Lea, Thomas Gibson, 1785-1844.

Catalogue of plants native and naturalized,
collected in the vicinity of Cincinnati, Ohio,
during the years 1834-1844. 1849.

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CATALOGUE
OF THE
PLANTS
OF
CINCINNATI.

COLLECTED BY
✓
THOMAS G. LEA.

PHILADELPHIA:
PRINTED BY T. K. & P. G. COLLINS.
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PLANTS,

NATIVE AND NATURALIZED,

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IN THE VICINITY OF CINCINNATI, OHIO,

DURING

THE YEARS 1834—1844.

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CATALOGUE

PLANTS

NATIVE AND NATURALIZED

COLLECTED

IN THE MOUNTAINS OF CINCINNATI OHIO

1840

THE YEARS 1841-1842

BY

THOMAS G. LEE

1841-1842

PHILADELPHIA

PRINTED BY T. E. & G. COLLINS

1842

NOTICE.

THE following Catalogue has been arranged and printed in accordance with instructions left with me by my late brother, Thomas G. Lea. His MSS. and Herbarium were placed in the hands of Mr. W. S. Sullivant, who kindly prepared the whole, with the exception of the Fungi, determined by the Rev. M. J. Berkeley, and the Lichens by Mr. Edward Tuckerman.

My brother's son, Mr. James M. Lea, has seen to its progress through the press, under the supervision of Professor Asa Gray of Cambridge.

By the kindness of these gentlemen, his wishes have been fully carried out, and I have every confidence that this Catalogue will possess all the utility desired by him.

My brother, in his instructions, also desired to acknowledge his obligations to Sir W. J. Hooker and Mr. W. Wilson, for their assistance in authenticating the species of mosses.

ISAAC LEA.

PHILADELPHIA, *February* 1849.

P R E F A C E .

FEW botanists have more thoroughly investigated the vegetation of their immediate vicinities than did the late Thomas G. Lea that of Cincinnati. This is apparent not so much in the large number of plants here enumerated and determined with singular accuracy, as in the copious and valuable observations attached to the specimens in his Herbarium. These observations, had life and health been spared to complete them, would have appeared in the form of a local Flora—a work for which years of assiduous study of the plants of South-western Ohio had well fitted him.

The following Catalogue, however, is all that he left ready for publication—with the request that Mr. J. Carey, of New York, or myself, should see it through the press. In the Phænogamous portion no changes have been made other than in the nomenclature rendered necessary by the advance of the science since the period of his decease.

During the last three or four years of his life, Mr. Lea was zealously devoted to the study of Fungi: and his collections in that department will be found a highly valuable contribution to the mycology of the United States.

Mr. Lea died of an autumnal fever, on the 30th of September 1844, at Waynesville in this State, where he had been passing a

few weeks, making, as these pages will attest, many new and rare collections in the adjacent valley of the Little Miami river.

In accordance with his wishes, all the specimens of Fungi were submitted to his correspondent, the Rev. M. J. Berkeley of England, by whom alone they have been determined and prepared for this Catalogue.

W. S. SULLIVANT.

COLUMBUS, O., *October* 1848.

CATALOGUE.

PHÆNOGAMOUS PLANTS.

CLASS I.—EXOGENÆ.

ORDER 1.—RANUNCULACEÆ. (CROWFOOT FAMILY.)

CLEMATIS, *L.*

Viorna, *L.* (Leather-flower.)

Virginiana, *L.* (Virgin's Bower.)

ANEMONE, *L.*

Virginiana, *L.* (Thimble-weed.)

HEPATICA, *Dill.*

triloba, *Chais.* (Liver-leaf.)

TRAUTVETTERIA, *Fisch. & Meyer.*

palmata, *Fisch. & Meyer.*

THALICTRUM, *L.*

anemonoides, *Michx.* (Rue-anemone.)

Cornuti, *L.* (Meadow-rue.)

dioicum, *L.*

RANUNCULUS, *L.*

repens, *L.* (Creeping Crowfoot.)

Flammula, *L.* (Spear-wort.)

aquatilis, *L.* (White Water-crowfoot.)

micranthus, *Nutt.*

abortivus, *L.*

recurvatus, *Poir.*

ISOPYRUM, *L.*

biternatum, *Torr. & Gray.*

CALTHA, *Linn.*

palustris, *L.* (Marsh Marigold.)

AQUILEGIA, *L.*

Canadensis, *L.* (Wild Columbine.)

DELPHINIUM, *L.*

tricorne, *Michx.* (Wild Larkspur.)

HYDRASTIS, *L.*

Canadensis, *L.* (Yellow Puccoon.)

ACTÆA, *L.*

alba, *Bigel.* (White Baneberry.)

CIMICIFUGA, *L.*

racemosa, *Ell.* (Black Snake-root.)

ORDER 2.—MAGNOLIACEÆ. (MAGNOLIA FAMILY.)

LIRIODENDRON, *L.*

Tulipifera, *L.* (Tulip Tree.)

ORDER 3.—ANONACEÆ. (CUSTARD-APPLE FAMILY.)

ASIMINA, *Adans.*

triloba, *Dunal.* (Papaw.)

ORDER 4.—MENISPERMACEÆ. (MOONSEED FAMILY.)

MENISPERMUM, *L.*

Canadense, *L.* (Moonseed.)

ORDER 5.—BERBERIDACEÆ. (BARBERRY FAMILY.)

LEONTICE, *L.*

thalictroides, *L.* (Pappoose root.)

JEFFERSONIA, *Bart.*

diphylla, *Pers.* (Rheumatism-root.)

PODOPHYLLUM, *L.*

peltatum, *L.* (May-apple.)

ORDER 6.—NELUMBIACEÆ. (NELUMBO FAMILY.)

NELUMBium, *Juss.*

luteum, *Willd.*

ORDER 7.—NYMPHÆACEÆ. (WATER-LILY FAMILY.)

NUPHAR, *Smith.*advena, *Ait.* (Yellow Pond Lily.)

ORDER 8.—PAPAVERACEÆ. (POPPY FAMILY.)

STYLOPHORUM, *Nutt.*diphyllum, *Nutt.*SANGUINARIA, *Dill.*Canadensis, *L.* (Blood-root.)

ORDER 9.—FUMARIACEÆ. (FUMITORY FAMILY.)

DICENTRA, *Bork.*Cucullaria, *DC.* (Dutchman's Breeches.)Canadensis, *DC.* (Squirrel corn.)CORYDALIS, *L.*aurea, *Willd.*

ORDER 10.—CRUCIFERÆ. (MUSTARD FAMILY.)

NASTURTIUM, *R. Br.*palustre, *DC.* (Marsh Cress.)lacustre, *Gray, Gen. Ill.*IODANTHUS, *Torr. & Gr.*hesperidoides, *Torr. & Gr.* (Wild Rocket.)CARDAMINE, *L.*hirsuta, *L.*rotundifolia, *Michx.* (Water-cress.)Ludoviciana, *Hook.*DENTARIA, *L.*diphylla, *L.*laciniata, *Muhl.* (Tooth-wort.)ARABIS, *L.*dentata, *Torr. & Gr.*Canadensis, *L.* (Sickle-pod.)lævigata, *DC.*BARBAREA, *R. Br.*vulgaris, *R. Br.* (Winter-cress.)SINAPIS, *Tourn.*nigra, *L.* (Black Mustard.)

DRABA, *L.*

verna, *L.* (Whitlow-grass.)

CAMELINA, *Crantz.*

sativa, *Crantz.* (False Flax.)

CAPSELLA, *Vent.*

Bursa-pastoris, *Mench.* (Shepherd's Purse.)

ORDER 11.—CAPPARIDACEÆ. (CAPER FAMILY.)

POLANISIA, *Raf.*

graveolens, *Raf.*

ORDER 12.—VIOIACEÆ. (VIOLET FAMILY.)

VIOLA, *L.*

palmata, *L.*

Canadensis, *L.*

striata, *Ait.*

pubescens, *Ait.*

cucullata, *Ait.*

tricolor, *Ait.*

SOLEA, *Ging.*

concolor, *Ging.*

ORDER 13.—HYPERICACEÆ. (ST. JOHN'S WORT FAM.)

HYPERICUM, *L.*

prolificum, *L.*

perforatum, *L.*

mutilum, *L.*

corymbosum, *Muhl.*

ORDER 14.—CARYOPHYLLACEÆ. (PINK FAMILY.)

SILENE, *L.*

stellata, *Ait.* (Bladder Campion.)

Antirrhina, *L.*

Virginica, *L.* (Fire Pink.)

nivea, *DC.*

STELLARIA, *L.*

longifolia, *Muhl.*

pubera, *Michx.*

CERASTIUM, *L.*

nutans, *Raf.*

viscosum, *L.*

ANYCHIA, *Michx.*

dichotoma, *Michx.*

MOLLUGO, *L.*

verticillata, *L.*

ORDER 15.—PORTULACACEÆ. (PURSLANE FAMILY.)

CLAYTONIA, *L.*

Virginica, *L.* (Spring Beauty.)

ORDER 16.—MALVACEÆ. (MALLOW FAMILY.)

ABUTILON, *Tourn.*

Avicennæ, *Gærtn.* (Velvet-leaf.)

SIDA, *L.*

spinosa, *L.*

NAPÆA, *Clayt.*

dioica, *L.*

MALVA, *L.*

rotundifolia, *L.* (Low Mallow.)

HIBISCUS, *L.*

militaris, *Cav.*

ORDER 17.—TILIACEÆ. (LINDEN FAMILY.)

TILIA, *L.*

Americana, *L.* (Basswood.)

ORDER 18.—GERANIACEÆ. (GERANIUM FAMILY.)

GERANIUM, *L.*

maculatum, *L.* (Crane's Bill.)

ORDER 19.—OXALIDACEÆ. (WOOD SORREL FAMILY.)

OXALIS, *L.*

stricta, *L.* (Wood Sorrel.)

violacea, *L.*

ORDER 20.—BALSAMINACEÆ. (BALSAM FAMILY.)

IMPATIENS, *L.*pallida, *Nutt.* (Wild Touch-me-not.)fulva, *Nutt.*

ORDER 21.—LIMNANTHACEÆ.

FLOERKEA, *Willd.*proserpinacoides, *Willd.*

ORDER 22.—ZANTHOXYLACEÆ.

PTELEA, *L.*trifoliata, *L.*

ORDER 23.—ANACARDIACEÆ. (CASHEW FAMILY.)

RHUS, *L.*glabra, *L.*copallina, *L.*Toxicodendron, *L.* (Poison Ivy.)venenata, *DC.* (Poison Sumach.)typhina, *L.* (Staghorn Sumach.)

ORDER 24.—ACERACEÆ. (MAPLE FAMILY.)

ACER, *Wang.*saccharinum, *Wang.* (Sugar Maple.)dasycarpum, *Ehrh.* (White Maple.)rubrum, *L.* (Red Maple.)NEGUNDO, *Mench.*aceroides, *Mench.* (Box-Elder.)

ORDER 25.—HIPPOCASTANACEÆ. (HORSE CHESTNUT FAMILY.)

ÆSCULUS, *L.*flava, *Ait.*glabra, *Willd.* (Ohio Buckeye.)

ORDER 26.—CELASTRACEÆ. (SPINDLE TREE FAMILY.)

STAPHYLEA, *L.*trifolia, *L.* (Bladder Nut.)

CELASTRUS, *L.*

scandens, *L.* (Bitter-sweet.)

EUONYMUS, *Tourn.*

atropurpureus, *Jacq.* (Burning Bush.)

ORDER 27.—RHAMNACEÆ. (BUCKTHORN FAMILY.)

RHAMNUS, *L.*

lanceolatus, *Pursh.*

CEANOTHUS, *L.*

Americanus, *L.* (New Jersey Tea.)

ORDER 28.—VITACEÆ. (Vine Family.)

VITIS, *L.*

æstivalis, *Michx.* (Summer Grape.)

cordifolia, *Michx.* (Winter Grape.)

AMPELOPSIS, *Michx.*

quinquefolia, *Michx.* (American Ivy.)

ORDER 29.—POLYGALACEÆ. (MILKWORT FAMILY.)

POLYGALA, *Tourn.*

Senega, *Linn.* (Senega Snake-root.)

var. latifolia.

ORDER 30.—LEGUMINOSÆ. (BEAN FAMILY.)

LATHYRUS, *L.*

venosus, *Muhl.*

PHASEOLUS, *L.*

diversifolius, *Pers.*

APIOS, *Boerh.*

tuberosa, *Mæneh.* (Ground-nut.)

AMPHICARPÆA, *Ell.*

monoica, *Nutt.*

DESMODIUM, *DC.*

acuminatum, *DC.*

nudiflorum, *DC.*

rotundifolium, *DC.*

cuspdatum, *Torr. & Gr.*

canescens, *DC.*

(DESMODIUM.)

viridiflorum, *Beck.*paniculatum, *DC.*Dillenii, *Darlingt.*Canadensis, *DC.*pauciflorum, *DC.*LESPEDeza, *Michx.*hirta, *Ell.*violacea, *Pers.*procumbens, *Michx.*ASTRAGALUS, *L.*Canadensis, *L.*PHACA, *L.*neglecta, *Torr. & Gr.*PSORALEA, *L.*Onobrychis, *Nutt.*TRIFOLIUM, *L.*reflexum, *L.*stoloniferum, *Muhl.*BAPTISIA, *Vent.*leucantha, *Torr. & Gr.* (False Indigo.)australis, *R. Br.*CERCIS, *L.*Canadensis, *L.* (Red-Bud.)CASSIA, *L.*Marilandica, *L.* (Wild Senna.)GYMNOCLADUS, *Lam.*Canadensis, *Lam.* (Coffee Tree.)GLEDITSCHIA, *L.*triacanthos, *L.* (Honey Locust.)

ORDER 31.—ROSACEÆ. (ROSE FAMILY.)

PRUNUS, *Tourn.*Americana, *Marsh.* (Wild Plum.)CERASUS, *Tourn.*serotina, *DC.* (Wild Cherry.)SPIRÆA, *L.*opulifolia, *L.* (Nine Bark.)lobata, *Murr.* (Meadow Sweet.)

(SPIRÆA.)

Aruncus, *L.* (Goats-Beard.)

GILLENIA, *Mœnch.*

stipulacea, *Nutt.*

AGRIMONIA, *Tourn.*

Eupatoria, *L.*

parviflora, *Ait.*

GEUM, *L.*

Virginianum, *L.*

vernum, *Torr. & Gr.*

POTENTILLA, *L.*

Norvegica, *L.*

Canadensis, *L.* (Five Finger.)

FRAGARIA, *Tourn.*

Virginiana, *Ehrh.* (Wild Strawberry.)

RUBUS, *L.*

villosus, *Ait.* (Blackberry.)

Canadensis, *L.* (Dewberry.)

occidentalis, *L.* (Black Raspberry.)

ROSA, *Tourn.*

rubiginosa, *L.* (Sweet-Brier.)

setigera, *Michx.* (Climbing Rose.)

lucida, *Ehrh.*

Carolina, *L.* (Swamp Rose.)

CRATÆGUS, *L.*

coccinea, *L.*, & *var.*

Crus-galli, *L.* (Cockspur Thorn.)

punctata, *Jacq.*

tomentosa, *L.*

PYRUS, *L.*

Coronaria, *L.* (Crab-Apple.)

AMELANCHIER, *Medic.*

Canadensis, *Torr. & Gr.* (June-berry.)

ORDER 32.—MELASTOMACEÆ.

RHEXIA, *L.*

Virginica, *L.* (Deer Grass.)

ORDER 33.—LYTHRACEÆ. (LOOSESTRIFE FAMILY.)

AMMANNIA, *Houst.*humilis, *Michx.*latifolia, *L.*LYTHRUM, *L.*Hyssopifolia, *L.*alatum, *Pursh.*

ORDER 34.—ONAGRACEÆ.

EPILOBIUM, *L.*coloratum, *Muhl.*ÆNOTHERA, *L.*biennis, *L.* (Evening Primrose.)GAURA, *L.*biennis, *L.*LUDWIGIA, *L.*alternifolia, *L.*palustris, *Ell.*CIRCÆA, *Tourn.*Lutetiana, *L.*

ORDER 35.—GROSSULACEÆ. (CURRANT FAMILY.)

RIBES, *L.*Cynosbati, *L.* (Prickly Gooseberry.)floridum, *L.* (Wild Black Currant.)

ORDER 36.—PASSIFLORACEÆ.

PASSIFLORA, *L.*lutea, *L.* (Passion Flower.)

ORDER 37.—CUCURBITACEÆ. (GOURD FAMILY.)

SICYOS, *L.*angulatus, *L.*

ORDER 38.—CRASSULACEÆ.

SEDUM, *L.*ternatum, *Michx.* (Stone-crop.)

PENTHORUM, *Gronov.*
sedoides, *L.*

ORDER 39.—SAXIFRAGACEÆ.

SAXIFRAGA, *L.*
 Virginensis, Michx.
HEUCHERA, *L.*
 Americana, L. (Alum-root.)
MITELLA, *Tourn.*
 diphylla, L. (Bishop's Cap.)
HYDRANGEA, *Gronov.*
 arborescens, L.

ORDER 40.—HAMAMELACEÆ.

