LETTER No. 49.

Report of specimens received since last report. My best thanks are extended to those who have favored me with specimens.

In my printed letter I do not give authorities for names, believing that the binomial should represent a plant name, but in acknowledging the specimens to my correspondents, I give the "authority" in event they desire to use the same. All specimens are acknowledged by personal letter as soon as they come into my hands. Foreign correspondents may send specimens to my English address, and they will reach me promptly, although in countries which have direct parcel post arrangements with the United States it is best to send them by parcel post direct to me. Specimens may be sent to either of the following addresses:

C. G. LLOYD,
224 West Court Street,
Cincinnati, Ohio.

C. G. LLOYD,
95 Cole Park Road,
Twickenham, England.

Cincinnati, Ohio, January, 1914.

AIKEN, W. H., Ohio:

Fomes pomaceus. *Growing on maple.*

ALLEN, MISS LIZZIE C., Massachusetts:

Poria Vaillantii. Characteristic with its cord-like mycelium strands and the thick subiculum, loosely adhering like a white membrane.

Geoglossum irregulare.—Polystictus circinatus.—Polyporus adustus.—Lenzites betulinus.—Stereum hirsutum.—Polyporus griseus.—Daedalea confragosa.—Lycogala Epidendrum.—Enteridium Roseanum.—Polystictus Montagnei. A *rare* plant.—Polyporus albellus.—Fomes connatus.—Trametes suaveolens.

AMES, FRANK H., New York:

Phlebia radiata.—Phlebia radiata. This form is called Phlebia merismoides Fr., but there is but *one species of Phlebia* of this color.—Polyporus adustus.—Stereum spadiceum.—Polyporus brumalis.—Merulius tremellosus.—Irpex cinnamomeus.—Stereum complicatum.—Polyporus caesius. Smooth specimens.—Phallus duplicatus.—Bulgaria inquinans.—Hydnum ochraceum.—Tremellodendron pallida.—Xylaria corniformis.—Stereum complicatum.—Polyporus lacteus.—Thelephora albido-brunnea.—Polyporus caesius. Pubescent specimen.—Stereum ochraceo-flavum.—Lenzites betulina (abnormal).—Daedalea ochracea.—Polyporus frondosus.—Irpex lacteus.—Polyporus (Ganodermus) sessile (or Oerstedii Fr. as I call it).—Polyporus albellus.—Irpex lacteus.—Polyporus tephroleucus.—Trametes malicola.—

Stereum hirsutum. This is as near the European plant as we seem to have in America. It is a rare species with us.—Stereum complicatum (?, too large).—Polyporus radiatus.—Stereum (Hym.) tabacinum.—Crucibulum vulgare.—Porothelium fimbriatum.—Lenzites trabea.—Hydnum pulcherrimum. —Stereum purpureum.—Stereum Micheneri??—Polystictus variiformis (as Trametes). (See Note 117).—Polyporus Spraguei.

BALLOU, W. H., New York:

Polystictus hirsutus.—Polyporus, small pored form of Polyporus rufescens (See Note 118).—Polyporus alutaceus (See Note 119).—Polyporus cuticularis.—Polystictus biformis.—Irpex pachydon.—Fomes connatus.—Hydnum ochraceum.

BARTHOLOMEW, PROF. E., Kansas:

From Washington.—Polyporus rufescens.—Polyporus aurantiacus.

From Montana.—Lenzites confragosa.—Stereum purpureum.—Polyporus igniarius.—Fomes Ellisianus (See Note 120).

From Kansas.—Polyporus squamosus.—Lenzites trabea.

From New York.—Fomes conchatus.

From Louisiana.—Hydnum laeticolor.—Polystictus focicola.—Stereum versiforme.—Merulius Corium.—Irpex (Sp. ?).—Trametes sepium.—Peniophora gigantea.

From Louisiana.—Hydnum ochraceum.—Polyporus palustris.—Polyporus Oerstedii.—Polyporus sessile.—Irpex (Sp.?).

From Texas.—Polyporus cuticularis.—Polystictus biformis.—Stereum complicatum.—Stereum spadiceum.—Polystictus Friesii.—Lenzites zonata. —Irpex pachydon.

From Oklahoma.—Polystictus pinsitus.—Merulius tremellosus.—Merulius incarnatus.—Polyporus obtusus.—Polystictus biformis.—Tremella mesenterica.—Hydnum pulcherrimum.—Lenzites trabea.

BEARDSLEE, H. C., North Carolina:

A fine lot of specimens, which are quite an acquisition to my collection. I am particularly glad to get the fine set of Hydnums, as I shall try to get a clear knowledge of the Hydnum species in the next year or so.

Dacryomyces aurantia.—Tremella clavarioides. A fine specimen.—Tremella vesicaria.—Tremella foliacea.—Xylaria persicaria (See Note 121). —Polyporus arculariformis. For me, a depauperate form of Polyporus arcularius.—Polystictus dependens. A rare species.—Thelephora cuticularis (See Note 122).—Favolus europaeus.—Thelephora albido brunnea.—Thelephora multipartita.—Naematelia nucleata.—Polyporus albellus.

Prof. Beardslee sends some interesting Hydnums as follows.—Hydnum amicum.—Hydnum zonatum.—Hydnum laevigatus??—Hydnum subsquamosum.—Hydnum fuligineo-violaceum (Note 123).—Hydnum suaveolens.—Hydnum caeruleum.—Hydnum putidum (See Note 124).

BLACKFORD, MRS. E. B., Massachusetts:

Fomes fomentarius.—Hydnum velutinum (=H. spongiosipes).—Polyporus dichrous.

Cordyceps capitata.

BONANSEA, DR. S. J., Mexico:

Trametes hydnoides.—Schizophyllum commune.—Calvatia lilacina.—Lenzites repanda.—Lentinus lepideus.—Lenzites saepiaria.—Favolus flaccidus. Doubtful, if distinct, from Favolus brasiliensis.

Polystictus villosus. Cfr. Myc. Notes, Pol. Series, p. 47. This plant has *very dark* pores, and it is doubtful if it is the same as Polystictus pinsitus described with white pores. — Hirneola polytricha (with purplish hymenium = purpurascens Jungh. as Exidia).—Trametes hydnoides.—Lenzites repanda, with a reddish stain.—Polyporus arcularius.—Polystictus sulcifer. I judge from my photograph of the type (from Brazil), but it should be compared.

BROWN, CHAS. N., Wisconsin:

Polyporus fumosus.

Irpex lacteus.—Polystictus hirsutus.—Stereum fasciatum.—Stereum spadiceum.—Polystictus versicolor.—Polyporus adustus.—Polystictus pergamenus.—Fomes fraxinophilus.

Daedalea unicolor.—Fomes applanatus.—Merulius tremellosus.—Polyporus resinosus.

Polyporus albellus? ? This is the white form which has been called Polyporus lacteus.

BURNHAM, STEWART H., New York:

Fomes igniarius.—Stereum bicolor.—Stereum complicatum.—Aleurodiscus Oakesii.

