LETTER No. 60.

Acknowledgment of specimens received since last report. My best thanks are extended to those who favored me with specimens. Some of the notes referred to in this letter have been published in the previous letter, No. 59, and some notes that will be illustrated with photographs will be published in the next issue of Mycological Notes.

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 corespondents 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. Cincinnati, Ohio, December, 1915. C. G. LLOYD, 95 Cole Park Road,

Twickenham, England.

ALLEN, L. C., Massachusetts:

Lenzites saepiaria .-- Polystictus circinatus .-- Hydnum fragile. (See Note 326.)-Phlebia strigoso-zonata.-Polystictus perennis.-Fomes connatus.-Daedalea confragosa.-Polyporus elegans.-Polystictus hirsutulus.-Polystictus versicolor.-Hydnum melaleucum.-Thelephora terrestris.-Polyporus betulinus .-- Hydnum mirabile .-- Hydnum ferrugineum ?-- Polystictus Montagnei.-Polyporus betulinus.-Hydnum amicum.-Hydnum aurantiacum.-Stereum ochraceoflavum.-Hydnum carnosum?-Stereum fasciatum.-Stereum (Hymenochaete) tabacinum.

AMES, FRANK H., New York:

Hydnum repandum.-Hydnum subsquamosum.-Hydnum laevigatum.-Hydnum fuligineo-violaceum .--- Hydnum scabripes .--- Hydnum mirabile .---Hydnum scobiculatum.-Hydnum velutinum.-Hydnum erinaceum.-Polyporus Amesii. (See Note 327.)-Hydnum Schiedermayeri.-Hydnum ochraceum .- Hydnum pulcherrimum .- Hydnum septentrionale.

ARANZADI, PROF. T. DE, Spain:

Polyporus varius.—Polystictus perennis. (See Note 328.)

BALLOU, W. H., New York:

Trametes malicola .-- Hydnum pulcherrimum .-- Polyporus intybaceus. (See Note 329.)-Phlebia radiata.-Polyporus adustus.-Polyporus caesius. -Polyporus hirsutus.-Hydnum zonatum.-Hydnum scabripes.-Hydnum

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fuligineo-violaceum.—Hydnum amicum.—Hydnum velutinum.—Hydnum nigrum.—Polystictus versicolor.—Polyporus Schweinitzii.—Daedalea unicolor.—Polyporus Spraguei.—Polyporus cristatus.—Polyporus rutilans.— Hydnum albidum.—Hydnum aurantiacum.—Polyporus (Ganodermus) sessilis.—Merulius tremellosus.—Calvatia craniiformis.—Panus strigosus.— Calvatia elata.—Polyporus dryadeus.—Fomes applanatus.—Hydnum Caput-Ursi.—Ustulina vulgaris. conidial.—Hydnum rufescens.—Polystictus cinnamomeus.—Favolus europaeus.—Daedalea unicolor.—Hydnum putidum.— Hydnum subsquamosum.—Hydnum scobiculatum.—Polyporus glomeratus.— Polyporus frondosus.—Polyporus sulphureus.—Polystictus hirsutus.—Polyporus Ballouii.—Polyporus radicatus.—Poria betulina.—Polyporus tephroleucus??—Bulgaria inquinans.—Polystictus conchifer.—Polyporus malicolus.—Polyporus floriformis.—Hydnum mirabile.

BARKER, W. E., New Zealand:

Daldinia concentrica.—Lycoperdon pratense.—Crucibulum vulgare.— Fomes applanatus.—Fomes senex.—Bovistella ? cuprica. (See Note 330.)

BEAN, PROF. A. M., Oregon:

Polyporus sulphureus .-- Polyporus Schweinitzii.

BEARDSLEE, H. C., North Carolina.

Thelephora palmata.—Hydnum putidum.—Hydnum amicum.—Polystictus cinnamomeus.—Helvella crispa.—Thelephora multipartita.—Tremella vesicaria.—Tremellodendron pallidum.—Hydnum rufescens.—Polyporus albellus.—Hydnum subsquamosum.—Hydnum laevigatum.

BLACKFORD, MRS. E. B., Massachusetts. Tremellodendron merismatoides.

BRANDEGEE, T. S., California. Tylostoma Americanum.

BRENCKLE, J. F., North Dakota.

Polystictus pergamenus.-Fomes igniarius.-Irpex lacteus.

BURKE, DR. R. P., Alabama.

