at first oblong-oval and floccose-scaly, soon campanulate, naked, closely striate, cinereous-brown or blackish-brown, often with a leaden hue, finally expanded, the disk smooth, reddish or ochraceous-brown, the margin revolute and much split or lacerated; lamellæ closely crowded, linear, free, white, then pinkish, finally black; stipe white, tall, fragile, tapering upward, finely floccose-sqamulose, hollow, sometimes with a large tap root; plant gregarious or cæspitose.

Height 3′–6′, breadth of pileus 6″–18″.

Dung heaps. West Albany and Sandlake. June and July.

Very variable in size and color. The covering of the pileus is easily rubbed off. It soon disappears, and the plant quickly decays, seldom continuing through the day.

3. COPRINUS NIVEUS *Fr.*

Pileus thin, at first long ovate, then campanulate or expanded, coated with a dense white mealy or floccose-squamulose persistent covering, slightly tinged with pink, the margin somewhat revolute and splitting; lamellæ narrow, crowded, attached, white, then pinkish, finally black; stipe white, nearly equal, fragile, hollow, with a white villous-floccose covering.

Height 3′–5′, breadth of pileus 8″–15″.

Dung heaps. West Albany. June.

*4. COPRINUS MICACEUS *Fr.*

Pileus thin, ovate, then campanulate, with the margin more or less revolute, wavy, splitting, closely striate, with a few minute scales and sparkling atoms, or naked, varying in color from whitish-ochraceous to livid brown, generally darker when moist or old; lamellæ rather narrow, crowded, white, then pinkish, finally black; stipe slender, fragile, easily splitting, slightly silky, white, hollow, often twisted; plant mostly cæspitose.

Height 2′–4′, breadth of pileus 1″–2″.

Streets, yards and fields, on or about old stumps. May–September.

*5. COPRINUS PLICATILIS *Fr.*

Pileus very thin and delicate, soon expanded, distantly sulcate-striate, grayish-brown, tinged with red, the disk smooth, depressed, the margin splitting; lamellæ narrow, distant,

attached to a collar formed of the dilated apex of the stipe, grayish, then black; stipe slender, hollow, smooth, white.

Height 1′–2′, breadth of pileus 6″–9″.

Rich ground. Albany. June.

6. COPRINUS EPHEMERUS *Fr.*

Pileus very thin and delicate, ovate-campanulate, at length expanded with the margin recurved and split, distantly sulcate-striate, cinereous, the disk smooth, elevated, reddish; lamellæ distant, very narrow, attached, grayish, then black, stipe very slender, fragile, white, hollow; plant sometimes cæspitose.

Height 1′–1.5′, breadth of pileus 4″–6″.

Dung heaps. Albany and Sandlake. June and July.

Genus — CORTINARIUS *Fr.*

Gills membranaceous, persistent; trama floccose. Veil consisting of arachnoid threads. Spores rusty-ochre. — *Berk. Outl.*

A large and difficult genus, containing many closely related species, varying in color and differing in size, according to conditions of weather and locality. The color of the spores is reddish-ochre, sometimes ochraceous, and the veil is composed of fine filaments, which may generally be seen in the young expanding plant, stretching from the stipe to the margin of the pileus. The prevailing color of these plants is some shade of yellow or ochre, and the emarginate lamellæ at length become cinnamon-color. Most of the species grow in woods and shaded places.

Subgenus — Phlegmacium.

Pellicle of pileus viscid when moist. Veil, and consequently the stem from which it springs, dry. — *Berk. Outl.*

The viscid pileus and dry stem are the marks of this subgenus, but it should be borne in mind that a viscid pileus when old or dry ceases to be viscid.

SYNOPSIS OF THE SPECIES.

Stem bulbous, lamellæ pallid	1.
Stem bulbous, lamellæ yellow	2.
Stem not bulbous nor annulate	3.
Stem not bulbous, annulate	4.

1. CORTINARIUS COLORATUS *n. sp.*

Pileus fleshy, broadly convex or expanded, smooth, bright reddish-yellow; lamellæ thin, deeply emarginate, eroded on

the edge, whitish, then cinnamon; stipe equal, solid or stuffed, firm, fibrillose, whitish, bulbous.

Height 4′–6′, breadth of pileus 3′–4′, stipe 4″–6″ thick.

Mossy ground under fir trees. Catskill Mountains. October.

The lamellæ appear as if finely and obscurely striated transversely. The color of the pileus is a rich, reddish-yellow, almost orange.

2. CORTINARIUS LUTEO-FUSCUS *n. sp.*

Pileus fleshy, broadly convex, even, smooth, brown; lamellæ rather close, yellow, then cinnamon, deeply emarginate; stipe equal, nearly straight, solid, silky, striate, whitish, bulbous.

Height about 4′, breadth of pileus 2′, stipe 3″–4″ thick.

Woods. North Elba. August. The fuscous pileus, yellow lamellæ, and white stem give the plant a tricolored appearance.

3. CORTINARIUS COMMUNIS *n. sp.*

Pileus fleshy, broadly convex or expanded, whitish or gray, tinged with red, the disk deeper colored; lamellæ rather broad, not crowded, emarginate and spuriously decurrent-toothed, whitish, then ochraceous-cinnamon; stipe equal, solid or stuffed, not bulbous, white-mealy at the top, fibrillose below, dingy white.

Height 2′–4′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Woods and open places. Common. Center, Catskill Mountains, etc. September and October.

4. CORTINARIUS CAPERATUS *Fr.*

Pileus fleshy, not thick except on the disk, at first ovate, then subcampanulate or expanded, obtuse or broadly subumbonate, often irregular and rugose-wrinkled, bright egg-yellow; lamellæ rather broad, slightly emarginate and decurrent-toothed, whitish, then pale cinnamon; stipe stout, nearly equal, not bulbous, solid, annulate, white, mealy-squamulose above the ring.

Height 4′–8′, breadth of pileus 3′–5′, stipe 6″–10″ thick.

Woods. Catskill and Adirondack Mountains. August–October.

A large and showy species, not agreeing well with the characters of the subgenus. The pileus is said to be slightly viscid and incrusted with superficial white flocci, which at length disappear. In our specimens, even when young, no incrustation was perceptible, neither was the pileus clearly

viscid. The edge of the lamellæ, too, is entire, not serrated, as described. These facts show it to be not only an aberrant species, but also a variable one. The annulus shows its relation to the subgenus *Pholiota*, in which it was formerly placed. The character and color of the pileus and the obscure transverse striations of the lamellæ indicate its relation to the following species.

Subgenus—Myxacium.

Universal veil, and consequently the stem, viscid and polished when dry.—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Stem not bulbous ..... 5.
Stem bulbous ..... 6.

5. CORTINARIUS COLLINITUS *Fr.*

Pileus fleshy, rather thin except the disk, subcampanulate, then convex, obtuse or broadly umbonate, generally longitudinally rugose-wrinkled, very viscid or glutinous, bright tawny-yellow, shining; lamellæ slightly emarginate, whitish, then pale cinnamon; stipe stout, equal, solid, viscid, white, smooth or at length scaly from the cracking of the viscid covering when dry.

Height 3′–5′, breadth of pileus 2′–3′, stipe 4″–6″ thick.

Ground in woods. Sandlake and Catskill Mountains. September and October.

Plant sometimes cæspitose.

6. CORTINARIUS TRICOLOR *n. sp.*

Pileus convex, smooth, yellow; lamellæ rather close, attached, emarginate, whitish, slightly violet-tinged, then pale cinnamon; stipe equal, bulbous, white, tinged with violet at the top.

Height 2′–3′, breadth of pileus 1.5′–2′, stipe 3″–4″ thick.

Sandy soil. Center. October.

Subgenus—Inoloma.

Pileus fleshy, dry, at first silky with scales or innate fibres, not hygrophanous; stem bulbous.—*Berk. Outl.*

The bulbous or enlarged base of the stem in many species gradually tapers upward so that the stem becomes somewhat conical, or obclavate.

SYNOPSIS OF THE SPECIES.

Pileus densely squamulose ..... a.
a. Plant violet-colored ..... 7.
a. Plant cinnamon-brown ..... 8.
Pileus smooth or silky ..... b.
b. Pileus tinged with violet or lilac ..... c.
c. Stem white; plant odorous ..... 9.
c. Stem tinged with lilac above ..... 10.
b. Pileus not violet or lilac-tinged ..... d.
d. Dull yellow, variegated with matted ferruginous fibrils ..... 11.
d. Ferruginous, sprinkled with whitish fibrils ..... 12.
d. Ochraceous ..... 13.

7. CORTINARIUS VIOLACEUS *L.*

Pileus fleshy, even, convex, rough with numerous small hairy scales, dark violet-color; lamellæ loose, thick, rather broad, violet, then brownish-cinnamon; stipe equal or slightly tapering upward, solid, slightly striate-fibrillose, bulbous, violet.

Height 3′–5′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Ground in woods. Adirondack Mountains. August.

A pretty species. The flesh is pale violet color. Edible.

8. CORTINARIUS SQUAMULOSUS *n. sp.*

Pileus thick, fleshy, convex, densely fibrillose-squamulose, cinnamon-brown, the scales darker; lamellæ not crowded, deeply emarginate, pale pinkish-brown, then cinnamon-colored; stipe thick, solid, shreddy, subsquamulose, concolorous, swollen at the base into a very large tapering or subventricose bulb.

Height 4′–6′, breadth of pileus 2′–4′, stipe 6″–9″ thick at the top, 12″–18″ at the bottom.

Borders of swamps in woods. Sandlake. August.

Related to *C. pholideus* and *C. arenatus*, but distinct by the deep emargination of the lamellæ. It gives out a strong odor while drying. The color of the flesh is pinkish-white. (Plate 3, figs. 1–3.)

