

FORTIETH ANNUAL REPORT

OF THE

NEW YORK STATE MUSEUM
OF
NATURAL HISTORY,

For the Year 1886.

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Extr. 40th Regent's Report.

REPORT OF THE BOTANIST.

for year 1876

R E P O R T.

To the Honorable the Board of Regents of the University of the State of New York:

GENTLEMEN:—I have the honor to communicate to you the following report:

In prosecuting the work of completing and arranging the State herbarium the past year, specimens of the plants of the State have been collected in the counties of Albany, Genesee, Essex, Hamilton, Livingston, Montgomery, Rensselaer, Saratoga, Schoharie, Washington, Wayne and Wyoming.

Specimens of 184 species have been added to the herbarium, of which twelve were contributed by correspondents, and 172 were collected by the Botanist. Of these 106 are new to the herbarium, and with two exceptions are new to our flora. Forty-seven of them are regarded as previously unpublished species. Among the added species are seven flowering plants, one moss and one lichen. The remainder are fungi. A list of the additions accompanies this report and is marked "A."

The number of contributors is twenty-three. Among their contributions are specimens of many extra limital species, not included in the preceding enumeration. These are kept distinct from the herbarium proper, which represents the State flora. A list of the contributors and of their respective contributions is marked "B."

A paper containing notices of species not before reported, together with a record of their respective localities and descriptions of new species, is marked "C."

Notes and observations concerning those not new to our flora will be found in a paper marked "D."

Wishing to obtain good flowering specimens of certain plants which grow upon the summit of Mt. Marcy, that locality was visited early in June. Although the snow had not yet entirely disappeared from that high elevation, several of the desired plants were in full bloom. Fine specimens were obtained of the alpine

rosebay, *Rhododendron Lapponicum*, the Lapland diapensia, *Diapensia Lapponica*, the hairy fly honeysuckle, *Lonicera caerulea*, and the dwarf birch, *Betula glandulosa*. The hairy fly honeysuckle and the small cranberry had not before been observed by me on the open summit of the mountain and should be added to the list of plants already published as belonging to that elevated station. July is given in the Manual and also in the State Flora as the time of flowering of the alpine or Lapland rosebay, but here it was flowering finely on the tenth day of June. Several new and interesting species of fungi rewarded my search in that bleak locality. Near the base of the mountain, the few fruited June berry, *Amelanchier Canadensis*, var. *oligocarpa*, enlivened the dark evergreen forest with its few pure white flowers. These are much scattered on the branches, there being only one, two or three in a place. The petals are broadly oval or almost orbicular, and the branches are wide-spreading, straggling and irregular. These features are so unlike the corresponding ones in other varieties of the species, that for the instant they almost compel us to believe that the plant is a distinct species rather than a mere variety. Yet, in less elevated and more open places connecting forms appear. Along Marcy brook, the rare mountain bush cranberry or few flowered viburnum, *Viburnum pauciflorum*, was observed, but it was not yet in flower. At Ausable ponds the large leaved avens, *Geum macrophyllum*, was discovered. This is a notable addition to our flora. It is an inhabitant of the White mountain region of New Hampshire and of the Lake Superior region, whence it extends westward to the Sierra Nevada mountains, and northward to Sitka. This New York station is intermediate between the eastern one and the nearest western one. An interesting form of the northern Clintonia was also discovered at this time. In it, one or two lateral umbels project from the scape at short distances below the terminal umbel of flowers. I find no mention of this form in our botanies. It is apparently due to a very thrifty and vigorous condition of the plant. The number of flowers in an umbel often much exceeds the number ascribed in the descriptions of the botanies.

From time to time reports have reached me that a red-flowered form of the white water-lily, *Nymphaea odorata*, existed in some of the waters of the Adirondack region. As I had never been

able to find such a plant myself, these reports were somewhat tantalizing. Knowing that such a lily had been found in Massachusetts, and learning of a definite locality where it was reported to have been seen in the Adirondacks, I determined to test the accuracy of this report, and to add, if possible, a specimen of such a rarity to the herbarium. Mud pond, in which it was said to grow, is a small, boggy water-hole, between Long lake and Tupper's lake. Upon visiting it I found an abundance of the white water-lily. There were a few flowers scattered about, in which the external petals were considerably tinged with red. When these flowers were but partly open, and viewed at a short distance, they had a decided pink-red appearance, and might easily be mistaken for the variety in question. But a closer examination invariably revealed white interior petals, though in some instances these were slightly stained with red or pink on the exterior surface near the base. Thus far the occurrence of the real red water-lily in the Adirondack region has not been verified by me; but this half-way approach to it indicates the possibility of its existence there, and raises the hope that it may yet be added to our flora. In this bog hole the bayonet rush, *Juncus militaris*, was found growing plentifully. It is an interesting addition to the indigenous plants of the State. On this trip, groves of larches or tamaracks, *Larix Americana*, in three widely separated localities, were noticed, in which many of the trees were almost defoliated by the ravages of some insect. Among them were many trees already dead, evidently having yielded to the thorough manner in which they had been deprived of their foliage. It appears that the loss of a large percentage of the larch trees of these noble forests must yet be added to the loss of many of the spruces through the agency of pestilent insects.

Wishing to observe what influence had been exerted on the flora by the operation of the salt works at Warsaw and its neighboring localities, that place was visited. It is well known that certain so-called seaside and salt marsh plants occur at Onondaga lake, about the salt works at Salina, and in other places where there are saline influences. It is evident that at Warsaw no saline influences have been present until quite recently. No salt springs come to the surface. The salt water is manufactured, so to speak, and pumped up from great depths. No salt marsh plants existed there when

the salt wells were first opened. Had any been introduced and established there since that time, was a question, the answer to which I wished to put on record. Not a single plant of this character was found. The nearest approach to it is the common orache, *Atriplex patula*, which grows freely along the sea coast; but this plant is also capable of living and thriving in places remote from salt water or saline influences. It has followed the tracks of our railroads till now it is a common plant along these thoroughfares in many places in the interior of the State. At Warsaw it is abundant, and occurs in several well-marked forms, thus showing well its disposition to vary. Its fondness for salt water, however, is shown by the fact that it is especially vigorous along the ditches by which the waste brine is carried away, and it follows these for considerable distances. Some of the trees in the immediate vicinity of several factories were seen to be dead or dying. Their death was apparently due to the gaseous products of the combustion of coal which is used in running the works. They were not in reach of the brine.

Two opinions are entertained concerning the liability of plants to the attacks of parasitic fungi. Some claim that, no matter how vigorous and healthy a plant may be, if the spores of its parasite lodge upon it the result will be the development in it of the disease which that parasite generates in that particular host plant. Others claim that there is a difference in the susceptibility of plants of the same species to the attacks of the same parasite; that a plant in a weak, starved or feeble condition is more likely to yield to and suffer from the attacks of its parasites than is one of the same species which is strong, well fed and vigorous. In other words, it is claimed that the vigorous plants, though exposed to the action of the spores of the parasite, have the power to resist the development of the disease and to remain healthy and unaffected; while the more feeble ones, exposed to the action of the spores of the same parasite, yield to the disease and suffer therefrom. This last claim is one of great practical importance, and if it can be shown to be well founded, a knowledge of it may be useful. Two instances illustrative of it fell under my observation the past season.

At Warsaw a small patch of knotgrass, *Polygonum aviculare*, was noticed. The plants were very small and starved in appear-

ance, and seemed to be struggling for existence. A close inspection showed that many of them were affected by a parasitic fungus, *Uromyces Polygani*. On one side of this patch, and continuous with it, was one composed of taller, more healthy looking plants. These were entirely free from the fungus, thus indicating that the weakness of the plants in one patch had favored the development of the disease, while the strength of the plants in the other had resisted it. It might be said by the supporters of the other claim that the dwarfed and weak condition of the affected plants was due to the presence of the fungus and not the predisposing cause of its presence. To one accustomed to observe this fungus, such an assertion would carry but little weight. But if we should admit the truth of this assertion, how should we explain the presence of the dwarf but unattacked plants in this patch?

In low ground near the lake shore at Port Henry, were numerous seedling plants, apparently of the discoid tickseed, *Coreopsis discoidea*. This ground had been overflowed in time of high water, and when the water receded it left numerous heaps of small sticks, bits of bark and other floodwood. Many of the seedling tickseeds were growing on these heaps of rubbish where there was little or no soil to afford nutriment to their roots. Others were growing on the ground about them, having their roots imbedded in and nourished by the soil. The plants growing on the floodwood were in many instances infested by a parasitic fungus, *Peronospora Halstedii*; but not a single affected plant could be found among those whose roots were in the soil. In this case the better nourished plants had escaped infection, although as much exposed to it as their less favored companions. Possibly there may be cases in which plants are liable to the attacks of parasitic fungi, no matter how strong and vigorous they may be, but it is clear that this cannot be a rule without exceptions. Instances are not wanting to show a greater susceptibility to attack in weak than in strong and well fed plants. Those who are accustomed to collect specimens of parasitic fungi soon learn, almost unconsciously, to look for them, either among feeble and starved plants or among those of unusually rank and luxuriant growth.

Very respectfully submitted,

CHAS. H. PECK,

ALBANY, December 15, 1886.

(A.)

PLANTS ADDED TO THE HERBARIUM.

NEW TO THE HERBARIUM.