BUTIGNOT, DR., Switzerland:

Hydnum aurantiacum.

Thelephora palmata, form with slender branches.

CARL, EMMA J., Ohio:

Polystictus conchifer.

CARTER, L. W., South Dakota:

Bovista plumbea. Young specimens with the exoperidium still adhering, but so large that I was at first dubious about them.

CAVE, G. H., India:

A liberal sending. The species are many of them of the African type.

Daldinia concentrica.—Lenzites ochroleuca. Two collections showing every possible diversity as to the hymenium (cfr. Hexagona pamphlet, page 31).—Lentinus subnudus.—Polyporus scruposus.

Fomes fomentarius. From the specimen alone one could not say that these were not collected on the Beech trees around Paris. Exactly the same.

Polystictus xanthopus. Mr. Cave sends four abundant collections of this plant, varying from the light (typical) color to the dark color called Polystictus florideus by Berkeley. It is quite a common species in Africa. —Stereum lobatum. Two collections.—Trametes obstinatus.—Polystictus

Gaudichaudii (Cfr. Stipitate Polyporoids, fig. 435), Polystictus elongatus (See Note 125).—Polystictus. I do not know whether this has a special name or not. It is only a form of Polystictus hirsutus, with softer, silky, hairs.—Polyporus secernibilis (Cfr. Letter 45, page 4).—Polyporus sulphureus?—Stereum princeps (See Note 126).

Polyporus montanus. This is the European analogue of Polyporus Berkeleyi, and a small edition of it. It has same habits and same peculiar spores (Cfr. Stipitate Polyporoids, page 148). Polyporus Berkeleyi is a large and frequent species in the United States. It grows usually at base of oak trees, and, I am told, is a root rot of the tree. What is practically the same plant occurs in Europe (rarely), and has been called Polyporus montanus. Mr. Cave's specimens have the general characters of the European form. It (or a near species) is known at Kew from a single specimen from New Zealand (called Polyporus Zelandicus), and from one from Japan (called Polyporus Dickinsii).—Polyporus varius.—Hexagona umbrinella.—Trametes Carteri (See Note 127).

DAVIS, SIMON, Massachusetts:

Polystictus conchifer.—Fomes pinicola.—Polystictus hirsutulus.—Bovista plumbea.

Polyporus Spraguei—Polyporus albellus.

DEARNESS, J., Ontario:

Seven specimens of Clavarias and resupinate Thelephoraceae, families which I do not know.

DUPAIN, VICTOR, France:

Stereum pallidum. Very glad to get the specimen, for while I have seen it in several museums of Europe, these are the first I have ever received.—Stereum (Aleurodiscus) disciforme.

DUTHIE, MISS A., South Africa:

Lenzites betulina.—Polystictus sanguineus.—Tylostoma poculatum.—"Isaria" flabelliformis.—Polyporus gilvus (scrupose).—Phellorina Delastrei.—Cyathus vernicosus.

FARIS, BEN H., Ohio:

Phallus imperialis. Of interest as the first collection of this species made around Cincinnati.

FRIES, THORE, C. E., from Swedish Lapland:

Bovista nigrescens. Bronzed variety.

Calvatia borealis, n. s., as named by Mr. Fries. It is a very distinct "new species" and well named. Very common in the mountains of Lapland, Mr. Fries states. I believe it only occurs in these extreme northern regions.—Calvatia saccata.—Lycoperdon umbrinum.

FROGGAT, WALTER W., Australia:

Polyporus abruptus (see Note 128).—Polystictus sanguineus.—Polyporus lignosus.—Daldinia concentrica.—Trametes obstinatus.—Polystictus

occidentalis.—Polystictus gallo-pavonius.—Trametes lactinea.—Daedalea repanda. This plant is normally pure white. Some of these specimens are stained brownish, but surely the same species.—Stereum involutum.

Polystictus pinsitus. This is a very common species in the American tropics, and I had an impression that there was some difference in the Eastern plant. But I can not note any difference between these specimens and collections from Brazil.—"Xylaria" cinnabarina (see Note 129).—Pleurotus sapidus.—Fomes (see Note 130).—Fomes applanatus.—Trametes strigata.—Polyporus mangiferae.

GRELET, REV. L. J., France:

Helvella monachella.—Acetabula Dupainii.—Pustularia ochracea.—Fomes pomaceus.—Lenzites tricolor.—Thelephora intybacea. I am not sure about this species.—Lycoperdon echinatum.

GUNDERSON, MRS. MINNIE, Massachusetts:

Fomes connatus.—Polystictus hirsutulus.—Irpex lacteus.—Irpex tulipifera.—Phlebia radiata.—Poria sinuosa.—Stereum (Hymenochaete) tabacinum.—Polystictus versicolor.—Stereum complicatum.—Stereum ochraceoflavum.—Polystictus hirsutus.—Hymenochaete corrugata.

HASSLER, DR. F. A., California:

Battarea phalloides. The robust form called Battarea Stevenii (cfr. Tylostomaea, p. 6). This is a rather unusual species, both in America and Europe, and with us is only known from the Pacific Coast.

HIBBARD, MISS A., Masachusetts:

Polystictus admirabilis.—Polystictus hirsutus. Slightly different from the usual form.—Daedalea unicolor.—Polystictus versicolor.—Hyndum adustum.—Dacrynomyces deliquescens.

Stereum fasciatum.—Stereum complicatum.—Exidia recisa.—Polyporus radiatus.—Polyporus amorphus.—Stereum spadiceum.—Tremella sarcoides.

Fistulina pallida. Very young specimen, the pores not developed. It is quite a *rare* species.—Guepinia spathulata.—Lenzites saepiaria.—Trametes sepium.—Irpex tulipifera.—Irpex lacteus.—Hydnum ochraceum.—Polyporus fumosus.—Merulius tremellosus.—Polyporus Spraguei.

HOLDEN, WM., North Carolina:

Polyporus adustus.—Polyporus gilvus.—Polyporus dichrous.—Polyporus reniformis.—Polystictus fociola.—Polystictus versicolor.—Hirneola auricula-Judae.—Hydnum imbricatum.—Hydnum adustum.—Polyporus cristatus, a regular mesopodial specimen.—Schizophyllum vulgare.—Isaria farinosa.—Stereum fasciatum.—Polystictus sanguinarius.—Polyporus Spraguei.—Fomes pomaceum.—Merulius tremellosus.—Lenzites trabea.—Thelephora cuticularis (see Note 131).—Thelephora albido-brunnea.

Daldinia concentrica.—Polyporus sulphureus.—Polyporus picipes.—Polystictus circinatus.—Stereum spadiceum.

HUMPHREY, C. J., Wisconsin:

Polyporus radiatus.—Daedalea unicolor.—Polystictus zonatus, as near as we have it in this country.—Polystictus Grayei.—Trametes serialis, resupinate. It is also Poria calosa, Fr.—Polyporus nodulosus.—Polyporus betulinus.