Hydnum adustum.-Stereum subpileatum.-Polyporus amygdalinus. (See Note 331.)-Lenzites betulina.-Fomes marmoratus.-Polyporus supinus.-Polystictus ochraceus.-Polystictus elongatus.-Irpex lacteus.-Clavaria pyxidata.-Irpex concrescens. (See Note 332.)-Xerotus lateritius.-Polystictus hirsutulus .-- Polyporus adustus .-- Xylaria corniformis .-- Stereum diaphanum.-Stereum Ravenelli.-Polystictus hirsutus.-Fomes Calkinsii.-Hydnum ochraceum.-Polyporus gilvus.-Fomes Meliae. (See Note 333.)-Polystictus fimbriatus .- Strobilomyces strobilaceus .- Polystictus petaliformis.-Hirneola auricula-Judae.-"Isaria" flabelliformis.-Polyporus rhipidium .- Bulgaria rufa.- Exidiopsis alba.- Thelephora multipartita.- Hydnum pulcherrimum.-Poria obliqua.-Polyporus Curtisii.-Polyporus biformis .-- Polyporus rutilans .-- Merulius Corium .-- Polystictus pubescens .-- Polyporus Schweinitzii.-Peniophora cinerea.-Craterellus Cantharellus.-Polystictus conchifer .-- Stereum Leveilleanum .-- Paxillus panuoides .-- Stereum spadiceum.-Polysaccum pisocarpium.-Lenzites saepiaria.-Polyporus giganteus.-Polyporus rufescens.-Polyporus Spraguei.-Crucibulum vulgare.

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-Cyathus striatus.-Polystictus Friesii.-Calocera cornea.-Peziza occidentalis.-Polystictus versatilis.-Polystictus sanguineus.-Geaster rufescens.-Polyporus poculus.-Tremellodendron pallidum.-Polyporus distortus. -Cyathus stercoreus.-Fomes fraxineus. (See Note 334.)-Guepinia spathularia.-Polystictus petaloides.-Stereum fasciatum.

CONANT, J. F., Massachusetts.

Polyporus Montagnei.—Polyporus confluens.—Polyporus ovinus. (See Note 335.)

CRADWICK, WM., Jamaica. Trametes hydnoides.

CROSWELL, EMILY S., Massachusetts. Thelephora anthrocephala?

DAVIS, SIMON, Massachusetts. Hydnum mirabile.—Polyporus albidus.

DICKSON, B. T., New York: Daedalea confragosa.

DUPRET, H., Canada.

Daedalea confragosa.-Stereum spadiceum ?-Polystictus cinnabarinus.

DUTHIE, MISS A. V., South Africa.

Exidia purpureo-cinerea. (See Note 336.)—Exidia caespitosa. (See Note 337.)—Xerotus fuliginosus. (See Note 338.)—Xylaria fistulosa.— Lentinus strigosus.—Tremella fusiformis.—Stereum laxum. (See Note 339.)—Tylostoma cyclophorum.—Myriostoma coliformis.—Stereum hirsutum.—Trametes hispida.—Cyathus pallida.—Bovistella aspera.—Arachnion album.—Arachnion Scleroderma. (This will be published with illustration in Mycological Notes. It is the most novel addition to the puff-balls that ever came to me.)—Polystictus Telfarii.—Stereum caperatum. (Will be published in Mycological Notes and illustrated.)—Lenzites betulina.—Lenzites Junghuhnii.—Rhizopogon luteolus.—Polystictus versicolor.—Kalchbrenneri corallocephala.—Hexagona albida.

DUTRA, DR. J., Brazil.

Auricularia mesenterica.—Polyporus fruticum.—Polyporus licnoides.— Fomes pectinatus.—Lenzites indica.—Polystictus pinsitus.—Polyporus stereinus.—Polyporus ectypus.—Stereum lobatum?—Hirneola auricula-Judae. (See Note 340.)—Polyporus ostreiformis.

EVANS, I. B. POLE, South Africa.

Stereum Kalchbrenneri. (See Note 341.)—Polyporus scruposus.—Fomes Caryophylli.—Fomes rimosus.—Fomes badius.—Stereum hirsutum.—Daedalea Eatoni. (See Note 342.)—Lenzites betulina.—Polystictus sanguineus.— Daedalea Dregeana. (See Note 343.)—Polyporus gilvus.—Irpex vellereus.— Hydnum Henningsii.—Trametes hispidus.—Trametes lactinea.—Daedalea moesta.—Polystictus polyzonus.—Polyporus subradiatus. (See Note 344.)— Polyporus lucidus.—Polyporus Curtisii.—Polyporus resinaceus.—Fomes applanatus.—Polyporus (Ganodermus) mollicarnosus. (See Note 345.)— Polyporus (Ganodermus) colossus.

FISHER, G. CLYDE, New York:

Lycoperdon cruciatum.

FLOCKTON, MISS MARGARET L., Australia.

Stereum illudens. (See Note 346.)—Stereum hirsutum.—Polyporus arcularius. (See Note 347.)—Polyporus decipiens. (See Note 348.)—Trametes lilacino-gilvus.—Polyporus rhipidium.—Polyporus Hartmanni. (See Note 349.)—Polystictus sanguineus.—Stereum Leichardtianum. (See Note 350.) —Polystictus oblectans. (See Noté 351.)—Lycoperdon piriforme var. flavum. (See Note 352.)—Polyporus gilvus.—Hexagona similis. (See Note 353.)