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|---|--|
| Geum macrophyllum <i>Willd.</i> | P. eupyrena <i>Sacc.</i> |
| Aster sagittifolius <i>Willd.</i> | P. Populi <i>Pk.</i> |
| Lactuca Scariola <i>L.</i> | P. herbarum <i>West.</i> |
| Mimulus moschatus <i>Dougl.</i> | P. Castanea <i>Pk.</i> |
| Amianthium muscætoxicum <i>Gr.</i> | P. Dipsaci <i>Sacc.</i> |
| Juncus militaris <i>Bigel.</i> | Aposphæria conica <i>Sacc.</i> |
| Alopecurus pratensis <i>L.</i> | Cytospora grandis <i>Pk.</i> |
| Distichium capillaceum <i>B. & S.</i> | Haplosporella Pini <i>Pk.</i> |
| Calicium eusporum <i>Nyl.</i> | Diplodia paupercula <i>B. & C.</i> |
| Collybia fuliginella <i>Pk.</i> | D. Asparagi <i>Pk.</i> |
| Clitopilus subvilis <i>Pk.</i> | Stagonospora Chenopodii <i>Pk.</i> |
| Hebeloma glutinosum <i>Lind.</i> | Septoria Stachydis <i>R. & D.</i> |
| Polyporus dryophilus <i>Berk.</i> | S. fusca <i>Pk.</i> |
| P. sinuosus <i>Fr.</i> | S. Stellariæ <i>R. & D.</i> |
| P. radiculosus <i>Pk.</i> | S. Sibirici <i>Thum.</i> |
| Hydnum velatum <i>B. & C.</i> | S. solidaginicola <i>Pk.</i> |
| H. subfuscum <i>Pk.</i> | S. brevis <i>Pk.</i> |
| H. carbonarium <i>Pk.</i> | S. populicola <i>Pk.</i> |
| Irpex ambiguus <i>Pk.</i> | S. Smilacinae <i>E. & M.</i> |
| Porothelium papillatum <i>Pk.</i> | Pilidium graminicola <i>Pk.</i> |
| Thelephora dendritica <i>Berk.</i> | Glæosporium Robergei <i>Desm.</i> |
| Stereum abietinum <i>Pers.</i> | G. septorioides <i>Sacc.</i> |
| Hymenochæte tennis <i>Pk.</i> | G. Lindemuthianum <i>Sacc.</i> |
| Clavaria Kromholzii <i>Fr.</i> | Melanconium betulinum <i>Schm.</i> |
| Phyllosticta Caryæ <i>Pk.</i> | M. dimorphum <i>Pk.</i> |
| P. phaseolina <i>Sacc.</i> | Marsonia Populi <i>Sacc.</i> |
| P. Lycopersici <i>Pk.</i> | Coryneum tumoricola <i>Pk.</i> |
| P. phomiformis <i>Sacc.</i> | Scolecosporium Fagi <i>Lib.</i> |
| P. tumoricola <i>Pk.</i> | Pestalozzia Jefferisii <i>Ellis.</i> |
| P. populina <i>Sacc.</i> | Monilia Martini <i>S. & E.</i> |
| P. spermoides <i>Pk.</i> | M. cinerea <i>Bon.</i> |
| P. faginea <i>Pk.</i> | Ramularia Barbareæ <i>Pk.</i> |
| P. vagans <i>Pk.</i> | Coniosporium punctoideum |
| P. fatiscens <i>Pk.</i> | <i>Karst.</i> |
| P. Symphoricarpi <i>West.</i> | Cladosporium Aphidis <i>Thum.</i> |
| Phoma magnitructa <i>Pk.</i> | C. Asparagi <i>Fr.</i> |
| P. leguminum <i>West.</i> | C. brevipes <i>Pk.</i> |

C. letiferum *Pk.*
 Cercospora Acetosellæ *Ellis.*
 Macrosporium tomato *Oke.*
 Pilacre orientalis *B. & Br.*
 Graphium Sorbi *Pk.*
 Isariopsis alborosella *Sacc.*
 Fusarium Lycopersici *Sacc.*
 Peziza truncicomes *Ger.*
 P. alboviolascens *A. & S.*
 Helotium episphaericum *Pk.*
 Ascomyces letifer *Pk.*
 A. rubrobrunnens *Pk.*
 Erysiphe horridula *Lev.*
 Calosphæria ciliatula *Karst.*
 Valsa Thujae *Pk.*
 V. exudans *Pk.*
 Valsella adhærens *Fckl.*

V. Laschii *Sacc.*
 Diatrypella quercina *Nits.*
 Melanconiella Decorahensis
Ellis.
 Sphærella Pinsapo *Thum.*
 S. minutissima *Pk.*
 S. alnicola *Pk.*
 S. Pontederiæ *Pk.*
 Diaporthe farinosa *Pk.*
 D. sulphurea *Fckl.*
 Valsaria Niesslii *Sacc.*
 Leptosphaeria Asparagi *Pk.*
 Massaria Pyrii *Oth.*
 Pleospora Shepherdia *Pk.*
 Dothidella Alni *Pk.*
 Lophiotrema vestita *Pk.*
 L. parasitica *Pk.*

NOT NEW TO THE HERBARIUM.

Thalictrum purpurascens *L.*
 Nelumbium luteum *Willd.*
 Nymphaea odorata *Ait.*
 Nuphar advena *Ait.*
 Nasturtium lacustre *Gr.*
 Arabis Drummondii *Gr.*
 Cardamine hirsuta *L.*
 Lepidium Virginicum *L.*
 Lechea major *Mx.*
 Polygala paucifolia *Willd.*
 Lathyrus palustris *L.*
 Lespedeza violacea *Pers.*
 Geum rivale *L.*
 Pyrus sambucifolia *C. & S.*
 Amelanchier Canadensis *T. & G.*
 Ribes Cynosbati *L.*
 R. lacustre *Poir.*
 R. prostratum *L'Her.*
 Cornus paniculata *L'Her.*
 Lonicera cærulea *L.*
 Symphoricarpos racemosus *Mx.*
 Aster acuminatus *Mx.*
 A. Radula *Ait.*
 Solidago uliginosa *Nutt.*
 Hieracium pilosella *L.*
 Rhododendron Lapponicum
Wahl.
 Hyssopus officinalis *L.*

Polygonum tenue *Mx.*
 Diapensia Lapponica *L.*
 Carya alba *Nutt.*
 Quercus palustris *Du Roi.*
 Betula glandulosa *Mx.*
 Salix Cutleri *Tuckerm.*
 Abies alba *Mx.*
 Orchis spectabilis *L.*
 Clintonia borealis *Raf.*
 Streptopus roseus *Mx.*
 S. amplexifolius *D. C.*
 Polygonatum biflorum *Ell.*
 Luzula parviflora *Desv.*
 Juncus articulatus *L.*
 Scirpus Eriophorum *Mx.*
 Scleria verticillata *Muhl.*
 Carex alopecoidea *Tuckerm.*
 C. flava *L.*
 C. longirostris *Torr.*
 Agrostis vulgaris *With.*
 Avena striata *Mx.*
 Panicum capillare *L.*
 P. Crus-galli *L.*
 Setaria glauca *Bv.*
 Triticum caninum *L.*
 Aspidium Goldianum *Hook.*
 Omphalia umbellifera *L.*
 Pleurotus subareolatus *Pk.*

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| Crepidotus hærens <i>Pk.</i> | Marsonia Juglandis <i>Sacc.</i> |
| Boletus subaureus <i>Pk.</i> | Ramularia Plantaginis <i>E. & M.</i> |
| Polyporus pubescens <i>Fr.</i> | Cystopus Bliti <i>Lev.</i> |
| P. cyphellæformis <i>B. & C.</i> | Peronospora Halstedii <i>Farl.</i> |
| Trametes mollis <i>Fr.</i> | P. gangliformis <i>De By.</i> |
| Phlebia radiata <i>Fr.</i> | Trichothecium roseum <i>Lk.</i> |
| Odontia fimbriata <i>Fr.</i> | Pezicula acericola <i>Pk.</i> |
| Peniophora neglecta <i>Pk.</i> | Uncinula adunca <i>Lev.</i> |
| Clavaria pinea <i>Pk.</i> | Hypoxylon atropunctatum <i>Schw.</i> |
| Glæosporium Martini <i>S. & E.</i> | Diaporthe acerina <i>Sacc.</i> |

(B.)

CONTRIBUTORS AND THEIR CONTRIBUTIONS.

Mrs. M. M. PATTON, Berne, N. Y.

Cynoglossum grande *Dougl.* | Brodiaea capitata *Benth.*

Mrs. I. B. SAMPSON, Albany, N. Y.

Sarracenia variolaris *Mx.* | Ruellia oblongifolia *Mx.*
Polygala nana *DC.* | Eriocaulon gnaphalodes *Mx.*

Hon. DAVID MURRAY, Albany, N. Y.

Viola lutea *Sm.* | Sedum acre *L.*
Arenaria verna *L.* | S. saxatile *L.*
Silene inflata *Sm.* | Linnea borealis *Gron.*
Parnassia palustris *L.* | Gnaphalium leontopodium
Saxifraga aizoon *Jacq.* | *Willd.*
S. azoides *L.* | Hieracium pilosella *L.*
S. bryoides *L.* | Loiseleuria procumbens *Desv.*

Prof. JAMES HALL, Albany, N. Y.

Agaricus subareolatus *Pk.*

CHARLES E. BEECHER, Albany, N. Y.

Lenzites sepiaria *Fr.* | Dædalea glaberrima *B. & C.*
Polyporus brumalis *Fr.* | Stereum versicolor *Fr.*
P. sanguineus *L.* | Hypochnus rubrocinctus *Ehr.*
Trametes hydnoides *Fr.* | Geaster minimus *Schw.*

GEO. A. REX, M. D., Philadelphia, Penn.

Hemiarcyria stipata *R.* | Tilmadoche gyrocephalum
Arcyria dictyonema *R.* | *Mont.*
A. Erstedii *R.* | Physarum pulcherrimum *B. & C.*
Trichia Jackii *R.* | P. Petersii *B. & C.*

Rev. A. B. LANGLOIS, Pointe a la Hache, La.