JANSE, A. J. T., Africa:

Lenzites repanda.—Daldinia concentrica.—Polystictus occidentalis. The tomentum is more brown than usual.—Stereum hirsutum.—Polystictus sanguineus.—Schizophyllum commune.—Polyporus sulphureus.—Polyporus reniformis. Seems same as our American plant, viz., the annual form of Fomes applanatus.—Fomes leucophaeus.—Fomes senex.

JONES, KATE A., New Hampshire:

Daedalea unicolor.—Polystictus pergamenus.—Lenzites saepiaria.—Favolus europaeus.—Daedalea confragosa.—Polystictus versicolor.—Polyporus albellus.—Fomes leucophaeus. Unusual form, with a distinct stipe.

LANGTON, THOS., Canada:

Favolus europaeus.—Polyporus albellus.—Polyporus mollis.

Polyporus spumeus (see Note 132).

LEEUWEN, DR. VAN, Java:

Polystictus sanguineus.—Polystictus Persoonii.—Polystictus caperatus.—Lenzites repanda.—Polystictus Persoonii, of an *unusual color*.—Polystictus xanthopus.—Polyporus (Ganodermus) mastoporus.—Hexagona tenuis form bivalvis.—Polyporus (Ganodermus) lucidus. Tropical form.—Fomes (Ganodermus) applanatus. Tropical form, with yellow pore mouths.—Polyporus rubidus.—Trametes cingulatum.—Trametes aspera.

LONG, W. H., Washington, D. C.:

Specimens all collected in the Southern States.

Fomes juniperinus. On Juniper Utahensis in Arizona. The first specimen of this rare species our museum has received (cfr. Myc. Notes, page 522). Mr. Long tells me he now concedes that Fomes juniperinus and "Fomes Earlei, n. s. Murrill" are one and the same thing.—Fomes robustus.—Polyporus croceus. On red oak in Arkansas.—Fomes geotropus (see Note 133).

From Southern and Southwest United States:

Polyporus fissilis (see Note 134).—Polyporus cuticularis.—Polyporus corruscans.—Polyporus hispidus?—Fomes Everhartii.—Fomes texanus (see Note 135).—Ganodermus sessile.—Ganodermus polychromum.—Ganodermus (cfr. reniformis).—Ganodermus Sequoiae.—Poria medulla-panis.—Daedalea juniperinus.

LORDLEY, E. D., Nova Scotia:

Hydnum Caput Ursi, reported as being fragrant.—Bovista pila.

LOWE, MRS. F. E., Massachusetts:

Lenzites betulina.—Polystictus hirsutus.—Merulius tremellosus.—Stereum hirsutum.—Stereum spadiceum.

Stereum complicatum.—Polystictus hirsutulus.—Stereum sericeum.—Daedalea confragosa.—Schizophyllum commune.—Daedalea quercina.

MACBRIDE, PROF. T. H., Iowa. (Collected in Northwest):

Geaster limbatus.—Geaster hygrometricus (var. giganteus, Geastrae, p. 10). — Polysaccum pisocarpium (form tending toward crassipes). — Lycoperdon gemmatum (form excipuliforme).—Lycoperdon gemmatum.—Lycoperdon pratense.—Lycoperdon umbrinum.—Lycoperdon piriforme.—Lycoperdon piriforme (dark form).—Bovista pila (young).—Lycoperdon elegans.—Lycoperdon atropurpureum.—Lycoperdon cupricum.—Rhizopogon rubescens.

MACOUN, PROF. J., British Columbia:

Polyporus caesius.—Trametes cervinus.—Hydnum coralloides.—Gyrocephalus rufus. Rarely received.—Fomes annosus.—Tremellodon gelatinosum. Stipitate species.—Trametes Pini.—Fomes (Ganodermus) applanatus.—Polystictus abietinus.—Thelephora radiata.—Xylaria hypoxylon.—Polyporus hirtus. Finest specimen I ever saw of this rare species.—Polyporus sulphureus.—Typhula filiformis.—Geaster saccatus.—Hymenochaete cinnamomea.—Trametes serialis??—Helvella infula.—Solenia anomala.—Morchella esculenta.—Morchella conica.—Stereum complicatum.—Dacryomyces aurantia.—Trametes abietinus.—Helvella sulcata.—Verpa bohemica.—Lycoperdon pratense.—Lycoperdon gemmatum, form.—Lycoperdon unnamed.—Lycoperdon cepaeforme.

MAIRE, R., France:

Stereum insignitum.—Polyporus cuticularis.—Polyporus croceus.—Hydnum ochraceum.—Polyporus Schweinitzii.—Corticium salicinum.—Polyporus albellus.—Several Porias unknown to me.

MORRIS, GEO. E., Massachusetts:

A nice collection of specimens, many of them from Maine.

Trametes suaveolens.—Tremella lutescens.—Polystictus perennis.—Polystictus conchifer.—Polyporus borealis, variety spathulatus.—Tremella foliacea.—Dacryomyces aurantia.—Hydnum caeruleum.—Hydnum mirabile? (see Note 136.).—Tremellodendron pallida.—Thelephora palmata.—Trametes abietinus.—Lenzites betulina.—Daldinia concentrica.—Polyporus adustus.—Daedalea ochraceus (see Note 137).—Hydnum suaveolens (see Note 138).—Hydnum velutinum.—Hydnum rufescens.—Hydnum cyathiforme.—Hydnum carnosum?—Hydnum nigrum.—Hydnum aurantiacum.—Fomes pinicola.

NAVAS, REV. LONGINOS, Spain:

Polyporus gilvus. This is the first specimen I have ever gotten, and the second specimen I have ever seen from Europe (cfr: Letter 38, Note 22).—Polyporus squamosus. Young, and with a most curious, bulbose stem.—Trametes hispida.

NEAD, J. H., New York:

Polystictus velutinus.—Polyporus lucidus.

NOBLE, MRS. M. A., Florida:

Lenzites saepiaria.—Polystictus sanguinarius.—Irpex lacticolor. A rare plant.—Daedalea (sp. ?).

OLESON, O. M., Iowa:

Stereum spadiceum.—Poria rhodella.—Lentodium squamulosum.—Stereum complicatum.—Pleurotus striatulus.—Polyporus fumosus.

Irpex (or Poria) Tulipifera.—Daedalea unicolor.—Stereum sericeum.—Stereum (Hymenochaete) tabacinum.—Hydnum pulcherrimum.—Merulius tremellosus.—Fomes Everhartii.—Irpex cinnamomeus.—Polyporus dichrous.—Stereum Leveilleanum, resupinate (cfr. Letter 46).—Polyporus elegans.—Fomes leucophaeus.—Favolus europaeus.—Exidiopsis alba (cfr. Note 48, Letter 44).—Polyporus Spraguei.—Daedalea confragosa.—Thelephora palmata?—Tylostoma rufum (cfr. Monograph, p. 18).—Xylaria polymorpha.—Poria ambigua.—Polystictus cinnabarinus.—Polyporus albellus.—Hypocrea sulphurea.