Miss Flockton sends beautiful specimens, nicely dried and selected.

GRANT, J. M., Washington.

Fuligo septica —Fuligo violacea.—Fuligo muscorum.—Schizophyllum commune.—Polyporus picipes.—Polystictus abietinus.—Stereum hirsutum. —Fomes applanatus.—Fomes pinicola.—Polyporus (Ganodermus) Oregonensis.—Fomes pini.—Fomes leucophaeus.—Polyporus elegans.—Aleurodiscus amorphus.—Xylaria Hypoxylon.—Bovista pila.—Bovista plumbea.—Bovista plumbea var. nigrescens. (See Note 354.)—Hydnum coralloides.— Polyporus Schweinitzii.—Stereum fasciatum.—Polyporus Berkeleyi.—Polyporus stipticus.—Lycoperdon atropurpureum.—Lycoperdon cepaeforme.— Trametes carnea.—Spathularia flavida.

GRIFFIN, D. B., Vermont:

Polyporus rutilans.—Polyporus gilvus.—Polyporus albiceps.—Polyporus melanopus.—Polyporus adustus.—Polystictus pergamenus.—Daedalea unicolor.—Stereum spadiceum.—Polystictus hirsutus.—Fomes connatus.—Corticium salicinum.—Polyporus pubescens.—Fuligo septica.—Polyporus occidentalis.—Polyporus albellus.—Cyathus striatus.—Polystictus conchifer.— Panus torulosus.—Fomes scutellatus. (See Note 355.)

GRIFFITHS, D., District Columbia:

Fomes pinicola.-Polystictus abietinus.

HADLEY, A. M., Vermont:

Polystictus cinnamomeus.-Polystictus conchifer.-Daedalea unicolor.-Trametes suaveolens .-- Fomes leucophaeus .-- Polyporus malicolus .-- Lycoperdon gemmatum.-Polyporus albellus.-Polyporus floriformis?--Lenzites saepiaria.-Lenzites betulina.-Polystictus hirsutus.-Daedalea unicolor.-Polystictus pergamenus.-Polyporus adustus.-Polyporus brumalis.-Polyporus radicatus .-- Polystictus abietinus .-- Stereum purpureum .-- Trametes heteromorpha. (See Note 357.)-Thelephora Caryophyllacea.-Stereum fasciatum .- Tremella vesicaria .- Polyporus picipes .- Polystictus cinnabarinus. -Helotium citrinum.-Polystictus versicolor.-Trogia crispa.-Polyporus albellus .-- Polystictus pergamenus .-- Polyporus dichrous .-- Hydnum ochraceum .- Polyporus radiatus .- Polystictus planus. (See Note 358.)-Polyporus elegans .-- Polystictus pubescens .-- Hydnum pulcherrimum .-- Polystictus biformis .-- Polyporus semisupinus .-- Polystictus circinatus .-- Favolus europaeus.-Lycoperdon subincarnatus.-Peziza scutellatus.-Hydnum compactum .--- Hydnum carnosum .--- Trametes heteromorpha.--- Polystictus versi-color.-Panus stipticus.-Poria sinuosa.-Hydnum scobiculatum.-Irpex lacteus.

HAMILTON, A. G., New South Wales:

Polystictus occidentalis.—Schizophyllum commune.—Stereum lobatum. —Lentinus fasciatus.—Hirneola auricula-Judae.

HANMER, C. C., (Collected in Maine):

Sistotrema confluens. (See Note 359.)—Polystictus perennis.—Polyporus brumalis.—Polyporus adustus.—Lycoperdon gemmatum.

HANMER, C. C., Connecticut. Polyporus adustus.

HARVEY, B. T., Colorado:

Aecidium Clematidis.—Merulius Corium.—Polyporus volvatus.—Fomes Laricis.—Polystictus abietinus.—Polyporus amarus. (Wood affected with the "pin rot." Specimens of the fungus are much desired.)

HEDGCOCK, GEO. G., District of Columbia: Tremellodon getatinosum.

HIBBARD, MISS ANN, Massachusetts:

Hydnum velutinum. (See Note 320, Letter 59.)—Lachnocladium Micheneri. (See Note 323, Letter 59.)—Hydnum fasciatum. (See Note 324, Letter 59.)—Hydnum concrescens.—Hydnum Schiedermayeri.—Polyporus Schweinitzii.—Polystictus Montagnei.—Hydnum melaleucum.—Hydnum amicum.—Hydnum Peckii. (See Note 360.)—Hydnum carnosum.—Xylaria polymorpha.—Cudonia circinans.—Helvella lacunosa.—Thelephora Americana.—Tremellodendron merismatoides.—Tremellodendron pallidum.—Tremellodendron Cladonia.—Craterellus cornucopioides.