Cytospora pallida, *Ellis.* | Botryodiplodia diplocarpa
Fusarium sarcochroum *Desm.* | *E. & E.*
Ailographum cæspitosum *E. & E.* | Meliola sanguinea *Ellis.*
Dinemasprium Langloisii *Ellis.* | Valsa hylodes *Ellis.*

E. C. HOWE, M. D., Lansingburgh, N. Y.

Carex Buxbaumii <i>Wahl.</i>		Triticum caninum <i>L.</i>
Alopecurus geniculatus <i>L.</i>		

H. L. GRIFFIS, Binghamton, N. Y.

Polygala paucifolia *Willd.*

C. E. SMITH, Philadelphia, Penn.

Baptisia tinctoria <i>R. Br.</i>		Linaria vulgaris <i>Mill.</i>
Polygala lutea <i>L.</i>		

P. H. DUDLEY, New York, N. Y.

Trametes Pini <i>Fr.</i>		Polyporus versicolor <i>Fr.</i>
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Prof. B. T. GALLOWAY, Columbia, Mo.

Cercospora condensata <i>E. & K.</i>		Cercospora Sanguinariæ <i>Pk.</i>
C. Gymnocladi <i>E. & K.</i>		Puccinia Seymeriæ <i>Burrill.</i>
C. rhuina <i>C. & E.</i>		Septoria bacciligeræ <i>Wint.</i>
C. Plantaginis <i>Sacc.</i>		Gleosporium Aceris <i>Cke.</i>
C. Caulophylli <i>Pk.</i>		Marsonia Quercus <i>Pk.</i>

Prof. L. M. UNDERWOOD, Syracuse, N. Y.

Puccinia curtipes <i>Howe.</i>		Uromyces Trifolii <i>Fckl.</i>
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Prof. T. H. McBRIDE, Iowa City, Iowa.

Boletus sphærosporus *Pk.*

JULIUS A. BISKY, Flushing, N. Y.

Aster Radula <i>Ait.</i>		Mimulus moschatus <i>Dougl.</i>
A. acuminatus <i>Mx.</i>		Amianthium muscætoxicum <i>Gr.</i>

Prof. F. LAMSON SCRIBNER, Washington, D. C.

Arundo Donax *L.*

A. P. MORGAN, Preston, O.

Polyporus endocrocinus *Berk.*

Prof. WM. TRELEASE, St. Louis, Mo.

Lycoperdon delicatum <i>B. & C.</i>		Dothidea viridispora <i>Cke.</i>
L. rimulatum <i>Pk.</i>		

Prof. W. A. KELLERMAN, Manhattan, Kansas.

- Lenzites abietina *Fr.*
 Panus stipticus *Fr.*
 Polyporus adustus *Fr.*
 P. brumalis *Fr.*
 P. sulphureus *Fr.*
 P. applanatus *Fr.*
 P. picipes *Fr.*
 P. fraxinophilus *Pk.*
 Trametes sepium *Berk.*
 Craterellus cornucopioides *Fr.*
 Stereum frustulosum *Fr.*
 Merulius tremellosus *Schrad.*
 Hydnum pallidum *C. & E.*
 Tremella foliacea *Fr.*
 Glæosporium stenosporum
E. & K.
 Vermicularia Dematium *Fr.*
 Darluca filum *Cast.*
 Leptostroma vulgare *Fr.*
 L. Actææ *Schw.*
 Septoria Verbenæ *R. & D.*
 S. gaurina *E. & K.*
 S. Nolitangeris *Ger.*
 S. Kalmicola *B. & C.*
 S. Helianthi *E. & K.*
 S. Verbascicola *B. & C.*
 S. Polygonorum *Desm.*
 S. Mimuli *E. & K.*
 S. Pruni *Ellis.*
 S. Cerastii *R. & D.*
 S. Gei *Desm.*
 S. sphærelloides *E. & K.*
 S. xanthifolia *E. & K.*
 S. Sisymbrii *Ellis.*
 S. Speculariæ *B. & C.*
 S. Erigerontis *Pk.*
 S. lactucicola *E & M.*
 S. Cacaliæ *E. & K.*
 Phyllosticta Asiminiæ *E. & E.*
 P. acericola *B. & C.*
 P. smilacina *E. & M.*
 P. Phaseoli *Sacc.*
 P. Chenopodii *West.*
 P. Ampelopsidis *E. & M.*
 P. Labruscæ *Thum.*
 P. Podophylli *Wint.*
 P. Lycii *E. & K.*
 Discosia maculæcola *Ger.*
 Phoma glandicola *Desm.*
 Stilbospora ovata *Pers.*
 Coniothyrium herbarum
C. & E.
 Sphæronema Persicæ *Schw.*
 Cæoma mercurialis *Lk.*
 Coleosporium Campanulacearum
Fr.
 C. Sonchi *Tul.*
 C. Senecionis *Fr.*
 C. Agrimonis *Bon.*
 Uredo Smilacis *Schw.*
 Trichobasis Crotonis *Cke.*
 Chrysomyxa pyrolatum *Koenig.*
 Synchytrium Anemones *Woron.*
 S. mercurialis *Fckl.*
 S. Taraxaci *DeBy.*
 Ræstelia penicillati *Fr.*
 R. lacerata *Tul.*
 Melampsora salicina *Lev.*
 Æcidium impatientatum *Schw.*
 Æ. Allii-ursini *Pers.*
 Æ. Tragopogonis *Pers.*
 Æ. Prenanthis *Pers.*
 Æ. Euphorbiæ *Pers.*
 Æ. leucospermum *DC.*
 Æ. rubellum *Pers.*
 Æ. Epilobii *DC.*
 Æ. Cænotheræ *Pk.*
 Æ. Caladii *Schw.*
 Æ. Dicentræ *Trel.*
 Æ. Ficariæ *Pers.*
 Æ. Violæ *Schum.*
 Æ. Callirrhoes *E. & K.*
 Æ. amphigenum *E. & K.*
 Æ. Sambuci *Schw.*
 Æ. Verbenicola *E. & K.*
 Æ. Ceanothi *E. & K.*
 Uromyces appendiculatus *Lev.*
 U. Zygadeni *Pk.*
 U. Euphorbiæ *C. & P.*
 U. Lespedezæ *Schw.*
 U. Alchemillæ *Pers.*
 U. Peltandræ *Howe.*
 U. Hyperici *Schw.*
 Ustilago Carbo *Tul.*

- U. Syntherismæ Schw.
 Phragmidium obtusum Lk.
 Gymnosporangium macropus Schw.
- Puccinia Sorghi Schw.
 P. Helianthi Schw.
 P. Mariæ Wilsoni Clint.
 P. Amorphæ Curt.
 P. aculeata Lk.
 P. Artemisiarum Duby.
 P. Myrrhis Schw.
 P. Xanthii Schw.
 P. Malvastri Pk.
 P. nigrescens Pk.
 P. Polygonorum Lk.
 P. solida Schw.
 P. Chærophylli Purt.
 P. Menthæ Pers.
 P. Silphii Schw.
- Epicoccum sphaerococcum Berk.
 Sporocybe byssoides Fr.
 Fusicladium fasciculatum C. & E.
- Helminthosporium gracile Wallr.
- H. interseminatum B. & R.
 Macrosporium Maydis C. & E.
 M. Solani E. & M.
 M. Catalpæ E. & M.
 Polythrincium Trifolii Kze.
 Stachybotrys lobulata Berk.
 Botrytis vulgaris Fr.
 Pyricularia grisea Sacc.
 Cylindrosporium Fraxini E. & K.
- Microstroma leucospora Niessl.
 Ramularia Desmodii Cke.
 R. Astragali E. & H.
 R. Grindeliæ E. & K.
 R. rufomaculans Pk.
 R. Tulasnei Sacc.
 Entyloma Ranunculi Bon.
 E. Physalidis Wint.
 Cystopus cubicus Lev.
 C. Bliti DeBy.
 Peronospora sordida Berk.
 P. parasitica Tul.
 P. gangliformis De By.
- P. alta Fckl.
 P. Halstedii Farl.
 P. Oxybaphi E. & K.
 P. Arthuri Farl.
- Cercospora Acalyphæ Pk.
 C. Ampelopsidis Pk.
 C. Chenopodii Fres.
 C. Plantaginis Sacc.
 C. effusa Ellis.
 C. Desmodii E. & K.
 C. condensata E. & K.
- Cercospora Gymnocladi E. & K.
 C. chionea E. & K.
 C. Isanthi E. & K.
 C. rhuina C. & E.
 C. microsora Sacc.
 C. Teucriti E. & K.
- Peziza capitata Pk.
 P. floccosa Schw.
 P. nivea Fr.
- Ascobolus pilosus Fr.
 Phacidium Pini Schw.
 P. Medicaginis Schw.
- Cenangium triangulare Schw.
 Exoascus deformans Berk.
 Chætomium chartarum Cd.
 Chætomella perforata E. & E.
 Podosphaeria Kunzei Lev.
 Phyllactinia suffulta Reb.
 Erysiphe lamprocarpa Lev.
 Uncinula adunca Lev.
- U. Ampelopsidis Pk.
 U. macrospora Pk.
 Microsphaeria Euphorbiæ B. & C.
 M. Platani Howe.
- Diatrype disciformis Fr.
 D. bullata Fr.
 D. hypophlæa B. & C.
- Xylaria Hypoxylon Fr.
 Hypoxylon sassafras Schw.
 H. atropunctatum Schw.
- Rosellinia millegrana Sacc.
 Dothidea perisporioides B. & C.
 Stigmatea Robertiani Fr.
 Diaporthe spiculosa Fr.
 Phyllachora Ulmi Fckl.
 Heliosphaeria patella Grev.
 Linospora caprea Fckl.