Polyporus resinosus.—Polyporus brumalis.—Polystictus pergamenus.—Poria Tulipifera.—Irpex pachydon.—Hydnum ochraceum.—Polystictus perennis.—Lycogala Epidendrum.—Stereum (Aleurodiscus) Oakesii.—Peniophora incarnata.—Stereum (Hymenochaete) rubiginosum.

Lenzites saepiaria.—Hirneola auricula-Judae.—Guepinia elegans.—Daldinia concentrica. Stipitate form tending toward Daldinia vernicosa (in shape).—Trametes malicola.—Tremella mesenterica.—Polystictus. Unknown to me and unnamed, I believe.

OVERHOLTS, L. O., Missouri:

Polyporus zonalis, form rugulosus (see Note 139).

Fomes fraxineus.—Fomes salicinus.—Fomes graveolens. Fine specimens (see Note 140).

PAMMEL, L. H., Iowa:

Stereum frustulosum.—Poria pulchella.—Lentinus sulcatus. A very rare species.—Schizophyllum commune.—Trametes sepium.

PARISH, S. B., California:

Polyporus corruscans. Young. A rare plant (cfr. Note 47, Letter 44).

RICK, REV. J. Brazil:

Ascopolyporus polychrous. This is the first specimen of this genus we have ever received. Moeller gives an extended account of the genus in Phycomyceten und Ascomyceten.—Lentinus ciliatus.—Phylacia turbinata (=Henningsinia durissima Moel).—Hydnum pulcherrimum. Thinner than the plant with us.—Polystictus pinsitus.—Polyporus. Belongs to section Lentus, close to arcularius. Probably Polyporus depressus.

Lentinus villosus.—Polyporus porphyritis (see Note 141).

Polyporus varius. Brazilian form. Much *thinner* than the type form in Europe. Much like our form in the United States which we call "picipes."

Polyporus depressus?—Polystictus lutescens?—Fomes marmoratus.—

Polyporus subolivaceus.—Fomes lignosus.—Fomes geotropus.—Polyporus subfulvus.—Daldinia clavata. A form of concentrica.

Mycobonia flava.—Fomes pectinatus.—Lenzites striatus.—Stereum lobatum.—Polyporus licnoides.—Hydnum spongiosum. An excellent species. —Polyporus cubensis.—Stereum (Lloydella) membranaceum.—Irpex farinaceus.—Polystictus sanguineus. These specimens petaloid with a long stalk. —Schizophyllum commune.—Lenzites betulina.—Polyporus candidus.—Lenzites erubescens.

Ganodermus. Stipitate, belonging to Section 2 of my recent pamphlet, but not there included, and not, I believe, with a distinct name. It has same context, pores, and pore mouths as Fomes applanatus, but is stipitate and, I think, not a form of Polyporus applanatus. I have received the same plant before from Brazil. It was sent as Ganodermus fornicatus, from which it is entirely different in the stipe insertion, and in the nature of its pores.—Trametes on willow. Unknown to me.—Trametes cervinus? ?

SCARFE, W. A., New Zealand:

Fomes fraxineus? Only a section was sent, but it is a very large specimen, more than a foot in diameter, and with over twenty-five annual layers. When received, I referred it to Fomes hornodermus, which is the most common, tropical species with pale context. On making a comparative study, however, I conclude it is not Fomes hornodermus, but very close to, if not, the same as Fomes fraxineus of Europe. Fomes fraxineus, in England, where it has been called Fomes cytisinus, also sometimes occurs very large, "a foot or more across."

Daldinia concentrica. Also a mammoth in size, over three inches in diameter.

STIGLER, DR. T. E., Brazil:

Polystictus gilvoides.—Stereum lobatum.—Polystictus versatilis.—Polystictus versicolor.—Xylaria cerebriformis.

STOWARD, DR. F., West Australia:

Scleroderma flavidum.—Polysaccum pisocarpium.—Polyporus scrupulosus.—Lentinus fasciatus.

Polystictus cinnamomeus. This is exactly same as the European plant, although the usual Australian specimens have erect fibrils on the pileus, and named Polystictus oblectans Berk. (cfr. Note 10, p. 7, Pol. Issue, No. 1). —Polystictus cinnabarinus.—Stereum hirsutum.

TUCKER, SUSAN, Washington:

Secotium acuminatum.—Craterellus pistillaris (see Note 142).—Lycoperdon stellare (cfr. Myc. Notes, p. 225, Plate 57).—Catastoma circumcissum.—Lycoperdon fuscum.—Lycoperdon umbrinum.—Lycoperdon umbrinum, pale form.—Calvatia lilacina, var. occidentalis.

WHETSTONE, DR. MARY, Minnesota:

Polyporus spumeus.—Xylaria polymorpha.—Polystictus biformis. —Polyporus brumalis.—Lenzites betulina.—Hydnum septentrionale.—Dae-

dalea unicolor.—Polystictus hirsutus.—Trametes suaveolens (young).—Daldinia vernicosa.

Isaria farinosa.—Polyporus adustus.—Daedalea confragosa.—Stereum spadiceum.—Polystictus velutinus, var. Grayei.—Trametes hispida.—Tylostoma campestre.—Polystictus pergamenus.—Polyporus gilvus.—Tremellodendron pallida.—Polyporus lucidus.—Polyporus elegans.—Xylaria corniformis.—Polyporus picipes.—Polyporus Peckianus.—Polystictus perennis.—Tremella clavarioides (cfr. Myc. Notes, Old Series, p. 10).—Tremella vesicaria.—Lycogala Epidendrum.—Arcyria incarnata.—Helotium citrinum.—Otidea auricula.—Thelephora albido-brunnea.

WILSON, M. T., Scotland:

Fomes annosus? Specimen from a hot-house.

YASUDA, PROF. A., Japan:

Polyporus fumosus (=salignus, Fr.).—Stereum elegans (cfr. Letter No. 46).—Fomes torulosus.—Stereum spectabile.—Scleroderma Cepa. Small form.—Stereum hirsutum.—Lentinus subnudus.—Lentinus revelatus.—Enteridium olivaceum.—Stemonitis fusca.—Polyporus zonalis.—Fomes pusillus (see Note 143).—Phlebia strigosus-zonata. Resupinate.

NOTE 117.—**Polystictus variiformis as Trametes,** from Mr. Frank H. Ames, Brooklyn, N. Y. This is a rare plant, and this the first *pileate* specimen I have seen. In its perfect form it is a Polystictus. I had only seen the resupinate, and had this pileate specimen been sent without the resupinate, I should probably have been at a loss to refer it. I expect in the end that Polystictus hexigoniformis, recently described, will be found to be the same thing, nor should I be surprised if both turn out to be polyporoid forms of Lenzites heteromorpha, a rare plant of Sweden which, as noted by Fries, is sometimes resupinate and polyporoid. Mr. Ames' specimen recalls to me very strongly plants I have photographed in the museum at Upsala.