HAMAMELIS, *L.*
 Virginica, L. (Witch Hazel.)

ORDER 41.—UMBELLIFERÆ. (PARSLEY FAMILY.)

SANICULA, *Tourn.*
 Canadensis, L.
 Marilandica, L.
HERACLEUM, *L.*
 lanatum, Michx. (Cow Parsley.)
ARCHEMORA, *DC.*
 rigida, DC. (Cowbane.)
ARCHANGELICA, *Hoffm.*
 hirsuta, Torr. & Gr.
THASPIUM, *Nutt.*
 aureum, Nutt.
 barbinode, Nutt.
ZIZIA, *Koch.*
 integerrima, DC.
 aurea, Koch.
CICUTA, *L.*
 maculata, L. (Water Hemlock.)
 bulbifera, L.
SIUM, *L.*
 latifolium, L. (Water Parsnep.)

- CRYPTOTÆNIA, *DC.*
 Canadensis, DC.
 CHÆROPHYLLUM, *L.*
 procumbens, Lam.
 OSMORRHIZA, *Raf.*
 longistylis, DC. (Sweet Cicely.)
 brevistylis, DC.
 ERIGYNIA, *Nutt.*
 bulbosa, Nutt.

ORDER 42.—ARALIACEÆ. (SPIKENARD FAMILY.)

- ARALIA, *L.*
 racemosa, L.
 PANAX, *L.*
 quinquefolium, L. (Ginseng.)

ORDER 43.—CORNACEÆ. (DOGWOOD FAMILY.)

- CORNUS, *Tourn.*
 circinata, L'Her.
 sericea, L.
 florida, L'Her.
 paniculata, L'Her.

ORDER 44.—CAPRIFOLIACEÆ. (HONEYSUCKLE FAMILY.)

- SYMPHORICARPUS, *Dill.*
 vulgaris, Michx. (Indian Currant.)
 TRIOSTEUM, *L.*
 perfoliatum, L.
 angustifolium, L.
 VIBURNUM, *L.*
 prunifolium, L. (Black Haw.)

ORDER 45.—RUBIACEÆ. (MADDER FAMILY.)

- GALIUM, *L.*
 circæzans, Michx. (Wild Liquorice.)
 Aparine, L. (Goosegrass.)
 trifidum, L.
 var. tinctorium.

(GALIUM.)

var. *latifolium*.*triflorum*, *Michx.*CEPHALANTHUS, *L.**occidentalis*, *L.* (Button-bush.)MITCHELLA, *L.**repens*, *L.* (Partridge-berry.)HEDYOTIS, *L.**glomerata*, *Ell.**purpurea*, *Torr. & Gr.**longifolia*, *Hook.**ciliolata*, *Torr.**cærulea*, *Hook.*

ORDER 46.—VALERIANACEÆ. (VALERIAN FAMILY.)

VALERIANA, *Tourn.**pauciflora*, *Michx.*FEDIA, *Gærtn.**radiata*, *Michx.**patellaria*, *Sulliv.*

ORDER 47.—COMPOSITÆ.

VERNONIA, *Schreb.**fasciculata*, *Michx.* (Iron-weed.)ELEPHANTOPUS, *L.**Carolinianus*, *Willd.*EUPATORIUM, *Tourn.**sessilifolium*, *L.**ageratoides*, *L.**purpureum*, *L.**perfoliatum*, *L.* (Boneset.)CONOCLINIUM, *DC.**cœlestinum*, *DC.*ASTER, *L.**miser*, *L.**Tradescanti*, *L.**Novæ-Angliæ*, *L.**macrophyllus*, *L.**puniceus*, *L.*

(ASTER.)

- prenanthoides, *Muhl.*
- sagittifolius, *Willd.*
- undulatus, *L.*
- patens, *Ait.*
- cordifolius, *L.*
- Shortii, *Boott.*
- simplex, *Willd.*

ERIGERON, *L.*

- Canadense, *L.*
- strigosum, *Muhl.* (Fleabane.)
- bellidifolium, *Muhl.*
- Philadelphicum, *L.*
- anuum, *Pers.*

SOLIDAGO, *L.* (Golden-rod.)

- latifolia, *L.*
- speciosa, *Nutt.*
- lanceolata, *L.*
- gigantea, *Ait.*
- Riddellii, *Frank.*
- Canadensis, *L.*
- nemoralis, *Ait.*
- ulmifolia, *Muhl.*
- patula, *Muhl.*
- cæsia, *L.*

COREOPSIS, *L.*

- tripteris, *L.*

PLUCHEA, *Cass.*

- fætida, *DC.*

INULA, *L.*

- Helenium, *L.* (Elecampane.)

ECLIPTA, *L.*

- procumbens, *Michx.*

POLYMNIA, *L.*

- Canadensis, *L.*
- Uvedalia, *L.*

SILPHIUM, *L.*

- perfoliatum, *L.*
- terebinthinaceum, *L.*
- trifoliatum, *L.*

AMBROSIA, Tourn.trifida, *L.*artemisiæfolia, *L.***XANTHIUM, Tourn.**strumarium, *L.* (Clot-burr.)**HELIOPSIS, Pers.**lævis, *Pers.***RUDBECKIA, L.**hirta, *L.*speciosa, *Wender.*laciniata, *L.*triloba, *L.***LEPACHYS, Raf.**pinnata, *Torr. & Gr.***HELIANTHUS, L.**hirsutus, *Raf.*strumosus, *L.*decapetalus, *L.*giganteus, *L.*divaricatus, *L.*grosse-serratus, *Martens.*doronicoides, *Lam.*microcephalus, *Torr. & Gr.***ACTINOMERIS, Nutt.**helianthoides, *Nutt.*squarrosa, *Nutt.***BIDENS, L.**connata, *Muhl.*frondosa, *L.*chrysanthemoides, *Michx.* (Spanish needles.)bipinnata, *L.***HELENIUM, L.**autumnale, *L.***ACHILLEA, L.**millefolium, *L.* (Yarrow.)**ARTEMISIA, L.**biennis, *Willd.***GNAPHALIUM, L.**purpureum, *L.*uliginosum, *L.*

(GNAPHALIUM.)

polycephalum, *Michx.*ANTENNARIA, *Gærtn.*plantaginifolia, *Hook.*EREC THITES, *Raf.*hieracifolia, *Raf.* (Fire-weed.)CACALIA, *L.*reniformis, *Muhl.*suaveolens, *L.*SENECIO, *L.*aureus, *L.*

var. obovatus.

CIRS IUM, *Tourn.*altissimum, *Spreng.* (Thistle.)muticum, *Michx.*discolor, *Spreng.*CYNTHIA, *Don.*Virginica, *Don.*HIERACIUM, *Tourn.*paniculatum, *L.*Gronovii, *L.*scabrum, *Michx.*NABALUS, *Cass.*crepidineus, *DC.*altissimus, *Hook.*albus, *Hook.*LACTUCA, *Tourn.*elongata, *Muhl.*MULGEDIUM, *Cass.*Floridanum, *DC.*acuminatum, *DC.*leucophœum, *DC.*

ORDER 48.—LOBELIACEÆ.

LOBELIA, *L.*cardinalis, *L.* (Cardinal flower.)inflata, *L.* (Indian tobacco.)spicata, *Lam.*syphilitica, *L.*

ORDER 49.—CAMPANULACEÆ.

CAMPANULA, *Tourn.*Americana, *L.*aparinoides, *Pursh.*SPECULARIA, *Heist.*perfoliata, *Alph. DC.*

ORDER 50.—MONOTROPACEÆ.

HYPOPITYS, *Dill.*lanuginosa, *Nutt.*MONOTROPA, *Gronov.*uniflora, *L.* (Indian Pipe.)

ORDER 51.—AQUIFOLIACEÆ. (HOLLY FAMILY.)

PRINOS, *L.*verticillatus, *L.* (Winter-berry.)

ORDER 52.—EBENACEÆ.

DIOSPYROS, *L.*Virginiana, *L.* (Persimmon.)

ORDER 53.—PLANTAGINACEÆ.

PLANTAGO, *L.*major, *L.* (Plantain.)lanceolata, *L.*

ORDER 54.—PRIMULACEÆ. (PRIMROSE FAMILY.)

DODECATHEON, *L.*Meadia, *L.*LYSIMACHIA, *L.*ciliata, *L.*lanceolata, *Walt.*quadrifolia, *L.*SAMOLUS, *L.*floribundus, *Kunth.* (Brook-weed.)

ORDER 55.—LENTIBULACEÆ. (BLADDERWORT FAM.)

UTRICULARIA, *L.*
 minor, *L.*

ORDER 56.—OROBANCHACEÆ.

EPIPHEGUS, *Nutt.*
 Virginiana, *Bart.* (Beech Drops.)
 CONOPHOLIS, *Wallr.*
 Americana, *Wallr.* (Cancer Root.)
 APHYLLON, *Mitchell.*
 uniflorum, *Torr. & Gr.*

ORDER 57.—BIGNONIACEÆ.

TECOMA, *Juss.*
 radicans, *Juss.* (Trumpet-flower.)
 MARTYNIA, *L.*
 proboscidea, *Glox.* (Unicorn Plant.)

ORDER 58.—ACANTHACEÆ.

DIANTHERA, *Gronov.*
 Americana, *L.*
 DIPTERACANTHUS, *Nees.*
 strepens, *Nees.*

ORDER 59.—SCROPHULARIACEÆ. (FIGWORT FAMILY.)

VERBASCUM, *L.*
 Thapsus, *L.* (Common Mullein.)
 Blattaria, *L.*
 SCROPHULARIA, *Tourn.*
 nodosa, *L.* (Figwort.)
 COLLINSIA, *Nutt.*
 verna, *Nutt.*
 CHELONE, *Tourn.*
 glabra, *L.* (Snake-head.)
 PENSTEMON, *Mitchell.*
 pubescens, *Solander.* (Beard-tongue.)

MIMULUS, *L.*ringens, *L.* (Monkey.)alatus, *Ait.*CONOBEA, *Aublet.*multifida, *Benth.*GRATIOLA, *L.*Virginiana, *L.* (Hedge Hyssop.)ILYSANTHES, *Raf.*gratioloides, *Benth.*VERONICA, *L.*Virginica, *L.* (Culver's Root.)Americana, *Schwein.*serpyllifolia, *L.*peregrina, *L.*arvensis, *L.*agrestes, *L.*Anagallis, *L.*SEYMERIA, *Pursh.*macrophylla, *Nutt.*GERARDIA, *L.*tenuifolia, *Vahl.*quercifolia, *Pursh.* (False Foxglove.)PEDICULARIS, *Tourn.*Canadensis, *L.*

ORDER 60.—VERBENACEÆ. (VERVAIN FAMILY.)

VERBENA, *L.*hastata, *L.*stricta, *Vent.*PHRYMA, *L.*leptostachya, *L.*LIPPIA, *L.*nodiflora, *Michx.*

ORDER 61.—LABIATÆ. (MINT FAMILY.)

ISANTHUS, *Michx.*cæruleus, *Michx.*MENTHA, *L.*piperita, *L.* (Peppermint.)Canadensis, *L.*

- COLLINSONIA, L.**
 Canadensis, L. (Horse Balm.)
HEDEOMA, Pers.
 pulegioides, Pers. (Pennyroyal.)
BLEPHILIA, Raf.
 hirsuta, Benth.
 ciliata, Raf.
MONARDA, L.
 fistulosa, L. (Wild Bergamot.)
NEPETA, L.
 Cataria, L. (Catnep.)
 Glechoma, Benth. (Ground Ivy.)
LYCOPUS, L.
 sinuatus, Ell.
 Virginicus, L.
LOPHANTHUS, Benth.
 scrophulariæfolius, Benth.
 nepetoides, Benth.
PYCNANTHEMUM, Michx.
 pilosum, Nutt.
 lanceolatum, Pursh.
PRUNELLA, L.
 vulgaris, L.
SCUTELLARIA, L.
 versicolor, Nutt.
 nervosa, Pursh.
 canescens, Nutt.
 lateriflora, Nutt. (Mad dog Scull cap.)
 parvula, Nutt.
SYNANDRA, Nutt.
 grandiflora, Nutt.
LEONURUS, L.
 Cardiaca, L. (Motherwort.)
STACHYS, L.
 aspera, Michx.
 sylvatica, L.
MARRUBIUM, L.
 vulgare, L. (Horehound.)
TEUCRIUM, L.
 Canadense, L. (Wood Sage.)

ORDER—62. BORAGINACEÆ.

LITHOSPERMUM, *Tourn.*arvense, *L.*latifolium, *Michx.*MYOSOTIS, *L.*stricta, *Link.*MERTENSIA, *Roth.*Virginica, *DC.*

CYNOGLOSSUM,

Morisoni, *DC.* (Beggar's Lice.)officinale, *L.*Virginicum, *L.*

ORDER 63.—HYDROPHYLLACEÆ.

HYDROPHYLLUM, *L.*Canadense, *L.*macrophyllum, *Nutt.*appendiculatum, *Michx.*Virginicum, *L.*PHACELIA, *Juss.*bipinnatifida, *Michx.*Purshii, *Buckl.*

ORDER 64.—POLEMONIACEÆ. (GREEK-VALERIAN FAMILY.)

POLEMONIUM, *Tourn.*reptans, *L.*PHLOX, *L.*maculata, *L.*divaricata, *L.*paniculata, *L.*glaberrima, *L.*

ORDER 65.—CONVOLVULACEÆ. (BINDWEED FAMILY.)

CALYSTEGIA, *R. Br.*spithamæa, *Pursh.*sepium, *R. Br.*CONVOLVULUS, *L.*panduratus, *L.*

(CONVOLVULUS.)

nil, *L.*lacunosus, *Spreng.*

ORDER 66.—CUSCUTACEÆ.

CUSCUTA, *Tourn.*Saururi, *Engl.*Gronovii, *Willd.*

ORDER 67.—SOLANACEÆ. (NIGHTSHADE FAMILY.)

PHYSALIS, *L.*viscosa, *L.*SOLANUM, *L.*Carolinense, *L.*

ORDER 68.—GENTIANACEÆ. (GENTIAN FAMILY.)

SABBATIA, *Adans.*angularis, *Pursh.*GENTIANA, *L.*Andrewsii, *Griseb.*quinqueflora, *Lam.*OBOLARIA, *L.*Virginica, *L.*

ORDER 69.—APOCYNACEÆ. (DOGBANE FAMILY.)

APOCYNUM, *Tourn.*cannabinum, *L.*

ORDER 70.—ASCLEPIADACEÆ. (MILK WEED FAMILY.)

ASCLEPIAS, *L.*incarnata, *L.*tuberosa, *L.*phytolaccoides, *Pursh.*purpurascens, *L.*Cornuti, *Decaisne.*quadrifolia, *Jacq.*ENSLANIA, *Nutt.*albida, *Nutt.*

GONOLOBUS, *Michx.*
 macrophyllus, *Michx.*

ORDER 71.—OLEACEÆ.

FRAXINUS, *Tourn.*
 sambucifolia, *Lam.* (Black Ash.)
 quadrangulata, *Michx.* (Blue Ash.)
 Americana, *L.* (White Ash.)

ORDER 72.—ARISTOLOCHIACEÆ.

ASARUM, *Tourn.*
 Canadense, *L.* (Wild Ginger.)
 ARISTOLOCHIA, *Tourn.*
 Serpentaria, *L.* (Virginia Snake Root.)

ORDER 73.—CHENOPODIACEÆ. (GOOSE-FOOT FAMILY.)

CHENOPODIUM, *L.*
 album, *L.*
 AMBRINA, *Spach.*
 Botrys, *Moquin.* (Jerusalem Oak.)
 anthelmintica, *Spach.* (Wormseed.)
 ambrosioides, *Spach.* (Mexican Tea.)
 ACNIDA, *Mitchell.*
 cannabina, *L.* (Water Hemp.)

ORDER 74.—AMARANTHACEÆ.

AMARANTHUS, *L.*
 hybridus, *L.*
 spinosus, *L.*
 IRESINE, *Willd.*
 celosiodes, *Willd.*

ORDER 75.—PHYTOLACCACEÆ.

PHYTOLACCA, *Tourn.*
 decandra, *L.* (Poke-weed.)

ORDER 76.—POLYGONACEÆ. (BUCKWHEAT FAMILY.)

POLYGONUM, *L.*Pennsylvanicum, *L.*Virginianum, *L.*lapathifolium, *L.*hydropiperoides, *Michx.*aviculare, *L.* (Goose-grass.)amphibium, *L.*dumetorum, *L.*Convolvulus, *L.*sagittatum, *L.*arifolium, *L.*Hydropiper, *L.* (Smart-weed.)Persicaria, *L.* (Lady's Thumb.)RUMEX, *L.*obtusifolius, *L.*Acetosella, *L.* (Sheep Sorrel.)Britannica, *L.* (Swamp Dock.)Hydrolapathum, *Huds.*crispus, *L.* (Curled Dock.)

ORDER 77.—LAURACEÆ. (LAUREL FAMILY.)

SASSAFRAS, *Nees.*officinale, *Nees.* (Sassafras.)BENZOIN, *Nees.*odoriferum, *Nees.* (Spice Bush.)

ORDER 78.—NYSSACEÆ.

NYSSA, *L.*multiflora, *Wang.* (Black Gum.)