Venturia orbicula <i>C. & P.</i>	S. Arthuriana <i>Sacc.</i>
Kellermania yuccagena <i>E. & E.</i>	S. anguillida <i>C. & E.</i>
Leptosphaeria doliolum <i>Pers.</i>	S. fulgida <i>C. & P.</i>
Pleonectria denigrata <i>Wint.</i>	Sphaerella decidua <i>E. & K.</i>
Ophiobolus porphyrogonus <i>Sacc.</i>	S. maculaeformis <i>Pers.</i>
Melanomma pulvispyrius <i>Fckl.</i>	S. sparsa <i>Awd.</i>
Gnomonia setacea <i>Pers.</i>	S. polystigma <i>Ellis.</i>
Melanconis dasycarpa <i>E. & R.</i>	S. Campanulae <i>E. & K.</i>
Sphaeria Caryae <i>C. & E.</i>	

E. J. FORSTER, M. D., Boston, Mass.

Hydnum auriscalpium <i>L.</i>	Urocystis pompholygodes <i>Schl.</i>
Scleroderma vulgare <i>Fr.</i>	Podisoma Sabinæ <i>Fr.</i>
Phyllosticta Sambuci <i>Desm.</i>	Roestelia lacerata <i>Tul.</i>
Sporidesmium lepraria <i>B. & Br.</i>	Sepedonium chrysospermum <i>Lk.</i>
Phragmidium bulbosum <i>Schl.</i>	Chaetomium elatum <i>Kze.</i>
P. mucronatum <i>Lk.</i>	Hypomyces aurantius <i>Tul.</i>
P. gracile <i>Grev.</i>	H. lateritius <i>Tul.</i>
Triphragmium Ulmariae <i>Lk.</i>	H. rosellus <i>Tul.</i>
Puccinia graminis <i>Pers.</i>	Sphaerotheca Castagnei <i>Lev.</i>
P. clandestina <i>Carm.</i>	Sphaeria fimbriata <i>Pers.</i>
P. Umbilici <i>Guep.</i>	Sphaerella Buxi <i>DC.</i>
Ustilago Carbo <i>Tul.</i>	Stigmatea Robertiani <i>Fr.</i>

H. C. GORDINIER, M. D., Troy, N. Y.

Ranunculus alismæfolius <i>Geyer.</i>	Salix candida <i>Willd.</i>
Lepidium campestre <i>L.</i>	Thuja occidentalis <i>L.</i>
Cerastium nutans <i>Raf.</i>	Orchis spectabilis <i>L.</i>
Arenaria lateriflora <i>L.</i>	Cypripedium spectabile <i>Swartz.</i>
Geranium Carolinianum <i>L.</i>	Carex Buxbaumii <i>Wahl.</i>
Trifolium hybridum <i>L.</i>	C. Muhlenbergii <i>Schk.</i>
Mitella nuda <i>L.</i>	C. alopecoidea <i>Tuck.</i>
Chrysopsis graminifolia <i>Nutt.</i>	C. aurea <i>Nutt.</i>
Polygonum tenue <i>Mx.</i>	Alopecurus geniculatus <i>L.</i>
Rumex Brittanica <i>L.</i>	Glyceria acutiflora <i>Torr.</i>
Blitum capitatum <i>L.</i>	Pardanthus Chinensis <i>Ker.</i>
Populus balsamifera <i>L.</i>	

J. DUNN, Albany, N. Y.

A piece of wood of silver maple, showing the scar of an inscribed cross, both in the wood and the bark.

W. S. HAYWARD, Sodus, N. Y.

A splinter of wood and fragments of stone broken by lightning.

(C.)

PLANTS NOT BEFORE REPORTED.

GEUM MACROPHYLLUM, Willd.

Adirondack mountains, near the inlet of Lower Ausable pond. In the Manual this species is accredited to the base of the White mountains, Northern Michigan, Illinois and north-westward. Our newly discovered station is intermediate between the eastern and western localities recorded in the Manual. Flowering specimens were collected in June.

LACTUCA SCARIOLA, L.

Introduced, but apparently well established, in Clyde, Wayne county. September.

MIMULUS MOSCHATUS, Dougl.

Introduced. "Well established in a bog near Locust Valley," Long Island. *Julius A. Bisky*. August.

AMIANTHIUM MUSCÆTOXICUM, Gr.

Valley Stream, Long Island. July. *J. A. Bisky*. This is probably one of its most northern stations.

JUNCUS MILITARIS, Bigel.

Adirondack mountains. In Mud pond and Clear pond near Long lake. July. The bayonet rush grows in shallow water in these localities. Its panicle is not very conspicuous, and a superficial observer might easily mistake the plant for the great bulrush, *Scirpus validus*, which grows in similar situations. It spreads by creeping rootstocks which give origin to new plants, sometimes at less than an inch from the parent plant. The capillary submersed leaves noticed by Dr. Robbins in flowing water were not seen in these stations, in which the plants grow in quiet water. The whitish membranous scales that subtend the reddish-brown or chestnut colored heads of flowers are noticeable by reason of the contrast in colors.

DISTICHIMUM CAPILLACEUM, B & S.

Wet rocks and precipices. Adirondaek mountains, Cascadeville. June. The distichous arrangement of the leaves, characteristic of the genus, is not very conspicuous in this moss, which at first sight somewhat resembles *Dicranella heteromalla*.

CALICIUM EUSPORUM, Nyl.

Bark of dead balsam, *Abies balsamea*. Chapel pond, Adirondaek mountains. June. This rare lichen has but recently been detected in this country. Mr. Willey informs me that he first found it about a year ago in the White mountain region.

COLLYBIA FULIGINELLA, N. sp.

Pileus convex or nearly plane, sometimes irregular or undulate on the margin, glabrous, even, fuliginous-brown, flesh white; lamellæ, rather narrow, close, rounded behind, adnexed or nearly free, white; stem equal or slightly tapering upward, subfibrillose, stuffed or hollow, colored like the pileus or a little paler, white tomentose at the base; spores subelliptical, .0003 to .00035 inch long, .0002 to .00025 broad, usually containing a single large nucleus.

Pileus 1.5 to 2.5 inches broad, stem 1.5 to 2 inches long, 2 to 3 lines thick.

Under or near arbor-vitæ, *Thuja occidentalis*. Elizabethtown, Essex county. September.

In size and shape this species resembles *Collybia dryophila*, but its color, which closely resembles that of *Lactarius lignyotus*, is far different.

CLITOPILUS SUBVILIS, N. sp.

Pileus thin, centrally depressed or umbilicate, with the margin decurved, hygrophaneous, dark-brown and striatulate when moist, grayish-brown and silky-shining when dry; lamellæ subdistant, adnate or slightly decurrent, whitish when young, then flesh-colored; stem slender, brittle, rather long, stuffed or hollow, glabrous, colored like the pileus or a little paler; spores irregular, angular, .0003 to .0004 inches long; odor weak or none, taste farinaceous.

Pileus 8 to 15 lines broad, stem 1.5 to 3 inches long, 1 to 2 lines thick.

Damp soil in thin woods. Karner, Albany county. October.

The species seems to be closely related to *Clitopilus vilis*, from

which I have separated it because of its smooth and shining (not flocculose and opaque), pileus and its farinaceous taste. It was discovered in 1884, growing, in company with *Entoloma rhodopolium* in such a way that it was taken to be a variety of it, and it was referred to that species under the name var. *umbilicatum*. This year it was found plentifully in the same locality, but entirely unaccompanied by *E. rhodopolium*. A more careful study of it leads me to the conclusion that it is a distinct species.

HEBELOMA GLUTINOSUM, Lind.

Among fallen leaves and on half buried decaying wood, in thin woods. Conklingville. September.

In wet weather the gluten is sufficiently copious to drip from the pileus.

CORTINARIUS SUBFERRUGINEUS, Fr.

Thin woods. Conklingville. September.

POLYPORUS DRYOPHILUS, Berk.

At the base of oak trees. Conklingville. July.

POLYPORUS SINUOSUS, Fr.

Decaying wood of maple, *Acer saccharinum*. Forestburgh, Sullivan county. September. The species is remarkable for and easily known by its sweet and agreeable fragrance, which has been likened to that of licorice.

POLYPORUS RADICULOSUS, N. sp.

Resupinate, effused, thin, soft, tender, orange-yellow, the mycelium creeping in and over the wood, silky-tomentose, at first white, then yellow, forming numerous yellow branching root-like strings or ribs which are more or less connected by a soft, silky tomentum; pores rather large, angular, at first shallow, sunk in the mycelium, the dissepiments becoming more elevated, thin and fragile; spores elliptical, .0002 to .00025 inch long, .00012 to .00016 broad.

Half buried chips of poplar. *Populus tremuloides*. Gansevoort. September.

The species is allied to *P. Vaillantii*, in its peculiar rhizomorphoid strings of mycelium, but from this it differs decidedly in its color and texture. In these respects it approaches *P. bombycinus*, of which it may possibly be a peculiar variety. It is very

destructive to the wood on which it grows, causing it to become soft, brittle and even friable.

HYDNUM VELATUM, B. & C.

Decaying wood of poplar, *Populus tremuloides*. Gansevoort. September.

HYDNUM SUBFUSCUM, N. sp.

Resupinate, thin, soft, the margin and subiculum beneath white, tomentose, sometimes extended into branching strings of mycelium, the upper surface of the subiculum pale yellowish-brown or dingy-isabelline, when magnified, appearing as if sprinkled with minute shining particles; aculei slender, subulate, very acute, white when young, then with white tips or wholly colored like the subiculum.

Decaying wood of deciduous trees. Conklingville. September. In *H. himantia*, which, in some respects, this species resembles the teeth are described as obtuse and pulverulent.

HYDNUM CARBONARIUM, N. sp.

Resupinate, very thin, at first floccose-pruinose and white, then smoky-brown, sometimes retaining a white margin; aculei at first short, then longer, subulate or cylindrical, minutely ciliate at the apex, whitish when young, then smoky-brown.

Charred wood. Elizabethtown. September. The species is easily recognized by its peculiar color and by the ciliate or setulose tips of the teeth. It appears as if it had been smoked or scorched.

IRPEX AMBIGUUS, N. sp.

Resupinate, adnate; subiculum very thin, flocculose-pruinose, white, becoming pallid with age; aculei oblique, somewhat united at the base, minute, very variable, subulate and entire, or compressed, acute, truncate, branched, incised or subserrate, white when young, becoming pallid with age.

Decaying beech wood and bark. Adirondack mountains. September.

It forms small irregular or interrupted patches. To the naked eye it resembles *Hydnum pallidum*, but the teeth are more or less united at the base, thus requiring it to be placed in the genus *Irpex*. Scarcely any two of them are exactly alike.