NOTE 118.—**Polyporus rufescens form Ballouii.** I believe it is a remarkable form of Polyporus rufescens or Polyporus biennis, as it is sometimes called in Europe, although it has such small pores that the species was not at first suggested to me. This is a nice specimen. Polyporus rufescens in Europe is characterized by very large pores. In fact, it has been called Daedalea. We have the same plant in this country, the pores of which are smaller, but I have never received a species, such as Mr. Ballou sends, where the pores are designated as minute. Excepting as to its pores, however, it is the same as Polyporus rufescens in context, color, and the spores, which are abundant, hyaline, and piriform, 4-4½ x 7-8 each, with a large gutta. The usual form in America is abortive and was named Polyporus distortus (cfr. Stip. Pol., p. 158). However, I have never seen the abortive form with such minute pores as Mr. Ballou sends.

NOTE 119.—**Polyporus alutaceus,** sent by W. H. Ballou, New York. This is the same as Peck, called Polyporus guttulatus. Bresadola has recently published them as synonyms, and on comparison of American and European specimens I find them the same.

NOTE 120.—**Fomes Ellisianus,** received from Prof. E. Bartholomew. This species is quite frequent on the Shepherdia argentea in our Western States, and was named as above by Anderson (it is alleged, but in reality by Ellis, for Anderson knew nothing about classification, and his name was only used as a ruse). It is exactly the same plant as grows on the Ash in our Eastern States named Fomes fraxinophilus by Peck, and I can note no difference on comparison either macroscopic or microscopic. The spores, which are abundant in these specimens, are elliptical, hyaline, smooth, 5-7 x 7-9 mic.

NOTE 121.—**Xylaria persicaria,** sent by H. C. Beardslee, North Carolina. This is the first collection, to my knowledge, since Schweinitz's day. There is one type specimen in Schweinitz's herbarium, and cotypes are at Kew, but these are all I have previously known. Ellis does not record it save Schweinitz's record. Schweinitz found it on buried peach seed, but these specimens were attached to Dogwood (?) seed. The species is quite similar to Xylaria carpophila, which is not rare on fruits of various kinds, as beach nuts, magnolia cones, etc. It is a much larger species, however, and often branched. Schweinitz's type has three branches. Most of Professor Beardslee's collection are simple, but several have two branches. It is an interesting find.

Ripe specimens which were afterwards collected (December, 1913,) have simple clubs with sterile apices. The spores are 6 x 12. The plant is very close to Xylaria Oxycanthae,

which Tulasne described on haw berries from England, and probably is the same species. Professor Beardslee thinks the fruit on which he finds it is that of the dogwood (Cornus florida).

NOTE 122.—**Thelephora cuticularis,** from H. C. Beardslee, Asheville, N. C. We take this in the sense of Morgan, for we know no other name for it, though it is not the same as type of Berkeley at Kew, which is Thelephora albido-brunnea. We think they are different species, though we are not sure.

NOTE 123.— **Hydnum fuligineo-violaceum,** sent by H. C. Beardslee, Asheville, N. C. Judging from the figures (Kalchbrenner 32, 2, Bresadola 159 and Karsten 11, 59) and from the description, Hyndum fuligineo-violaceum and Hydnum fennicum are very much the same species. It is characterized by the bluish tinge at base of stipe. The surface of Kalchbrenner's figure is smooth, of the other two with small scales, but the descriptions all indicate that the surface is sometimes smooth, sometimes broken into scales. The spores are not like Karsten shows, but for that matter I do not believe there are any species with colored, spinulose spores. They all have (in this section) irregular, tubercular spores.

NOTE 124.—**Hydnum putidum,** from H. C. Beardslee, Asheville, N. C. This is the first specimen I have received. It is a good species as far as America goes, and occurs in the South, not in the East. It has been referred to violascens in Europe, but I can not reconcile it to the illustration of Europe. It does seem to me to be same as violaceum, as illustrated and described by Quèlet, which, he claims, is different from violascens. In the recent "critical" account of this "genus" in America and Europe the silence on the subject is quite profound.

NOTE 125.—**Polystictus elongatus,** sent by Mr. G. H. Cave, Darjeeling, British India. This, which is merely the tropical form of the common Polystictus pergamenus of temperate America, takes in the East two forms, one with the pileus more silky than the other. The plants that Mr. Cave sends are the silky form.

NOTE 126.—**Stereum princeps,** from Mr. G. H. Cave, Darjeeling, British India. This is the largest Stereum that grows, and is common in the East. At Leiden I saw thick specimens a foot in diameter. It is thick, hard, rigid, and perennial, with stratose hymenium. The emergencies are pale-colored, and with short spines. They would probably be called dendrophytes.

Stereum princeps is the analogue of Stereum subpileatum of the Southern United States, and practically a large edition of same plant. Both have same "structure," and both redden when the hymenium is bruised.

Berkeley re-named Stereum princeps Stereum scytale, and usually so determined it. He also called it Stereum contrarium.

NOTE 127.—**Trametes Carteri,** from Mr. G. H. Cave, Darjeeling, British India. The first collection I have received, and named from my photographs of the type, which was from India. Except as to pores, Trametes Carteri reminds me of rigid Daedalea unicolor, and might be characterized, in short, as rigid, trametoid Daedalea unicolor.

NOTE 128.—**Polyporus abruptus,** sent by Mr. Walter W. Frogatt, Sydney, Australia. I collected this plant in Samoa, and my Samoan collection has been compared with the type at Kew. Mr. Frogatt is the first of my correspondents who has sent it in. We have a very similar but slightly different species in the American tropics—Polyporus submurinus (named by Murrill as Trametes). The pileus of Polyporus abruptus when fresh has a delicate, rosy, smoky color. The color of our American plant is "mouse" gray, and it has slightly larger pores. In other features the plants are the same.

NOTE 129.—**"Xylaria" cinnabarina,** received from Mr. Frogatt. This was so named by Cooke. When the genera of these large Pyrenomycetes are worked out, I doubt if it will be included in the genus "Xylaria." On its perithecia character alone it belongs to Physacria, as Patouillard calls it; but when the large Pyrenomycetes are finally referred to genera, I doubt if the perithecia character alone will characterize a genus.

NOTE 130.—**Fomes martius,** also from Mr. Frogatt, Australia. This is a thin, applanate specimen and very close to Fomes hornodermus. The context is somewhat "punky" in this specimen, very hard and compact in hornodermus. It is also a thinner species than hornodermus. When received in America, I referred the specimen to Fomes ligneus, but on comparing at Kew I find it the same as Fomes martius from Brazil.

NOTE 131.—**Fomes marmoratus.** In our Note 33, Letter 43, my apologies are tendered to Mr. Swartz. I thought I had located all of Swartz' types at the British Museum, and never questioned the plant from Jamaica, which passed as the type of Fomes fasciatus. That it is the same as Fomes marmoratus there is no question; but since Mr. Romell has raised it, there is a question as to it being Swartz' type. I carefully noted the label on my last visit to the museum, and there is nothing to connect it with Swartz. It is a very old specimen from Jamaica, collected by a Mr. Poore.

We have heretofore called the plant Fomes fasciatus on the strength of this specimen, but since a type in Thunberg's herbarium is not the same (cfr. Note 33), we must abandon the name for this species and take Berkeley's more recent, but more certain name, Fomes marmoratus.