9. CORTINARIUS ARGENTATUS *Fr.*

Pileus fleshy, convex, then expanded, smooth, bluish-lilac or pale violet, the margin at first silky, then whitish; lamellæ rather close, whitish, then cinnamon-color; stipe short, thick, solid, somewhat bulbous, easily splitting, whitish.

Height 2′–3′, breadth of pileus 2′–4′, stipe 6″–10″ thick.

Ground in woods. Bethlehem and Knowersville. September.

It has a strong odor not unlike that of chestnut blossoms. The lamellæ are sometimes serrated.

10. CORTINARIUS ALBOVIOLACEUS *Pers.*

Pileus fleshy, rather thin, convex, then expanded, sometimes broadly subumbonate, smooth, silky, whitish, tinged with lilac or pale violet; lamellæ generally serrulate, whitish-violet, then cinnamon-color; stipe equal or a little tapering upward, solid, silky, white, stained with violet, especially at the top, slightly bulbous, the bulb gradually tapering into the stipe.

Height, 3′–4′, breadth of pileus 2′–3′, stipe 3″–6″ thick.

Ground in thin woods, more frequently under poplars. Center. October.

The stem is sometimes subannulate, and being violet above and white below the obscure ring, it appears as if sheathed with a silky white covering. Inodorous. Sometimes the stem gradually tapers from the base to the top, so that it can scarcely be called bulbous.

11. CORTINARIUS AUTUMNALIS *n. sp.*

Pileus fleshy, convex or expanded, dull rusty-yellow, variegated or streaked with innate ferruginous fibrils; lamellæ rather broad, with a wide shallow emargination; stipe equal, solid, firm, bulbous, a little paler than the pileus.

Height 3′–4′, breadth of pileus 2′–4′, stipe 6″ thick.

Pine woods. Bethlehem. November.

The plant is sometimes cæspitose. The flesh is white.

12. CORTINARIUS CATSKILLENSIS *n. sp.*

Pileus fleshy, convex or subcampanulate, then subexpanded, even, pale ferruginous clothed with minute scattered white fibrils; lamellæ watery cinnamon, becoming darker with age, deeply emarginate; stipe stout, solid, nearly white, fibrillose; the bulbous base gradually tapering into the stipe.

Height 3′–4′, breadth of pileus 2′–3′, stipe 6″–10″ thick.

Ground in open places. Catskill Mountains. October.

13. CORTINARIUS OCHRACEUS *n. sp.*

Pileus fleshy, convex, at length broadly subumbonate or gibbous, smooth, even or obscurely wrinkled, pale ochraceous; stipe solid, fibrillose, ochraceous at the top, white below, gradually enlarged into a thick bulbous base.

Height 2′–4′, breadth of pileus 2′–3′, stipe 4″–6″ thick at the top, 12″–18″ at the base.

Under balsam trees in open places. Catskill Mountains. October.

The stipe appears as if sheathed. In some specimens the stipe is short and rapidly tapers from the base to the top.

Subgenus — Dermocybe.

Pileus thin, silky with innate down, dry, not hygrophanous; stem equal or attenuated, not bulbous.—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Stem red ..... 14.
Stem yellow ..... 15.

14. CORTINARIUS SANGUINEUS *Fr.*

Pileus rather thin, convex or expanded, with decurved margin, silky or minutely squamulose, bright red; lamellæ rather close and broad, emarginate, a little darker red than the pileus; stipe equal, stuffed or solid, nearly smooth, concolorous.

Height about 2′, breadth of pileus 6″–12″, stipe 1″–2″.

In woods. Adirondack Mountains. August.

A beautiful species, easily recognized.

15. CORTINARIUS CINNAMOMEUS *Fr.*

Pileus fleshy, thin, convex, sometimes obtusely umbonate, silky or minutely squamulose, cinnamon-brown; lamellæ close, not broad, slightly emarginate, yellow, then cinnamon; stipe equal, solid or stuffed, silky, yellow.

Height 2′–4′, breadth of pileus about 1′, stipe 2″ thick.

In woods. Adirondack Mountains. August.

The pileus varies in color, being at one time nearly yellow, at another dark brown. The color of the lamellæ also varies.

Var. *semisanguinea* has the lamellæ red, almost as in the preceding species, also the base of the stipe red. Center. October.

Subgenus — Telamonia.

Pileus moist, hygrophanous, smooth, or clothed only with evanescent threads; stem peronate (sheathed with the interwoven veil).—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Stipe bulbous ..... 16.
Stipe not bulbous ..... a.
a. Pileus at first squamulose ..... 17.
a. Pileus smooth, bay ..... b.
b. Stipe stout ..... 18.
b. Stipe slender, subannulate ..... 19.

16. CORTINARIUS ARMILLATUS *Fr.*

Pileus fleshy, thick, convex or subcampanulate, then expanded, minutely squamulose, yellowish-red; lamellæ not

close, broad, slightly emarginate, whitish-ochraceous, then cinnamon; stipe stout, solid, fibrillose, whitish, girt with one to four red bands, bulbous.

Height 4′–6′, breadth of pileus 2′–4′, stipe 4″–8″ thick.

Woods. North Elba. August.

A large and noble species. The margin of the pileus is thin and sometimes uneven; the upper band on the stem is usually the brightest and most regular. The pileus is not distinctly hygrophanous.

17. CORTINARIUS DISTANS *n. sp.*

Pileus thin except the disk, convex, squamulose, bay-brown when moist, tawny when dry; lamellæ broad, distant, thick, dark cinnamon-color; stipe subequal, often a little tapering upward, solid, slightly fibrillose-scaly, concolorous.

Height 2′–3′, breadth of pileus 1′–2′, stipe 4″–6″ thick.

Grassy ground in pine woods. Greenbush. June.

The flesh is dull yellowish. The pileus, when drying, has for a time a brown marginal zone.

18. CORTINARIUS BIFORMIS *Fr.*

Pileus fleshy, thin except the disk, convex or subcampanulate, then expanded and broadly umbonate, smooth, shining, of a bay color; lamellæ rather broad at the inner extremity, tapering outwardly, subrounded at the stipe, scarcely emarginate, watery cinnamon; stipe stout, solid or stuffed, fibrillose-striated, paler than the pileus, subannulate, the sheath white, generally obliquely terminating, sometimes distant.

Height 2′–4′, breadth of pileus 2′, stipe 3″–4″ thick.

Ground under spruce and balsam trees. Catskill Mountains. October.

The plant is sometimes cæspitose, and not unfrequently the cuticle cracks into scales or areas.

19. CORTINARIUS CASTANEOIDES *n. sp.*

Pileus thin, convex, becoming expanded, with deflexed margin, smooth, dark bay or chestnut-color when moist, paler when dry; lamellæ not crowded, slightly and unequally emarginate, yellowish-cinnamon, then cinnamon-color; stipe slender, equal, stuffed or hollow, subannulate, paler than the pileus, the veil or sheath white.

Height 1′–2′, breadth of pileus 6″–12″, stipe 1″–2″ thick.

Under hemlock trees. Catskill Mountains. October.

The pileus sometimes has a small umbo. The plant is gregarious or cæspitose. The veil is subpersistent, and its abrupt termination affords a quite distinct annulus. (Plate 4, figs. 10–15.)

Subgenus — Hygrocybe.

Pileus hygrophanous; stem distinct from the fibrillose veil, hence neither annulate nor floccose-squamulose.—*Berk. Outl.*

SYNOPSIS OF THE SPECIES.

Pileus dark bay ..... 20.
Pileus pale watery cinnamon ..... 21.

20. CORTINARIUS CASTANEUS *Bull.*

Pileus fleshy, thin, campanulate or convex, then expanded, dark chestnut-color when moist, paler when dry; lamellæ rather broad, violet-tinged, then cinnamon, stipe fibrillose, stuffed or hollow, lilac-tinged at the top, white below.

Height 2′–3′, breadth of pileus 1′–2′, stipe 3″–4″ thick.

Ground under spruce and balsam trees. Catskill Mountains. October. Edible.

21. CORTINARIUS VERNALIS *n. sp.*

Pileus thin, hemispherical or convex, then more or less expanded, smooth or at first clothed with a few silky fibrils, pale watery cinnamon when moist, nearly white or yellowish-white when dry; lamellæ rather close, tapering toward the outer extremity, very slightly emarginate, pale cinnamon; stipe subconcolorous, smooth, slender, hollow, easily splitting.

Height 1′–1.5′, breadth of pileus 6″–12″, stipe 1″ thick.

Wet ground in pastures. Helderberg Mountains. May. In very wet ground the margin of the pileus becomes recurved. The spores are ochraceous.

Genus — HYGROPHORUS *Fr.*

Hymenophorum continuous with the stem, and descending without change into the sharp-edged gills; hymenium waxy.—*Berk. Outl.*

The pileus is viscid or moist; the lamellæ are generally distant and decurrent, of a waxy nature and with a watery juice.

SYNOPSIS OF THE SPECIES.

Pileus convex conic or campanulate, not umbilicate ..... a.
a. Pileus viscid or glutinous when moist ..... b.
b. Stem solid or stuffed ..... c.
c. Lamellæ white ..... 1.
c. Lamellæ red ..... 5.
b. Stem hollow ..... 4.
a. Pileus not distinctly viscid ..... e.
e. Lamellæ white ..... 2.
e. Lamellæ colored ..... 3.
Pileus convex, at length umbilicate or depressed ..... f.
f. Pileus not viscid ..... 6.
f. Pileus viscid ..... 7.

1. Hygrophorus chrysodon *Fr.*

Pileus fleshy, not thick, convex, then expanded, viscid when moist, white, the disk often yellowish, the margin dotted with little yellow floccose scales; lamellæ subarcuate, decurrent, distant, white, sometimes faintly pinkish-tinged; stipe equal or slightly attenuated below, solid, white, dotted with yellow floccose scales, especially toward the top.