POROTHELIUM PAPILLATUM, N. sp.

Effused, very thin, flocculose-pruinose, white when young, soon pallid or isabelline, subwaxy and often rimose, the margin subin-

determinate: verrucae minute, subdistant, at first a limpid globule resting on the subiculum, then slightly prominent, papilliform, colored like the subiculum and crowned with a limpid globule which varies in color from hyaline to amber.

Decorticated wood of poplar, *Populus tremuloides*. Elizabethtown. September. It forms patches several inches in extent. It is apparently related to *P. Friesii*, but it is not membranous, the warts are colored like the subiculum and are not immersed in it.

THELEPHORA DENDRITICA, Berk.

Overspreading the hymenium of effete *Polyporas applanatus*. Adirondack mountains. September.

STEREUM ABIETINUM, Pers.

Prostrate trunk of spruce, *Abies nigra*. Cascadeville, Adirondack mountains. June.

Our specimens agree with the description of the species to which we have referred them, but they present some interesting characters not mentioned in that description. It often happens that great perplexity arises because of the incomplete descriptions of some of the older authors. A careful examination of our specimens shows the presence of both setæ and metuloids, the latter much more numerous than the former. Thus this species does for *Stereum*, *Hymenochæte* and *Peniophora* what *Dædalea confragosa* does for *Dædalea*, *Trametes* and *Lenzites*, as was shown in the thirtieth report. It sets at naught the characters used in distinguishing these genera, and bids defiance to the generic limits assigned in the botanies. To the naked eye, the hymenium in our specimens has a somewhat "velvety pruinose" appearance, but when examined by the microscope it is found to be abundantly furnished with projecting setiform bodies, some of which are smooth and colored, as in *Hymenochæte*; others are colorless and rough or minutely warted, as in *Peniophora*. Sometimes a single one is colorless and warted in the upper part, colored and smooth in the lower. And as if this was not enough of confusion to our former notions, the hymenium, though dry, becomes rimose as in many species of *Corticium*. The fungus sometimes forms patches several inches in extent by the confluence of individuals. It is nearly or quite one line thick, the intermediate stratum being

composed of erect fibres. Though dry, it is not very tough. The spores are oblong or subfusiform .0005 to .0007 inch long, .0002 broad.

HYMENOCHÆTE TENUIS, N. sp.

Resupinate, very thin, even, forming elongated, more or less confluent, dark ferruginous patches, concolorous on the determinate margin, inseparable, rimose; setæ acute, .0012 to .0025 inch long.

Decorticated wood of arbor-vitæ, *Thuja occidentalis*. Cascadeville. June.

CLAVARIA KROMHOLZII, Fr.

Open woods. Brewerton and Adirondaek mountains. September.

PHYLLOSTICTA LYCOPERSICI, N. sp.

Spots large, suborbicular, cinereous; perithecia minute, brown or blackish, opening by a single or sometimes by two pores; spores abundant, oblong or elliptical, .00025 to .0003 inch long, .0001 to .00012 broad.

Fruit of tomato, *Lycopersicum esculentum*. Menands, Albany county. July.

PHYLLOSTICTA PHASEOLINA, Sacc.

Leaves of cultivated bean, *Phaseolus vulgaris*. Menands. September.

PHYLLOSTICTA CARYÆ, N. sp.

Spots large, irregular, often confluent, at first yellowish, then brown, sometimes becoming grayish in the center; perithecia minute, .004 inch broad, punctate, epiphyllous; spores irregularly elliptical, .0002 inch long, .00008 broad.

Living leaves of hickory, *Carya alba*. Piffard. August.

PHYLLOSTICTA PHOMIFORMIS, Sacc.

Living leaves of white oak, *Quercus alba*. Sandlake, Rensselaer county. September.

PHYLLOSTICTA TUMORICOLA, N. sp.

Spots suborbicular, arid, pallid with a reddish or reddish-brown margin, apparently caused by insects; perithecia amphigenous or epiphyllous minute, .005 to .007 inch broad, depressed, brownish; spores oblong or narrowly elliptical, colorless, .0004 to .0005 inch long, .0002 to .00025 broad.

Living gall-spotted leaves of white oak, *Quercus alba*. Karner. October. In *P. phomiformis* the spores are much larger than in

this species. The spots are centrally punctured and appear to have been produced by the stings of insects.

PHYLLOSTICTA POPULINA, Sacc. v. PARVA n. var.

Living or languishing leaves of necklace poplar, *Populus monilifera*. Menands. October.

Spots very small, orbicular, white, with a brown border; perithecia one to four on a spot.

PHYLLOSTICTA SPERMOIDES, N. sp.

Spots suborbicular, brown or cinereous with a brown border, sometimes confluent; perithecia minute, .0014 to .0025 inch broad, numerous, hypophyllous, blackish; spores minute cylindrical, .0002 inch long.

Living leaves of wild grape vine, *Vitis riparia*. Gansevoort. September.

PHYLLOSTICTA FAGINEA, N. sp.

Spots suborbicular, small, often seriate or subconfluent, and arranged in rows parallel to the veins of the leaf, cinereous or reddish-gray, with a reddish-brown border or wholly reddish-brown, subferruginous beneath; perithecia few, epiphyllous, minute, .003 inch broad, black; spores ovate or elliptical, .0003 to .0004 inch long, .0002 to .00025 broad.

Living leaves of beech, *Fagus ferruginea*. Argusville and Elizabethtown. September.

PHYLLOSTICTA VAGANS, N. sp.

Spots none; perithecia minute, .003 to .0035 inch broad, amphigenous, numerous, occupying the whole leaf, black; spores very minute, spermatoid, .00012 inch long, .00004 broad, sometimes oozing out and forming a white globule.

Dead leaves of *Smilacina racemosa*. Conklingville. September.

This is a very anomalous species. But for the very short minute spores, it would accord better with *Septoria* than *Phyllosticta*.

PHYLLOSTICTA FATISCENS, N. sp.

Spots rather large, suborbicular, pallid, generally marked by one or more elevated concentric lines, at length cracking around the margin and separating, wholly or in part, from the uninjured tissues of the leaf; perithecia minute, .004 inch broad, epiphyllous,

at first pale, then brownish; spores oblong, straight or slightly curved, .00025 to .0004 inch long, .00012 to .00016 broad.

Living leaves of yellow pond lily, *Nuphar advena*. Argusville, Schoharie county. July.

PHYLLOSTICTA SYMPHORICARPI, West.

Living leaves of snowberry, *Symphoricarpus racemosus*. Canajoharie, Montgomery county. July.

PHOMA MAGNIFRUCTA, N. sp.

Perithecia small, .005 to .007 inch broad, scattered, subglobose, erumpent, black; spores oblong-fusiform, .0009 to .0012 inch long, .0003 to .0004 broad; sporophores short.

Cone scales of arbor vitæ, *Thuja occidentalis*. Keene, Essex county. June.

This species is readily distinguished from others inhabiting cone scales by its large spores.

PHOMA LEGUMINUM, West.

Legumes of locust, *Robinia pseudacacia*. Piffard. August.

PHOMA OLERACEA, Sacc v. DIPSACI Sacc.

Dead stems of teasel, *Dipsacus sylvestris*. Wallington, Wayne county. September.

PHOMA EUPYRENA, Sacc.

Dead potato stems. Menands. October.

PHOMA POPULI, N. sp.

Perithecia minute, .003 to .004 inch broad, epiphyllous, gregarious, black, opening by a large pore; spores cylindrical, straight or slightly curved, .0006 to .0008 inch long, .00012 broad.

Dead leaves of poplar, *Populus tremuloides*. Elizabethtown. September.

PHOMA HERBARUM, West.

Dead stems of wormwood, *Artemisia vulgaris*. Port Henry. June.

PHOMA CASTANEA, N. sp.

Perithecia numerous, surrounding the branch, .011 to .014 inch broad, erumpent, black; spores minute, oblong or cylindrical, .00025 to .0003 inch long, .00006 to .00008 broad; sporophores short.

Dead branches of chestnut, *Castanea vesca*. Sandlake. May.

AOSPHÆRIA CONICA, Sacc.

Decaying oak wood. Piffard. August.

CYTOSPORA GRANDIS, N. sp.

Pustules large, two to three lines broad, ellipsoid or suborbicular, scar-like, ferruginous from the ruptured bark; loculi numerous; spores minute, curved, .0002 inch long.

Dead bark of sumach, *Rhus typhina*. Gansevoort. September.

HAPLOSPORELLA PINI, N. sp.

Perithecia valsoid, cæspitose, three to five in a cluster, sunk in the inner bark, erumpent; spores globose or subelliptical, colored, .0005 to .0006 inch long.

Dead bark of white pine, *Pinus Strobus*. Elizabethtown. June.

DIPLODIA PAUPERCUA, B. & Br.

Dead branches of elder, *Sambucus Canadensis*. Adirondack mountains. June.

DIPLODIA ASPARAGI, N. sp.

Perithecia gregarious, subglobose, minute, opening by a papillate pore, black; spores elliptical, colored, .0008 to .001 inch long, .0005 broad.

Dead stems of asparagus. Menands. October.

STAGONOSPORA CHENOPODII, N. sp.

Spots few, large, brown or yellowish-brown; perithecia minute, .004 to .005 inch broad, black; spores oblong, obtuse, biseptate or triseptate, constricted at the septa, colorless, .0008 to .001 inch long, .0003 to .0004 broad.

Living leaves of goose-foot, *Chenopodium album*. Menands. August.

SEPTORIA STACHYDIS, R. & D.

Living leaves of hedge nettle, *Stachys aspera*. Port Kent. June.

SEPTORIA FUSCA, N. sp.

Spots blackish-brown, indefinite, occupying the lobes of the leaves or their margins; perithecia epiphyllous, black; spores filiform, straight, slightly curved or flexuous, .0016 to .002 inch long.

Living or languishing leaves of wormwood, *Artemisia vulgaris*. Port Henry. June.