NOTE 132.—**Polyporus spumeus,** received from Thos. Langton, Toronto, Canada. While this is not a rare plant in America, it has not been recognized in the current traditions, and appears in Murrill's work as Polyporus galactinus, a misreference, cfr. Note 147. I learned Polyporus spumeus at Upsala, and it is usually correct in the current European literature. When fresh it is pure white, but discolors in drying. Dried specimens are easily confused with Polyporus salignus, from which it differs in a spore character. The American specimens (as this from Mr. Langton) are usually thinner than my European material.

NOTE 133.—**Fomes geotropus,** from Mr. W. H. Long, collected in the Southern States. A destructive rot on the cypress of the South, causing the hollow trees. There is a question as to the name to employ. First, a question whether it is or is not Fomes lignosus, so common in the tropics, and the destructive disease of the rubber tree (cfr. Myc. Notes, page 519), with which it seems to agree in everything excepting the surface of the pileus. Second, whether it is not Fomes ulmarius of England, which is very close to it, but has bright pores. Fomes ulmarius, Fomes lignosus, and this species are all three *very closely* related plants, and, I believe, in the end will be held to be essentially the same.

NOTE 134.—**Polyporus fissilis,** received from Mr. W. H. Long. This is the first specimen I have received. I think Murrill has this right as to species, although the type at Kew is a single, thin slice about which I could not tell much, never having seen a specimen. I found the spores of the type abundant; globose, 6-7 mic. hyaline, with thick walls, and as Murrill states that they are ovoid, 3 x 5, I questioned his determination, but it proves only to be one of his inaccurate spore records. The spores of Long's specimen are same as the type. Nor does it belong to the section Spongipellis, in the sense of the man who proposed this juggle.

But this same plant grows in Europe, at least a plant that I can not distinguish on comparison. The spores of the European plant are smaller, measuring about 4 mic., but a species can not be maintained on that difference. The European nomenclature is more confusing than the American. Bresadola in Fungi Kmet. referred it to Polyporus rubiginosus "Fr.," and afterwards he determined specimens for both Romell and Bourdot as Polyporus albus "Fr." I can see little resemblance to the figure Fries cites, but the description, "poris ex albo rufescentibus," would seem to indicate it. Recently Romell has named the European plant Polyporus albo-sordescens, which is a good name for it. There are discrepancies given in the spore records of the various authors. Romell ovate, 3 x 4-5; Bresadola obovate, 3½-4 x 5-6. I make them globose when perfect, although many are as Romell states.

Notwithstanding the spore discrepancies, I do not doubt the practical identity of the American and European plants. It is a very peculiar species, white when fresh; it turns reddish in drying, particularly the pores, which turn darker than the flesh, and coalesce into a rigid mass. This is due no doubt to some chemical constituent that oxidizes. I think it is of a resinous nature.

We have another similar species in our Western States, Polyporus amarus, as recently named by Hedgecock. It grows on the incense cedar in California. This differs from Polyporus fissilis in spores (5 x 8), and the nature of the flesh, which is brittle, not fibrillose.

The name fissilis means capable of being split in the direction of the grain, and is not a bad name for our American plant. Polyporus fissilis with us is of a Southern range. Mr. Long's specimen is from Mississippi, and at New York are four collections all from the South.

NOTE 135.—**Fomes texanus,** from Mr. W. H. Long. Cotype specimen. Growing on juniper, living trees. This specimen is quite close to Fomes igniarius, as it grows on poplar. I question if it would be practical to distinguish the sporaphores alone. It has the same yellowish mycelium, black, rimose surface, and the context is very nearly the same color. It has no setae. The spores are 7-8 mic. (not 3-4 as stated), globose, smooth, and almost hyaline. I think they are very pale-colored, at least their abundance would so indicate. The spores of Fomes igniarius are slightly smaller and hyaline.

NOTE 136.—**Hydnum mirabile,** sent in by George E. Morris, Waltham, Mass., as to Peck's determination, and no one has ever proven he was wrong. (Cfr. Fries, Icones, t. 3, fig. 2.) Nothing is known of Fries' plant in Northern Europe excepting this figure. Our American plant has a sharp, peppery taste when fresh, and is supposed to be the same as is found in France and called Hydnum acre by Quèlet. Then Atkinson sent our American plant to Bresadola, who discovered that it was a "new species," and Atkinson published it as Hydnum cristatus. When the truth is learned about that rare Northern plant of Europe, I have no doubt that it will be found that Peck was right, and that the plant is Hydnum mirabile.

Since the above was written, I have received specimens of Hydnum mirabile from Erik Haglund, who has been fortunate enough to find recently this long-lost species of Sweden. Also an authentic specimen of Hydnum acre from Bresadola. As I have several collections of our American plant, when I get home and can compare this material, I ought to reach some definite conclusions on the subject that has long puzzled me as to these three species.

NOTE 137.—**Daedalea ochraceus,** received from Geo. E. Morris, Waltham, Mass. I would designate the light-colored forms of Daedalea unicolor that frequently reach me, which correspond to Polystictus ochraceus as forms of Polystictus hirsutus.

NOTE 138.—**Hydnum suaveolens,** from Geo. E. Morris, Waltham, Mass. This specimen corresponds to the Swedish plant, as I have collected it in Sweden. It is quite close, but, I believe, different from the usual American collection (cfr. Note 69), which we call caeruleum (which is Peck's cyaneotinctus).

NOTE 139.—**Polyporus zonalis,** sent in by Mr. L. O. Overholts, St. Louis, Mo. Temperate region form. So named by Bresadola, and, I think (in substance), correct. The pores, spores, and pore color are same as the tropical form, but the surface of pileus is quite different. Polyporus zonalis figures in our records only as a tropical plant, and the finding of a temperate region form is a matter of interest. The form that Mr. Overholts sends does not have the strong zones of Polyporus zonalis (typical of the tropics). It is what Léveillé called Polyporus rugulosus.

NOTE 140.—**The odor of Fomes graveolens.** "In September of this year I found this plant, a fine lot, growing on a dead but erect stump of a sugar maple tree. The plant had no other than a slight fungus odor, and they were in growing condition. When my father saw the specimens, he remarked the plant was sweet knot, and that his father used to collect it and carry it home and place it in the living room, where it soon scented the whole room. When I told him that these specimens had no odor, he appeared to think that the plant was not old enough for that."—L. O. Overholts.

NOTE 141.—**Polyporus porphyritis,** from Rev. J. Rick, S. J., Lageada, Brazil. This, which seems to me, the only American representative that we have of the section "Microporus," is thicker and has larger pores than those of the Eastern species.

NOTE 142.—**Craterellus pistillaris,** from Mrs. Susan Tucker, Cheney, Washington. Undoubtedly a form of Clavaria pistillaria, as stated in Note 56, and this collection is the first strongly differentiated form we have seen. It was this form that Peck misdetermined as Cantharellus clavatus (cfr. Note 56). This is quite a different plant from Cantharellus clavatus.