Height 2′–3′, breadth of pileus 1′–2′, stipe 2″–4″ thick.

Pine woods. Bethlehem. November.

The lamellæ are said to be crisped, and, when young, to have the edge yellow-floccose; but I have seen no such specimens.

2. Hygrophorus pratensis *Fr.*

Pileus convex, firm, even, smooth, moist, white; lamellæ distant, rather thick, arcuate, decurrent, white or yellowish-white; stipe nearly equal, smooth, firm, solid or stuffed, white.

Height about 2′, breadth of pileus 6″–18″, stipe 2″ thick.

Woods. North Elba.

This is the white variety, growing in northern woods. The common form, with a turbinate pileus, of a fulvous or tawny color, and lamellæ either white or concolorous, growing in meadows, I have not seen. I suspect a rigid division would separate our plant as a distinct species.

*3. Hygrophorus conicus *Fr.*

Pileus thin, submembranaceous, fragile, smooth, conical, generally acute, sometimes obtuse, the margin often lobed; lamellæ rather close and broad, subventricose, narrower toward the stem, free, terminating in an abrupt tooth at the outer extremity, scarcely reaching the margin, yellow; stipe equal, fibrous-striate, yellow, hollow.

Height 3′–6′, breadth of pileus 6″–12″, stipe 1″–2″ thick.

Ground in woods and open places. North Elba and Center. August–October.

The color of the pileus is variable. I have taken specimens with it pale sulphur-yellow and others with it bright red or scarlet. The plant turns black in drying.

* 4. Hygrophorus ceraceus *Fr.*

Pileus thin, convex, becoming expanded, smooth, shining, viscid, yellow; lamellæ distant, subemarginate, yellow; stipe smooth, shining, viscid, hollow, more or less tapering, compressed or irregular, concolorous.

Height 1′–3′, breadth of pileus 8″–18″.

Open woods. North Greenbush. October.

5. HYGROPHORUS CONGELATUS *n. sp.*

Pileus thin, convex, even, smooth or obscurely fibrillose, sordid red, sometimes tinged with yellow; lamellæ few, distant, broad, subemarginate, decurrent-toothed, bright red; stipe equal, slender, smooth, solid, red, yellow within.

Height 1′, breadth of pileus 4″–6″, stipe about 1″ thick.

Banks by roadsides. North Elba. September.

The specimens were collected in dry weather, but when moistened the pileus appears to be viscid. It has a peculiar, faded, dingy red appearance as if frost-bitten; whence the name. At first sight the plant might be taken for small *Hygrophorus miniatus*, from which it is clearly distinct by the smooth pileus and the color and character of the lamellæ.

6. HYGROPHORUS CANTHARELLUS *Schw.*

Pileus thin, convex, at length umbilicate or centrally depressed, minutely squamulose, moist, bright red, becoming orange or yellow; lamellæ distant, subarcuate, decurrent, yellow, sometimes tinged with vermilion; stipe smooth, equal, subsolid, sometimes becoming hollow, concolorous, whitish within.

Height 2′–4′, breadth of pileus 6″–12″, stipe 1″–2″ thick.

Swamps and damp shaded places in fields or woods. July–September. Common.

Var. *rosea* has the pileus expanded and the margin wavy scolloped. Swamps. Sandlake.

7. HYGROPHORUS NITIDUS *B. & R.*

Pileus thin, fleshy, convex, broadly umbilicate, smooth, shining, viscid, pale yellow with the margin striatulate when moist, nearly white when dry; lamellæ arcuate, decurrent, yellow; stipe slender, brittle, smooth, viscid, hollow, yellow; flesh yellow.

Height 2′–4′, breadth of pileus 8″–12″, stipe 1″–2″ thick.

Swamps. Sandlake. August.

The cavity of the stem is very small. (Plate 1, figs. 2–6.)

Genus — LACTARIUS *Fr.*

Hymenophorum confluent with the stem and vesiculose trama.

Gills milky, edge acute.— *Berk. Outl.*

The species of this genus are most readily known by the milky or rarely colored juice which oozes from the lamellæ when cut or broken. The pileus is generally rather thick, fleshy, at first convex, then more or less centrally depressed, often subfunnel form; the lamellæ are rather close, attached and appearing decurrent from the form of the pileus; the stem is most frequently short and thick, either solid, spongy, stuffed or hollow. The taste is often acrid, hot or peppery, yet some species are mild and considered not only esculent but delicious. The spores are globose and minutely papillose.

Synopsis of the Species.

Pileus viscid when moist ..... a.
a. Milk white, not changing color ..... 2.
a. Milk white, becoming purplish or lilac ..... 3.
a. Milk orange-colored ..... 4.
Pileus dry or not clearly viscid when moist ..... b.
b. Taste mild ..... c.
c. Stem solid; pileus yellowish-tawny ..... d.
d. Lamellæ close ..... 5.
d. Lamellæ distant, connected by veins ..... 6.
c. Stem stuffed or hollow; pileus dark rufous ..... 7.
b. Taste acrid (hot like pepper) ..... e.
e. Milk white, becoming yellow ..... f.
f. Pileus pinkish-yellow ..... 11.
f. Pileus sooty-brown ..... 16.
e. Milk white, unchangeable ..... g
g. Margin of the pileus tomentose ..... 1.
g. Margin of the pileus naked ..... h.
h. Stem solid ..... i.
i. Pileus white ..... 12.
i. Pileus brown ..... 15.
h. Stem stuffed ..... k.
k. Pileus dark rufous ..... 9.
k. Pileus cinereous or brown, plant odorous ..... 18.
k. Pileus cinereous or brown, plant inodorous ..... 14.
h. Stem at length hollow ..... l.
l. Stem thick ..... m.
m. Lamellæ broad (4″) ..... 10.
m. Lamellæ narrow (2″) ..... 13.
l. Stem slender ..... n.
n. Pileus cinereous ..... 17.
n. Pileus pale reddish-ochraceous ..... 8.

* 1. Lactarius torminosus *Fr.*

Pileus depressed with the margin decurved and villous-tomentose, pallid, sometimes banded or zonate; lamellæ narrow, close, whitish, inclining to yellowish flesh-color; stipe equal, smooth, hollow, whitish.

Height 2′–4′, breadth of pileus 2′–4′, stipe 4″–8″ thick.

Woods. North Elba. August.

The pileus is generally pale ochraceous, somewhat mottled with flesh-color. Sometimes the tomentum extends over nearly the whole surface of the pileus. Taste acrid.

2. LACTARIUS AFFINIS *n. sp.*

Pileus fleshy, viscid, smooth, centrally depressed, pale ochraceous-yellow; lamellæ rather broad, whitish, tinged with yellow, some of them forked near the inner extremity; stipe equal, smooth, stuffed, at length hollow, concolorous; flesh, milk and spores white.

Height 2′–4′, breadth of pileus 3′–4′, stipe 6″–8″ thick.

Pastures. Catskill Mountains. October.

Very near *Lactarius insulsus*, from which it differs only in the entire absence of zones or bands, and in having the spores white, instead of yellow. The taste is acrid. But for the color of the spores, I should not have separated it from *L. insulsus*.

3. LACTARIUS UVIDUS *Fr.*

Pileus rather thin, convex, then expanded, sometimes depressed, smooth, viscid, grayish-brown or livid-brown, tinged with flesh-color, often with a small umbo; lamellæ narrow, close, white or yellowish, becoming purplish or dull lilac where cut or bruised; stipe rather long, equal, or slightly tapering upward, white, stuffed or hollow, smooth; milk white, changing to dull lilac color.

Height 2′–4′, breadth of pileus 1′–2.5′, stipe 3″–5″ thick.

Woods, generally in moist places. North Elba and West Albany. August–October.

Flesh turning purplish when cut. The taste is slightly acrid.

4. LACTARIUS DELICIOSUS *Fr.*

Pileus at first convex and broadly umbilicate, then depressed, smooth, viscid when moist, pale orange with brighter colored bands; lamellæ rather broad, subconcolorous; stipe equal, smooth, stuffed or hollow, concolorous, sometimes spotted; milk orange-colored.

Height 2′–3′, breadth of pileus 2′–3′, stipe 4″–6″ thick.

Ground in woods and open places. Catskill and Adirondack Mountains and Sandlake. August–October.

Esculent, and said to be very good. The taste is mild. The pileus fades with age, and the wounded lamellæ at length become stained with green.

*5. LACTARIUS VOLEMUS *Fr.*

Pileus fleshy, thick, firm, convex, then expanded or depressed, dry, yellowish-tawny, the cuticle of the disk sometimes cracking into areas; lamellæ narrow, close, white or

yellowish; stipe nearly equal, short, firm, solid, smooth or pruinose, concolorous; flesh whitish; milk abundant, white, not acrid.

Height 2′–4′, breadth of pileus 2′–4′, stipe about 6″ thick.

Common. July–September. Edible.

6. Lactarius distans *n. sp.*

Pileus fleshy, firm, convex or expanded, centrally depressed, pruinose-tomentose, yellowish-tawny, sometimes rugulose-wrinkled; lamellæ distant, subarcuate, connected by veins, white or yellowish; stipe very short, solid, firm, equal or tapering downward, pruinose, subconcolorous; flesh and milk white, mild.

Height 1′–2′, breadth of pileus 2′–4′.

Grassy ground. Albany. July.

The pileus is sometimes irregular and eccentric, and the cuticle often cracks into areas. The stipe scarcely exceeds one inch in length. Allied to *L. hygrophoroides*, of which it may possibly prove to be a large variety.