HOUGHTON, H. E., India:

Polyporus lucidus.

HONE, DAISY S., Minneapolis.

Polystictus pergamenus.—Daedalea unicolor.—Polystictus pubescens.— Stereum fasciatum.—Stereum hirsutum.—Polystictus versicolor.—Lenzites betulina.—Lenzites saepiaria.—Panus stipticus.—Polyporus semisupinus.— Polystictus biformis.—Schizophyllum commune.—Favolus europaeus.—Favolus microsporus.—Daedalea confragosa.—Polyporus gilvus.—Stereum spadiceum.—Daldinia concentrica.—Xylaria polymorpha.—Polystictus cinnamomeus.—Tremellodendron pallidum.—Merulius tremellosus.—Clavaria stricta.—Polystictus cinnabarinus.—Hyphomyces Lactifluorum.—Polyporus betulinus.—Polyporus picipes.—Lachnea scutellata.—Peziza occidentalis.—Boletinus pictus.—Geoglossum hirsutum.

JONES, KATE A., New Hampshire:

Polystictus velutinus.—Polystictus conchifer.—Polystictus perennis.— Polystictus hirsutus.—Polyporus elegans.—Hyphomyces Lactifluorum.— Polyporus adustus.—Stereum fasciatum.—Tremellodendron pallidum.—Daedalea confragosa.—Lenzites saepiaria.—Fomes fomentarius.—Fomes leucophaeus.—Daedalea unicolor.—Polystictus versicolor.—Polystictus cinnabarinus.—Lenzites betulina.—Polyporus lucidus.—Chlorosplenium aeruginosum.

LATHAM, ROY, New York:

Hydnum velutinum.—Pleurotus striatulus.—Polyporus (Ganodermus) lucidus.—Poria pinea.—Panus torulosus.—Tremellodendron pallidum.—Crucibulum vulgare.—Polyporus Spraguei?—Scleroderma aurantiacum.—Polystictus versicolor.—Polyporus albellus.—Stereum (Hymen.) tabacinum.— Fomes (Ganodermus) leucophaeus.—Polyporus squamosus.—Sphaerobolus stellatus.—Clavaria fusiformis.—Trametes protracta.—Dacryomyces aurantia.

LEEPER, BURTT, Ohio:

Sebacina dendroidea, or "Thelephora dendroidea" as called. There is but little doubt in my mind that it is a Sebacina. (Cfr. Note 116, Letter 48.) Mr. Leeper sends a fine photograph of the plant which will shortly be published with a detailed history of the plant.

Hydnum adustum.—Stereum complicatum.—Polystictus pubescens. (See Note 361.)—Lenzites saepiaria.—Polyporus intybaceus?—Polyporus radicatus.—Polyporus amorphus.—Polyporus caesius.—Polyporus croceus.— Fomes applanatus.—Tremellodendron pallidum.—Thelephora anthrocephala. —Xylaria polymorpha.—Xylaria Cornu Damae.—Peziza alutaceus.—Peziza macroporus.—Helvella sulcata.—Polystictus cinnamomeus.—Polystictus versicolor.—Hydnum pulcherrimum.—Polyporus trabeus. (See Note 362.)— Polyporus radicatus. (See note 319, Letter 59, in error spelled radiatus.)— Polyporus cuticularis.—Polyporus spumeus.—Polyporus Spraguei.— Stereum fasciatum.—Irpex lacteus.

LEWIS, JOHN E. A., Japan. (Collected in Central Japan):

Lentinus strigosus.—Polyporus rufescens.—Daedalea unicolor.—Polystictus sanguineus.—Polyporus lucidus.—Hirneola auricula-Judae.—Paxillus atrotomentosus.—Lenzites subferruginea. (See Note 363.)—Lenzites murina. (See Note 364.)—Daedalea ungulata. (See Note 386.)

LONG, W. H., New Mexico: Polyporus stipticus.

LORDLEY, E. D., Nova Scotia: Polyporus alutaceus?

LOWE, F. E., Massachusetts: Polyporus Schweinitzii.—Polystictus perennis.

LYMAN, G. R., District of Columbia.

Exotic species introduced on bamboo wood from Manila.—Polyporus zonalis.—Xylaria Hypoxylon. Cosmopolitan.

MASTER, P. D., India:

Hexagona tenuis.—Fomes senex.—Polystictus affinis.—Polystictus floccosus.—Polystictus xanthopus.—Hexagona polygramma.—Lenzites flavida. —Trametės flavida.—Auricularia mesenterica.—Hirneola polytricha.

MILLE, REV. LOUIS, Ecuador:

Battarrea phalloidea.—Tylostoma Berkeleyi.—Stereum Galeottii. (See Note 365.)

NOBLE, MRS. M. A., Florida:

Laternea columnata.—Mutinus elegans.—Trametes hydnoides.—Polyporus adustus.—Polyporus Curtisii.—Polyporus gilvus.—Polystictus sanguineus.—Merulius corium.—Scleroderma Cepa.—Paxillus panuoides.— Scleroderma tenerum.