ORDER 79.—LORANTHACEÆ. (MISTLETOE FAMILY.)

VISCUM, *L.*flavescens, *Pursh.* (Mistletoe.)

ORDER 80.—ULMACEÆ. (ELM FAMILY.)

ULMUS, *L.*Americana, *L.* (White Elm.)fulva, *Michx.* (Slippery Elm.)

CELTIS, *Tourn.*

occidentalis, *L.* (Hack berry.)

ORDER 81.—SAURURACEÆ.

SAURURUS, *L.*

cernuus, *L.* (Lizard's Tail.)

ORDER 82.—CERATOPHYLLACEÆ.

CERATOPHYLLUM, *L.*

echinatum, *A. Gr.*

ORDER 83.—CALLITRICHACEÆ.

CALLITRICHE, *L.*

verna, *L.*

ORDER 84.—EUPHORBIACEÆ. (SPURGE FAMILY.)

EUPHORBIA, *L.*

hypericifolia, *L.*

corollata, *L.*

Peplus, *L.*

platyphylla, *L.*

maculata, *L.*

ACALYPHA, *L.*

Caroliniana, *Walt.*

Virginica, *L.*

ORDER 85.—JUGLANDACEÆ. (WALNUT FAMILY.)

JUGLANS, *L.*

cinerea, *L.* (Butternut.)

nigra, *L.* (Black Walnut.)

CARYA, *Nutt.*

glabra, *Torr.* (Pignut.)

sulcata, *Nutt.*

tomentosa, *Nutt.*

amara, *Nutt.*

alba, *Nutt.* (Shell-bark Hickory.)

ORDER 86.—CUPULIFERÆ. (OAK FAMILY.)

QUERCUS, *L.*

coccinea, *Wang.* (Scarlet Oak.)

palustris, *Duroi.* (Pin Oak.)

Leana, *Nutt.*

Castanea, *Willd.* (Chestnut Oak.)

bicolor, *Willd.* (Swamp Oak.)

imbricaria, *Michx.* (Laurel Oak.)

rubra, *L.* (Red Oak.)

tinctoria, *Bart.* (Black Oak.)

obtusiloba, *Michx.* (Post Oak.)

alba, *L.* (White Oak.)

macrocarpa, *Michx.* (Burr Oak.)

FAGUS, *Tourn.*

ferruginea, *Ait.* (Beech.)

CORYLUS, *Tourn.*

Americana, *Walt.*

CARPINUS, *L.*

Americana, *Michx.* (Hornbeam.)

OSTRYA, *Micheli.*

Virginica, *Willd.* (Iron Wood.)

ORDER 87.—SALICACEÆ. (WILLOW FAMILY.)

SALIX, *Tourn.*

discolor, *Muhl.*

nigra, *Marshall.* (Black Willow.)

sericea, *Marsh.*

alba, *L.*

POPULUS, *Tourn.*

grandidentata, *Michx.*

monilifera, *Ait.* (Cotton Wood.)

ORDER 88.—PLATANACEÆ.

PLATANUS, *L.*

occidentalis, *L.* (Sycamore.)

ORDER 89.—URTICACEÆ. (NETTLE FAMILY.)

MORUS, *Tourn.*

rubra, *L.* (Red Mulberry.)

URTICA, *Tourn.*dioica, *L.* (Stinging Nettle.)Canadensis, *L.*PILEA, *Lindl.*pumila, *Lindl.*BÆHMERIA, *Jacq.*cylindrica, *Willd.*PARIETARIA, *Tourn.*Pennsylvanica, *Muhl.*

CLASS II.—ENDOGENÆ.

ORDER 90.—ARACEÆ.

ARUM, *L.*triphyllum, *L.* (Indian Turnip.)Dracontium, *L.* (Dragon Root.)SYMPLOCARPUS, *Salisb.*fœtidus, *Salisb.* (Skunk Cabbage.)ACORUS, *L.*Calamus, *L.* (Sweet Flag.)

ORDER 91.—LEMNACEÆ. (DUCKWEED FAMILY.)

LEMNA, *L.*minor, *L.* (Duck-weed.)polyrhiza, *L.*

ORDER 92.—TYPHACEÆ. (CAT-TAIL FAMILY.)

TYPHA, *Tourn.*latifolia, *L.* (Cat-tail.)SPARGANIUM, *Tourn.*ramosum, *Hudson.* (Burr-reed.)Americanum, *Nutt.*

ORDER 93.—NAIADACEÆ. (PONDWEED FAMILY.)

- NAIAS, *L.*
flexilis, Rostk.
 ZANNICHELIA, *Micheli.*
palustris, L.
 POTAMOGETON, *Tourn.*
natans, L. (Pondweed.)
compressus, L.
pectinatus, L.
pauciflorus, Pursh.

ORDER 94.—ALISMACEÆ.

- ALISMA, *L.*
Plantago, L. (Water Plantain.)
 SAGITTARIA, *L.*
variabilis, Engelm. (Arrow-head.)

ORDER 95.—HYDROCHARIDACEÆ.

- UDORA, *Nutt.*
Canadensis, Nutt.

ORDER 96.—ORCHIDACEÆ. (ORCHIS FAMILY.)

- LIPARIS, *Richard.*
liliifolia, Richard.
 CORALLORHIZA, *Haller.*
multiflora, Nutt. (Coral Root.)
innata, R. Br.
odontorhiza, Nutt.
 APLECTRUM, *Nutt.*
hyemale, Nutt. (Putty-root.)
 ORCHIS, *L.*
spectabilis, L.
 PLATANThERA, *Richard.*
peramoena, Gray.
 POGONIA, *Juss.*
pendula, Lindl.
 SPIRANTHES, *Richard.*
gracilis, Big.
cernua, Rich. (Ladies' Tresses.)

GOODYERA, *R. Br.*

pubescens, *R. Br.* (Rattlesnake Plantain.)

CYPRIPEDIUM, *L.*

pubescens, *Willd.* (Ladies' Slipper.)

spectabile, *Swartz.*

ORDER 97.—AMARYLLIDACEÆ. (AMARYLLIS FAMILY.)

HYPOXYS, *L.*

erecta, *L.* (Stargrass.)

ORDER 98.—IRIDACEÆ. (FLAG FAMILY.)

IRIS, *L.*

versicolor, *L.* (Blue Flag.)

SISYRINCHIUM, *L.*

Bermudiana, *L.* (Blue-eyed Grass.)

var. anceps.

ORDER 99.—DIOSCOREACEÆ. (YAM FAMILY.)

DIOSCOREA, *Plumier.*

villosa, *L.* (Wild Yam root.)

ORDER 100.—SMILACEÆ.

SMILAX, *Tourn.*

tamnoides, *L.*

herbacea, *L.* (Carrion flower.)

rotundifolia, *L.* (Green brier.)

glauca, *Walt.*

TRILLIUM, *L.*

sessile, *L.*

erectum, *L.*

ORDER 101.—LILIACEÆ. (LILY FAMILY.)

POLYGONATUM, *Tourn.*

canaliculatum, *Pursh.* (Solomon's Seal.)

SMILACINA, *Desf.*

racemosa, *Desf.* (False Spikenard.)

SCILLA, *L.*

esculanta, *Ker.* (Quamash.)

ALLIUM, *L.*Canadense, *Kalm.*cernuum, *Roth.* (Wild Onion.)tricoceum, *Ait.*LILIUM, *L.*Canadense, *L.* (Wild Lily.)ERYTHRONIUM, *L.*Americanum, *Smith.* (Adder's Tongue.)albidum, *Nutt.* (Dog's-tooth Violet.)

ORDER 102.—MELANTHACEÆ.

UVULARIA, *L.*grandiflora, *Sm.* (Bellwort.)MELANTHIUM, *Gronov.*Virginicum, *L.*

ORDER 103.—JUNCACEÆ. (RUSH FAMILY.)

LUZULA, *DC.*campestris, *DC.*JUNCUS, *L.*tenuis, *Willd.*marginatus, *Lam.*effusus, *L.*scirpoides, *Lam.*acuminatus, *Michx.*

ORDER 104.—PONTEDERIACEÆ.

HETERANTHERA, *R. & P.*reniformis, *R. & P.* (Mud Plantain.)SCHOLLERA, *Schreb.*graminea, *Willd.* (Water Star-grass.)

ORDER 105.—COMMELYNACEÆ.

TRADESCANTIA, *L.*Virginica, *L.* (Spiderwort.)pilosa, *Lehm.*COMMELYNIA, *Dill.*angustifolia, *Michx.* (Day-flower.)

ORDER 106.—CYPERACEÆ. (SEDE FAMILY.)

CYPERUS, *L.*diandrus, *Torr.*flavescens, *L.*inflexus, *Muhl.*repens, *Ell.*speciosus, *Vahl.*strigosus, *L.*KYLLINGIA, *L.*pumila, *Michx.*DULICHIMUM, *Richard.*spathaceum, *Pers.*ELEOCHARIS, *R. Br.*acicularis, *R. Br.*obtus, *Schultz.*palustris, *R. Br.*tenuis, *Schultz.*SCIRPUS, *L.*atrovirens, *Muhl.*Eriophorum, *Michx.*lacustris, *L.*lineatus, *Michx.*FIMBRISTYLIS, *Vahl.*autumnalis, *R. & S.*CAREX, *L.*ampullacea, *Good.*var. utriculata, *Boott.*anceps, *Willd.*arida, *Schw. & Torr.*bromoides, *Schk.*Careyana, *Dewey.*cephalophora, *Muhl.*comosa, *Boott.*crinita, *Lam.*Davisii, *Schw. & Torr.*decomposita, *Muhl.*festucea, *Schk.*filiformis, *L.*gracillima, *Schw.*granularis, *Muhl.*

(CAREX.)

- Grayii, *Carey*.
 grisea, *Wahl*.
 Hitchcockiana, *Dewey*.
 hystericina, *Willd*.
 lacustris, *Willd*.
 lagopodioides, *Schk*.
 var. cristata, *Schw. & Torr*.
 lanuginosa, *Michx*.
 lupulina, *Muhl*.
 miliacea, *Muhl*.
 Muhlenbergii, *Schk*.
 oligocarpa, *Schk*.
 Pennsylvanica, *Lam*.
 polytrichoides, *Muhl*.
 pubescens, *Muhl*.
 rosea, *Schk*.
 scoparia, *Schk*.
 Shortiana, *Dewey*.
 sparganioides, *Muhl*.
 squarrosa, *L*.
 stellulata, *Good*.
 stenolepis, *Torr*.
 Steudelii, *Kunth*.
 stipata, *Muhl*.
 straminea, *Schk*.
 stricta, *Lam*.
 tentaculata, *Muhl*.
 teretiuscula, *Good*.
 triceps, *Michx*.
 varia, *Muhl*.
 virescens, *Muhl*.
 vulpinoidea, *Michx*.
 Willdenovii, *Schk*.

ORDER 107.—GRAMINEÆ. (GRASS FAMILY.)

LEERSIA, *Soland*.

- oryzoides, *Swartz*.
 Virginica, *Willd*.

PHLEUM, *L.*

pratense, *L.* (Timothy-grass.)

AGROSTIS, *L.*

perennans, *Walt.*

scabra, *Willd.* (Hair-grass.)

vulgaris, *With.* (Red-top.)

CINNA, *L.*

arundinacea, *L.*

MUHLENBERGIA, *Schreb.*

diffusa, *Schreb.*

Mexicana, *Trin.*

sobolifera, *Trin.*

Willdenovii, *Trin.*

ELEUSINE, *Gærtn.*

Indica, *Gærtn.* (Yard-grass.)

TRICUSPIS, *Beauv.*

seslerioides, *Torr.* (Tall Red-top.)

DIARRHENA, *Raf.*

Americana, *Beauv.*

DACTYLIS, *L.*

glomerata, *L.* (Orchard-grass.)

REBOULEA, *Kunth.*

obtusata, *Gray.*

Pennsylvanica, *Gray.*

GLYCERIA, *R. Br.*

fluitans, *R. Br.*

nervata, *Trin.*

POA, *L.*

compressa, *L.* (Blue-grass)

trivialis, *L.*

ERAGROSTIS, *Beauv.*

capillaris, *Nees.*

megastachya, *Link.*

pilosa, *Beauv.*

reptans, *Nees.*

FESTUCA, *L.*

elatior, *L.*

nutans, *Willd.*

pratensis, *Huds.*

BROMUS, *L.**ciliatus, L.**secalinus, L. (Chess.)***UNIOLA, *L.****latifolia, Michx.***ELYMUS, *L.****Canadensis, L.**Hystrix, L. (Bottle-brush grass.)**striatus, Willd.**Virginicus, L.***DANTHONIA, *DC.****spicata, Beauv. (Wild-oat Grass.)***ARRENATHERUM, *Beauv.****avenaceum, Beauv.***PASPALUM, *L.****fluitans, Kunth.***PANICUM, *L.****capillare, L.**clandestinum, L.**Crus-galli, L. (Barn-yard Grass)**depauperatum, Michx.**dichotomum, L.**latifolium, L.**proliferum, Lam.**sanguinale, L. (Crab Grass.)***SETARIA, *Beauv.****glauca, Beauv.**viridis, Beauv. (Fox-tail Grass.)***ANDROPOGON, *L.****Virginicus, L. (Beard Grass.)*

CRYPTOGAMOUS PLANTS.

ORDER 108.—EQUISETACEÆ. (HORSE-TAIL FAMILY.)

EQUISETUM, *L.*arvense, *L.* (Scouring Rush.)robustum, *Braun.*

ORDER 109.—FILICES. (FERN FAMILY.)

Polypodium, *L.*hexagonopterum, *Michx.*PTERIS, *L.*aquilina, *L.* (Brake.)ADIANTUM, *L.*pedatum, *L.* (Maiden-hair.)CAMPTOSORUS, *Link.*rhizophyllus, *Link.* (Walking Leaf.)ASPLENIUM, *L.*ebeneum, *Ait.*angustifolium, *Michx.*thelypteroides, *Michx.*Felix-fœmina, *R. Br.*CYSTOPTERIS, *Bernh.*fragilis, *Bernh.*DRYOPTERIS, *Adas.*Novebracensis, *Gray.*Thelypteris, *Gray.*Goldiana, *Gray.*POLYSTICHUM, *Roth.*acrostichoides, *Schott.*ONOCLEA, *L.*sensibilis, *L.*OSMUNDA, *L.*spectabilis, *Willd.*Claytoniana, *L.*

BOTRYCHIUM, Swartz.lunarioides, *Swartz.*Virginicum, *Swartz.***OPHIOGLOSSUM, L.**vulgatum, *L.* (Adder's Tongue.)**ORDER 110.—MUSCI. (MOSS FAMILY.)****APHANORHEGMA, Sulliv.**serrata, *Sulliv.* (*Schistidium serratum, H. & W.*)**ATRICHUM, Beauv.**angustatum, *Beauv.***AULACOMNION, Schwægr.**heterostichum, *B. & S.***BARBULA, Hedw.**cæspitosa, *Schwægr.*unguiculata, *Hedw.***BARTRAMIA, Hedw.**marchica, *Brid.*pomiformis, *Hedw.* var. *crispa.*radicalis, *Schwægr.***BRYUM, L.**affine, *Blandon.*argenteum, *L.*bimum, *Schreb.*cæspiticium, *L.*cuspidatum, *Hedw.*pulchellum, *Hedw.*pyriforme, *Hedw.*roseum, *Schreb.*serratum, *Brid.*Wahlenbergii, *Schwægr.***CAMPYLOPUS, Brid.**Leai, *Sulliv.* *Leucophanes Leanum, Sulliv.***CERATODON, Brid.**purpureus, *Brid.***CLIMACIUM, W. & M.**dendroides, *W. & M.***CRYPHÆA, Brid.**filiformis, *Brid.*

DICRANUM, Hedw.

- flagellare, *Hedw.*
- heteromallum, *Hedw.*
- scoparium, *Hedw.*
- varium, *Hedw.*

DRUMMONDIA, Hook.

- clavellata, *Hook.*

FISSIDENS, Hedw.

- bryoides, *Hedw.*
- hyalinus, *H. & W.*
- obtusifolius, *Wils.*
- subbasilaris, *Hedw.*
- taxifolius, *Hedw.*

FUNARIA, Schreb.

- hygrometrica, *Hedw.*

GRIMMIA, Ehrh.

- apocarpa, *Hedw.*

HYPNUM, L.

- adnatum, *Hedw.*
- Boscii, *Schwægr.*
- ciliata, *Hedw.*
- curvifolium, *Hedw.*
- deplanatum, *B. & S.*
- fluitans, *L.*
- hians, *Hedw.*
- imponens, *Hedw.*
- minutulum, *Hedw.*
- riparium, *L.*
- salebrosum, *Hoffm.*
- scitum, *Beauv.*
- serpens, *Linn.*
- serrulatum, *Hedw.*
- strigosum, *Hoffm.*
- Sullivantii, *Spruce.*
- tamariscinum, *Hedw.*
- triquetrum, *L.*
- varium, *Beauv.*

ISOETHECIUM, Brid.