7. Lactarius camphoratus *Bull.*

Pileus thin, fleshy, convex, then expanded or depressed, smooth, with a very small umbo or papilla, dark bay or brownish-red; lamellæ rather narrow, close, a little paler than the pileus, sometimes tinged with yellow; stipe nearly equal, smooth, subconcolorous, stuffed above, hollow below, flesh tinged with dull red; milk white, mild.

Height 2′–3′, breadth of pileus 8″–18″, stipe 2″–4″ thick.

Swamps. Sandlake. August.

I have not seen specimens with the pileus zonate. The dried specimens emit an agreeable odor, like that of *Cyperus inflexus*. In size and shape it is like *L. subdulcis*, from which it is distinct by its mild taste and darker color. Its color is like that of *L. rufus*, but that species is larger and intensely acrid.

8. Lactarius subdulcis *Bull.*

Pileus thin, fleshy, plane or depressed, smooth, with a very small umbo or papilla, pale ochraceous-red, tinged with flesh-color; lamellæ close, more narrow toward the stipe, whitish, tinged with red or flesh-color; stipe nearly equal, rather slender, smooth, stuffed or hollow, concolorous, villous at the base; flesh whitish; milk white.

Height 2′–3′, breadth of pileus 8″–15″, stipe 2″–3″ thick.

Swamps and wet places in woods and fields.

Very common. July–October. The taste is at first mild, soon slightly acrid and woody.

9. LACTARIUS RUFUS *Scop.*

Pileus fleshy, at first convex and centrally depressed, then funnel-form, smooth, often with a small umbo, dull bay; lamellæ not broad, close, yellowish, tinged with red or flesh-color; stipe equal, smooth, stuffed, subconcolorous; flesh pinkish-tinged; milk white.

Height 3′–5′, breadth of pileus 2′–4′, stipe 3″–5″ thick.

Low swampy woods. North Elba. August. Taste intensely acrid.

10. LACTARIUS PLATYPHYLLUS *n. sp.*

Pileus fleshy, thick, depressed, with the margin spreading or decurved, sometimes subfunnel-form, smooth, yellowish flesh-color; lamellæ broad, not crowded, dull yellowish; stipe equal, stout, smooth, hollow, a little paler than the pileus; flesh white; milk white.

Height 4′–6′, breadth of pileus 4′–8′, stipe 6″–12″ thick.

Woods. North Elba. August.

A very large species, with an acrid taste. In color it resembles *L. chrysorheus*, from which it is distinct by its large size, zoneless pileus, unchanging milk, and very broad lamellæ, which are 4″ wide. The pileus is perhaps viscid in moist weather. I have only seen it dry.

11. LACTARIUS CHRYSORHEUS *Fr.*

Pileus fleshy, not thick, convex, umbilicate, then expanded and centrally depressed or subfunnel-form, nearly smooth, yellowish flesh-colored, with brighter bands; lamellæ narrow, close, yellowish, stained with sordid reddish or brown spots where bruised; stipe equal, smooth, paler than the pileus, stuffed or hollow; flesh white, stained with yellow; milk white, quickly changing to yellow.

Height 2′–4′, breadth of pileus 2′–4′, stipe 4″–6″ thick.

Woods and groves. Common. North Elba, West Albany, etc. August–October.

The taste is acrid and woody. The colored bands of the pileus are sometimes wanting.

*12. LACTARIUS PIPERATUS *Scop.*

Pileus fleshy, thick, firm, smooth, at first convex and umbilicate or centrally depressed, at length funnel-form; lamellæ narrow, close, some of them forked, white; stipe short, stout, equal, firm, solid; flesh white; milk white.

Breadth of pileus 4′–6′, stipe 1′–2′ long, 8″–12″ thick.

Woods, especially under hemlock trees. Very common.

This is classed with the edible species, although its taste is acrid in the uncooked state.

13. LACTARIUS SORDIDUS *n. sp.*

Pileus fleshy, thick, firm, convex and centrally depressed, at length subfunnel-form, nearly smooth, pale brownish-yellow, the disk darker, with greenish hues; lamellæ very narrow, close, white or yellowish; stipe short, firm, equal or slightly tapering upward, hollow, concolorous, generally spotted; flesh white, with a pinkish tinge; milk white.

Height 2′–3′, breadth of pileus 2′–4′, stipe 4″–6″ thick.

Ground under spruce and balsam trees. North Elba. September. Taste acrid.

The pileus of this, like that of *L. piperatus*, is often soiled by dirt carried up in its growth. (Plate 2, figs. 10–12.)

14. LACTARIUS PYROGALUS *Fr.*

Pileus fleshy, expanded or depressed, smooth, often slightly zoned when moist, livid-gray; lamellæ narrow, not crowded, white or yellowish; stipe short, equal, stuffed or hollow, concolorous; flesh whitish; milk white.

Height 1′–2′, breadth of pileus 1′–2′, stipe 2″–4″ thick.

Ground in grassy places and borders of woods. Greenbush and Center. October. Taste acrid, woody.

15. LACTARIUS PLUMBEUS *Fr.*

Pileus fleshy, firm, convex and centrally depressed, then subfunnel-form, dry, minutely tomentose, varying in color, grayish-brown, pinkish-brown, or blackish-brown; lamellæ narrow, close, yellowish; stipe firm, equal, solid, paler than the pileus; flesh and milk white.

Height 1′–3′, breadth of pileus 1′–3′, stipe 3″–6″ thick.

In hemlock woods. Catskill Mountains. October. Taste acrid.

* 16. LACTARIUS SUBTOMENTOSUS *B. & R.*

Pileus fleshy, not thick, convex, then expanded or slightly depressed, dry, minutely tomentose, brown, sometimes with a small umbo, often with the margin wavy-lobed; lamellæ distant, yellowish; stipe equal, rather long, stuffed, concolorous; flesh white; milk white.

Height 2′–4′, breadth of pileus 2′–3′, stipe 3″–4″ thick.

Woods and groves. Adirondack Mountains and Sandlake. July – October.

Pileus sometimes rugose-wrinkled.

17. LACTARIUS GRISEUS *n. sp.*

Pileus fleshy, thin, expanded and broadly umbilicate or subfunnel-form, most often with a small umbo or papilla, minutely tomentose, gray, becoming dingy-white with age; lamellæ narrow, close, white tinged with yellow; stipe rather long, equal or slightly tapering upward, brittle, stuffed above, hollow below, villous at the base; milk white.

Height 2′–3′, breadth of pileus 6″–18″, stipe 2″–3″ thick.

Swamps and low woods. Sandlake and Adirondack Mountains. August and September. Taste slightly acrid.

18. LACTARIUS GLYCIOSMUS *Fr.*

Pileus thin, fleshy, convex, then expanded or depressed, dry, minutely tomentose, cinereous, or grayish-brown, often with a small umbo and the margin distantly striate-marked; lamellæ narrow, close, yellowish; stipe short, nearly equal, pallid, stuffed; milk white.

Height 1′–2′, breadth of pileus 6″–18″ stipe 1″–2″.

Under pine and balsam trees on the ground or on rotten wood. Adirondack and Catskill Mountains. August – October. Taste acrid, unpleasant. Remarkable for, and easily distinguished by, its strong aromatic odor.

Genus — RUSSULA *Fr.*

Hymenophorum continuous with the vesiculose trama. Gills rigid, not milky; edge acute. Veil none.— *Berk. Outl.*

In size and shape the species of this genus resemble those of the preceding one, from which they are at once distinguished by the absence of a milky or colored juice. Some of them resemble the exannulate *Amanitæ*, from which the entire absence of a veil will serve to separate them.

SYNOPSIS OF THE SPECIES.

1. RUSSULA DECOLORANS *Fr.*

Pileus fleshy, firm, smooth, viscid when moist, at length expanded or depressed, the margin thin, even or obscurely striate-tuberculate, color various, orange, yellow or grayish-

brown, tinged with purple, becoming paler with age; lamellæ rather close, venose-connected, some of them forked, white, then yellowish; stipe cylindrical, solid, spongy, whitish or pinkish; spores yellow.

Height 3′–5′, breadth of pileus 3′–5′, stipe 6″–15″ thick.

Pine woods. West Albany. October.

A large species, with a mild taste.

2. Russula nitida *Fr.*

Pileus firm, fleshy, with a thin submembranaceous margin, at first convex, then expanded or depressed, viscid when moist, shining, the margin striate-tuberculate, color various, generally a dull or sordid purple, the disk darker; lamellæ close, subfree, narrowed toward the inner extremity, venose-connected, white, then yellow; stipe white, stuffed, equal or slightly tapering upward.

Height 2′–4′ breadth of pileus 2′–3′, stipe 4″–6″ thick.

Pine woods. West Albany. October.

Taste mild at first, then slightly disagreeable.

3. Russula fœtens *Fr.*

Pileus fleshy, with a wide thin margin, hemispherical or convex, then expanded or depressed, viscid when moist, widely striate-tuberculate on the margin, dull pale yellow or straw-color; lamellæ rather broad, close, venose-connected, some of them forked, whitish; stipe nearly cylindrical, whitish, hollow; spores white; plant sometimes cæspitose.

Height 2′–3′, breadth of pileus 2′–4′, stipe 4″–8″ thick.

Ground in woods and open places. Common. Sandlake, Albany, etc. July and August.

Taste acrid, odor strong. When young, the lamellæ are studded with drops of moisture.

Genus—CANTHARELLUS *Fr.*

Hymenophorum inferior, confluent with the floccose trama.

Gills thick, swollen, somewhat branched. Edge obtuse.—*Berk. Outl.*

The species of this genus are easily separated from all others by the obtuse edge of the narrow, more or less branching or anastomosing gills.

Synopsis of the Species.