NOTE 143.—**Fomes pusillus,** from A. Yasuda, Sendai, Japan. Unguliform, 1 to 1½ cm. in diameter. Surface with a brown, smooth crust. Context cinnamon brown. Pores very minute. Spores globose, hyaline, 6-7 mic. Setae none. Specimen (No. 185) from A. Yasuda, Japan, growing on stems of Zelkowa acuminata. This little Fomes is quite close to Fomes jasminus, found on the Jasmine in Europe, and has similar microscopic characters. It is much larger, with a smooth crust and different habits of growth. The spores of Fomes jasminus are slightly colored and much smaller.

NOTE 144.—**Polystictus Sequoiae,** from Mr. J. R. Weir, Priest River, Idaho. This very peculiar species has been named three times. First, it reached Ellis from Macoun, who named it Polystictus cuneatus, but never published it. Murrill published it under Ellis' name. Then Copeland collected it and published it as Trametes Sequoiae, a good name for it, as it seems to only grow on the Sequoiae and allied trees. Recently Murrill on his Western trip collected it and discovered that it was a new species, and called it Polystictus Washingtonensis. It is a very peculiar thing. Pure white when fresh, but it discolors when old. Large pores. Context so soft and spongy that it can be pressed into a wad like a piece of elder pith. It does seem a thing so marked and peculiar should be recognized without the necessity of three different names in two different genera in a half-dozen years. Mr. Weir finds it abundant on Thuja plicata.

NOTE 145.—Professor McGinty has sent us a clipping from the American Boy, for March, 1913, taken from the "Popular Science Department," under the heading, "Nature Puzzles and Their Answers." We reproduce it exactly as written with the exception of the cut, which is a little figure of Geaster hygrometricus. We did not know Professor McGinty was at the head of this department, but it reads very much like his work.

THE AMERICAN BOY.

POPULAR SCIENCE DEPARTMENT

A Department of Interest to Young and Old

Edited and Illustrated by Professor A. Hyatt Verrill

Nature Puzzles and Their Answers

Earth Star

Robt. Ashburn:—The very perfect and interesting fungus arrived safely, and your drawing and description are so good that I am publishing them just as they are. Robert says, "It lives for three years, and will digest leaves and worms when they get in the 'clinchers' or points. It has a puff-ball in the center, and when dry the points close up and throw the spores out. From these spores grow the young. When the ground is wet the points expand, and often it rolls over, so it is constantly changing its location. It is found mainly in moist spots under boards, where the dampness is retained."

These "Earth Stars" are a species of fungus belonging to the puff-ball group and the genus Zeaster. Many species are found on dry and barren sand plains, or on rocky hillsides, while others are found beneath logs, etc. Robert's statement that they will digest worms is surprising, as few fungi are carnivorous, and I have never before heard this trait attributed to the earth stars.

NOTE 146.—**More about Professor McGinty.** "In looking over your Notes and Letters I was much interested in Professor McGinty's determinations. I had made up my mind that he was the own brother of Sairey Gamp's friend, Mrs. Harris, but not until I had read your Letter No. 38 did I realize that there was any relationship by marriage between Mrs. Harris and the immortal Sairey."

Professor McGinty's relationship does not end with Dickens' characters. He is a full brother and an honored member of that brotherhood of deluded individuals who think that "modern science" consists in digging up old corpses of discarded synonyms and attempting to inject life into them.

NOTE 147.—**Polyporus galactinus.** Although this species was originally named from Cincinnati, I have been fifteen years puzzling over its identity, and only lately have become thoroughly satisfied on the subject. Morgan had it right in his flora. It is a common species in our woods, late in the season, on rotten logs. When fresh the surface is fibrillose, rugulose, pubescent, with projecting hyphae. The color is sordid white, and when fresh it is zoned within. The spores are subglobose, 3½ x 4 hyaline, smooth, with a unilateral gutta. It dries rather firm and hard. I do not know the plant as a European species.

The plant is quite close to Polyporus spumeus of Europe and America, but the latter plant has larger spores, the flesh is white and not zonate, and it differs entirely in its habits. Polyporus spumeus is not a saprophyte on dead wood, but a heart rot, and the fruit is developed from knot holes or decayed portions of living trees. Polyporus spumeus is one of the few fungi that affect the apple trees. Murrill, as far as I can make out, does not include Polyporus galactinus at all in his work. What he calls Polyporus galactinus is Polyporus spumeus.

NOTE 148.—**Polyporus lacteus.** We finally accept Polyporus lacteus as the name for a common white species that has puzzled us for years. We accept it in the sense of Bresadola, but we can not reconcile it with Fries' description. The pores are small, round, and regular. Fries described the pores as "elongated flexuous, becoming labyrinthiform," and so shows them in his icones. Such a discrepancy would be a bar to taking the name, were it not for the fact that it is a common plant, and we have no other name for it, and do not propose to call it a "new species." And if it is not Polyporus lacteus, not only is this common plant unplaced in Fries, but Polyporus lacteus is unplaced as far as I know.

In this sense Polyporus lacteus is a frequent plant, pure white when fresh. Context white, without zones, drying soft and friable. Pores small, round. Spores allantoid, 1-1½ x 5-6. Surface fibrillose, rarely almost pubescent, varying to almost smooth.

Polyporus lacteus is virtually same plant as Polyporus albellus, and runs into it in every intermediate gradation. Theoretically (and often in reality) Polyporus albellus has a grayish, smooth surface, not fibrillose, but in other characters, flesh, pores, and spores is exactly the same, and the surface difference is probably (and apparently) not a definite character. In practice it is very difficult to definitely refer many collections that are intermediate between these two species.

Polyporus albellus has been confused by Karsten, Murrill, and, I think, by Fries in his latest work, with Polyporus chioneus of Bresadola, and that of Fries in his early days, which was surely a different plant.

NOTE 149.—The evolution in the history of fungus—**Polyporus rheades.** Our knowledge of the history of fungi is being gradually evolved. We learn a little here and a little there, and hardly a week passes but something is added to the general stock. Polyporus rheades is one of Persoon's species, and good types are in the museum at Leiden (cfr. Myc. Notes, p. 467). Fries called it Polyporus vulpinus, and under this name I first learned it from Mr. Romell. It grows on poplar, and is usually thin and extended in its manner of growth. While we have known it for a number of years, we never suspected that it was the same as the next plant. During one season, while I was collecting at Femsjö, where Fries made most of his collections, I found with Mr. Romell a large, soft, ungulate species on oak. I knew that Fries must have met the plant and had a name for it, and I soon convinced myself that it was the lost species of Europe that Fries called Polyporus corruscans. Mr. Romell had not figured that out, but he knew the plant that Fries called Fomes fulvus, and which Bresadola has renamed Polyporus Friesii, which, from what Mr. Romell told me, I was convinced was only a later stage, more hardened and indurate, but the same plant that we have found at Upsala (cfr. Letter 44, Note 47). I think Mr. Romell partially agreed to it. The next development was when I found that a plant that Berkeley had named from the United States as Polyporus dryophilus is exactly the same plant as our Swedish plant. I sent specimens to Bresadola, and he confirmed my decision.