- cladorrhizans, *Hedw.*
- minus, *Beauv.*
- seductrix, *Hedw.*

- LEPTODON, *Weber*.
 trichomitrium, *Mohr*.
- LEUCOBRYUM, *Hampe*.
 vulgare, *Hampe*.
- LEUCODON, *Schwægr*.
 brachypus, *Brid*.
 julaceus.
- LESKEA, *Hedw*.
 attenuata, *Schreb*.
 denticulata, *Sulliv*.
 fragilis, *Hook & Wils*.
 imbricatula, *Hedw*.
 obscura, *Hedw*.
 rostrata, *Hedw*.
- ORTHOTRICHUM, *Hedw*.
 crispum, *Hedw*.
 strangulatum, *Beauv*.
- PHASCUM, *Schreb*.
 alternifolium, *B. & S*.
 cohærens, *Hedw*.
 crassinervium, *Schwægr*.
 crispum, *Hedw*.
 cuspidatum, *Schreb*.
 muticum, *Schreb*.
- PHYSCOMITRIUM, *B. & S*.
 immersum, *Sulliv*.
 pyriforme, *B. & S*.
 pogonatum, *Beauv*.
 brevicaule, *Brid*.
- POLYTRICHUM, *L*.
 formosum, *Hedw*.
- PTEROGONIUM, *Swartz*.
 hirtellum, *Hedw*.
 intricatum, *Hedw*.
 repens, *Schwægr*.
- SPHAGNUM, *Dill*.
 acutifolium, *Ehrh*.
- TETRAPHIS, *Hedw*.
 pellucida, *Hedw*.
- TIMMIA, *Hedw*.
 megapolitana, *Hedw*.

- TRICHOSTOMUM, *Hedw.*
 pallidum, *Hedw.*
 tortile, *Schrad.*
 WEISSIA, *Hedw.*
 controversa, *Hedw.*

ORDER 111.—HEPATICÆ. (LIVERWORTS.)

- ANEURA, *Dumort.*
 palmata, *Nees.*
 ANTHOCEROS, *Micheli.*
 punctatus, *L.*
 CALYPOGEIA, *Raddi.*
 Trichomanis, *Corda.*
 CHILOSCYPHUS, *Corda.*
 ascendens, *Sulliv.* (*C. labiatus*, *Taylor.*)
 FEGATELLA, *Raddi.*
 conica, *Corda.*
 FRULLANIA, *Raddi.*
 Eboracensis, *Lehm.* (*F. læviscypha*, *Taylor.*)
 Virginica, *Lehm.*
 JUNGERMANNIA, *L.*
 curvifolia, *Dicks.*
 LOPHOCOLEA, *Nees.*
 bidentata, *Nees.*
 MADOTHECA, *Dumort.*
 platyphylla, *Dumort.*
 porella, *Nees.*
 MARCHANTIA, *L.*
 polymorpha, *L.*
 NOTOTHYLAS, *Sulliv.*
 valvata, *Sulliv.*
 REBOUILLIA, *Raddi.*
 hemisphærica, *Raddi.* var. *gracilis.*
 RICCIA, *Micheli.*
 lutescens, *Schwein.*
 SPHAGNICÆTIS, *Nees.*
 communis, *Nees.*

ORDER 112.—LICHENES.*

USNEA.

barbata, *Fr.*

a. florida, Fr. Trunks; infertile.

β. strigosa, Ach. Trunks; fertile.

RAMALINA.

calicaris, *Fr.*

β. fastigiata, Fr. Trunks; fertile.

NEPHROMA.

Helveticum, *Ach.* Trunks; fertile.

PELTIGERA.

canina, *Hoffm.* Rotten trunks; infertile.

horizontalis, *Hoffm.* Infertile.

SOLORINA.

Despreauxii, *Montag.* On the earth.¹

STICTA.

aurata, *Ach.* Trunks; infertile.

pulmonaria, *Ach.* Trunks; infertile.

glomerulifera, *Delis.* Beech trunks; fertile.

PARMELIA.

Subsect. I.—IMBRICARIA, Fr.

perforata, *Ach.* Trunks; fertile.

tiliacea, *Ach.* Trunks; fertile.

Borreri, *Turn.*

β. rudecta, Tuckerm. Trunks and rails; fertile.

colpodes, *Ach.* Trunks; fertile.

caperata, *Ach.* Rails; fertile.

parietina, *γ. rutilans, Fr.* Rails; fertile.

Subsect. II. PHYSCIA, Fr.

ciliaris, *Ach.*

β. galactophylla, Tuckerm. Dead branches of red cedar; Waynesville, fertile.

leucomela, *Ach.* With the last; infertile.²

* By Mr. Edward Tuckerman.

¹ Communicated to Dr. Montagne, and determined by him to be identical with his species from the Canary Islands.

² This has the appearance of a narrow and linear-lobed variety of the last, with which it also accords in its mostly simple fibres. It is, however, if I mistake not, undistinguishable from the British *P. leucomela*, of which I have specimens from Mr. Borrer; and agrees generally with other specimens in

(PARMELIA.)

detonsa, *Fr.* Trunks; fertile.

Leana, *Tuckerm.* Trunks.¹

stellaris, *Ach.* Trees and rails; fertile.

obscura, *Fr.*

β . *ulothrix*, *Fr.* Trunks; fertile.

fibrosa, *Fr. Syst. Orb. Veg.* p. 284. Trunks of Honey locust; fertile.²

Subsect. VIII.—PATELLARIA, Fr.

pallescentis, *Fr. a.* Trunks.

subfusca, *Fr.*

a. discolor, *Fr.*

β . *distans*, *Fr.* Trunks.

albella, *Ach. a.* Trunks.

sophodes, *Ach. a.* Trunks and rails.

varia, *Fr. a.* Old rails.

cerina, *Ach.* Trunks and rails.³

Subsect. IX.—URCEOLARIA, Fr.

hybocarpa, *Tuckerm.*⁴

my possession from the Cape of Good Hope (*Herb. Menzies*) and Nepaul (*Herb. Hook.*), which have also been referred to *P. leucomela*, and perhaps indicate an extreme state of the species, near to *P. ciliaris*.

¹ *PARMELIA LEANA*: Thallo subcartilagineo fragili substellato glabro albido, subtus pallide fusciscenti propter margines laciniarum pariter fibrilloso, lacinii linearibus planiusculis laxè imbricatis subpalmato-multifidis incisus nudis; apotheciis subsessilibus, margine crasso integro demum flexuoso ruguloso, disco e rufo-nigrescente nudo.—Thallus quite thin and brittle. The features of the apothecia appear to separate this from *P. speciosa*, *Ach.*, but the discovery of more perfect specimens may make necessary some modification of the other characters.

² First distinguished in this country by the late Mr. Oakes, and referred to under the name given it by him, in the *Synopsis of Lichenes of New England*, &c., p. 34.

³ There are also some small and imperfect fragments of what is possibly a new species, allied to *P. rubra* and *P. carneo-lutea*. I have another fragment of the same lichen collected by Mr. Curtis in North Carolina. What seem to be the peculiar features of these specimens may be indicated as follows: *P. crusta* cartilaginea granulata albo-glauciscenti; apotheciis elevatis extus granulatis, disco e concavo demum planiusculo, e pallide cerino-rufescente (demum et puniceo?) margine elevato, inflexo, granulato-crenulato. The name *P. granifera* will be appropriate to the state here described.

⁴ *PARMELIA HYBOCARPA*: crusta cartilaginea æquabili rimoso areolata glau-

CLADONIA.

pyxidata, *Fr.* symphycarpæa. Decaying wood.¹

cornuta, *Fr. Lich.*

β. Rotten trunks; infertile.

furcata, *Fl.*

δ. subulata, *Fl.* On the earth, infertile.

rangiferina, *Hoffm.*

β. sylvatica, *Fl.* Rotten trunks; infertile.

Floerkiana, *Fr.* Rotten trunks; fertile.

macilenta, *Hoffm. α. Fr.* Rotten trunks; fertile.

BIATORA.

spadicea, *Ach.* Trunks.²

suffusa, *Fr. Syst. Orb. Veg.* p. 285? Trunks.³

cinnabarina, *Sommerf.* (*LECIDEA coccinea, Schwein.*)

Trunks.

ferruginea, *Fr.* Trunks.⁴

LECIDEA.

parasema, *Fr.* Trunks, very common.

OPEGRAPHA.

varia, *Fr.*

α. pulicaris, *Fr.* Trunks.

atra, *Fr.*

γ. macularis, *Fr.* Trunks.

scripta, *Ach. Schær.*

α. limitata, *Schær.* Trunks.

γ. serpentina, *Schær.* Trunks.

cescente, hypothallo albo; apotheciis sessilibus, disco rufo mox protuberante immarginato nigrescente marginem thalldem integrum suboccludente.—Beech trunks; Covington.—The apothecia at length very protuberant. I have several fragments of the same, or a nearly allied species, collected in New Mexico by Mr. Fendler.

¹ A small and delicate state, commonly granulate or squamulose, and apparently distinguished by the paleness of its symphycarpæous apothecia. It seems to be most common on wood, but occurs also, elsewhere, on the earth.

² I have no European specimens of *B. carneola* (from which Fries considers this scarcely to differ) except the minute state which is the *Lecidea cornea* of *Borrer*. The limits of the American lichen do not seem to be clearly ascertained.

³ The cited brief diagnosis is all I have seen. The lichen is near to *B. mixta*, and, although strikingly distinguished by its white bloom, appears also to be approached by some states of the last species.

⁴ The specimens scanty, but near to this species, which occurs about Boston, and has been sent to me from N. Carolina by Mr. Curtis.

(OPEGRAPHÆ.)

polymorpha, *Tuckerm.* (*Arthonia*, *Ach.*) Trunks.¹

PERTUSARIA.

pertusa, *Fr. α.* Trunks.

faginea, *Fr.* Trunks.

VERRUCARIA.

elæochroa, *Tuckerm.* Limestone rocks.

nitida, *Schrad.* Trunks.

subelliptica, *Tuckerm.*²

epidermidis, *Fr. α.* Trunks.³

ORDER 113.—COLLEMACEÆ.

COLLEMA.

fasciculare, *Ach.* Trunks, among mosses.

LEPTOGIUM.

lacerum, *Fr.* Limestone rocks; fertile.

corticola, *Tuckerm.*⁴

¹ Nearest to the variety *maculans*, *Ach.* This is probably the *Arthonia polymorpha* of *Muhlenberg's Catalogue*, and does not seem to me to differ materially from the tropical lichen. It is common at Goat Island, Niagara Falls. Is it not near to *Lecanactis lyncea*?

² *VERRUCARIA SUBELLIPTICA*: Crusta hypophlæode; peritheciis subellipticis integris obtectis demum emersis, ostiolis papillatis papilla prominula vel rimosis, nucleo nigrescente. Trunks of honey-locust. Distinguished by its generally subelliptical perithecia, which are more constantly and somewhat more prominently papillated than those of the last species, and are marked very commonly with a furrow which at length gapes open. The perithecia are also smaller than in the common states of *V. nitida*.

³ Some of the specimens appear to possess an evident thallus. Base of the perithecia patent; nucleus white, globose. Beside this, there occurs a state with larger, applanate depressed perithecia, on a whitish crust, which may be distinct. There is also a *Verucarioid* plant with very small, often somewhat aggregated, hemispherical apothecia which resembles some states of *V. punctiformis*.

⁴ *LEPTOGIUM CORTICOLA*: Thallo foliaceo membranaceo tenero submonophyllo, orbiculari utrinque glabro papuloso, minutissime ruguloso e glaucoviridi-plumbeo, lobis adscendentibus rotundatis integerrimis flexuosis demum et rugosoplicatis; apotheciis majusculis sparsis subpedicellatis, disco e rufo-nigrescente, margine (proprio obscuriori pallido) thallodeque integerrimo cincto. — *Collema corticola*, *Taylor*, *New Lichens in Hook. Lond. Journ. Bot.* t. vi. p. 195. *Parmelia molybdæna*, *Herb. Willd.*! *P. Apalachensis*, *Spreng. in Herb. Floerk.*! — Trunks; fertile. Common also about Boston, and occurring in Pennsylvania,

ORDER 114.—FUNGI.¹

AGARICUS.

virens, *Fr. Epicr.* Waynesville, Aug. 31, Sept. 10, 1844.

pantherinus, *Dec.* On the ground. Cincinnati, July 12, 1842.

rubescens, *Pers.* Waynesville, Aug. 31, 1844.

vaginatus, *Bull.*² Cincinnati.

Muhl. in *Hb. Willd.*! The stations cited under *Collema pulchellum* in the *Synopsis of Lichenes of New England*, &c., p. 92, belong, as respects the New England plants in part, and as respects those of Pennsylvania and Ohio wholly, to the present species, which, as certainly known to Muhlenberg, Floerke, and Sprengel, I hesitated to consider undescribed. Thallus at first rosulate, mostly monophyllous, with much of the habit of *Collema nigrescens*, membranaceous, round-lobed, papulose, rugose and very minutely subreticulate-rugulose above, beneath costate-lacunose, from glaucous-green when moist becoming glaucous-lead-colored when dry, a little paler on the under side. Lobes rounded, very entire, ascendant, at length flexuous, and in old individuals the erect margins becoming somewhat plicate, as in *Collema plicatile*. Apothecia scattered, not confined to the margins of the lobes, numerous (often resembling those of *Leptogium azureum*); at first subimmersed in the thallus, and deeply impressed, but becoming subpedicellate, with a thick, entire thalline margin; the concave disc at length plane (or in old states slightly convex), fuscous-rufous, bordered by the very entire, inflexed margin of the thalline exciple, and contained by a proper exciple, of which the white base (*hypothecium*, *Eschw.*) is visible on dissection, though it seems scarcely ever to extend itself upwards as a prominent margin. This lichen appears to be properly referable to that group of species of the genus *Collema* of which Acharius constituted his section *Leptogium*; and also (if I mistake not), to be included in the genus *Leptogium* as constituted by *Fries* in his *Syst. Orb. Veget.* p. 255. In view, however, of the more recent observations of *Eschweiler* (*Fl. Bras.* p. 232), upon the inconstancy and uncertainty of the generic distinctions to be drawn from the presence or apparent absence of a proper exciple in the *Collemae*, and especially the remarks of *Montagne* under *Collema chloromelum*, and his exhausting description of that lichen in the *Cryptogamia of Cuba*, p. 110–111,* I should perhaps not have ventured to separate the present species from *Collema*, did not the characters of its apothecia appear to me to correspond too nearly with those of *Leptogium tremelloides* and *L. azureum*, to permit of its being kept far apart from them.

¹ By Rev. M. J. Berkeley.

² A distinct form, if not species, occurred at Banklick woods, Ohio, at the root of a beech tree, growing in a bunch, with the gills attached to the stem, but

* In his *Cryptogamia of the Canary Islands* in *Webb and Berthelot's Hist. Nat. des Isles Canaries, Crypt.*, p. 131, Dr. Montagne recedes from his earlier opinion as to this species, and refers it to *Leptogium*.

(AGARICUS.)

procerus, *Scop.* On the ground amongst leaves in woods. Cincinnati, Oct. 14, 1841.

mastoideus, *Fr.* Waynesville, Sept. 10, 1844.

acute-squamosus, *Weinn.* Ag. Mariæ, *Klotzsch.* Waynesville, Aug. 23, 1844.

clypeolarius, *Bull.* Waynesville, Aug. 29, 1844. Cincinnati.

melleus, *Vahl.* In clusters on a dead log and on the moist earth. Cincinnati, Oct. 27, 1841.

nebularis, *Batsch.* Amongst dead leaves in a fern ravine. Cincinnati, Oct. 27, 1841.

ochro-purpureus, *N. Sp.*¹ On clayey soil in woodlands. Cincinnati, Aug. 29, 1843. Waynesville, Aug. 31, 1844.

phyllophilus, *Pers.* Waynesville, Sept. 5, 1844.

illudens, *Schwein.* Cincinnati. Waynesville, Aug. 23, 1844.²

cyathiformis, *Bull.* Waynesville, Aug. 31, 1844.

pruinosis, *Fr.* Waynesville.

laccatus, *Scop.* Cincinnati. Waynesville, Aug. 31, Sept. 3, 1844.³

radicatus, *Relh.* In woods. Cincinnati, June 3, 1841.

lachnophyllus, *N. Sp.* On rotten pieces of wood amongst dead leaves in woods. Waynesville, Sept. 5, 1844.⁴

easily breaking away. The pileus was viscid, brownish yellow; the stem also brownish and viscid, especially within.

¹ *Ag. (CLYTOCYBE) OCHRO-PURPUREUS*: pileo subhemispherico, demum depresso, carnosus, compacto, lento, pallidé alutaceo, leviter purpurascenti; cute facile secernibili; margine inflexo primum tomentoso; mycelio albo; stipite pallidiore, hic illic purpurascente, medio tumido; lamellis crassis, non connexis, purpureis, posticé latioribus, decurrentibus. *Berk. in Hook., Lond. Journ. Bot.* iv. p. 299. Pileus two inches across. Stem two and a-half inches high, three quarters of an inch thick in the centre, solid, above deflexo squamose, occasionally equal.—This species resembles in most points *Ag. tyrianthinus*; but the gills are thick and distinct, resembling those of *Ag. laccatus*, and the mycelium (at least in the dry plant) is white. The spores when dry are of a palish yellow, but Mr. Lea in his notes describes them from the plant when gathered as white.