Plants terrestrial, stem central	a.
a. Lamellæ abundantly anastomosing, stem short	1.
a. Lamellæ irregularly branched or sparingly anastomosing	b.

b. Pileus luteous or egg-yellow ..... c.
c. Stem thick, solid ..... 2.
c. Stem slender, stuffed or hollow ..... 3.
b. Pileus brownish-yellow ..... d.
d. Hymenium yellow, not pruinose ..... 4.
d. Hymenium becoming lilac-pruinose ..... 5.
a. Lamellæ repeatedly forked, regular ..... e.
e. Lamellæ orange-colored ..... 6.
e. Lamellæ white ..... 7.
Plant lignatile, stem lateral ..... 8.

1. CANTHARELLUS FLOCCOSUS *Schw.*

Pileus fleshy, elongated funnel-form or trumpet shape, floccose-squamose, ochraceous-yellow; lamellæ veinlike, close, much anastomosing above, long decurrent and subparallel below, concolorous; stipe very short, thick, rarely deeply rooting.

Height 2′–4′, breadth of pileus at the top 1′–3′.

Woods and their borders. Not rare. Utica, *Johnson.* Albany and Sandlake. July and August.

2. CANTHARELLUS CIBARIUS *Fr.*

Pileus fleshy, obconic, smooth, egg-yellow, slightly depressed; lamellæ thick, distant, more or less branching and anastomosing, concolorous; stipe firm, solid, often tapering downward, concolorous, flesh white.

Height 2′–4′, breadth of pileus 2′–3′, stipe 3″–6″ thick.

In open woods and grassy places. Common. July and August.

Edible. The smell of apricots is not always clearly perceptible in American specimens.

3. CANTHARELLUS MINOR *n. sp.*

Pileus fleshy, thin, convex, then expanded and depressed, egg-yellow; lamellæ very narrow, distant, sparingly branched, yellowish; stipe slender, subflexuous, equal, smooth, hollow or stuffed, concolorous.

Height 1′–2′, breadth of pileus 6″–12″.

In open woods. Greenbush. July.

4. CANTHARELLUS LUTESCENS *Bull.*

Pileus thin, fleshy, convex, umbilicate, brownish-floccose, yellowish; lamellæ very distant, sparingly branched, arcuate-decurrent, pale ochraceous; stipe slender, slightly tapering downward, smooth, shining, bright orange-tinted yellow, stuffed or hollow.

Height 2′–3′, breadth of pileus 8″–15″.

Mossy ground in woods. Catskill and Adirondack Mountains, also Sandlake. August–October.

This is regarded by some as a variety of *C. tubæformis*.

5. CANTHARELLUS INFUNDIBULIFORMIS *Fr.*

Pileus fleshy, thin, umbilicate, then funnel-form, nearly smooth, dingy yellow; lamellæ thick, distant, dichotomously branched, sometimes anastomosing, yellowish, then dull lilac, pruinose; stipe equal, slender, smooth, hollow, pale yellow.

Height 1′–2′, breadth of pileus about 1′.

In swamps. Sandlake. August.

6. CANTHARELLUS AURANTIACUS *Fr.*

Pileus fleshy, obconic, nearly plane above, smooth or minutely tomentose, dull orange with the disk usually brownish, the margin decurved and sometimes yellowish; lamellæ narrow, close, repeatedly forked, orange, sometimes yellowish; stem inequal, generally tapering upward, colored like the pileus; flesh yellowish, taste mild.

Height 2′–3′, breadth of pileus 1′–3′, stem 2″–4″ thick.

Ground and very rotten logs in woods or in fields. Common.

7. CANTHARELLUS DICHOTOMUS *n. sp.*

Pileus fleshy, at first broadly convex, then expanded, obconic with a decurved margin, acutely umbonate, smooth or slightly silky, shining, steel-blue; lamellæ close, rather broad, repeatedly forked, white; stem long, soft, solid, silky, slightly tapering upward, whitish, usually tinged with the color of the pileus; flesh whitish.

Height 3′–6′, breadth of pileus 6″–12″, stem 2″–3″ thick.

Damp mossy ground in woods. North Elba. August.

The white mycelium at the thick base of the stem is abundant, and invests the surrounding mosses so closely that it is difficult to pluck the plant entire without taking with it a tuft of moss. The small but prominent acute umbo is rarely wanting.

Var. *brevior* is a smaller form, occurring in open, mossy places. It is grayish-brown with the umbo wanting or reduced to an acute papilla and the shorter stem equal and scarcely silky. North Elba and Catskill Mountains. August–October (Plate 4, figs. 6–9.)

*8. CANTHARELLUS CRISPUS *Fr.*

Pileus thin, expanded, villous or pubescent, yellowish-brown, often lobed and cæspitose; lamellæ narrow, close,

dichotomously branched, sometimes anastomosing, crisped, glaucous-green; stipe lateral or none.

Pileus 4″–8″ broad.

Trunks of trees, etc. Common. September–November.

Genus — MARASMIUS *Fr.*

Hymenophorum confluent with the stem, though different in texture, descending into the floccose trama. Hymenium dry, covering the interstices as well as the gills. Gills or folds thick, tough and subcoriaceous. Edge acute.—*Berk. Outl.*

The tough subcoriaceous texture of the plant, and the dry, continuous hymenium are the chief characters in this genus. Specimens of these plants are easily preserved, being less fleshy, putrescent and perishable than the preceding. Most of the species grow upon wood, decaying twigs or leaves.

SYNOPSIS OF THE SPECIES.

Stem naked, solid ..... 1.
Stem velvety-tomentose or hairy ..... a.
a. Lamellæ narrow, crowded ..... 2.
a. Lamellæ not crowded ..... 3.
Stem smooth, shining, hollow ..... b.
b. Pileus even; plant fetid ..... 4.
b. Pileus distantly sulcate-striate ..... c.
c. Pileus whitish ..... d.
d. Lamellæ attached to a free collar ..... 5.
d. Lamellæ attached to the stem ..... 6.
c. Pileus subrufous ..... e.
e. Pileus expanded ..... 7.
e. Pileus campanulate or convex ..... 8.

*1. MARASMIUS OREADES *Bolt.*

Pileus fleshy, firm, smooth, convex, then expanded, often irregular and broadly subumbonate, watery fulvous when moist, whitish or cream-colored when dry; lamellæ broad, distant, free, whitish or cream-colored; stipe equal, smooth, solid, concolorous, sometimes rooting.

Height 2′–3′, breadth of pileus 1′–2′.

Grassy ground and pastures. May–October. Very common.

The plant is described as growing in rings. I have never seen it forming a complete ring, but it often forms a part of one. Edible.

2. MARASMIUS VELUTIPES *B. & C.*

Pileus thin, submembranaceous, smooth, convex or expanded, grayish-rufous when moist, cinereous when dry; lamellæ very narrow, crowded, whitish or gray; stipe slender,

equal, hollow, clothed with a dense grayish velvety tomentum; plant often cæspitose.

Height 3′–5′, breadth of pileus 8″–18″.

Woods. Sandlake and Adirondack Mountains. July–October.

*3. MARASMIUS PLANCUS *Fr.*

Pileus thin, expanded or slightly depressed, sometimes uneven and striatulate, dull rufous when moist, paler when dry, the disk often a little darker; lamellæ distant, rounded at the inner extremity and separating from the stem, dull yellowish; stipe firm, often compressed, especially at the top, stuffed or hollow, concolorous, whitish-pubescent.

Height 2′–4′, breadth of pileus about 1′.

Woods. Common. June–August.

4. MARASMIUS SCORODONIUS *Fr.*

Pileus thin, submembranaceous, expanded, subrugulose, grayish-rufous, the disk a little darker; lamellæ very narrow, close, rounded at the inner extremity, subfree, whitish or cream-colored; stipe slender, tough, smooth, shining, hollow, reddish-brown, paler at the top; plant with a fetid odor.

Height 1′–2′, breadth of pileus 4″–6″.

On sticks and decaying wood. Sandlake. August.

The odor resembles that of skunk-cabbage.

*5. MARASMIUS ROTULA *Fr.*

Pileus membranaceous, dry, convex or expanded, umbilicate, smooth, radiate-sulcate, whitish; lamellæ few, distant, broad, whitish, attached to a free collar surrounding the stem; stipe slender, tough, smooth, shining, black, paler at the top, hollow.

Height 1′–2′, breadth of pileus 3″–6″.

On sticks, dead leaves, etc. Common. June–September.

6. MARASMIUS SUBVENOSUS *n. sp.*

Pileus membranaceous, dry, convex, subumbilicate, radiate-sulcate, smooth, white or yellowish; lamellæ few, distant, sometimes branched and subvenose, concolorous, attached to the stipe; stipe tough, smooth, shining, brown, paler above, hollow.

Height 8″–12″, breadth of pileus 2″–4″.

On dead herbaceous stems and leaves. Center. October.

Closely related to *M. epiphyllus*, from which it differs in its smooth stem. (Plate 6, figs. 15–21.)

7. MARASMIUS ANDROSACEUS *L.*

Pileus membranaceous, convex or expanded, subumbilicate, obscurely striate, brownish-red; lamellæ narrow, rather numerous, attached, whitish or subconcolorous; stipe tough, smooth, shining, black, whitish at the top, hollow.

Height 1′–2′, breadth of pileus 3″–5″.

On sticks and leaves in woods, especially of pine. June–September.

8 MARASMIUS CAMPANULATUS *n. sp.*

Pileus membranaceous, convex or campanulate, dry, smooth, radiate-sulcate, ochraceous-red, the disk a little darker; lamellæ few, distant, broad, narrowed toward the stem, free or slightly attached, whitish; stipe tough, smooth, shining, blackish-brown, hollow.

Height 1′–2′, breadth of pileus 3″–6″.

Dead leaves, etc., in woods. Common. July and August.

Allied to *M. siccus* but differing in the character of the lamellæ and the paler stipe.