OVERHOLTS, L. O., Pennsylvania:

Hydnum rufescens .-- Irpex mollis. (See Note 321, Letter 59.)

OWENS, C. E., Oregon:

Hydnum aurantiacum.

RAMSEY, HERBERT P., District of Columbia.

Lysurus borealis. (See Note 366.)—Also fine photographs showing the plant in its natural position.

RICK, REV. J., Brazil:

Polystictus arenicolor.—Stereum elegans.—Stereum aurantium.—Lentinus villosus.—Xylaria anisopleura.—Xylaria pyramidata.—Xylaria multiplex.—Xylaria corniformis.—Xylaria apiculata.—Xylaria gracillima.—Xylaria polymorpha.—Stereum (Hym.) reniforme.—Polyporus neofulvus. (See Note 367.)

RIDDLE, L. W., Massachusetts:

Stereum spadiceum.-Stereum sericeum?-Hydnum aurantiacum. (See Note 325, Letter 59.)-Polyporus Curtisii.-Tremellodendron pallidum.-Polyporus adustus.-Stereum (Hym.) tabacinum.-Polystictus pergamenus.

SAXTON, W. T., India. (Collected N. W. Himalaya, 6,500 feet):

Fomes pseudosenex.—Trametes lactinea.—Polystictus inquinatus.— Stereum hirsutum.—Polystictus versicolor.—Polystictus polyzonus.

SCHRENK, HERMANN VON, Missouri: Xylaria Hypoxylon.

STERLING, E. B., New Jersey:

Polyporus hispidus. (See Note 368.)—Polyporus giganteus. (See Note 369.)—Daedalea confragosa.—Tremellodendron pallidum.—Arachnion albidum?—Boletinus porosus.—Hydnum septentrionale.—Polyporus Spraguei.— Polyporus incrustans.—Trametes suaveolens.—Polyporus Spraguei.—Volvaria bombycina.—Polyporus rutilans.—Polyporus adustus.—Lycogala Epidendrum.—Irpex pachyodon.—Crucibulum vulgare.—Polystictus perennis.— Lentinus strigosus.—Polystictus hirsutulus.

STEVENSON, WM. C., JR., Pennsylvania.

Fomes applanatus.—Fomes leucophaeus.—Polyporus borealis. (See Note 370.)—Polyporus cuticularis.—Thelephora albido-brunnea.—Stereum complicatum.—Thelephora cuticularis.—Tremellodendron pallidum.—Tremellodendron merismatoides.—Tremellodendron Cladonia.

STOCKER, S. M., Minnesota:

Phlebia radiata.—Hydnum ochraceum.—Tremella lutescens.—Polyporus brumalis.—Polyporus circinnatus.—Polystictus pubescens.—Polyporus albellus.—Favolus europaeus.—Schizophyllum commune.—Polyporus trabeus.— Fomes pomaceus.

STOWARD, DR. F., West Australia:

Stereum hirsutum .-- Polystictus cinnabarinus .-- Polyporus scruposus.

SWANTON, E. W., England:

Cordyceps Robertsii. As fine a collection as I have ever seen. They were collected in the vicinity of Napier, New Zealand.

TAYLOR, MORRIS, New York:

Polyporus aurantiacus.--Polyporus gilvus.--Polyporus radicatus.--Stereum tabacinum.--Lenzites betulina.--Polystictus pergamenus.--Polyporus Spraguei.--Irpex pachyodon.--Stereum fasciatum.--Polyporus elegans.--Polyporus albellus.--Fomes annosus.

TORREND, REV. C., Brazil:

Fomes (Ganodermus) applanatus. (See Note 371.)

I have a large collection from Rev. Torrend that I have not found time to study. They will be acknowledged in detail in the next letter.

TUCKER, SUSAN, Washington:

Crucibulum vulgare.-Cyathus vernicosus.

WEIR, JAMES R., Idaho:

Thelephora Caryophyllea.-Thelephora fimbriata?

WHETSTONE, MRS. M. S., Minnesota:

Cordyceps melolonthae. (Will be published in detail and illustrated in Mycological Notes.)—Peziza floccosa.—Polyporus gilvus.

WOLF, F. A., Alabama:

Polysaccum pisocarpium.-Polystictus sanguineus.

Strobilomyces pallidus. New for the United States. It will be published in detail and illustrated in Mycological Notes.

WOOTEN, E. C., Montana:

Calvatia lilacina.