It differs from *S. Artemisia* in its indefinite spots and longer spores.

SEPTORIA STELLARIÆ, R. & D.

Living or languishing leaves of chickweed, *Stellaria media*. Aden Lair, Adirondack mountains. June.

SEPTORIA SIBIRICI, Thum.

Living leaves of fetid currant, *Ribes prostratum*. Adirondack mountains. September.

SEPTORIA SOLIDAGINICOLA, N. sp.

Spots small, angular, white or whitish on the upper surface, darker beneath, surrounded by a brown or reddish brown border; perithecia few, usually one or two on a spot, epiphyllous, subglobose, blackish; spores linear, straight, subacute, simple, .001 to .0016 inches long, .00016 broad.

Living leaves of goldenrod, *Solidago arguta*. Cobble hill, near Elizabethtown. September.

Distinguished from *S. Solidaginis* by its longer continuous spores, which are neither septate nor nucleate.

SEPTORIA BREVIS, N. sp.

Spots none; perithecia scattered, epiphyllous, minute, .003 to .004 inch broad, opening widely, black; spores short, .0004 to .0005 inch long, .00006 broad, straight or slightly curved.

Dead leaves of *Solidago Virgaurea* v. *alpina*. Mt. Marcy. June.

Distinct from other species inhabiting solidago, by its very short spores, which resemble somewhat the allantoid spores of species of *Valsa*.

SEPTORIA POPULICOLA, N. sp.

Spots suborbicular, reddish or brownish red with a narrow blackish border on the upper surface, grayish on the lower; perithecia hypophyllous, few, pale, opening widely; spores filiform, curved, two to four-septate, .0025 to .003 inch long .00012 to .00016 broad.

Living leaves of balm of Gilead, *Populus balsamiferu*. Keene. June.

Distinguished from other species found on poplar by its long pluriseptate spores. The perithecia are but slightly developed.

SEPTORIA SMILACINÆ, E. & M.

Languishing leaves of *Smilacina racemosu*. Sandlake. September.

PILIDIUM GRAMINICOLA, N. sp.

Perithecia minute, .008 to .014 inch broad, depressed, erumpent, orbicular or hysteriform, membranous, opening widely, black, the disk whitish, the mouth laciniate-dentate; spores oblong or subfusiform, colorless, triseptate, .0012 to .0016 inch long, .0004 to .00045 broad; sporophores short, colorless.

Dead leaves of blue joint, *Calamagrostis Canadensis*. Mount Marcy. June.

GLÆOSPORIUM LINDEMUTHIANUM, Sacc.

Living bean pods, especially of the butter or wax bean. Menands. August.

An injurious fungus that produces brown spots on the pods, thus spoiling their appearance and diminishing their value.

GLÆOSPORIUM SEPTORIOIDES, Sacc.

Living leaves of white oak. *Quercus alba*. Gansevoort. September.

GLÆOSPORIUM ROBERGEI, Desm.

Living leaves of water beech, *Carpinus Americana*. Gansevoort. September.

MELANCONIUM BETULINUM, Schm.

Dead bark of white birch, *Betula populifolia*. Menands. September.

Distinguished from *M. bicolor* by its longer spores.

MELANCONIUM DIMORPHUM, N. sp.

Pustules small, subcutaneous, slightly prominent, subconical, black, containing a small white stroma; spores of two forms, one narrow, cylindrical, straight or curved, .0003 to .0004 inch long, .00008 broad, the other oblong, elliptical or subfusiform, colored, .0004 to .0005 inch long, .0002 to .00025 broad, oozing out in a black mass or in tendrils.

Dead branches of alder, *Alnus viridis*. Adirondack mountains. June.

Remarkable for the two kinds of spores. In some pustules the broader spores are more numerous, in others the narrower ones, but both kinds were found in all the pustules examined. Can the narrow ones be broken or effete sporophores?

MARSONIA POPULI, Sacc.

Living leaves of *Populus monilifera*. Menands. July.

CORYNEUM TUMORICOLA, N. sp.

Spots scattered, suborbicular, pallid with a reddish-brown border, apparently produced by insects; heaps epiphyllous, minute, dot-like, unequal, black; spores oblong, triseptate, colored, .0004 to .0005 inch long, .00016 broad, at length breaking from the sporophores.

Living leaves of elm, *Ulmus Americana*. Adirondack mountains. July. The spots in this instance, as in that of *Phyllosticta tumoricola*, appear to be due to the stings of insects. A central aperture or puncture is visible in the spots and the fungus occurs on only a part of them.

SCOLECOSPORIUM FAGI, Lib.

Dead branches of alder, *Alnus incana*. Elizabethtown. September.

The typical form occurs on beech, but I find no essential differences in the form on alder. *Massaria macrosperma*, the ascigerous form has not yet been observed with us.

PESTALOZZIA JEFFERISII, Ellis.

Leaves of wild grape, *Vitis riparia*. Gansevoort. September.

The fungus occurs on spots which are apparently produced by a sterile *Rhytisma*.

MONILIA MARTINI, E. & S.

Old corn cobs. Menands. September.

MONILIA CINEREA, Bon.

On plums. Sandlake. Closely related to *Monilia fructigena*, with which the species has been united by some authors.

RAMULARIA BARBAREÆ, N. sp.

Spots suborbicular, arid, white, generally bordered by a slightly thickened brown line; floeci amphigenous, either short and branched or longer and simple; spores oblong or cylindrical, often catenulate, rarely uniseptate, .0004 to .0009 inch long, .00012 to .00016 broad.

Living leaves of winter cress, *Barbarea vulgaris*. Highland Mills and Port Henry. June.

This species is closely related to *R. Armoracia*, from which it may be distinguished by the whiter mostly margined spots, the shorter hyphæ and the catenulate spores.

CONIOSPORIUM PUNCTOIDEUM, Karst.

Decorticated wood of arbor vitæ, *Thuja occidentalis*. Adirondack mountains. June.

CLADOSPORIUM APHIDES, Thum.

Dead aphides of *Phragmites communis*. Bergen Swamp. June.

CLADOSPORIUM ASPARAGI, Fr.

Dead stems of asparagus. Menands. October.

CLADOSPORIUM BREVIPES, N. sp.

Spots suborbicular, cinereous; flocci densely cæspitose, short, .001 to .0015 inch long, dark olivaceous, almost black in the mass, amphigenous, septate; spores terminal, elliptical, .0005 to .0006 inch long, .0003 to .0004 broad.

Living leaves of white oak, *Quercus alba*. Menands. July. This species forms minute compact tufts, so distinct and well defined that they might easily be mistaken for perithecia.

CLADOSPORIUM LETIFERUM, N. sp.

Spots dark brown, irregular, large, often involving the whole leaf; tufts epiphyllous, subeffused, olive green, the hyphæ very short, almost obsolete; spores oblong-pyriform, uniseptate or biseptate, slightly constricted at the septa, .0008 to .0012 inch long, .0003 broad.

Living leaves of poplar, *Populus tremuloides*. Keene. June.

This fungus often kills the leaves it attacks. When the spores have a single septum the two cells are unequal; when they have two septa the middle cell is generally larger than the terminal ones. The species differs from *C. Asteroma* in the shape and character of the spores and in its more effused habit.

CERCOSPORA ACETOSSELLÆ, Ellis.

Living leaves of yellow dock, *Rumex crispus*. Elizabethtown. September.

Our specimens differ slightly from the type and may be designated variety *maculosa*. Spots numerous, small, suborbicular, grayish,

surrounded by an elevated margin and a brownish-red border ; spores at length with one or two septa.

MACROSPORIUM TOMATO, Cke.

Decaying fruit of tomato. Menands. October.

PILACRE ORIENTALIS, B. & Br.

Dead bark of alders, *Alnus incana*. Elizabethtown. September.

In our specimens the sporiferous branches are sometimes elongated and flexuous and the young plant wholly white, in which respects they differ from the typical form of the species. But the stem soon becomes cinereous and finally the whole plant is umber-brown. Young plants sometimes grow from the base of old ones, sometimes from the head.

GRAPHIUM SORBI, N. sp.

Spots generally small, one to two lines broad, orbicular, definite, reddish-brown ; stems hypophyllous, rather stont, equal or slightly tapering upward, the component flocci diverging and colorless at the apex ; spores oblong, hyaline, .0008 to .001 inch long, .00025 to .0008 broad, sometimes with two to four minute nuclei.

Living leaves of mountain ash, *Pyrus Americana*. Adirondack mountains. July.

ISARIOPSIS ALBOROSELLA, Sacc.

Living or languishing leaves of chickweed, *Cerastium vulgatum*. Keene. July.

I find only uniseptate spores in our specimens.

FUSARIUM LYCOPERSICI, Sacc.

Fruit of the tomato. Menands. August.

A malady affects the fruit of the tomato. In the vicinity of Albany, the past season, the first ripening tomatoes were found almost invariably to be soft and decaying. A brown or discolored spot, usually located at the flowering end of the fruit, appears to be the origin and center of the disease. This spot often makes its appearance while the fruit is yet green. This *Fusarium* soon develops on this spot, appearing in the form of minute pallid dots, or in more effused patches which are of a pinkish or an orange hue. With advancing age it assumes a more or less brownish hue. If the affected tomato be cut open its inner flesh often exhibits a

peculiar purplish tint. In a short time the white flocculent threads of the fungus appear on the cut surface, soon to be followed by the more waxy and colored patches of spores, thus showing that the mycelium has permeated the diseased flesh of the tomato. The affected tomatoes become very watery and any surface on which a diseased tomato lies, soon becomes wet from the exuding juices. From the constancy with which this fungus appears in connection with the disease, it would appear that it might be regarded as the cause of the decay, but there are circumstances that point to some more subtle agent of the mischief. Further investigation is necessary to determine satisfactorily the source of the disease.

PEZIZA TRUNCICOMES, Ger.

Decaying prostrate trunks of deciduous trees. Knowersville, Albany county. May.

PEZIZA ALBOVIOLASCENS, A. & S.

Old chestnut rails. Conklingville. September.