Genus—LENTINUS *Fr.*

Coriaceous, fleshy and tough, at length hard, tough, dry. Gills tough. Edge acute, toothed. Hymenophorum homogeneous with the stem.—*Berk. Outl.*

The firm tough fleshy pileus, and the thin serrated lamellæ are the prominent characters of this genus. The stipe is often eccentric or lateral. The species generally grow on wood, in open places, persist for some time and become hard when dry.

SYNOPSIS OF THE SPECIES.

1. LENTINUS LEPIDEUS *Fr.*

Pileus fleshy, firm, convex or expanded, nearly white, spotted with dark brown appressed scales; lamellæ rather broad, not crowded, attached, slightly emarginate and decurrent, white, the edge rough, eroded or torn; stipe firm, solid, equal or tapering downward, more or less scaly, whitish, sometimes eccentric, straight or curved.

Height 2′–4′, breadth of pileus, 3′–5′, stipe 4″–6″ thick.

Growing from crevices in old stumps, logs, etc., exposed to the full rays of the sun. Common. Albany, Sandlake, North Elba. June–August. Poughkeepsie. *Gerard.*

2. Lentinus cochleatus *Fr.*

Pileus fleshy, firm, expanded, irregular, sublobed, often umbilicate or depressed, smooth, dull grayish-rufous; lamellæ close, rather broad, serrated, dull flesh-colored; stipe central, eccentric or lateral, solid, slightly narrowed downward, distantly sulcate; plant densely cæspitose; pilei often growing together.

Height 1′–2′, breadth of pileus 6″–12″.

Decaying wood. North Elba. August.

Genus—BOLETUS *Fr.**

Hymenophorum quite distinct from the hymenium. Trama obsolete. Hymenium lining the cavity of tubes separable from one another and from the hymenophorum.—*Berk. Outl.*

The species of this genus are numerous, often large and fleshy, and readily known by the tubes being easily separable from the pileus. The flesh is soft and juicy and is very liable to be attacked by insects. In some species it changes color when bruised or cut.

Synopsis of the Species.

Pileus viscid when moist ..... a.
  a. Tubes attached to the stem, without a stipal cavity ..... b.
    b. Stem annulate ..... c.
      c. Pileus scaly ..... d.
        d. Stem long (4′–6′) ..... 1.
        d. Stem short (1′–3′) ..... 2.
      c. Pileus smooth ..... e.
        e. Tubes small, simple ..... f.
          f. Pileus yellow ..... 3.
          f. Pileus bay ..... 4.
        e. Tubes ample, compound ..... 5.
    b. Stem not annulate ..... g.
      g. Pileus yellow, flesh yellow ..... 6.
      g. Pileus pallid, flesh white ..... 7.
      g. Pileus white, flesh white ..... 8.
  a. Tubes with a stipal cavity ..... 9.
Pileus not viscid ..... h.
  h. Tubes with a stipal cavity ..... i.
    i. Flesh becoming blue where cut or bruised ..... k.
      k. Tubes one color ..... 10.
      k. Tubes with the mouth differently colored ..... 11.
    i. Flesh not turning blue ..... l.
      l. Tubes pale flesh-color 12
      l. Tubes yellow 13
  h. Tubes attached, with no stipal cavity ..... m
    m. Pileus distinctly tomentose ..... n.
      n. Pileus purplish-brown ..... 14.
      n. Pileus bright pinkish-red ..... 15.
      n. Pileus blackish-brown ..... 16.
    m. Pileus smooth, or most minutely tomentose ..... o.

*This genus belongs to the order *Polyporei*.

o. Stem reticulated ..... 17.
o. Stem not reticulated ..... p.
p. Tubes pale yellow ..... 18.
p. Tubes fulvous, sinuate ..... 19.

1. BOLETUS SPECTABILIS *n. sp.*

Pileus broadly convex, viscid when moist, squamose, bright red, with brownish scales, sometimes pink with brownish-yellow scales; tubes convex, attached, large, angular, ochraceous; stipe nearly equal, solid, annulate, yellow stained with red or subconcolorous; veil membranaceous, red, viscid; flesh yellow; spores dark ferruginous.

Height 4′–6′, breadth of pileus 3′–5′, stipe 6″ thick.

Mossy swamps. North Elba. August. A large showy species.

The scales of the pileus are large and distant, except on the disk. (Plate 6, figs. 1–3.)

2. BOLETUS PICTUS *n. sp.*

Pileus broadly convex or expanded, viscid when moist, at first covered with a red tomentum, which soon breaks up into rather small close scales; tubes plane or convex, attached, large, angular, yellow; stipe equal, solid, annulate, subconcolorous; flesh yellowish.

Height 1.5′–3′, breadth of pileus 2′, stipe, 3″–5″ thick.

Woods and borders of swamps. Common. July and August.

The red tomentose scales give it a pretty spotted appearance. The stipe is slightly marked at the top by the decurrent walls of the tubes.

3. BOLETUS LUTEUS *L.*

Pileus convex, sometimes expanded, smooth, dull yellow, when moist coated with a brownish gluten, streaked or obscurely reticulated with brownish-yellow; tubes plane or convex, short, attached, minute, subrotund, ochraceous yellow; stem equal, annulate, solid, scabrous with small reddish or brown dots; flesh whitish, inclining to dull yellow; annulus brownish.

Height 2′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Sandy soil. Center. October.

Our specimens, in color, vary somewhat from the type, and have the stem dotted its whole length. Edible.

4. BOLETUS CLINTONIANUS *n. sp.*

Pileus thick, convex, viscid when moist, smooth, shining, bay-red, or chestnut-color; tubes nearly plane, attached, subdecurrent, small, nearly round, pale yellow, becoming darker:

stipe equal, stout, solid, annulate, subconcolorous, sometimes stained with yellow, slightly reticulated at the top; annulus and flesh yellow; plant sometimes cæspitose.

Height 4′–6′, breadth of pileus 3′–5′, stipe 6″–9″ thick.

Low woods. North Elba. August. A noble species.

Large specimens sometimes have a submarginal groove or concavity on the pileus. Dedicated to Hon. G. W. Clinton, than whom there is no more ardent lover of botany nor more devoted friend of science. (Plate 5, figs. 1–5.)

5. BOLETUS ELBENSIS *n. sp.*

Pileus convex, sometimes gibbous, smooth, viscid when moist, dingy-gray tinged with flesh-color, obscurely streaked and reticulated with darker hues; tubes nearly plane, attached, subdecurrent, rather large, angular, compound, whitish, becoming ochraceous-brown; stipe equal, solid, annulate, concolorous below, white above the annulus, the top slightly marked by the decurrent walls of the tubes; flesh white.

Height 4′–5′, breadth of pileus 2′–4′, stipe 4″–6″ thick.

Low ground in woods and their borders. North Elba. August.

Related to *B. laricinus*, but our plant is not at all squamose, nor does it have the stem pitted. The pileus, from its markings, sometimes has the appearance of being pitted or slightly eaten on its surface by insects.

6. BOLETUS FLAVIDUS *Fr.*

Pileus convex or expanded, viscid when moist, smooth, yellow; tubes plane or slightly convex, attached, rather large, angular, compound, honey-yellow; stipe rather slender, nearly equal, solid, dotted, not annulate, yellow or brownish; flesh whitish, inclining to yellow.

Height 2′–3′, breadth of pileus 2′, stipe 2″–4″.

Woods and open places. Common. August–October.

Sometimes the pileus is dotted and streaked with red. The veil is very fugacious, so that the stipe is seldom found with an annulus. Sometimes drops of juice or moisture are seen on the tubes and stipe. These turn black with age. The fingers are stained in handling the plant. Edible.

7. BOLETUS COLLINITUS *Schæff.*

Pileus convex, viscid when moist, grayish-white, more or less tinged with rusty-red or yellow; tubes plane, attached, not large, some of them, at least, divided, whitish, becoming yellow; stipe equal, solid, firm, not annulate, whitish, dotted with reddish-brown; flesh white.

Height 2′–3′, breadth of pileus 2′–3′, stipe 3″–6″ thick.

In pastures and borders of woods. Common. Albany. Sandlake, etc. September and October. Edible.

The plant is sometimes cæspitose.

8. BOLETUS ALBUS *n. sp.*

Pileus fleshy, smooth, convex, viscid when moist, white; tubes plane, attached, subrotund, medium size, compound, ochraceous-yellow; stipe equal or slightly tapering downward, white, tinged with pink, dotted, not annulate, slightly reticulated at the top; flesh white.

Height 3′–4′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Woods. Adirondack Mountains. August.

This species differs from *B. collinitus* in its white pileus, larger and differently colored tubes, etc.

*9. BOLETUS SCABER *Fr.*

Pileus convex, viscid when moist, variable in color, brick red, gray or brown; tubes convex, depressed about the stipe or free, small, rotund, white, then grayish-yellow; stem solid, slightly tapering upward, exannulate, white, rough with small, blackish, fibrous scales.

Height 4′–6′, breadth of pileus 3′–5′, stipe 4″–6″ thick.

Borders of woods and open places. Common. June–September

Edible. Variable. It sometimes attains a very large size, exceeding the dimensions given.

10. BOLETUS CYANESCENS *Bull.*

Pileus broadly convex or expanded, dry, densely yellowish-tomentose or floccose-squamose; tubes convex, free, small, round, whitish, then yellow; stipe firm, stuffed or hollow, tomentose-pruinose, rapidly tapering toward the top, ventricose-bulbous at the base, concolorous; flesh white, quickly turning blue and purple when cut or bruised.

Height 3′–5′, breadth of pileus 2′–4′.

Banks by roadsides and in woods. Sandlake and Adirondack Mountains. August and September.