YASUDA, PROF. A., Japan:

Cordyceps nutans. (See Note 372.)—Paxillus Curtisii.—Polyporus (Ganodermus) valesiacus.—Polyporus versiporus.—Pleurotus ostreatus.— Polyporus Mikadoi.—Hypocrea mesenteria.—Stereum induratum.—Polyporus (or Fomes) Caryophylleus.—Polystictus polyzonus.—Leotia atrovirens. (See Note 373.)—Polyporus sambuceus. (See Note 374.)—Polyporus Guilfoylei.—Polyporus luteus.—Polyporus orientalis. (See Note 375.) —Cordyceps Tricentrus. (See Note 376.)—Pachyma Hoelen.

ZIMM, L. A., New York:

Polyporus cuticularis.—Irpex lacteus.—Polyporus pubescens.—Polyporus brumalis.—Polystictus velutinus.—Polyporus fumosus.—Polystictus hirsutus.—Trametes suaveolens.—Polyporus mollis.—Poria odora.—Polyporus adustus.—Trametes hispida.—Polystictus Greyii.

ZOURNE, S. A., New York:

Polystictus biformis.—Polyporus fuscus.—Daedalea confragosa.—Polystictus hirsutulus.—Daedalea unicolor.—Polystictus pergamenus.—Lenzites saepiaria.—Stereum (Hymenochaete) tabacinum. NOTE 326.—Hydnum fragile, from Miss Lizzie C. Allen, Massachusetts. This we have previously determined as Hydnum reticulatum, an American and inappropriate name. It was referred to the European species by Cooke and on looking up the figures and description we think correctly. It is well named, for the dry flesh is very fragile. It is a pine woods species, and departs from all other known fleshy species in having tubercular, hyaline spores. (Cfr. Letter 54, Note 234.) I have it from several Eastern correspondents.

NOTE 327.—Polyporus Amesii, from F. H. Ames, New York. Additional specimens confirm to our mind the validity of the species (cfr. Apus Polyporus, page 309). We think it a marked deviation of Polyporus fumosus. To the eye from the dark adustus pores, it appears a color form of Polyporus adustus, but the spores indicate its relationship to Polyporus fumosus, as we classified it. It was collected on oak, at Jamaica, Long Island, November 2, 1909.

NOTE 328.—Polystictus perennis, from Prof. T. de Aranzadi, Spain. The surface of these specimens has a thin, white "whitewashed" effect not usual to the species, but I am satisfied it is not of specific importance. It is what Quélet calls P. fimbriatus, but not what Fries calls P. pictus, which has a very slender stipe.

NOTE 329.—Polyporus intybaceus, from W. H. Ballou, New York. Growing on top of a stump. Whether there is really any difference (excepting habitat) between Polyporus intybaceus growing on wood and Polyporus frondosus growing in ground attached to buried wood, is not sure, notwithstanding the conclusions I reached in Note 276, Letter 58. The spore difference there indicated does not hold good as to this specimen.

Note 330.—Bovistella? cuprica, from W. E. Barker, New Zealand. Peridium globose, $1-1\frac{1}{2}$ cm. in diameter, glabrous, bright copper color. Sterile base distinct, but scanty. Capillitium long, intertwined, rigid threads which run out into pointed branches. Spores globose, 4 mic., without pedicel, smooth.

This is characterized by its bright copper color and smooth peridium. If it had an exoperidium when young, all traces have disappeared, from these specimens. It is an ambiguous Bovistella, strongly tending towards Lycoperdon. The capillitium, I am satisfied, is of "separate" threads, viz., the Bovista type, but so long and intertwined that the "separate" threads are difficult to make out. The spores are of the Lycoperdon type.

NOTE 331.—Polyporus amygdalinus, from Dr. R. P. Burke, Alabama. This is the first freshly collected specimen that exists now, I believe. The old type at Kew is so poor, little can be told about it. Surface soft, dull, pale yellowish, or brownish now, with darker, innate fibrils. Context soft, spongy, punky, light, pale yellow (salmon buff). Pores and pore tissue white. Mouths small, round or irregular, white. Spores not found, except small, globose, conidial spores.

This species was not included in our Polyporus Synopsis, as little could be told from the old, effete type at Kew. I would enter it in Section 87. The contrast of the white pore tissue and yellow flesh is a feature unknown to me in other species. Ravenel states it has an odor of bitter almonds when fresh, hence the name.

NOTE 332.—Irpex concrescens, from Dr. R. P. Burke, Alabama. I have received this from several correspondents and it has not been published as far as I know. Resupinate. Subiculum thick, white, closely adnate. Teeth white, flattened, 8–12 mic. long, growing together and often forming nodules. Cystidia, none. Spores 3×5 , opaque, hyaline. The entire plant remains white in drying. This appears not to be rare and, I think, has been generally referred to Irpex obliquus. I have also specimens from E. Bartholomew, La. (5471), on Cottonwood, J. Dearness from Prof. Macoun (320), on fir stump.

NOTE 333.—Fomes Meliae, from Dr. R. P. Burke, Alabama. This is the first specimen I have received. The types at New York are old and unsatisfactory (cfr. Syn. Fomes, page 283), and recent determinations at New York are Fomes connatus.