² The Rev. M. A. Curtis finds this species in North Carolina.

³ The amethyst-colored variety also occurs, as at Waynesville, Sept. 3, 1844.

⁴ *Ag. (COLLYBIA) LACHNOPHYLLUS*: pileo carnosula, conico-hemispherico,

(AGARICUS.)

velutipes, *Curt.* On a paper mulberry tree. Cincinnati, Nov. 1840.

*cirrhatu*s, *Fr.* On the ground near a dead stump. Waynesville, Sept. 10, 1844.¹

dryophilus, *Bull.* Amongst dry leaves in woods under beech trees. Cincinnati, May 15, 1841.

Leaianus, *N. Sp.* On dead trunks. Cincinnati, May. Waynesville, August, 1844.²

galericulatus, *Scop.* On stumps of trees, &c. Cincinnati, Dec. 15, 1840, Oct. 27, 1841, Jan. 14, 1842.

filopes, *Bull.* On the ground in woods. Cincinnati, Sept. 14, 1841.

hæmatopus, *Pers.* Waynesville, Sept. 5, 1844.

muralis, *Sow.* On the ground in wet woods. Cincinnati, July 12, 1842.

fulvo-spadiceo, velutino; stipite cavo, deorsum fusco-purpureo, nitido, sursum pallido subvelutino; lamellis liberis, fulvo-velutinis.—More or less tufted. Pileus three-quarters of an inch across, subcarnose, conico-hemispherical, of a rich tawny brown, clothed with short, velvety pubescence, much wrinkled when dry.—Stem two inches high, one line or more thick, tough, hollow, brownish-purple below, shaded off into white above, and clothed with scattered short pubescence, downy and rather bulbous where it roots into the wood.—Gills narrow, close, quite free, velvety, with tawny pubescence.—An exquisite species, allied apparently to *Agaricus longipes*. The gills, as in that species, are densely velvety.

¹ The tubers, Mr. Lea observes, resemble the grains at the base of *Dielytra cucullata*.

² *AGARICUS (MYCENA) LEAIANUS*: pileo convexo, umbilicato, tenui, margine striato minutissime miniato-virgato, stipiteque longo deorsum tomentoso strigosoque aurantiis viscosis; lamellis distantibus, ventricosis, postice sinuatis, adnexis, aurantiis, coccineo-marginatis. *Berk. in Hook. Lond. Journ.* v. 4, p. 300.—Pileus rather more than half an inch across, convex umbilicate, orange, clothed with a viscid cuticle, smooth, wrinkled when dry; margin striate and streaked with vermilion flocci; stem two and a-half inches high, scarce one line thick, orange, smooth and viscid above, with a few indistinct darker specks, below clothed with matted tawny down and stigose flocci, stringy, attached to dead leaves, &c., by a creeping, strigose orange mycelium. Gills distinct, broad, ventricose, remarkably sinuated behind, adnexed, orange, with a vermilion margin.—Allied to *Ag. pelianthinus*. The pileus when dry has somewhat the appearance of *Ag. palmatus* in consequence of its viscid cuticle. It must be highly beautiful when fresh.

(AGARICUS.)

umbelliferus, *L.* On pieces of sticks amongst dead leaves, in woods. Waynesville, Sept. 3, 1844.¹

campanella, *Batsch.* Cincinnati. Waynesville.

fibula, *Bull.* Waynesville.

salignus, *Pers.* On a prostrate Buck-eye. Cincinnati, Dec. 9, 1841.

pinsitus, *Fr.* Waynesville, Sept. 3, 1844.

mastrucatus, *Fr.* Waynesville.

algidus, *Fr.* Waynesville, Aug. 26, 1844, with *Panus dealbatus.*

niger, *Schwein.* On Beech bark. Cincinnati, March 3, 1842. Waynesville, Aug. 23, 1844.²

bombycinus, *Schæff.* Waynesville.

rhodopolius, *Fr.* In woods. Waynesville, Sept. 5, 1844.

chrysophæus, *Schæff.* Waynesville, Sept. 3, 1844.

clypeatus, *L.* Waynesville, Sept. 8, 1844.

durus, *Fr.* Waynesville, Aug. 31, 1844.

squarrosus, *Mull.* On a rotten trunk. Cincinnati, Oct. 29, 1841.

adiposus, *Batsch.* On dead trunks. Cincinnati, Nov. 1, 1842. Waynesville, Sept. 7, 1844.

mutabilis, *Schæff.* On rotten trunks. Cincinnati, Jan. 28, 1842.

lanuginosus, *Bull.* Waynesville, Aug. 23, 1844.

dulcamarus, *Pers.* Waynesville.

pyriodorus, *Pers.* Waynesville.

auricomus, *Batsch.* Waynesville.

fastibilis, *Pers.* Waynesville, Aug. 29, 1844.

polychrous, *N. Sp.* On rotten trunks of trees, sticks, &c. Waynesville, Sept. 3, 1844.³

¹ As the locality is curious, I subjoin Mr. Lea's notes.

"Pileus brown, subhemispherical, pruinose; margin sulcate; stem buff, very smooth, tapering to the base, much enlarged and spreading into the pileus, so as to be clavate; gills brown, distant, broad, very decurrent."

² Very nearly allied to *Ag. applicatus.*

³ *Ag. (FLAMMULA) POLYCHROUS*: pileo plano, late umbonato, multicolori, primum purpureo, viscido, disco carnoso; stipite firmo, subligneo, primum furfuraceo; velo floccoso, flavo-purpureo; lamellis pallido-purpureis, demum

(AGARICUS.)

sapineus, *Fr.* On fence rails. Waynesville, Sept. 7, 1844.

vervacti, *Fr.* Cincinnati.

semiorbicularis, *Bull.* Amongst grass. Cincinnati, June 28, 1841.

inguilinus, *Fr.* Waynesville.

furfuraceus, *Pers.* On the ground amongst grass. Cincinnati, March 14, 1842.

siligineus, *Fr.* Waynesville.

mucidolens, *Berk.* On a rotten trunk. Cincinnati, April 21, 1842.¹

crocophyllus, *N. Sp.* On a dead trunk. Waynesville, Sept. 5, 1844.²

flavo-fuscis, adnato-decurrentibus.—Pileus two and three inches across, solitary or tufted, when young convex, purple, soon expanding and flat, with a broad fleshy umbo, very viscid, varying from light yellow to buff, with the umbo brownish yellow or purple; stem one and one and a half inch high, two lines thick, hard and somewhat woody, nearly equal, brownish-yellow, at first furfuraceous; veil fugitive, consisting of purple and yellow flocci; gills at first dirty white, then brownish purple, at length yellow-brown, broad, rather distant, adnate, slightly decurrent, but easily breaking away from the stem.—Frequently eaten by large larvæ, and then, with the exception of the woody stem, turning into a viscid mass.—This beautiful species is evidently allied to *Ag. Harmoge*, but differs essentially in the nature of the gills.

¹ *AG. (GALERA) MUCIDOLENS*: olidus, pileo pluteiformi, lobato, glabro, nitido, viscido, fuligineo; stipite fibrilloso; lamellis liberis. *Berk. in Hook. Lond. Journ.* v. iv., p. 301.—Pileus two to three inches broad, of a dull smoky brown, viscid; stem two inches or more high, clothed with brownish fibres; gills free; spores dull, ferruginous, broadly subcymbiform, with a small nucleus. Smell like that of decayed cheese.—Allied to *Agaricus reticulatus*, but differing in several points, and especially in its dull ferruginous, not croceo-ferruginous spores.

² *AG. (CREPIDOTUS) CROCOPHYLLUS*: pileo sessili, subflabilliformi, ochraceo-fusco, adpresse squamoso; lamellis aurantiis.—Pileus scarce half an inch long, flabelliform, convex, ochraceous-brown, clothed with minute adpressed scales; stem none; gills rather broad, rounded behind, bright buff; spores subglobose, pale ochre-yellow.—I do not know any species with which to compare this. *Agaricus croceo-lamellatus* is, I believe, the same with *Paxillus Panuoides*. The only resemblance, however, is in the color of the gills. It is perhaps most like *Agaricus mollis*, but besides the color of the gills the spores are smaller and of a different form. It is not, I believe, resupinate in any stage of growth.

(AGARICUS.)

campestris, *Linn.* On rotten dung. Cincinnati, April 18, 1842.¹

sylvaticus, *Fr.* Waynesville, Sept. 8, 1844.

fabaceus, *N. Sp.* On the ground, amongst dead leaves in open woods. Waynesville, Sept. 10, 1844.²

semiglobatus, *Batsch.* Amongst old cow dung. Cincinnati, Oct. 14, 1841.

fascicularis, *Huds.* Waynesville.

lateritus, *Schæff.* On rotten wood. Cincinnati, Dec. 9, 1841.

velutinus, *Pers.* Waynesville, Sept. 8, 1844.

stipatus, *Pers.* On the ground. Cincinnati, May 21, 1841.

Fimiputris, *Bolt.* On dung. Cincinnati, July 8, 1842.

campanulatus, *Linn.* Cincinnati. With the foregoing species.

COPRINUS.

fuscescens, *Fr.* Between the timbers of a pier. Cincinnati, Nov. 6, 1841.

micaceus, *Fr.* At the foot of a dead poplar. Cincinnati, May 28, 1841.

nychthemerus, *Fr.* Waynesville.

plicatilis, *Fr.* In grass fields. Waynesville, Aug. 12, 1844.

¹ Six days after the specimens were collected and put to dry, on opening the paper they had the smell, and produced the sensation on the eyes and nose of hartshorn. This vanished in a short time on exposure to air.

² *AG. (PRATELLA) FABACEUS*: pileo tenui subcarnoso, umbonato, albo, demum plano; stipite glabro, fibrilloso, basi bulbosa excepte æquali, albo; velo amplo, extus floccoso; lamellis confestis, tenuissimus, liberis, brunneis.—Pileus four to five inches across, thin, almost submembranaceous, umbonate, conical when young, becoming nearly plane as it expands, white, viscid when moist; epidermis smooth, tough, feeling like fine kid leather, turning yellow when bruised; stem three to four inches high, one-third of an inch thick, white, smooth, with the exception of a few fibrilla, equal except at the base; veil large, at first covering the gills and connecting the margin with the stem, white, externally floccose; gills crowded, very thin, not ventricose, free, brown when young, then darker brown, at length almost black like the dark part of a bean flower.—A fine species allied to *Ag. arvensis*. When young it has a peculiar, but not unpleasant smell.

CORTINARIUS.

varius, *Fr.* Waynesville, Sept. 5, 1844.

callochrous, *Fr.* In woods. Cincinnati, Oct. 14, 1841.

cærulescens, *Fr.* Waynesville, Sept. 8, 1844.

violaceus, *Fr.* On the ground. Waynesville, Aug. 1840.

PAXILLUS.

porosus, *N. Sp.* In moist woods. Waynesville, Aug. 23, 1844.¹

flavidus, *N. Sp.* On the ground amongst grass, in dry open woods. Waynesville, Sept. 20, 1844.²

HYGROPHORUS.

ceraceus, *Fr.* Waynesville, Sept. 3, 1844.

eburneus, *Fr.* Waynesville, Aug. 31, 1844.

LACTARIUS.

zonarius, *Fr.* Waynesville, Aug. 21, 1844.

pergameneus, *Fr.* Waynesville, Aug. 4, 1844.

piperitus, *Fr.* Waynesville, Aug. 21, 1844.

vellereus, *Fr.* Waynesville, Sept. 2, 1844.

vietus, *Fr.* Waynesville, Sept. 8, 1844.

Voleonum, *Fr.* Waynesville, Aug. 21, 1844.

subdulcis, *Fr.* Waynesville, Sept. 5, 1844.

¹ *PAXILLUS POROSUS*: pileo excentrico, carnoso, nitido; stipite lento, sursum reticulato; hymenio toto poroso, flavo.—Pileus two to five inches broad, one-quarter to three-quarters of an inch thick, fleshy, viscid when moist, reddish-brown, rather shining; margin thin and even; stem lateral, one inch or more high, one-third of an inch thick, tough, diffused into the pileus, reticulated above by the decurrent hymenium; hymenium yellow, porous, formed by radiating thin folds from a line to half a line distant, branching and connected by numerous irregular veins, so as to form large angular pores, the radiating folds being broader than those which connect them; spores semi-ovate; smell very strong and unpleasant.—Nearly allied to *Paxillus involutus*, but apparently distinct. The spores are of the same form but larger than in that species. Without examining the fructification it might be taken for a *Boletus*.

² *PAXILLUS FLAVIDUS*: pileo alutaceo-fusco, depresso; stipite lento, flavo, squamulis glutinosis aspero; lamellis parce ramosis, postice fuscatis, vivide flavis.—Pileus two to four inches across, depressed, sometimes subinfundibuliform, smooth to the touch like kid leather, buffish brown, or pale snuff-color, viscid when moist; flesh rather thin, spongy; gills close, thin, slightly branched, connected by veins, decurrent, forked at the base, bright yellow; stem one to two inches high, one-third to a half inch thick, tough, yellow, rough with glutinous scales.—Distinguished by its bright yellow, very decurrent gills, which are forked behind but do not anastomose.

(LACTARIUS.)

Calceolus, *N. Sp.* On the ground in woods. Waynesville, Aug. 31, and Sept. 10, 1844.¹

RUSSULA.

nitida, *Fr.* Waynesville.

CANTHARELLUS.

cibarius, Waynesville, Aug. 31, 1844.

MARASMIUS.

fusco-purpureus, *Fr.* On rotten wood, &c. Cincinnati, May 28, 1842.

erythropus, *Fr.* On the ground. Cincinnati, May 5, 1842.

pyrrhocephalus, *N. Sp.* On the ground in damp woods, Aug. 23, 31, 1844.² Waynesville.

nigripes, *Fr.* Waynesville. Cincinnati.

Rotula, *Fries.* On a dead trunk. Cincinnati, May 30, 1840. Waynesville, Sept. 1, 1844.

clavæformis, *N. Sp.* On dead sticks. Waynesville, May 31, 1844.³

¹ *LACTARIUS CALCEOLUS*: pileo tenui, centro depresso margine repando, alutaceo, fusco, epidermide rimosa; stipite curto, concolori; lamellis perpaucis, distantibus, venoso-connexis, decurrentibus, albis.—Pileus three inches across, thin, arched, so as to present a half ovate form, brown-buff, smooth, not viscid, epidermis cracked; flesh white; stem short, half an inch in height and thickness, brown-buff, like the pileus; gills white, decurrent, half an inch broad, extremely distant, not exceeding twenty, more or less connected by transverse veins or plates, forked near the edge, exuding a mild milky juice.—An extremely curious species, remarkable for its few distant gills, and the contrast between the brown-buff stem and white gills. The pilei in all the specimens found at present are laterally confluent. It cannot be confounded with any known species.

² *MARASMIUS PYRRHOCEPHALUS*: pileo convexo, umbilicato, striato plicato, rufo; stipite gracili, brunneo, piloso, sursum pallescente; lamellis ventricosis, breviter adnatis ex albo alutaceis.—Pileus two lines across, hemispherical, umbilicate, membranaceous, red-brown, smooth, striate; stem one and a half to two inches high, slender, brown, closely velvety below, generally rooting, paler above, more or less densely covered with short pale hairs and meal; mucellum arachnoid white; gills white, at length pale, tan-colored, ventricose, shortly adnate.—Allied to *Marasmius hæmatocephalus mont.* Two forms occur, the one smaller and more delicate than the other.

³ *MARASMIUS CLAVÆFORMIS*: pileo, convexo, albo; stipite gracili, deorsum attenuato, depresso-velutino, fusco, rursum albo, furfuraceo; lamellis carneo-albris, antice latis, postice longe decurrentibus.—Pileus two lines broad, convex, tough, white; stem one inch high, attenuated below, attached by a minute

LENTINUS.

Lecomtei, *Fries*. On rotten trunks. Cincinnati, May 30, 1840.

tigrinus, *Fr*. On dry stumps. Cincinnati, Nov. 1842.¹

cæspitosus, *N. Sp*. In woods, on the ground. Waynesville, Sept. 8, 1844.²

sulcatus, *Berk*. In the cracks of dry fence rails. Cincinnati, May 28, 1842.³

vulpinus, *Fr*. Waynesville, Aug. 31, 1844.

pelliculosus, *Fr*. On rotten wood. Cincinnati, Dec. 15, 1840.

PANUS.

conchatus, *Fr*. On a dead trunk. Cincinnati, July 12, 1842. Waynesville.

stipitus, *Fr*. On stumps. Cincinnati, Oct. 14, 1841. Waynesville, Aug. 1844.

bulb, brown and clothed for three-quarters of its height with depressed velvety pubescence, incrassated above where it passes into the pileus, white sprinkled with furfuraceous particles; gills distant, broad in front, very decurrent behind, whitish inclining to flesh color; interstices more or less reticulate.— Allied to *Marasmius insititius*. Remarkable for its very decurrent gills.

¹ The gills have anastomosed in these specimens to such an extent as to form a solid wood mass.