HELOTIUM EPISPHERICUM, N. sp.

Receptacle minute, .012 to .02 inch broad, gregarious, sessile, at first subhyaline, then reddish-yellow, the disk nearly plane, asci subcylindrical; spores oblong or lanceolate, .0002 to .00025 inch long, .0001 to .00012 broad.

On old *Hypoxyylon Morsei*. Elizabethtown. September.

It resembles *H. citrinum* in habit, but is very much smaller.

ASCOMYCES LETIFER, N. sp.

Indefinite, hypophyllous, often occupying the whole lower surface of the leaf and suffusing it with a glaucous bloom; asci cylindrical, obtuse or subtruncate, .0016 to .002 inch long, .0006 to .0008 broad; spores minute, varying from narrowly elliptical to subglobose, .00016 to .0002 inch long, .00008 to .00012 broad.

Living leaves of mountain maple bush, *Acer spicatum*. Elizabethtown. June.

The species is very distinct from *A. polysporus*, which forms definite spots. The attacked leaves soon turn black, wither and die. Sometimes all the leaves on a branch are affected and the fungus then causes a veritable blight.

ASCOMYCES RUBROBRUNNEUS, N. sp.

Spots definite, variable, small and suborbicular or large and irregular, sometimes confluent, usually concave above, convex below, dull reddish-brown above, paler below; asci oblong, truncate at the apex, .002 to .003 inch long, .0006 to .0009 broad; spores minute, subelliptical, .00012 to .00016 inch long, .0006 to .0008 broad.

Living leaves of red oak, *Quercus rubra*. Sandlake. September.

In some respects this approaches *A. alutarius*, from which the color of the spots, larger asci and different shape of the spores will distinguish it.

ERYSIPHE HORRIDULA, Lev.

Abundant on corn gromwell, *Lithospermum arvense*. Port Henry. June.

Our specimens were too young when collected to show the spore characters, and are to this extent doubtful.

CALOSPHERIA CILIATULA, Karst.

Dead trunks and branches of white birch, *Betula populifolia*. Menands. September.

VALSA THUJÆ, N. sp.

Pustules scattered, slightly prominent, closely covered by the epidermis; perithecia nestling in the inner bark, subcircinate, five to ten in a pustule; asci oblong-clavate, .0014 to .0016 inch long; spores allantoid, .0004 to .0005 inch long, .00008 to .0001 broad.

Dead branches of arbor vitæ, *Thuja occidentalis*. Elizabethtown. September.

VALSA EXUDANS, N. sp.

Perithecia collected in a cortical stroma, thin, crowded, angular, closely covered by the pustulately elevated, irregularly ruptured epidermis, ostiola obscure or concealed beneath the defiled epidermis; asci very slender, cylindrical, .0016 inch long, .00016 broad; spores minute, oblong, straight, colored, .0002 inch long, oozing out and staining the surface of the matrix.

Dead bark of alders, *Alnus incana*. Elizabethtown. September.

This is an anomalous species and does not agree well with the generic characters. The straight, colored and oozing spores are unusual and peculiar features.

VALSELLA ADHERENS, Fckl.

Corticated trunk and branches of white birch, *Betula populifolia*. Sandlake. September.

In our plant the disk is often whitish or grayish from the adhering remains of the epidermis; the perithecia are five to twelve in a pustule and the spores are colored in the mass. It is apparently a variety of the species and may be called var. *Americana*.

VALSELLA LASCHII, Sacc.

Dead whitened twigs of *Acer spicatum*. Port Henry. June.

In our specimens the black stroma is apparent through the translucent epidermis, and the white disk, though small, is plainly seen by contrast. The asci are very broad, .0016 to .002 inch long, .0005 to .0006 broad. This form may be designated var. *acerina*.

DIATRYPELLA QUERCINA, Nits.

Dead branches of thorn, *Crataegus tomentosa*. Elizabethtown. September.

Although occurring on thorn branches, there does not appear to be any good characters for separating this fungus from the species to which I have referred it.

SPHÆRELLA MINUTISSIMA, N. sp.

Perithecia very numerous, occupying the whole lower surface of the leaf, very minute, .002 to .0025 inch broad, veiled by the epidermis, black; asci oblong or slightly narrowed toward the apex, .0016 to .002 inch long, .0003 to .0004 broad; spores crowded, oblong, straight, obscurely septate in the middle, .0006 to .0007 inch long, .00016 broad.

Dead leaves of alder, *Alnus incana*. Adirondack mountains. June.

The perithecia are scarcely visible to the naked eye. The affected leaves remain on the branches through the winter. They had not yet fallen in June.

SPHÆRELLA ANLICOLA, N. sp.

Perithecia small, .0035 to .0045 inch broad, hypophyllous, clustered or scattered, naked, black; asci oblong or subclavate, .002 to .0025 inch long, .0005 to .0006 broad; spores crowded, lanceolate,

uniseptate, often slightly curved, .0009 to .0011 inch long, .00016 broad.

Dead leaves of alder, *Alnus viridis*. Mt. Marcy. June. The spores are narrowed toward one end and septate in the middle. The species is evidently distinct from *S. Alni viridis* in its larger exposed perithecia, in the shape of its spores and in wanting a dematiaceous stroma. Apparently the same species was found near Elizabethtown, but without fruit.

SPHÆRELLA PONTEDERLÆ, N. sp.

Spots rather large, six to ten lines long, oblong or elliptical, sometimes confluent, brown above, blackish brown or grayish brown below; perithecia minute, .003 inch broad, hypophyllous, black; asci oblong or subfusiform, .002 to .0025 inch long, .0005 broad; spores crowded or biseriate, oblong-clavate, uniseptate, sometimes quadrinucleate, .0006 to .0008 inch long, .0002 to .00025 broad.

Languishing leaves of pickerel weed, *Pontederia cordata*. Whitehall, Washington county. September.

Apparently related to *S. Caladii*, but with longer spores and different spots.

SPHÆRELLA PINSAPO, Thum.

Fallen leaves of arbor-vitæ. Port Henry. June.

DIAPORTHE SULPHUREA, Fckl.

Dead stems and branches of hazelnut, *Corylus rostrata*. Gansevoort. September.

This species is easily recognized by the beautiful yellow spurious stroma that extends everywhere under the epidermis of the affected branches.

DIAPORTHE (CHOROSTATE) FARINOSA, N. sp.

Stroma somewhat pulverulent or mealy, dull buff color, formed of the slightly changed inner bark, erumpent in a minute slightly exserted disk; perithecia valsoid, irregularly circinating, generally four to ten in a circle, the clusters subconfluent, ostiola black, dotting the prominent pulverulent buff colored or at length brownish disk; asci subcylindrical, .0024 to .003 inch long, .00035 to .0004 broad; spores crowded or biseriate, oblong or subfusiform, uniseptate, generally quadrinucleate, .0006 to .0008 inch long, .00016 to .0002 broad.

Dead branches of basswood, *Tilia Americana*. Argusville. July.

This species approaches *D. furfuracea* in its pulverulent stroma, but it differs in its prominent disk, which renders the affected branches rough to the touch, and in its smaller quadri-nucleate crowded or biseriate spores. From *D. velata* it is easily separated by the entire absence of any black circumscribing line or blackened surface. It evidently belongs to the subgenus *Chorostate*, but the clusters of perithecia are so numerous and so closely and almost confluent placed that they form an almost continuous stratum which surrounds the branch and extends long distances under the epidermis.

MELANCONIELLA DECORAHENSIS, Ellis.

Dead bark of white birch, *Betula populifolia*. Gansevoort. September.

In the typical form the disk is described as "sordid gray." In our specimens, both it and the stroma are yellowish green and pulverulent. On the smaller branches the disk is smaller and the ostiola are less prominent than on the larger ones. When the epidermis is torn away the perithecia adhere to it. The young spores are colorless and subacute at each end. The mature ones are colored; obtuse and constricted at the septum.

The conidia ooze out and form orbicular black patches one to two lines broad. These are very conspicuous by reason of the contrast between their color and the white color of the matrix.

VALSARIA NIESSLII, Sacc.

Dead bark of white birch, *Betula populifolia*. Menands. September.

LEPTOSPHERIA ASPARAGI, N. sp.

Perithecia broadly conical, .01 to .014 inch broad, at first covered by the pierced epidermis, then naked, black; asci clavate or cylindrical, short pedicellate, .003 to .004 inch long, .00045 to .0006 broad; spores oblong or subfusiform, crowded, .0008 to .0012 inch long, .0003 broad, at first colorless and triseptate, then slightly colored and five-septate, constricted at the septa.

Dead stems of asparagus. Menands. October.

MASSARIA PYRI, Otth.

Bark of pear and apple trees. Albany. May.

PLEOSPORA SHEPHERDIÆ, N. sp.

Perithecia scattered, small, .014 to .018 inch broad, covered by the epidermis, erumpent, black; asci cylindrical, .006 to .008 inch long, .0006 broad; spores uniseriate, oblong, generally triseptate, rarely five-septate, with one or two longitudinal septa, constricted in the middle, colored, .0008 to .001 inch long, .0003 to .0004 broad.

Dead branches of *Shepherdia Canadensis*. Port Henry. June.

DOTHIDELLA ALNI, N. sp.

Stroma orbicular, one to three lines broad, thin, convex and black above, concave, brown or grayish-black and papillosely rugulose below; asci cylindrical; spores ovate-elliptical, obscurely uniseptate near one end, colorless, .0006 to .0008 inch long, .0003 to .00035 broad.

Dead leaves of *Alnus viridis*. Mt Marcy. June.

The spores are very unequally divided, the smaller cell appearing like an umbo.

LOPHIOTREMA VESTITA, N. sp.

Perithecia closely gregarious, small, .014 to .02 inch broad, sunk in the wood, erumpent, conical, clothed with a slight tawny-terruginous pulverulent tomentum, ostiola naked, black, subterete or compressed; asci clavate, .006 to .007 inch long, .0006 to .0007 broad; spores crowded, subfusiform, at first biconic and uniseptate, then triseptate or quadrinucleate, constricted in the middle, colorless, .0012 to .0016 inch long, .0003 to .0004 broad.