Fomes Meliae and Fomes connatus are quite close in general appearance and both have pale context, and pore layers separated by layers of context, a character not known in any other species with pale context. In connatus the pores are ochraceous, darker than the context, spores globose, and hymenium with capitate cystidia. In Meliae the pores are grayish, same color as context, spores elliptical, $3 \ge 6$, and no cystidia. I am glad it proves a good species, as Underwood did a lot of guessing in this line, and he is entitled to stumble over a few that are good. Dr. Burke finds it growing on Melia Azedarach. It is no doubt a species imported from China.

NOTE 334.—Fomes fraxineus, from Dr. R. P. Burke, Alabama. A rare plant with us, and this specimen is more like the European in texture than those I have previously seen. Spores are globose, 6-7 mic.

NOTE 335.—Polyporus ovinus, sent by J. F. Conant, Massachusetts. This is correct, I am satisfied, on comparison with my European material. There is a faint reddish cast to the dried specimens, but nothing like as pronounced as it is in Polyporus confluens. These two species are close to each other and have been much confused. I have always claimed that ovinus could be told by having no reddish cast. I will have to withdraw that now. Still it is not the pronounced red of confluens, particularly in very old specimens. Cfr. Note 196.

NOTE 336.—Exidia purpureo-cinerea, from Miss A. V. Duthie, South Africa. We determine this from the description and the fact that it was named from South Africa. The short diagnosis does not tell much, but it is probably correct. We noted at once that it was not a European species, differing in its mode of growth, its paler color, and the dense, minute papillae from Exidia glandulosa, its nearest relative in Europe. It is a true Exidia with globose, cruciate, pale colored basidia, 10 mic. in diameter, and typical papillae. The spores also are typical of the genus, 6 x 16, reniform, subhyaline, with granular contents. To our eye there is nothing purple about it. The types at Berlin are very poor, and we think these are the only good specimens in any museum.

NOTE 337.—Exidia caespitosa, from Miss A. V. Duthie, South Africa. Truncate, densely caespitose, so that it appears cerebriform. Color pale amber brown. Imbedded near the surface are slender, broken, deep colored ducts (gloeocystidia). Basidia not found. Spores not seen. This species has same color and papillae as the Exidia purpureo-cinerea, differing in shape and structure. The form is like that of Exidia truncata of Europe, but its caespitose manner of growth, much paler color, and smaller size, all distinguish it.

NOTE 338.—Xerotus fuliginosus, from Miss A. V. Duthie, South Africa. The genus Xerotus, in the sense it has acquired by use, is simply a Panus with colored, distant gills. It occurs in warm countries only. As to the species, I have never studied them in detail in the museums, but my impression in looking through the cover is that they are largely the same. We have in our collection, we believe, three different species.

Xerotus nigritus. This, we believe, is the most common species and widely distributed. When young it is reddish brown (tawny of Ridgway), but becomes dark, almost black, when old. Several of our collections show both conditions, and intermediate stages. The spores are 8×14 , hyaline, apiculate with granular contents. The coloring matter is readily dissolved in potash, and the resulting solution is a dark green color. This species we have from the Philippines, E. D. Merrill and several collections from our Southern States. Our American plant was called Xerotus lateritius in its young (tawny) state, and Xerotus viticola when old and black. (Cfr. also Note 165, Letter 53.)

Xerotus fuliginosus. This, the same size, shape and color as young nigritus, does not become dark when old. The spores 6 x 8, hyaline, also quite different. I have determined it from description only. I presume Xerotus fragilis is same thing. These specimens from Miss A. V. Duthie, South Africa, are all I have.

*Xerotus Archeri. This, the same color as preceding, is spathulate, with short, thick stipe. The basidia are colored and form a palisade layer, and I find no spore. There are greenish granules seen, which Kalchbrenner evidently took for spores and based on them the genus Anthracophyllum (sic). I have one collection only from Dr. Stoward, West Australia.

NOTE 339.—Stereum laxum, from Miss A. V. Duthie, South Africa. Resupinate, loosely woven, but forming a soft membrane. Context brown. Hymenium white. The entire tissue, hymenial and subhymenial, is formed of loosely woven hyphae, the latter colored, the former similar but hyaline. The hyphae are $3-3\frac{1}{2}$ mm. thick, and the hymenial bears small granular thickenings. Basidia clavate, not forming a layer. Cystidia none. Spores $3\frac{1}{2}-4 \ge 5$, hyaline, smooth.

It grew resupinate on a dead leaf. The loosely woven hymenium indicates the genus Hypochnus, but as the plant is a soft membrane I think it better in Stereum.