² *LENTINUS CÆSPITOSUS*: eximie cæspitosus; pileo plano, alutaceo, fibrillis brunneis adpressis sparsis ornato, margine incurvo; stipite elongato, striato, griseo-albo, fibrilloso; lamellis integris, albis, longe decurrentibus.—Pilei forming tufts of thirty or more individuals, one and a half to two inches across, plane tough, yellowish-buff, clothed with close-pressed, brownish-red fibrillæ; margin incurved; stems three inches high, two lines thick, flexuous, tough, striate, grayish-white, fibrillose, solid formed of fibres; gills white, very decurrent and attenuated behind, quite entire.—A very curious species, with the habit of *Agaricus contortus*, *Bull*. It is easily distinguished from *L. sitaneus* and its allies by its entire gills.

³ *LENTINUS SULCATUS*: parvus, pileo primum subconico, demum hemispherico, carnosulo, diffracto squamoso, sericeo-virgato, rufescente, margine sulcato; stipite centrali, brevi, solido, subconcolore, furfuraceo; lamellis distantibus, latiusculis, subcrassis, postice emarginatis, pallidis. *Berk. in Hook. Lond. Journ.*, v. iv. p. 301.—Pileus not three-quarters of an inch broad, hemispherical or nearly so, at first slightly conical, of a more or less rufous tint, broken up into irregular scales, sericeo virgate (sometimes the scales are more or less indistinct); fleshy; margin deeply sulcate, with the interstices darker, which gives the pileus a very neat appearance; stem about three-quarters of an inch high, one and a half line thick, often slightly attenuated downwards, solid, of the same color as the pileus, furfuraceous, sometimes confluent; gills distant,

(PANUS.)

dealbatus, *N. Sp.* On a dry dead branch. Waynesville, Aug. 26, 1844.¹

angustatus, *N. Sp.* On a dead log. Waynesville, Sept. 10, 1844.²

SCHIZOPHYLLUM.

commune, *Fr.* On a dead cherry tree. Cincinnati, June 7, 1840.

LENZITES.

betulina, *Fr.* On dead sticks. Cincinnati, Sept. 1842. Waynesville, Sept. 5, 1844.

BOLETUS.

subtomentosus, *L.* Waynesville, Sept. 10, 1844.

edulis, *Bull.* On the ground in woods. Cincinnati, July 28, 1840, July 12, 1842.

strobilaceus, *Scop.* On the ground, and on rotten trunks of trees. Cincinnati, July, August. Waynesville, Aug. 4, 1844.³

broad, subventricose, emarginate behind very slightly annexed, pallid, rather thick, indistinctly toothed.—Allied to *Lentinus scleropus*, &c.

¹ PANUS DEALBATUS: pileo coriaceo-molli, flabelliformi, umbrino, striato; stipiteque laterali, longiusculo, compresso, vel canaliculato, rursum dilatato, strato albo, subtiliter rimoso vestitis; lamellis decurrentibus, distinctis, umbri-
nis.—Pileus three-quarters of an inch broad, flabelliform, sometimes lobed; when moist tough and pliable, umbro-brown, striate; when dry, white and minutely cracked, as if whitewashed, with a dark border; stem quarter of an inch or more high, dilated upwards, compressed and often canaliculate, perfectly lateral, of the same color and texture as the pileus; gills narrow, umber-brown, distinct, without any veins in the interstices, decurrent and clothed below with a white stratum; when dry, brown with a white edge.—Allied to *Ag. farinaceus*, *Schum.* but at once distinguished by its very decurrent gills. There are few prettier fungi than this when dry. Sometimes the stem is forked, and each division produces a distinct pileus.

² PANUS ANGUSTATUS: parvus, tenuis; pileo spathulato, subtiliter pubescente, postice angustato, farinaceo; strato superiore gelatinoso; stipite brevissimo; lamellis angustis, decurrentibus.—Pileus about one inch long, coriaceo-submembranaceous, spatulate or flabelliform, narrowed behind, white, dirty white or yellowish, most minutely pubescent; upper stratum gelatinous; stem extremely short, being in fact little more than a continuation of the pileus; gills very narrow, close, decurrent, white, very minutely pubescent, yellowish when dry.—Somewhat resembling *Panus copulatus*. Mr. Lea describes it as tough when fresh, and it is therefore placed in the genus *Panus*.

³ The spores in this species are subglobose or obliquely ovate, and by no means elongated as in other Boleti. In the Ohio specimens I find them mi-

POLYPORUS.

ovinus, *Fr.* Waynesville, Dec. 7, 1844.

radicatus, *Schwein.* Waynesville, Sept. 1844.¹

leucomelas, *Fr.* On the ground, amongst dead leaves.
Cincinnati, July 12, 1842.

arcularius, *Fr.* Cincinnati, May 8, 1841, April 30,
May 7, 1842.²

connatus, *Schwein.* On ground where wood had been
burnt, amongst *Funaria hygrometrica*. Cincinnati,
June 4, 1842.³

Montagnei, *Fr.* Cincinnati.

lentus, *Berk.* Waynesville, Sept. 4, 1844.

Boucheanus, *Fr.* On dead hickory limbs lying on the
ground. Cincinnati, April 30, 1842. Waynesville,
Aug. 2, Sept. 3, 1844.

fissus, *N. Sp.* On a decaying stick. Waynesville,
Sept. 5, 1844.⁴

elegans, *Fr.* var. nummularius. On dead trunks and
sticks. Cincinnati, Oct. 27, 1841. Waynesville,
1844.

badius, *Schwein.* Cincinnati, Dec. 24, 1840.

lucidus, *Fr.* Cincinnati. Waynesville.

nutely granulato-echinulate. The tubes, too, do not separate from the pileus. It will probably form, some day, the type of a distinct genus.

¹ Specimens of this occur of various sizes from what Schweintz describes, to five inches across, with the stem eight inches or more high and an inch thick.

² The specimens agree exactly with one from the Pyrenees given me by Dr. Montague. Fries describes the pores as entire, but this character is probably taken from Micheli's figure.

³ With this is a variety of *Polyporus perennis*, which Mr. Lea considered a form of *P. connatus*. There is, however, such an immense difference in the pores, that I can scarcely credit it, though the external resemblance is very strong.

⁴ **POLYPORUS FISSUS:** pileo primum infundibuliformi, demum fisso, lobis flabelliformibus, tenuissimo, luteo fusco; stipite brevi, deorsum nigro; hymenio albo; poris minimis.—Pileus one and a half to two inches across, at first infundibuliform, at length split once or twice behind into flabellate lobes, extremely thin, quite smooth, minutely striate, yellow-brown; stem scarce half an inch, very minutely velvety, black below; pores white, invisible to the naked eye, punctiform.—Closely allied to *Pol. varius*, but a much more delicate species than any of its allies. The pores are as minute as in *Pol. xanthopus*, so that it was sent as a *Thelephora*.

(POLYPORUS.)

Rhipidium, *N. Sp.* On rotten trunks, in woods.—

Waynesville, August 21, 1844.¹

intybaceus, *Fr.* Cincinnati.

sulphureus, *Fr.* Waynesville.²

hypococcinus, *N. Sp.* Waynesville. On rotten trunks.

Sept. 7, 1844.³

molliusculus, *N. Sp.*⁴ Cincinnati.

destructor, *Fr.* Cincinnati.

¹ **POLYPORUS RHIPIDIUM**: cæspitosus; pileo coriaceo, reniformi, concentrice; sulcato, alutaceo-albo, cute in areolas furfuraceas secedente; stîpite laterali, brevi, sursum dilatato, pruinoso; poris parvis, albidis, angulatis, denticulatis, quandoque elongatis.—Pilei gregarius, cæspitoso-imbricate, coriaceus, three-quarters of an inch long and broad, deeply, concentrically sulcate, yellowish, cracked into minute, furfuraceous areolæ; stem quarter of an inch high, lateral, dilated above, pruinose, yellowish when dry; pores one-hundredth of an inch in diameter, dirty white, angular, often elongated, edge of dissepiments uneven and toothed.—This curious species exactly resembles *Panus stypticus*, with the exception of the hymenium. I know of no species to which it has a close affinity.

² The specimens are very thin and extremely beautiful.

³ **POLYPORUS HYPOCOCINUS**: pileo subungulato, carnosio-suberoso, intus fibroso zonatoque, inequabile, exalutaceo-aurantiaco, incano, subtiliter tomentoso; poris parvis, longis, e pileo secernibilibus, aurantiis, intus coccineis.—Pileus several inches across, subungulate or expanded, of a soft coriaceous or corky substance, uneven, buff and orange, becoming whitish when dry, very minutely tomentose; substance pale buff, (sometimes pink when dry,) consisting of fibres which radiate from the base and are crossed by concentric zones. hymenium bright crimson-orange; pores one-seventieth of an inch broad, an inch long, crimson within; edge of dissepiments orange, slightly thickened and flexuous, separable from the flesh and partially from each other.—This magnificent species approaches, in some respects, the genus *Fistulina*, but the pores, though partially separable, are those of a *Polyporus*. Its situation is amongst the *Anodermei*.

⁴ **POLYPORUS MOLLIUSCULUS**: imbricatus; pileis effuso-reflexis, sublobatis, leviter zonatis, albis, zonis strigis mollibus sparsis ornatis; contextu albo; poris mediis pallidis.—Imbricated, thin, four inches or more long, three inches broad, sometimes perfectly resupinate, more generally with the border broadly reflected and slightly lobed, white finely silky, or nearly smooth, with zones of soft strigæ, which, in the dried plant are perfectly innate; substance white, thin, corky when dry; pores one-forty-eighth of an inch broad, at first entire with thick dissepiments, at length lacerated and elongated, wood-colored.—Resembling in general appearance *Polyporus alutaceus*, as figured by Rostkovius, but much thinner. I cannot refer it to any described species. Its position is amongst the white *Anodermei*.

(POLYPORUS.)

gilvus, *Schwein.* Cincinnati, March 3, 1842. Waynesville, Aug. 29, Sept. 7, 1844.

Isidioides, *Berk.* On a large dead beech. Cincinnati, Sept. 17, 1842.¹

adustus, *Fr.* On a mulberry stump. Cincinnati, Oct. 14, 1841, Sept. 15, 1842.²

nigro-purpurascens, *Schwein.* On dead trunks.—Waynesville, Aug. 31, 1844.³

endocrocinus, *N. Sp.* On the decayed part of the trunk of a yellow hickory. Waynesville, Aug. 29, 1844.⁴

galactinus, *N. Sp.* On rotten trunks. Waynesville, Aug. 29, Sept. 10, 1844.⁵

¹ Berk. in Zeyher's Fungi from Uitenhage.—*Hook. Lond. Journ.* This species is perhaps too near *Pol. gilvus*.

² Were not *Pol. adustus* so very variable this would doubtless be considered a distinct species. It is of a yellow-brown tint, velvety, with a few distant zones, the margin white, rigid when dry, substance zoned; the pores are white and very shallow. It has a fetid odor when drying. The common form also occurs.

³ Pores at first salmon-colored or brownish, in older specimens yellowish-white. This, if my specimen from the south of Europe is properly named, is *P. dichrous*, *Fries*.

⁴ **POLYPORUS ENDOCROCINUS:** pileo crasso, carnoso-fibroso, setis strigoso-horrido, brunneo; contexta croceo-rhubarbarino; stipite brevi vel obsoleto; hymenio aureo-fusco; poris mediis laceratis; dissepimentis tenuibus.—Pileus thick, four to six inches across, of a fleshy-fibrous consistence, absorbing much moisture, dark-brown, clothed with strigose, flat, lacerated setæ or scales; substance of a rich saffron; hymenium golden-brown; pores one-sixtieth of an inch broad, angular, with the edge of the thin dissepiments torn or fringed.—This species shrinks much in drying. It is allied to *Pol. Schweintzii*, but is distinguished by its saffron colored substance, and its strigoso-squamose pileus. Two specimens only were found.

⁵ **POLYPORUS GALACTINUS:** pileo dimidiato, carnoso, molli, inæquabili strigoso-tomentoso, lacteo, intus zonato, fibroso, margine tenui; poris parvis albis.—Pileus two to three inches broad, one and a half inches long, dimidiate or uniform and elongated behind, convex, uneven, milk-white, clothed with strigose down, of a soft fleshy substance, zoned within and consisting of radiating fibres; hymenium flat, or slightly concave; pores one-hundredth of an inch broad, scarcely visible to the naked eye, but giving to the hymenium a silky lustre, white; dissepiments very thin, slightly uneven.—Nearly allied to *Pol undulatus*, *Schwein.* and *Pol. symphyton*, *Schwein.* The dried specimens are rigid, and sometimes have the margin dark-brown.

(POLYPORUS.)

dryophilus, *N. Sp.* On living Red-oak. Waynesville, Sept. 5, 1844.¹

resinosus, *Fr.* Cincinnati, Oct. 27, 1841.

pubescens, *Fr.* On rotten trunks, and dry fence rails.

Waynesville, Aug. 26, Sept. 9, 1844.²

conchifer, *Schwein.* Waynesville, Sept. 9, 1844.³

fomentarius, *Fr.* Cincinnati, Jan. 14, 1842.

applanatus, *Fr.* Cincinnati, Ohio, Oct. 27, 1841.

conglobatus, *N. Sp.* On Beech, bursting through the bark. Cincinnati, July 11, 1837. On a Hickory stump, June 1844.⁴

¹ **POLYPORUS DRYOPHILUS**: pileo crasso, rigido, unguato, scabroso, inæquali, incano-ferrugineo-flavo: contextu cinnamomeo, hymenio cinnamomeo-fusco, poris parvis, intus rhabarbarinis.—Pilei subimbricate, four inches broad, three inches long, unguate, unequal, rough with scabrous points formed by innate pubescence of a ferruginous yellow, but subdued by a thin white film; substance fibrous, hard, cinnamon; pores externally cinnamon-brown, within ferruginous yellow, about one-eightieth of an inch broad, angular, with thin dissepiment.—Nearly allied to *Polyporus dryadeus*, but a smaller, more rigid species with larger, differently colored pores. It has also much resemblance to *Polyporus gilvus*.

² A small variety not exceeding an inch in breadth, and the third of an inch in length.

³ Nothing can well be more different than the pure white, adult individuals and the elegantly brown-zoned plant, looking like some states of *Thelephora evolvens*, before the pores are formed. Occasionally the whole of the upper surface is clothed with a cracked brown stratum, not disposed at all in zones.

⁴ **POLYPORUS CONGLOBATUS**: pileis suberosis, erumpentibus, arctissime imbricatis, massam globosam efformantibus, arcuatis, rugosis, fusco-purpureis, margine pallido, postice leviter laccatis; hymenio brunneo; poris punctiformibus; dissepimentes obtusissimis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 303.—Forming a compact, globular mass, four or five inches in diameter, consisting of closely pressed curved, imbricating pilei, united at the base into a mottled mass consisting of bark highly impregnated with mycelium, purplish-brown behind, where it is laccate with a dark bloom, pallid in front; substance corky, rather soft, ferruginous; hymenium concave, scarcely conspicuous without dividing the pilei, brown; pores minute, punctiform, pale within; interstices even, obtuse. The mass behind is sometimes perforated by the larva of some insect, which makes large channels through it. Very fragrant when fresh; odor a combination of pine apple and strawberry, very perceptible at a distance of twenty yards from the tree.—The specimen on Hickory was of a fine ochre-red, and the hymenium purplish.—Allied to

(POLYPORUS.)

cinnabarinus, *Fr.* Cincinnati, May 8, 1841. Waynesville.

radiatus, *Fr.* On a decayed log. Cincinnati, Oct. 1, 1842.

hirsutus, *Fr.* On oak. Cincinnati, Dec. 26, 1840.

versicolor, *Fr.* Cincinnati, March 3, 1842, Nov. 13, 1841. Waynesville.

laceratus, *Berk.* Cincinnati, March 3, 1842.

Sullivantii, *Mont.* var. *poris pallidis*. Waynesville, Sept. 10, 1844.

virgineus, *Schwein.* Cincinnati.

niger, *N. Sp.* On rotten trunks. Cincinnati, March 14, 1842.¹

obliquus, *Fr.* Waynesville, Aug. 1844.²

ferruginosus, *Fr.* Waynesville, Aug. 29, 1844.

vulgaris, *Fr.* Waynesville, Aug. 1844.

vitreus, *Fr.* Waynesville, Aug. 9, 1844.

tenuis, *Schwein.* On a dead stick. Cincinnati, Sept. 1842.

TRAMETES.

lactea, *Berk.* On dead trunks. Cincinnati.³

Polyporus graveolens, Schweinitz, which grows on oak. The pilei in that species are spatulate, the pores invisible to the naked eye, and the substance very hard.

¹ *POLYPORUS NIGER*: resupinatus, crassiusculus; pileo vix ullo; hymenio nigro; poris minimis punctiformibus, intus umbrinis; dissepimentis tenuibus. *Berk. in Lond. Journ. Bot.*, vol. iv. p. 104.—Elongated, altogether resupinate, except at the very edge, where it is slightly raised, dark brown, and pubescent: substance, where it is not quite obsolete, dark brown; hymenium black; pores very minute, punctiform, two lines deep; edge very minutely tomentose with black down, umber within; dissepiments thin.—Nearly allied to *Pol. tephroporus* (formerly *P. Surinamensis*, Mont.), with which it agrees in many respects. The hymenium, however, is jet black, instead of cinereous, and the inside of the tubes is umber. Like it, it is slightly raised at the edge, and the substance and exposed portion of the pileus are dark brown. The dissepiments also in Dr. Montagne's fungus are thicker.