Decorticated wood of poplar, *Populus tremuloides*. Gansevoort. September.

Readily distinguished by the tawny, pulverulent tomentum of the perithecia.

LOPHIOTREMA PARASITICA, N. sp.

Perithecia crowded, subsuperficial, .014 to .02 inch broad, clothed with a minute subcervine pulverulent tomentum, becoming blackish-brown with age, the ostiola prominent, subterete or compressed, clothed like the perithecia; asci subclavate, .005 to .006 inch long, .0006 to .0007 broad; spores crowded, at first biconic, then triseptate, constricted in the middle, colorless, .0012 to .0016 inch long, .0003 broad.

On old *Hypoxylon Morsei*. Elizabethtown. September.

This and the preceding species appear to be peculiar by reason of the pulverulent tomentum of the perithecia. They would seem to constitute a distinct section of the genus.

(D.)

NOTES AND OBSERVATIONS.

THALICTRUM PURPURASCENS, L.

A singular *Thalictrum* was found on the shore of Lake Champlain, near Port Henry. Its leaves were thin and delicate, quite small, and five to seven-lobed, resembling those of *Thalictrum dioicum*. Some had a general petiole, others had none. The flowers were almost diœcious, the anthers resembling those of *Thalictrum purpurascens*, though perhaps they were a little more slender and more strongly mucronate. The plants had the general aspect of *T. purpurascens*, except the leaves, which resembled more those of *T. dioicum*. *T. dioicum* in the same locality was past flowering, it being now the middle of June, and had developed its fruit to full size. Whether this plant is a hybrid between *T. dioicum* and *T. purpurascens*, or a variety of the latter, or a distinct species, is the question to be solved. Similar forms have been regarded by Prof. Trelease as hybrids.

NASTURTIUM LACUSTRE, Gr.

Black creek, near Bergen.

ARABIS DRUMMONDII, Gr.

Port Henry. A form with spreading pods.

GEUM RIVALE, L.

A form with pale yellow or cream-colored flowers was collected in the Adirondack mountains. It is not rare in that locality.

RIBES CYNOSBATI, L.

A very lax form of this plant occurs at Cascadeville, in the Adirondack mountains. The branches are long and slender, and the flowers are much scattered and very long pedicelled. It is associated in this locality with *Ribes rotundifolium*, *R. lacustre* and *R. prostratum*. All were in flower at the same time. The last species occurs abundantly at Lower Ausable pond, where

nearly all the young fruit of a large patch was found infested by *Sphærotheca Mors-uvæ* Schw., which fungus is probably a mere variety of *Sphærotheca pannosa* Lev.

ASTER SAGITTIFOLIUS, Willd.

This fine aster has not hitherto been represented in the herbarium. It is recorded in the New York State Flora as a rare plant in New York. Fine specimens were found near Piffard, Livingston county, and it occurs in great abundance along the railroad between that place and Rochester.

ASTER ACUMINATUS, Mx.

Glen Cove, Long Island. *J. A. Bisky*. A very noticeable station for this mountain-loving plant.

SOLIDAGO ULIGINOSA, Nutt.

Bergen swamp. A very slender form, with unusually narrow and entire leaves, and a rather short panicle, sometimes slightly recurved.

SYMPHORICARPUS RACEMOSUS, Mx.

Near Canajoharie. The variety *pauciflorus* in rocky places, near Port Henry.

POLYGONUM TENUE, Mx.

Summit of Cobble hill, near Elizabethtown.

SALIX CANDIDA, Willd.

Occurs sparingly near Guilderland Station. *H. C. Gordinier*.

ABIES ALBA, Mx.

Newcomb, Essex county. It also occurs in North Elba, but in all the localities observed by me the trees were growing in cleared land, and had evidently sprung up since the forests were cut.

ORCHIS SPECTABILIS, L.

A form with white flowers. Schaghticoke. *H. C. Gordinier*. Mr. H. L. Griffis also sends a white-flowered form of the flowering wintergreen, *Polygala paucifolia*, from Binghamton.

CLINTONIA BOREALIS, Raf.

This plant grows almost everywhere in the Adirondack mountains, and in some places it is exceedingly thrifty and vigorous.

It is not uncommon to find plants with one or even two lateral umbels in addition to the terminal one. The number of flowers in the lateral umbels is generally less than the number in the terminal umbel of the same plant, and when there are three umbels the lowest one has the smallest number of flowers. They vary usually from three to six in the lateral umbels. In one specimen there were six flowers in the lateral and twelve in the terminal umbel. One plant had five large leaves.

SCLERIA VERTICILLATA, Muhl.

A small form with but three clusters of flowers is common in Bergen swamp.

CAREX ALOPECOIDEA, Tuckerm.

This species is rare in the eastern part of the State. It occurs near Lansingburgh. *E. C. Howe* and *H. C. Gordinier*.

CAREX FLAVA, L.

An extremely variable species, even in the same locality and apparently surrounded by the same circumstances and influences. At Hewitt's pond in the Adirondack mountains, specimens were collected which were but four or five inches high and which bore but a single small fertile spike each. Near these, others were found which were fifteen or sixteen inches high and bore five fertile spikes each. Another form, intermediate in size, had three fertile spikes, two approximate and a lower distinct one.

CAREX LONGIROSTRIS, Torr.

Rocky places. Keene. A rare species with us.

ALOPECURUS GENICULATUS, L.

Green Island. *H. C. Gordinier*. Lansingburgh. *E. C. Howe*.

These specimens are nearly erect, not geniculate at the base. On the other hand specimens of *Alopecurus pratensis*, a species described as erect, were collected by myself near Albany, in which the stems were decidedly geniculate at the base, thus exactly reversing this character as given in the descriptions.

AGROSTIS VULGARIS, With.

A form with very many of the flowers developed into leafy buds. Hewitts pond.

PANICUM CRUS-GALLI, L.

The form with dense panicles of awnless flowers is common in wet places about Warsaw, Wyoming county.

BOTRYCHIUM LANCEOLATUM, Angst.

Cascadeville, Adirondack mountains. June.

OMPHALIA UMBELLIFERA, L.

Not rare in the Adirondack mountains. Variety *abiegnus* grows on soft decayed wood of coniferous trees, and has a pale yellow pileus. Variety *alpinus* grows among mosses and on muck soil composed of decomposed vegetable matter. It usually occurs at high altitudes. It was plentiful in June on the summit of Mt. Marcy. In it the pileus and lamellæ are bright yellow.

PHOLIOTA MYCENOIDES, Fr.

In thin woods at Conklingville a form was found having the pileus rugose.

LENZITES SEPIARIA, Fr.

A resupinate form, var. *dentifera*, occurs on spruce in the Adirondack mountains, in which form the lamellæ anastomose, and are more or less toothed or lacerated, resembling an *Irpex* more than a *Lenzites*.

POLYPORUS VOLVATUS, Pk.

This singular species develops in May and June in the Adirondack mountains. When young it is slightly viscid. It is especially subject to the attacks of insects. In July most of the specimens will be found to be infested by them.

CREPIDOTUS HÆRENS, Pk.

Fine specimens of this rare species were found on ash and butternut near Sprakers. The pileus is sometimes slightly floccose-squamulose. The tough viscid pellicle is separable, and in drying the moisture disappears from the disk first, from the thin margin last.

HYDNUM GRAVEOLENS, Delast.

A singular *Hydnum* was found at Elizabethtown, in which the pileus was very uneven and everywhere coated with a whitish villosity or tomentum. It has the peculiar odor of *H. graveolens*, to which species we have referred it as variety *inequale*.

PHLEBIA RADIATA, Fr.

Dead bark of wild bird cherry, *Prunus Pennsylvanica*. Conklingville. September. A thin cream-colored form corresponding nearly to variety *pallida* Fr. It sometimes forms extensive patches by the confluence of many individuals.

ODONTIA FIMBRIATA, Pers.

Decaying wood of poplar. Conklingville. September. A form with the subiculum thicker than usual and finely rimose. Variety *rimosa*.

PENIOPHORA NEGLECTA, Pk.

A wholly resupinate form occurs on red maple, *Acer rubrum*. Bergen.

CORTICIUM MARTIANUM, B. & C.

When well developed this is a highly colored and very showy species. At first a small orbicular tuft of strigose radiating hairs appears. The center of the tuft soon assume a reddish tint, which again changes to bright-red or scarlet and becomes waxy. The hymenium is now covered with irregular rugæ or folds giving the plant the appearance of some species of *Phlebia*. With advancing age the hymenium loses its brilliancy and becomes tinged with brownish, grayish or olivaceous tints, but the margin retains for a longer time its bright-red color, which fades to gray on the extreme fimbriate edge. The mycelium is yellowish. Metuloids have been seen in some specimens, but they are rare.

SPHÆROPSIS MALORUM, Pk.

This has occurred on leaves of apple trees, but in this case with perithecia rather smaller than in the type.

MARSONIA JUGLANDIS, Sacc.

The species is quite variable, being both hypophyllous and epiphyllous, and occurring on small or large spots and with few or many nuclei.

SEPTOCYLINDRIUM RANUNCULI, Pk.

This has occurred on radical leaves of *Ranunculus abortivus*. Helderberg mountains. May.

RAMULARIA PLANTAGINIS, E. & M.

Variety *nigromaculans* Pk. Spots with a small grayish center and a broad blackish or blackish-brown margin. The fungus occurs on this blackish margin. Menands. October.

PERONOSPORA GANGLIFORMIS, De By.

Living leaves of *Souchus asper*. Warsaw.

PEZICULA ACERICOLA, Pk.

Variety *gregaria* Pk. Receptacles small, gregarious. Bark of red maple, *Acer rubrum*. Karner. September.

RHYTISMA SALICINUM, Fr.

Fallen leaves of *Salix Cutleri*. Mt. Marcy. June. Fertile specimens.