Recently I was favored with a visit from Mr. Long, Forest Pathologist of the United States Department of Agriculture. I am always glad to see Mr. Long, for he has made extensive observations in the field, and I learn much from exchanging notes with him. He knew Polyporus vulpinus from Romell, as he finds it on poplar, and also Polyporus dryophilus (as he calls it, on oak), and he had decided that they were the same species, modified only by the host. On closely comparing them I reach the same conclusion. I wonder if the final chapter is now written as to this species. As to the name to use when a plant has so many names, every fellow will have his own idea. I shall call the large form on oak Polyporus corruscans; the small, often imbricate form, on poplar, Polpyorus rheades.

This species (Polyporus rheades and Polyporus corruscans) is characterized by first developing a kind of mycelial cushion or core on which the tissue of the pileus is de-

veloped. This core I have noted on specimens for a long time, but did not correctly understand it, as I took it to be diseased tissue. Hartig shows this core (Plate XVII) and explains it in his classical work on Tree diseases, but it must be noted in passing that Hartig misnamed Polyporus rheades as Polyporus dryadeus. It is a striking commentary on the state of fungus taxonomy in Europe, that in Hartig's classical work, of the thirteen species he so beautifully depicts, six surely, and probably seven, are misnamed.

ILLUSTRATIONS OF JAPANESE FUNGI.

We have received from the Bureau of Forestry, Department of Agriculture and Commerce, Japan, the first issue of a series, consisting of four plates, devoted to the illustration of Japanese fungi. As a striking evidence of the wide distribution of fungi, any one who is familiar with these plants can look over the figures and from the species illustrated would hardly know whether they were collected in the United States, Europe or Japan. Of the 38 species that are illustrated, 35 of them look familiar to us and we believe that we have collected almost every one of them either in the United States or Europe, with the exception of four. Polystictus flabelliformis, a very familiar plant to us in Samoa, does not occur in the United States or Europe. "Isaria arachnophila," which seems to be the only misnamed plant on the plates (as it is probably not an Isaria, but a Cordyceps, and has not the most remote resemblance to Isaria arachnophila), is unfamiliar to us.

The plates are a great credit to the publishers, both from their accuracy and coloration. With the exception of Isaria arachnophila, all of them, we believe, are correctly determined, and we are very glad to note that the names used are mostly those established in mycology, and that no attention whatever has been paid to those engaged in juggling fungus names. We are glad to see that every single one of the Gasteromycetes is not only characteristically illustrated, but correctly named. Also that the author was fortunate enough to use the name Geaster hygrometricus, attributing it to Persoon, instead of the latest juggle, calling it Geaster stellatus, or Astraeus stellatus and attributing it to Linnaeus, or Morgan, or Schroeter, or somebody else that had nothing whatever to do with it.

If he had been as consistent in every particular, it would have been much better. Thus, it is somewhat provoking to one familiar with the situation to see a plant called "Spathularia clavata, Saccardo," which was well illustrated and well known, and had a well-established name long before Saccardo was born. Or, to see a plant called "Ithyphyllus impudicus, Fries," when Fries did not originate the specific name impudicus nor sanction the genus Ithyphallus, and never used the combination in any way. In citing authorities the author seems to be following the custom of a few English writers of substituting, after the specific name, not the name of the man who named the plant, but the name of the man who made the combination. This custom is followed, so far as we know, only by a few Japanese and a few English, and repudiated generally by most English, the Americans, Germans, French, and all other nations, as it should be by all, for it is based on dishonesty in principle. The double system of advertising which is generally employed in America and Germany is bad enough and leads to enough abuses, but if the dishonest

principle of writing the name of a man who shifts a species around to another genus, instead of the name of the man who named the species, is ever generally adopted, there will be no end to the abuses to which it will lead.

In the first issue of plates embracing 38 names, only three of them are discredited names, viz., Ithyphallus impudicus, Spathularia clavata, Amanitopsis vaginata, and each one of these has written after it the name of a man who had nothing to do with the naming of the plant.

We presume there is no ointment but what has its fly in it, and it is a pity that a beautiful set of illustrations such as this should have been marred by the adoption, even in three instances, of discredited names. We, of course, do not feel that the author of these plates was personally responsible for this, as he no doubt followed some English "authority." English mycologists could be better employed. It is gratifying to note, however, that two of the recent English writers, namely, Massee and Swanton, have repudiated the whole business and are simply employing a binomial as the name of a plant and leaving off all the personal advertisements. In our opinion, this is a plan that should be adopted in a work of this kind and is the only plan that will be of any stability. We are all of us interested in plants, and all interested in seeing them have proper names, but very few of us have any interest in the party who named them, much less in the parties who juggle them.

We do not know if this set of beautiful plates can be obtained by purchase in the United States, but any one who feels interested in mycology would find them very useful, for they are quite characteristic and most of them occur in the United States. The coloration and drawing are remarkably accurate and put to shame many of the ornate illustrations issued from this country.

But one figure, namely Polyporus volvatus, seems a little unusual. The figure has the top attached by a little curved stem. We have no doubt this was the case with the plant from which this figure was drawn, but it is probably an abnormal condition of the collection. Polyporus volvatus is normally attached by a sessile base, without a stem, both in this country and Japan, in most of the specimens that we have seen from both countries.

We congratulate the Bureau of Forestry of Japan on the excellent work that has been done on these plates, and hope it will be followed with a continuation.

NOTE 150.—**Merisma cristata.** Il parait exister en Europe une grande diversité d'opinion en ce qui concerne l'identité de Merisma cristata de Persoon. Puisqu'il existe des types incontestables dans l'herbier de Persoon, quelqu'un devrait étudier ces types et éclairer la vérité. Bresadola le rattache au Sebacina incrustans et déclare qu'il possède basidia divisé en croix et lisse, hyaline, spores. Patouillard maintient qu'il forme un genre séparé, que ses basidia ne sont pas divisés en croix, et que le spores sont echinulate, hyaline. Dernièrement von Hohnel publia son opinion que c'est un Thelephora et possède des spores colorés et anguleux. Quelqu'un se trompe, évidemment. Tous trois ne peuvent avoir raison à la fois. J'ai vu le spécimen dans l'herbier de Persoon, mais je ne sais si Patouillard ou Bresadola est dans l'erreur, car je ne sais quel genre de spores et de basidia ce spécimen possède. Je sais cependant que von Hohnel s'est trompé car ce n'est clairement pas un Thelephora. Von Hohnel a la réputation d'être un bon microscopiste mais il tire des conclusions en se basant sur des preuves très insuffisantes.

Pendant que nous traitons de ce Merisma cristata, je voudrais bien savoir si, en Europe, quelqu'un connaît une plante dont l'habitat s'accorde avec le Bulliard's (T. 415, f. 1) que cite Persoon. Je n'ai jamais vu pareille plante dans aucun musée, et je no crois pas que les types contenus dans l'herbier de Persoon puissent se référer à ce dessin.