² On a dead limb of *Ostrya Virginica*, throwing off the bark exactly as in *Corticium comedens*.

³ *TRAMETES LACTEA*: pileo laterali, duro, suberoso, explanato, dealbato, glabro, contextu albo; stipite brevissimo, disciformi; hymenio albedo; poris parvis, subrotundis, acie obtusa. *T. incana*, *Berk. in Hook. Lond. Journ.*, vol. iv.

DÆDALEA.

- ambigua, *Berk.* On dead trunks. Cincinnati.¹
 unicolor, *Fr.* Under side of a rotten log. Waynesville,
 Aug. 28, 1844.²
 aurea, *Fr.* Cincinnati.
 pallido-fulva, *N. Sp.* On a dead log in a log-fence.
 Cincinnati, March 19, 1842.³
 sæpium, *N. Sp.* On dry fence rails. Waynesville,
 Sept. 9, 1844.⁴

p. 305.—Pileus eight inches broad, four and a half inches long, attached by a very short, lateral, disciform stem, flabelliform, smooth, opaque white, zoneless, or with a few obscure depressions and short radiating grooves; substance hard, corky, white, one and a half inch thick, margin subacute; hymenium even, of a very pale ochre; pores small, one hundred and sixtieth of an inch in diameter, mostly roundish, here and there forming linear, or curved sinuses. Sometimes the stem is accidentally elongated.—Resembling somewhat *Dædalea ambigua*, and certain states of *Lenzites repanda*, but distinct from either. I am obliged to alter the name, as while my paper was in the press, M. Leveille published a species under the name of *Trametes incana*.

¹ DÆDALEA AMBIGUA: pileo suberoso, crasso, convexo, azonato, dealbato, glabro; hymenio subalutaceo; poris parvis, sinuosis, acie obtusa. *Berk. in Hook. Journ.*, vol. iv. p. 305. Pileus sessile, dimidiate, six inches broad, three inches long, one and a half inch thick, venose, zoneless, opaque-white, as if white-washed, smooth or most minutely pubescent, in the younger parts only of a hard corky texture; white within, margin at first very obtuse; hymenium rather concave, of a pale tan-color; pores small, narrow, sinuated moderately deep; dissepiments obtuse.—Other specimens gathered at Waynesville, Aug. 8, 1844, after the above characters were published, approach nearer to *Lenzites repanda* and *L. applanata*, combining the characters of both. They are flat and thinner, with the pores less sinuous, and in one specimen not altogether unlike those of *L. applanata*. The species is, however, more nearly allied to *L. repanda*. Even in the thinnest specimens, the margin is not acute as in that species.

² A resupinate form, differing from the ordinary state in its paler hymenium.

³ DÆDALEA PALLIDO-FULVA: coriaceo-suberosa, pileo dimidiato, subnitido, azono, pallido; hymenio pallido-fulvo, poris angustis, parce sinuosis rectis.—Pileus one and a half inch long, three inches or more broad; stem less dimidiate, even or rather rugged, zoneless, rather shining, at first most minutely pubescent; substance hard, wood-colored; hymenium pale, tawny; pores mostly straight, one-sixtieth of an inch broad.—A very distinct species, just intermediate between *Dædalea* and *Lenzites*.

⁴ DÆDALEA SÆPIUM: pileo tenui reflexo, basi effuso, subtiliter tomentoso, pallido-ligneo, zonis saturationibus, contextu albo; hymenio poroso-sinuoso;

• LENZITES.

Cratægi, *N. Sp.* On a dead branch of a *Cratægus*. Cincinnati, Oct. 12, 1840.¹

MERULIUS.

tremellosus, *Schrad.* Under side of a wet, rotten log. Cincinnati, Nov. 13, 1841. Waynesville, Sept. 10, 1844.

incarnatus, *Schwein.* Cincinnati, Dec. 15, 1840.

porinoides, *Fr.* Waynesville, Aug. 28, 1844.

HYDNUM.

diffractum, *N. Sp.* On the ground, in dry woods. Waynesville, Aug. 26, 1844.²

infundibulum, *Swartz.* Waynesville, Sept. 3, 1844.

repandum, *L.* Waynesville, Aug. 26, 1844.

zonatum, *Batsch.* In dry woods. Cincinnati, Aug. 19, 1842.

adustum, *Schwein.* Waynesville.

pallido.—Pilei effused at the base, reflexed above, laterally connate, at first often attached by the vertex, or triquetrous, pale wood color, finely tomentose, marked with numerous zones which are darker; hymenium pallid, consisting of slightly sinuous pores, about one-thirtieth of an inch in diameter. Its nearest ally is apparently *Dadalea zonata*, *Schwein.*

¹ LENZITES CRATÆGI: pileo coriaceo-rigido, glaberrimo, nitido, cervino, concentricè sulcato et fasciato, quandoque radiato-ruguloso; poris flexuosis, demum elongatis; dissepimentis molliusculis, hic illic lamellæformibus.—Pileus orbicular, one and a half inch broad, fixed by the vertex, rigid, coriaceous, quite smooth and shining, repeatedly zoned and sulcate; hymenium brownish; pores one-sixtieth of an inch in diameter, slightly sinuous, much elongated towards the centre; dissepiments thin, soft.—This beautiful species has exactly the habit of *Hexagona tenuis*, but the pores are very different. It was gathered at Isle aux Noix, Canada, by Dr. MacLagan, by whom it was sent. The specimen is ungulate, and marked with little radiating lines, which are wanting in Mr. Lea's plant.

² HYDNUM DIFFRACTUM: pileo carnosolento, crasso, glabro, alutaceo, margine incurvo, stipiteque: obeso concolori diffractis; aculeis subulatis, integris, mollibus, alutaceo-pallidis.—Pileus three inches broad, convex, smooth, of a tough fleshy substance, at length much cracked and split; margin involute; stem one and a half or two inches high, three-quarters of an inch or more thick, buff and split like the pileus; tender when fresh; spines even, subulate, entire, soft, of a pale buff; smell vinous.—A remarkably rigid species when dry; allied to *H. candidum* and *H. repandum*.

(HYDNUM.)

flabelliforme, *Berk.* On a dead Oak trunk. Cincinnati, Jan. 14, 1842.¹

coralloides, *Scop.* Waynesville, Aug. 29, 1844.

erinaceus, *Bull.* Waynesville, Aug. 1844.

stratosum, *N. Sp.* On a dead trunk. Cincinnati, June 1, 1844.²

cirrhatum. In a dense, imbricated cluster, on a rotten trunk. Cincinnati, Oct. 1, 1842.

Ohiense, *Berk.* On the under side of a decayed log. Cincinnati, March 19, 1842.³

¹ *HYDNUM FLABELLIFORME*: imbricatum, coriaceum; pileis spathulato-flabelliformibus, zonatis, hirsutis; hymenio ochraceo; aculeis longiusculis acutis carneis, siccis ochraceis. *Berk. in Hook. Lond. Journ. Bot.*, vol. iv. p. 306.—Pilei imbricated, laterally confluent, half an inch broad, three-quarters of an inch long, spathulato-flabelliform, fixed by a narrow base, which is mostly more or less distinct, coriaceous, clothed with white or slightly tawny short wooly hairs; hymenium bordered; aculei acute, sometimes slightly compressed above, flesh colored, ochraceous when dry.—Allied to *H. ochraceum*.

² *HYDNUM STRATOSUM*: pileis resupinatis, margine libero, demum stratosi, e processibus rigidis ramosis extus stipiteis formati; aculeis longis, rigidis, acuminatis, spadiceis, hic illic cinereis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 307.—Pilei resupinate, with a narrow lobed border, spreading for three or four inches over the matrix, consisting of repeatedly branched, rigid, brown processes resembling some *Cornicularia*, which are clothed above with gray, or ferruginous tow-like fibres. Aculei rather long, rigid, sharply acuminate, brown varying to cinereous, at length stratosi.—This is one of the most remarkable species with which I am acquainted. It resembles in many respects *H. parasiticum*, but has not, like that, a coriaceous pileus. The whole substance, indeed, consists merely of rigid branched processes, which are partially covered above with coarse pubescence, so that the pileus might perhaps be described as repeatedly branched. These processes, however, are combined into a lobed stratum. I do not know any other species with which it can be compared, except perhaps, as Dr. Montagne suggests, his *H. pteruloides*, but that he is now inclined to consider as merely a state of *Trametes hydroides*, whereas the present is a perfect fungus.

³ *HYDNUM OHIENSE*: resupinatum, membranaceum, a matrice hic illic secedibile, pallide flavum; aculeis longis, acutissimis, aquoso pallido-fuscis, subfasciculatis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 307.—Spreading for several inches, entirely resupinate, membranaceous, partially separable from the matrix; aculei somewhat fasciculate, one to two lines long, of a watery-pale brown, very slender at the apex.—Resembling *Hydnum Fernandesium*, Mont., from which it differs in its shorter, less crowded aculei. The margin,

PHLEBIA.

cinnabarina, *Schwein.* Cincinnati.

CRATERELLUS.

lutescens, *Fr.* Waynesville, Aug. 31, 1844, with *Cantharellus cibarius*.

THELEPHORA.

palmata, *Fr.* Moist woods, amongst dead leaves. Cincinnati, Sept. 24.

pallida, *Schwein.* Dry woods, on the ground. Waynesville, Aug. 4, 1844.

cuticularis, *N. Sp.* In the moist cavity of a dead tree, attached to the wood, twigs, &c. Waynesville, Aug. 23, 1844.¹

corrugata, *Fr.* On dead Beech. Cincinnati, March 14, 1842.

albo-marginata, *Schwein, Mss.* On bark of dead Buttonwood. Cincinnati, March 19, 1842.²

STEREUM.

fasciatum, *Fr.* Ohio.

lobatum, *Fr.* On a large Beech trunk. Cincinnati, Oct. 1842.

too, in the Juan Fernandez species is more distinct and the whole fungus more luxuriant.

¹ *THELEPHORA CUTICULARIS*: imbricata, coriaceo-mollis, brunneo-purpureo; pileolis inæquabilibus, rugosis, depresso-sericeis; hymenio sublævi, pulverulento.—Imbricated; pilei three-quarters of an inch long, laterally confluent, uneven, rugged, brown inclining to purple, with a pale margin, of a soft coriaceous consistence; surface soft clothed with matted down, not distinctly pubescent; zoneless; hymenium concave, nearly even, not setulose; smell strong and unpleasant.—One specimen, gathered apparently in a different locality, consists of a mass of pilei running one into the other with but little distinct hymenium. Allied to *Thelephora terrestris*.

² *THELEPHORA ALBO MARGINATA*: latissime confluenti-effusa, rarius breviter reflexa, umbrina, centro pruinosa, margine albo-tomentoso.—At first consisting of distinct, orbicular patches, which soon become confluent; umber, velvety, but by no means bristly, clothed with a white bloom, in the centre quite even, or irregularly rugose, sometimes reflexed, in which case the pileus is brown and silky; margin white, tomentose, not fimbriate.—This was distributed under the name of *T. arida*, but more perfect specimens show that it is a fine and very distinct species. It is possible that *T. albo-badia* may be a synonym, for I do not find the name adopted above from Sir W. J. Hooker's Herbarium in Schweinitz's list.

(STEREUM.)

- striatum, *Fr.* Waynesville, Aug. 26, 1844.
 complicatum, *Fr.* On prostrate Buckeye. Cincinnati,
 March 3, 1842. Waynesville, Aug. 26, 1844.
 bicolor, *Fr.* On dead trunks. Cincinnati, Oct. 27,
 1841.
 rubiginosum, *Fr.* Waynesville. On bark of dead
 wood. Cincinnati, Nov. 13, 1841.
 rugosum, *Fr. Epic.* On dead logs. Cincinnati, April
 30, 1842.¹

CORTICIUM.

- cinerascens, *Berk. Thelephora cinerascens, Schwein.*
 On the decaying portions of Paper Mulberry trees.
 Cincinnati, Feb. 11, 1842.
 ochraceum, *Fr.* Waynesville, Aug. 23, 1844.

SURPINIA.

- spathularia, *Fr.* Cincinnati.

CYPHELLA.

- galeata, *Fr.* Cincinnati.

SOLENIA.

- ochracea, *Hoffm.* Cincinnati.

CLAVARIA.

- botrytis, *P.* Cincinnati.
 flava, *Fr.* Waynesville, Aug. 31, 1844.
 fuliginea, *P.* On the ground, in woods. Cincinnati,
 June 1, 1844.
 subtilis, *Pers.* Waynesville, Sept. 3, 1844.
 pyxidata, *Pers.* Cincinnati.
 stricta, *Pers.* Waynesville, Aug. 21, 1844.
 pistillaris, *L.* Waynesville.
 mucida, *Pers. C. albissus, Mont.* On rotten wood.
 Cincinnati.

CALOCERA.

- cornea, *Fr.* Cincinnati.

TYPHULA.

- musciola, *Fr.* Cincinnati.

¹ The specimens are remarkably fine, spreading for several feet over the under side of dead logs. The pileus is concentrically zoned, of a rich brown, and decidedly tomentose. The general appearance is somewhat different from European specimens, but I do not consider it a distinct species.

TREMELLA.

lutescens, *Pers.* Waynesville, Aug. 27, 1844.

EXIDIA.

Auricula-Judæ, *Fr.* On roots of Beech. Cincinnati, March 3, 1842.

glandulosa, *Fr.* On dead Beech. Cincinnati, March 3, 1842.

PHALLUS.

Dæmonum, *Fr.* Cincinnati.

LYCOPERDON.

pyriforme, *Schæff.* On dead trunks. Cincinnati, Nov. 1840.

gemmatum, *Fr.* In woods. Cincinnati, Oct. 27, 1841.

GEASTER.

striatus, *DC.* β . *minor*. On the ground. Cincinnati, Sept. 14, 1841.

BOVISTA.

nigrescens, *Pers.* Waynesville, 1844.

SCLERODERMA.

vulgare, *Fr.* On the ground. Cincinnati, Oct. 27, 1841.

LYCOGALA.

epidendrum, *Fr.* On dead wood. Cincinnati, Oct. 1840.

ÆTHALIUM.

flavum, *Lk.* On a dead trunk, spreading over moss. Cincinnati, April 30, 1842.

DIDERMA.

vernicosum, *P.* On decaying Polypori. Cincinnati, Sept. 10, 1842.

DIDYMIUM.¹

tigrinum, *Fr.* Cincinnati.

regulosum, *N. Sp.* On bark of Honey-locust. Cincinnati, June 27, 1842.²

¹ *Exacte D. albo-punctatum, Fl. Dan.*

² *DIDYMIUM REGULOSUM*: gregarium; peridio lenticulari, subtus late umbilicato, albo, ruguloso; stipite tenui costato, stramineo, apice attenuato, capillitio, parco, albo; sporis nigris, sub lente fusco-purpureis. Columella nulla. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 308.—A minute species, one-third of a line in diameter, with the stem two-thirds of a line high. The appearance of the surface of the peridium is like that of a little globule of the mother of vinegar, white and curdled.

STEMONITIS.

fusca, *Roth.* On dead Poplar. Cincinnati, June 23, 1840.¹

obtusata, *Fr.* On dead wood. Cincinnati, July 10, 1842.

physaroides, *A. & S.* var. *subcœneus*. Cincinnati.

ACYRIA.

punicea, *P.* On a rotten stump. June 27, 1842.

cinerea, *Fl. Dan.* Cincinnati.

TRICHIA.

rubiformis, *P.* On rotten trunks of trees. Cincinnati, March 31, 1841, and Dec. 15, 1840.

clavata, *Pers.* On dead Poplar. March, 1841. Cincinnati.

nigripes, *P.* On wood, amongst moss. Cincinnati, June 27, 1842.

varia, *P.* On a rotten Buckeye trunk. Cincinnati, Jan. 14, 1842.

chrysosperma, *DC.* On rotten trunks of trees. Cincinnati, April 9, 1841.

CYATHUS.

striatus, *Haller.* On a rotten log. Cincinnati, Nov. 13, 1841.

vernicosus, *DC.* Cincinnati, June 11, 1844.

CRUCIBULUM.

vulgare, *Tulasne.* Cincinnati, May 30, 1840.

SPHERONEMA.

oxysporum, *N. Sp.* Waynesville, Aug. 3, 1844.²

DIPLODIA.

Mori, *N. Sp.* On twigs of *Morus multicaulis*. Cincinnati, June 25, 1840.³

¹ Spores larger than in British specimens.

² *SPHERONEMA OXYSPORUM*: peritheciis subulatis, flavis, apice nudis; sporis ellipticis, utriusque appendiculatis.—Externally resembling *Sphaeronema subulatum*, but distinguished by its spores having an elongated filament at either extremity, and by the naked tip of the perithecium, which has a more compact structure.

³ *DIPLODIA MORI*: peritheciis globosis, dispersis, siccitate collapsis: sporis obovato-oblongis, pallidis, simplicibus.—Sometimes aggregate and oblong

CYTISPORA.

carbonacea, *Fr.* On dead Elm twigs. Cincinnati, Nov. 6, 1841.