The tomentum of the pileus generally breaks up into substellate areas or scales. The exterior of the stem is firm, the interior soft or spongy. When the flesh is bruised the purple tints generally appear first, then the blue.

11. BOLETUS VERMICULOSUS *n. sp.*

Pileus broadly convex, dry, smooth or most minutely tomentose, grayish-brown, tinged with red; tubes plane or

slightly convex, free, small, round, yellow, with the mouth brownish-orange, becoming almost black; stipe equal, solid, smooth, paler than the pileus; flesh whitish, changing to blue, as also do the tubes, when cut or bruised.

Height 3′–4′, breadth of pileus 3′–4′, stipe 6″ thick.

Ground in woods and open places. New Baltimore and Sandlake. July and August.

Near *B. luridus*. I have always found this plant much infested by the larvæ of insects, so that it is with difficulty a specimen can be dried before they destroy it.

*12. Boletus felleus *Bull.*

Pileus broadly convex, soft, smooth, pale grayish-brown or brick-red, the margin thick; tubes convex, depressed around the stipe, very long, angular, not large, pale flesh-color; stipe equal or slightly tapering upward, smooth, solid, subconcolorous, reticulated above; flesh white, or pale flesh-color; spores rose-color.

Height 4′–6′, breadth of pileus 3′–5′, stipe 6″–12″ thick.

In pine or hemlock woods and groves. Common. July and August.

Our plant is a large and fleshy one, not agreeing closely with the published descriptions.

13. Boletus edulis *Bull.*

Pileus thick, broadly convex, smooth, grayish-red; tubes convex, nearly free, long, minute, round, yellow, at length tinged with green; stipe equal, firm, solid, dull ochraceous, finely reticulated its whole length; flesh whitish, not changing color.

Height 6′, breadth of pileus 4′–6′, stipe 1′ thick.

Banks by roadsides. North Elba. August.

It appears to be rare. Edible.

14. Boletus subtomentosus *L.*

Pileus broadly convex, or expanded, sometimes slightly umbonate, dry, squamulose-tomentose, pinkish-brown; tubes convex, attached or slightly decurrent, very large, angular, compound, yellow; stipe equal, solid, yellowish-brown, paler at the top and marked with the decurrent walls of the tubes; flesh whitish, tinged with yellow, unchangeable; spores pale ochraceous with a greenish tinge.

Height 3′–5′, breadth of pileus 3′–4′, stipe 3″–6″ thick.

Low mossy ground in woods. North Elba and Sandlake. August and September.

Edible. The pileus varies in the intensity of the color and the density of the tomentum.

15. BOLETUS PALUSTER *n. sp.*

Pileus fleshy, rather thin, convex, then expanded or slightly depressed, with a decurved margin, subumbonate, dry, floccose-tomentose, bright pinkish-red; tubes large, angular, slightly decurrent, formed by wider radiating lamellæ and more narrow transversely connecting and anastomosing dissepiments, yellow, becoming ochraceous; stem slender, solid, nearly smooth, red, yellowish at the top and marked with the slightly decurrent walls of the tubes; spores elliptical, dull pinkish or flesh-colored, $\frac{1}{300}'$ long.

Height 2′–3′, breadth of pileus 1′–2′, stem 2″–3″ thick.

Wet places and swamps among mosses. North Elba. August. (Plate 6, figs. 4–7.)

Allied to *Paxillus porosus* Berk., with which, perhaps, it ought to form a new genus intermediate between Paxillus and Boletus, and from which it differs in its more slender habit, central stem, floccose-tomentose pileus, larger pores and elliptical spores.

16. BOLETUS STROBILACEUS *Scop.*

Pileus convex, densely clothed with a blackish tomentum which breaks up into thick erect tufts or scales; tubes plane or slightly convex, white becoming darker, not large, angular, stem solid, usually scaly and colored like the pileus, whitish at the top; flesh white, changing to red then to black when wounded.

Height 3′–6′, breadth of pileus 2′–4′, stem 4″–6″ thick.

Ground in woods and open places. Common. Buffalo, *Clinton.* Utica, *Johnson.* Poughkeepsie, *Gerard.* Albany and Sandlake. July and August.

17. BOLETUS RETIPES *B. & C.*

Pileus thick, firm, broadly convex, dry, smooth or very minutely tomentose, grayish-brown; tubes concave or plane, rarely convex, attached, small, round, bright yellow; stipe equal, solid, yellow, strongly reticulated its whole length, the reticulations formed by the anastomosing of distinct firm vein-like ridges; flesh yellow, not changing color.

Height 3′–5′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Banks by roadsides. North Elba. August.

B. retipes is said to have the pileus yellow, and the stem reticulated nearly to the base—particulars which do not agree with our specimens. It is possible that future inves-

tigation may prove our plant to be a distinct species; but at present I prefer to consider it only a variety of the above mentioned species.

18. Boletus auriporus *n. sp.*

Pileus broadly convex, dry, most minutely tomentose, grayish-brown, sometimes tinged with red; tubes plane or nearly so, attached, their walls slightly decurrent on the stem, medium size, round, bright golden yellow; stipe equal, firm, solid, smooth; flesh white, unchangeable.

Height 2′–4′, breadth of pileus 2′–3′, stipe 3″–5″ thick.

Banks by roadsides and open woods. North Elba and New Baltimore. July and August.

19. Boletus Sistotrema *Fr.*

Pileus convex or expanded, nearly smooth, dry, reddish-tawny; tubes plane, attached, sinuate, except the marginal ones, bright tawny or cinnamon-color; stipe slender, equal, solid, concolorous; flesh white or yellowish, not changing color.

Height 1′–2′, breadth of pileus scarcely 1′, stipe 1″–2″ thick.

Woods and bushy places. Albany. September and October. A very small species.

New Stations of Rare Plants and Notable Varieties.

Thalictrum anemonoides *Michx.*

A form with double flowers, was found near Poughkeepsie by Miss Shattuck. *Gerard.*

Alyssum calycinum *L.*

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

Lepidium campestre *L.*

New Baltimore. *Howe.*

Dianthus Armeria *L.*

Abundant throughout the eastern part of Long Island.

Impatiens pallida *Nutt.*

A variety with spotless flowers. Newark. *Hankenson.*

TRIFOLIUM PROCUMBENS *L.*

This is not rare in the eastern part of Long Island. I have never seen it in the vicinity of Albany, where *T. agrarium* is common, and apparently becoming more plentiful every year.

ANETHUM FŒNICULUM *L.*

Newark. *Hankenson.*

ARALIA QUINQUEFOLIA *L.*

Helderberg Mountains. This valuable plant has now become so rare that I know but one station in this part of the State where it still lingers.

GALIUM MOLLUGO *L.*

Danube, Herkimer county. *Austin.*

EUPATORIUM PURPUREUM *L.*

A form with opposite leaves. Poughkeepsie. *Gerard.*

ACHILLEA MILLEFOLIUM *L.*

A pink flowered form. Trenton Falls. *Mrs. E. E. Atwater.*

ONOPORDON ACANTHIUM *L.*

Greenport and Shelter Island.

TARAXACUM DENS-LEONIS *Desf.*

Two heads on one peduncle. Poughkeepsie. *Gerard.*

CAMPANULA ROTUNDIFOLIA *L.*

With white flowers. Mount Wallface. Adirondack Pass.

THYMUS SERPYLLUM *L.*

Cemetery at Williamsville, Erie county. *Clinton.*

POLEMONIUM CÆRULEUM *L.*

Found around Sand Pond in the western part of Ulster county, by Rev. A. P. Van Gieson. *Gerard.*

SABBATIA STELLARIS *Pursh.*

With white flowers. Greenport, *Mrs. E. E. Atwater.*

CHENOPODIUM MURALE *L.*

Bath Island, Niagara Falls. *Clinton.*

PARIETARIA PENNSYLVANICA *Muhl.*

A dwarf form two or three inches high. Helderberg Mountains.

Lemna Torreyi *Austin.*
Riverhead, Long Island.

Spiranthes graminea *Lindl.*
Greenport. *Mrs. E. E. Atwater.*

Carex alata *Torr.*
Riverhead, Long Island.

Carex Grayii *Carey.*
New Baltimore. *Howe.* The specimens are remarkable for having the perigynia scabrous-pubescent.

Woodsia glabella *R. Br.*
Crevices of rocky ledges at Lake Avalanche and in the pass north of it. Found before in the State at Little Falls only.

In concluding this report, I would express my thanks to the botanists who have so generously aided me by furnishing specimens and information; also to Rev. M. A. Curtis, who has rendered much assistance in the determination of fungi. The continued co-operation of botanists is earnestly solicited.

When no name is added to the reported station or stations, the plant has been found therein by the writer. Dates signify the time of the occurrence of the plant, so far as determined by the observation of myself or correspondents.

Respectfully submitted.

CHAS. H. PECK.

Albany, *January* 8, 1870.

PLATE VI.

Boletus spectabilis Peck.

Page 28.

Fig 1. A young plant with the tubes concealed by the veil.
" 2. A specimen of medium size.
" 3. Vertical section of a small pileus.

Boletus paluster Peck.

Page 32.

Fig. 4. A very young plant.
" 5. A specimen showing the upper surface of the pileus.
" 6. A specimen showing the lower surface.
" 7. Vertical section of a pileus.

Agaricus latifolius Peck.

Page 81.

Figs. 8, 9. Specimens showing the upper surface of the pileus.
" 10, 11. Specimens showing the lower surface.
" 12, 13. Vertical sections of pilei.
Fig. 14. Transverse section of a stem.

Marasmius subvenosus Peck.

Page 25.

Figs. 15, 16. Specimens showing the upper surface of the pileus.
" 17, 18. Specimens showing the lower surface.
" 19, 20. Vertical sections of pilei, the latter slightly enlarged.
Fig. 21. Transverse section of a stem slightly enlarged.

PLATE V.

Boletus Clintonianus Peck.

Page 28.

Fig. 1. A young plant with the tubes concealed by the veil.
" 2. A specimen of small size.
" 3. A specimen of medium size, showing the marginal depression of the pileus.
" 4. Part of a vertical section of a pileus.
" 5. Mouths of tubes slightly magnified.

Agaricus paluster Peck.

Page 82.

Fig. 6. A specimen of small size, with the pileus expanded.
Figs. 7, 8. Specimens of medium size, with the pileus less expanded.
" 9, 10. Vertical sections of pilei.
Fig. 11. Transverse section of a stem.

Agaricus velutipes Curt.

Page 79.

Fig. 12. A cluster of very young plants.
Figs. 13, 14. Specimens showing the upper surface of the pileus.
Fig. 15. A specimen showing the lower surface of the pileus
" 16. Vertical section of a pileus.
" 17. Transverse section of a stem.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

PLATE IV.

AGARICUS SOLIDIPES Peck.

Page 101.

FIG. 1. A specimen of small size.
" 2. A larger specimen, showing the lower surface of the pileus.
" 3. Upper part of an old plant with the cuticle of the pileus broken into scales.
" 4. Vertical section of a small pileus
" 5. Transverse section of a stem.

CANTHARELLUS DICHOTOMUS VAR. BREVIOR Peck.

Page 123.

FIG. 6. A specimen showing the upper surface of the pileus.
" 7. A specimen showing more of the lower surface.
" 8. Vertical section of a pileus.
" 9. Lines representing the dichotomous branching of the lamellæ.

CORTINARIUS CASTANEOIDES Peck.

Page 111.

FIG. 10. A specimen with the pileus partly expanded.
" 11. A specimen with the pileus expanded.
" 12. A cluster of small plants.
FIGS. 13, 14. Vertical sections of pilei.
FIG. 15. Transverse section of a stem.


1
2
3
4
5
8
9
10
11
12
13

PLATE III.

Cortinarius squamulosus Peck.

Page 108.

Fig. 1. A specimen with the pileus but little expanded.
" 2. Part of a specimen with the pileus more expanded.
" 3. Part of a vertical section of a pileus.

Agaricus Johnsonianus Peck.

Page 98.

Fig. 4. A specimen of medium size.
" 5. A specimen of small size.
" 6. Vertical section of a pileus.


1
2
3
4
5
6

PLATE II.

AGARICUS CURVO-MARGINATUS Peck.

Page 92.

FIGS. 1, 2. Lateral view of two specimens of unequal length.
FIG. 3. A specimen showing more of the lower surface of the pileus.
" 4. Vertical section of a pileus.
" 5. Transverse section of a stem.

AGARICUS STRICTIOR Peck.

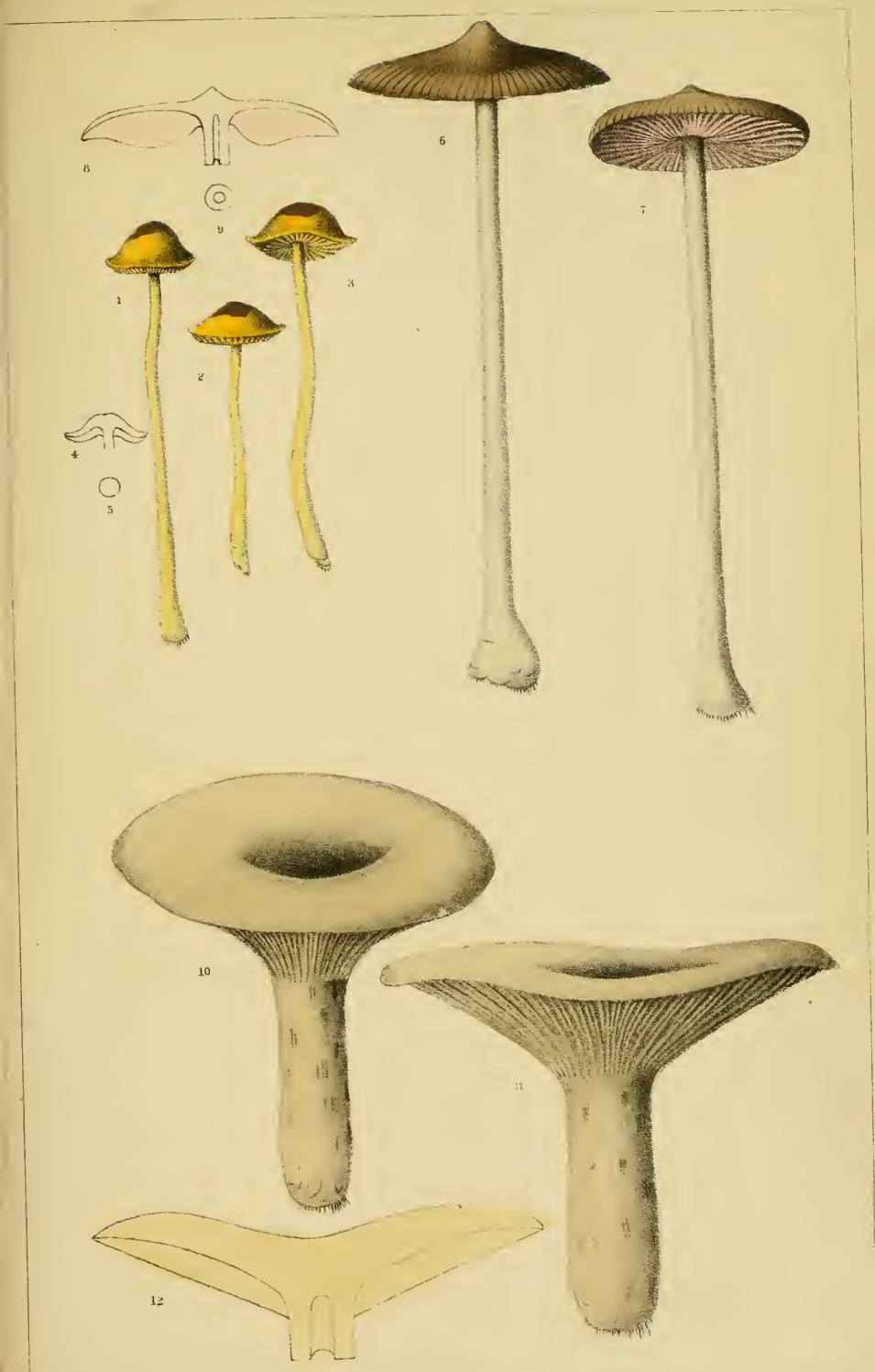
Page 88.

FIG. 6. A specimen showing the upper surface of the pileus.
" 7. A specimen showing the lower surface.
" 8. Vertical section of a pileus.
" 9. Transverse section of a stem.

LACTARIUS SORDIDUS Peck.

Page 119.

FIG. 10. A specimen showing the upper surface of the pileus.
" 11. A specimen showing more of the lower surface.
" 12. Vertical section of a pileus.


8
9
1
3
2
4
5
6
7
10
11
12

PLATES AND EXPLANATIONS.

PLATE I.

*Lycoperdon giganteum Batsch.**

Page 53.

Fig. 1. A specimen of medium size.

Hygrophorus nitidus B. & R.

Page 114.

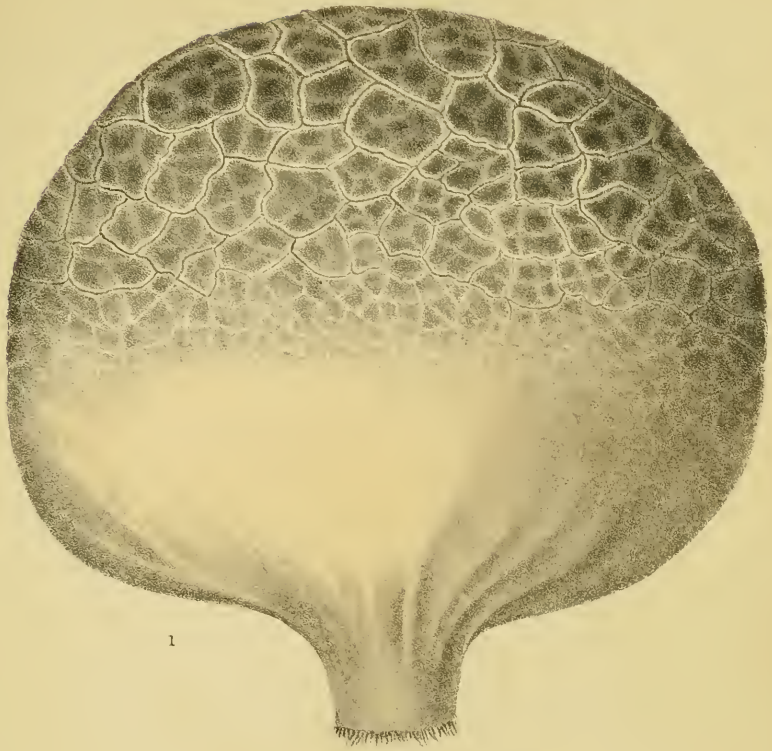
Fig 2. A young plant
" 3. A specimen showing the upper surface of the pileus.
" 4. A specimen showing more of the lower surface.
" 5. Vertical section of a pileus.
" 6. Transverse section of a stem.

Agaricus sarcophyllus Peck.

Page 96.

Fig. 7. A specimen with the pileus unexpanded.
" 8. A small specimen, showing the lower surface of the pileus.
" 9. A larger specimen, showing the lower surface.
" 10. Vertical section of a pileus.
" 11. Transverse section of a stem.

* = L. [illegible] fide Batsch. [illegible]


1


5
6
3
4
2
8
7
10
11
9