SEPTONEMA.

spilomeum, *Berk.* On fence rails. Cincinnati, March 3, 1842. Waynesville, Aug. 27, 1844.¹

SPORIDESMIUM.

atrum, *Lk.* On Buttonwood, with *Sphæria convergens*. Cincinnati, March 19, 1842.

cellulosum, *Fr.* On Elm twigs. Cincinnati, Nov. 6, 1841.

concinnum, *Berk.* On a rotten trunk. Cincinnati, March 31, 1841.²

PUCCINIA.

graminis, *Dec.* Cincinnati. Waynesville.

aculeata, *Schwein.* On the under side of the leaves of *Podophyllum peltatum*.³

circæ, *Pers.* Cincinnati.

UREDIO.

rubigo-vera, *DC.* On rye. Cincinnati, May 3, 1840.⁴

from the confluence of several individuals; more frequently solitary; occasionally the contents of the spores are attracted to either end, but I do not find a septum even in decaying specimens.

¹ *SEPTONEMA SPILOMEUM*: soris parvis, punctiformibus, atro-purpureis; filis ramosis; articulis oblongo ellipticis, scabriusculis, triseptatis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 310, tab. 12, fig. 5.—Forming little, scattered, purplish-black sori, about the size of a poppy-seed; threads branched; articulations oblongo-elliptic, triseptate, one or more of the septa containing, occasionally, an oil-globule; border of articulations pellucid, rough with little scabrous prominences.—Very distinct from the other species in its punctiform habit and the nature of the articulations. These are not represented sufficiently irregular in the figure. It is very difficult to get a clear view, as they are so opaque.

² *SPORIDESMIUM CONCINNUM*: sporis primum brevissime pedicellatis, oblongis, obtusis, nitidis, fenestratis. *Berk. in Hook. Lond. Journ. Bot.*, vol. iv. p. 309, tab. 12, fig. 3.—Forming minute, jet-black, crowded sori, which are at length almost confluent; stroma consisting of decumbent, branched threads; spores at first simple, obovate, pellucid, then oblong (the peduncle being entirely obliterated) and divided by numerous transverse and vertical, or more rarely oblique septa.

³ Corda Fasc 6, ined. cum optima icone.

⁴ An imperfect state of *Puccinia graminis*.

(URED.)

linearis, *Pers.* On wheat stalks. Cincinnati, June 30, 1841.

segetum, *Pers.* On wheat, very abundant. Cincinnati, June 3, 1840.

Potentillæ, *Dec.* On *Potentilla canadensis*. Cincinnati, May 7, 1842.

candida, *Pers.* Cincinnati.

CRONARTIUM.

asclepiadeum, *Kze.* var. *Thesii*, *Berk.* Cincinnati.¹

ÆCIDIUM.

Epilobii, *Dec.* On *Isnardia alternifolia*. Cincinnati, June 20, 1839.

compositarum, *Mart.*

Euphorbiæ, *Pers.*

podophyllatum, *Schwein.* Cincinnati.

cimicifugatum, *Schwein.* Cincinnati.

SCORIAS.

spongiosa, *Fr.* On the ground, in woods. Cincinnati, Dec. 9, 1841.

TUBERCULARIA.

vulgaris, *Tode.* Cincinnati.

FUSARIUM.

lateritium, *Nees.* On Beech. Cincinnati, April 14, 1841.

CLADOSPORIUM.

herbarum, *Lk.* On dead Tomato stems. Cincinnati, Jan. 25, 1842.

MACROSPORIUM.

pinguedinis, *Berk.* On grass soiled with fat. Cincinnati, June 19, 1841.²

¹ *C. ASCLEPIADEUM* KZE. var. *THESII*: maculis obliteratis; tuberculis parvis sparsis; sporis subglobosis; peridiis elongatis, incurvatis, extus minutissime rammentaceis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 311.—On *Thesium umbellatum*, generally scattered, not aggregate, as in the original species, where they seem to be usually confined to a determinate spot. Peridia more minute; cells of the peridium longer; spores not so much elongated.

² *MACROSPORIUM PINGUEDINIS*: latissime effusum, floccis tenuibus, erectis, simplicibus, septatis; sporis lanceolatis, quandoque obovato-oblongis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 309, tab. 12, fig. 2.—Completely investing the

(MACROSPORIUM.)

punctiforme, *Berk.* On dead stems of *Rubus occidentalis*. Cincinnati.¹

TRICHOOTHECIUM.

roseum, *Lk.* On dead Buttonwood, with *Sphæria convergens*. March 19, 1842.

OIDIUM.

simile, *Berk.* On decayed wood. Cincinnati, Jan. 18, 1842.²

MORCHELLA.

esculenta, *Pers.* Cincinnati.

HELVELLA.

esculenta, *Pers.* Cincinnati.

PEZIZA.

Acetabulum, *L.* On the ground. Cincinnati, Ap. 30, 1842.³

pustullata, *Pers.* Cincinnati.

aurantia, *Pers.* Cincinnati.

occidentalis, *Schwein.* Cincinnati.

floccosa, *Schwein.* Cincinnati.

scutellata, *L.* Cincinnati.

ærugiposa, *Fl. Dan.* Cincinnati.

leucostigma, *Fr.* Cincinnati.

citrina, *Batsch.* Cincinnati.

culms and leaves on which it grows. Flocci erect, flexuous, septate; spores brown, lanceolate, obtuse, transversely septate, with occasionally a vertical septum; sometimes obovate-oblong.

¹ *MACROSPORIUM PUNCTIFORME*: soris minutis, sparsis, punctiformibus; sporis obovatis; filis simplicibus, obtusis, subflexuosis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 309, table xii. fig. 1.—Forming minute, black, scattered dots; stroma reticulate; flocci erect, simple, slightly flexuous, sparingly septate, sometimes decumbent and then proliferous; spores obovate, at first simple and pellucid, then furnished with one or two transverse septa, at length acquiring a darker tinge and a few oblique or vertical septa.

² *OIDIUM SIMILE*: effusum, submembranaceum, fulvum; filis ramosiusculis; articulis ultimis subglobosis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 310, table xii. fig. 4.—Forming a deep, tawny, pulverulent, but somewhat membranaceous stratum, which to the outward eye exactly resembles *Oidium fulvum*, but distinguished by its subglobose, not oblong articulations. The fructifying bodies arise, either from a direct transformation of the ultimate joints, or from the central constriction of the subterminal.

³ This species, it will be observed, retains its early appearance in America.

PSILOPEZIA, *Nov. Gen.*¹

nummularia, *N. Sp.* On a decayed log in a wet place.
Cincinnati, July 16, 1842.²

PATELLARIA.

carpineae, *Berk. Peziza carpineae, Pers.* On Hornbeam. Cincinnati, Oct. 31, 1839.³

CENANGIUM.

Craterium, *Fr.* Cincinnati.

triangulare, *Fr.* On White Oak. Cincinnati, March 31, 1841.

GLONIUM.

stellatum, *Muhl.* On a rotten trunk, amongst moss.
Cincinnati, May 15, 1841.

RHYTISMA.

punctatum, *Fr.* On the leaves of Maples. Cincinnati, Sept. 1842.

HYSTERIUM.

pulicare, β . angustatum, *Fr.* On bark of large, prostrate Buttonwood. Cincinnati, March 14, 1842.

elongatum, *Wahl.* On fence rails. Cincinnati, March 3, 1842.

DICHÆNA.

faginea, *Fr.* On Beech. Cincinnati, March 14, 1842.

SPHÆRIA.

digitata, *Ehrh.* Cincinnati, July 1840.

polymorpha, *Pers.* Waynesville, Aug. 15, 1844.

¹ Hymenium planum, ascigerum, omnino immarginatum, strato tomentoso innatum. Asci ampli: sporidia elliptica, binucleata.

² PSILOPEZIA NUMMULARIA: orbicular, one-third of an inch broad, flat, purple-brown growing on a white, tomentose stratum, which forms a narrow border; asci large, containing eight large, elliptic binucleate sporidia.—The characters of this genus are precisely those of *Fyronema*, which was founded on the old confluent state of *Peziza omphalodes*. It has the habit of *Corticium* with the hymenium of a *Peziza*, from which it is distinguished by the total absence of any true margin. The name of *Pyronema* is evidently inapplicable to the present species.

³ PATELLARIA CARPINEA: This is not a good *Peziza*, though it certainly has asci and sporidia. The former are clavate, the latter subymbiform. *Ditola*, to which Fries is inclined to refer it, has no asci. It appears to me evidently congeneric with *Pez. rhubarbarine*, *Berk.*

(SPHERIA.)

hypoxylon, *Ehrh.* On a dead log. Cincinnati, May 1842.

carcophila, *Pers.* Cincinnati.

Pocula, *Schwein.* On bark of a dead log. Cincinnati, Nov. 13, 1841.

concentrica, *Bolt.* On dead Hickory. Cincinnati, Sept. 17, 1842.

vernica, *Schwein.* On dead Beech. Cincinnati, Sept. 24, 1842.

fragiformis, *Pers.* On dead branches of Buttonwood, Beech, &c. Cincinnati, March 19, 1842, April 28, 1841.

cohærens, *Pers.* On Beech. Cincinnati, April 9, 1841.

multiformis, *Fr.* Kentucky Hills, four miles from the Ohio.¹

lactifluorum, *Schwein.* Waynesville, Aug. 23, 1844.

rubiginosa, *Pers.* On Buttonwood, March 14, 1842.

confluens, *Pers.* Waynesville.

deusta, *Hoffm.* On dead logs. Cincinnati, April 21, 1842.²

atropunctata, *Schwein.* On dead Oak and Beech bark. March 27, 1841.

tinctor, *Berk.* On dead Buttonwood, (*Platinus occidentalis*.) Cincinnati, March 14, 1842.³

disciformis, *Hoffm.* Cincinnati, June 17, 1839.

spinosa, *Pers.* On Sugar Maple. Cincinnati, March 19, 1842.

¹ The effused variety.

² Young Thelephoroid state.

³ SPHERIA (LIGNOSÆ) TINCTOR: effusus, innatus, planus, sculpturam matricis e mycelio miniatæ superficie referens, intus extusque ater; peritheciis elongatis, collo brevi, ostiolo inconspicuo. *Berk. in Hook. Lond. Journ. Bot.*, vol. iv. p. 311.—Forming a black, widely effused stratum, exhibiting all the markings of the matrix, which is tinged to the depth of a quarter of an inch, orange red, black both within and without; stroma hard, half a line or more thick; perithecia vertical, elongated, with a very short neck; ostiola not visible externally even under a lens.—Analogous to *Sp. hypomilta*, *Mont.*, related to *S. stigma*. The stroma is quite distinct from the wood, though it exhibits on its surface all its markings. It has the habit of the tribe *Concrecentes*.

(SPHÆRIA.)

limæformis, *Schwein.* On a dead Red Oak. Cincinnati, Jan. 14, 1842.

fulvo-pruinata, *Berk.* On dead *Platanus occidentalis*. Cincinnati, Jan. 14, 1842.¹

Leaiana, *Berk.* On bark of dead Hornbeam. Cincinnati, June 20, 1839.²

convergens, *Tode.* On dead Buttonwood. Cincinnati, March 19, 1842.

quaternata, *Pers.* On Beech. Cincinnati, April 15, 1843.

rhizogena, *Berk.* On the roots of *Gleditschia triacanthos*, washed bare by the Ohio freshets. Cincinnati, Dec. 1840.³

SPHÆRIA (CIRCUMSCRIPTÆ) FULVO-PRUINATA: pustulata, subangulata, basi effusa, peritheciis oblongis, collo elongato; stromate discoque ostiolis punctato fulvis; sporidiis ellipticis, uniseptatis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 312.—Forming somewhat angular pustules, about a line broad, rather effused at the base, as seen through the thin cuticle; disc angular, tawny, pulverulent, pierced by the black punctiform ostiola; stroma tawny like the disc; perithecia globose; asci linear; sporidia elliptic, uniseptate, with a single globose nucleus in each cell.

² SPHÆRIA (CIRCUMSCRIPTÆ) LEAIANA: innata; stromate pallido, laxo, e cortice et ligno linea circumscripto; peritheciis ellipticis, ostiolis subconfertis, elongatis, lineolatis, granulatis, sporidiis minimis curvulis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 311.—About half a line in diameter. Perithecia not numerous, circinate, elliptic, seated on a pale stroma of rather a loose texture; ostiola forming a little tuft rather elongated, umbilicate, finely grooved, granulated; asci lanceolate; sporidia minute, curved like those of *S. verrucæformis*.—Distinguished from *Sp. Carpini* by its pretty, granulated ostiola; but above all by its minute, curved, not lanceolate sporidia. In *S. decipiens* the sporidia are dark and elliptic with one side flattened.

³ SPHÆRIA (CONFLUENTES) RHIZOGENA: suborbicularis, atro-fusca stromate pallido, peritheciis globosis primum cervino-pruinosis, demum supra atrofusis, subtus pallido-fuscis, papilla subtili abrupta quandoque depressa, intus pallido fuscis. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 312.—Patches nearly orbicular, two lines or more broad, with their surface rather irregular, here and there depressed; stroma pale, yellowish-brown; perithecia minute, dull, not shining, partially immersed, pale-brown when shaded from the light, nearly black above, at first pruinose, globose with a minute and sometimes depressed papilla, filled with pale brownish jelly; asci linear, sporidia elliptic.—Habit that of *S. Laburni*. Its nearest ally appears to be *S. Gleditschiae*. *S. melogramma* as published by Mougeot differs in its fusiform sporidia. Fries No. 441 has curved sporidia.

(SPHÆRIA.)

Maydis, *N. Sp.* On dead culms of *Zea Mays*. Cincinnati, May 1, 1841.¹

rhodomphala, *Berk.* On rotten wood. Cincinnati, Dec. 9, 1841.²

aquila, *Tode.* On dead Buttonwood. Cincinnati, March 14, 1842.

crinita, *Pers.* On a dead Beech. Cincinnati, March 31, 1841. Waynesville, Aug. 29, 1844.

Bombarda, *Batsch.* On a dead Oak stump. Cincinnati, April 16, 1841.

coccinea, *Pers.* On a dead Beech. March 31, April 9, 1841.

putaminum, *Schwein.* On Peach stones. Cincinnati.

argyrostigma, *N. Sp.* On dead leaves of *Yucca filamentosa*. Cincinnati, Feb. 8, 1842.³

herbarum, *P.* On dead stems of *Asparagus officinalis*. Cincinnati.

Dematium, *Pers.* On dead stems of *Osmorrhiza*. Cincinnati, Feb. 9, 1842.

¹ SPHÆRIA (SERIATÆ) MAYDIS: maculis parvis, subellipticis, elevatis; peritheciis paucis, ostiolo unico, conico; sporidiis oblongiis, curvulis, uniseptatis. —Habit that of *Sphæria arundinacea*. Spots minute, often purple-brown, punctiform or subelliptic, rarely linear, containing very few perithecia, with a single broad conical ostium; sporidia oblong, slightly curved, uniseptate. —Very different from *Sphæria Zeæ*, *Schwein.*, as appears from an authentic specimen in Sir W. J. Hooker's *Herbarium*.

² SPHÆRIA (BYSSISDÆ) RHODOMPHALA: peritheciis demum confertis, minutis, globosis umbilicatis, atris, plus minus, præsertim circa ostiolum obsoletum, miniato-pruinatis, sub lente scabriusculis subiculo fusco insidentibus. *Berk. in Hook. Lond. Journ.*, vol. iv. p. 313. —Scattered, at length much crowded, either free or seated on a matted brown subiculum: perithecia globose, at first powdered with vermilion which is more or less persistent in the centre; ostiolum simple, umbilicate; asci somewhat lanceolate, pedicellate; sporidia lanceolate, constricted in the centre with a single septum, and containing one or sometimes two nuclei. —A pretty species, but rather difficult to place, as the subiculum is sometimes entirely wanting and the perithecia are rather pulverulent than villous. It has almost equal claims to take its place amongst *Denudatæ Villosæ* and *Byssisæ*.

³ SPHÆRIA (SUBTECTÆ) ARGYROSTIGMA: epiphylla ethypophylla late dispersa; peritheciis minoribus depresso-globosis, epidermis tectis astomio; maculis epidermalibus, punctiformibus, nigris centro candidis sporidiis cymbiformibus, pellis. —Appearing like scattered *Phoma*, but it has distinct asci.

(SPHÆRIA.)

myriadea, *Dec.* On leaves of *Uvaria triloba*. Cincinnati, Oct. 14, 1841.

ONYGENA.

faginea, *Fr.* On the hard dead wood of a tree yet standing. Cincinnati, March 25, 1841.

MUCOR.

ramosus, *Bull.* On *Agaricus velutinus*, *Pers.* Waynesville, Sept. 8, 1844.

ANTENNARIA.

pinophila, *Nees.* On Sugar Maple. Cincinnati, Ap. 30, 1842.¹

SCLEROTIUM.

Semen, *Tode.* On dead leaves of Indian corn or other herbage, on moist clayey earth. Cincinnati, April 9, 1841.

complanatum, *Tode.* On the under side of a rail. Cincinnati, March 19, 1842.

¹ I cannot distinguish the specimens from *Nees von Esenbeck's* species.

THE END.

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