NOTE 340.—Hirneola auricula-Judae. In a lot of typical Hirneola auricula-Judae, the luxuriant, tropical form received from Dr. Joas Dutra, Brazil, is a specimen with the hymenium so strongly reticulate-porose that it could well be taken for Hirneola delicata. I presume this is the Brazilian plant over which Bresadola and Moeller had such a bitter controversy. I think they were both right and both wrong. The Brazilian plant I take to be a form of Hirneola auricula-Judae, not Hirneola delicata, as both Bresadola and Moeller refer it, and I think Moeller was right in saying it is a form of Hirneola auricula-Judae and wrong in referring it to Hirneola delicata, although from a single specimen like this it is very hard to point out why it is not Hirneola delicata. In Samoa, however, where I found Hirneola delicata frequently, it did not even suggest to me Hirneola auricula-Judae, and there were no connecting forms. "Species" in nature are only relative and subject to local conditions. In Brazil one has good grounds to consider Hirneola delicata and auricula-Judae the same. In the East they are such different plants that one could not possibly class them together.

NOTE 341.—Stereum Kalchbrenneri, from I. B Pole Evans, South Africa. Named amoenum by Kalchbrenner, from South Africa, and changed by Saccardo on account of duplication of name. These specimens agree exactly with cotype at Kew. It is very close, and I think a form of Stereum hirsutum, being more luxuriant with more scabrous, brighter colored upper surface, but the hymenium is just the same. It is evident to me that in the original description Kalchbrenner confused this plant with Stereum involutum, as he described the hymenium, as "lilaceo vel alutaceo." There is no lilac shade ever to any species of the hirsutum group, always yellow or cinereous. These specimens from Mr. Evans agree with the cotypes of Stereum Kalchbrenneri at Kew from MacOwan, South Africa, and I take the species in this sense. I have seen several specimens of Stereum involutum (which has lilaceous hymenium) in the museums, determined as Stereum Kalchbrenneri, but it is an error, at least as far as the cotypes at Kew are in evidence.

NOTE 342.—Daedalea Eatoni, from I. B. Pole Evans, South Africa. A thin plant, but with same context, color and pores, there is no doubt it is a thin (probably the first year's) growth of Daedalea Dregeana. From one of the specimens of Daedalea Dregeana, I pulled off a thin (supplementary growth) pileus that can not be told from Daedalea Eatoni.

NOTE 343.—Daedalea Dregeana, from I. B. Pole Evans, South Africa. A thick, rigid Trametes-like plant with hard, aniline yellow context and rigid daedaloid pores. The type is at Paris. It is a Fomes-Daedalea, the old pore layers indistinct, being filled up with the context tissue. It has no cystidia, and spores I do not find. This is the first time I have received the type (thick) form, though the thin form (cfr. Daedalea Eatoni) I have previously gotten. NOTE 344.—Polyperus subradiatus, from I. B. Pole Evans, South Africa. (Cfr. Apus Polyporus, page 346.) This was named from Japan, but evidently same species. Had it been named from this collection, it would have been called sublicnoides, for to the eye it is exactly same as Polyporus licnoides, but differs entirely in microscopic details. I do not find spores in this collection, but note on the hymenium a few hyaline, sharp, thin walled, smooth, projecting hyphae (cystidia?).

NOTE 345.—Polyporus (Ganodermus) mollicarnosus, from I. B. Pole Evans, South Africa. Pileus sessile, a foot or more in diameter. Surface not laccate, pale buff color, smooth, soft to touch. Context very soft and spongy, light color, varying from buff to isabelline. Pores small, round, an inch or more long, with concolorous mouths. Spores 8 x 12-14, very pale color, smooth.

This plant impresses me as exceptional among the Ganodermus section in its very soft flesh and pale spores. I know no other with such flesh excepting Polyporus colossus, which has a differently colored context, and larger spores. I would class it in Section 102 of my recent Apus Polyporus pamphlet. It is an evident annual and probably of rapid growth. Type No. 58 from I. B. Pole Evans, South Africa.

NOTE 346.—Stereum illudens, from Miss Margaret L. Flockton. Australia. Miss Wake-field states that Stereum spiniferum (Note 155, Letter 51) was based on young specimens of this species, and I think she is right. It is a frequent species in Australia. Not known elsewhere.

NOTE 347.—Polyporus arcularius, from Miss Margaret L. Flockton, Australia. The Australian plant is darker in color and not so scaly as our American plant, but surely same species.

NOTE 348 .- Polyporus decipiens, from Miss Margaret L. Flockton, Australia. (Cfr. Apus Polyporus, page 355, figure 390.) Recently this has been listed as Trametes. Properly it should be called Phaeotrametes, as Prof. McGinty proposed. It must be admitted that it is a better Trametes than it is Polyporus or "Hexagona," and it is not very good as either one. It is not rare in Australasia, but unknown elsewhere.

NOTE 349.—Polyporus Hartmanni, from Miss Margaret L. Flockton, Australia. A fine specimen. This species is closely allied to Polyporus radicatus of the United States. It is only A fine known from Australia and Miss Flockton is the only one of my correspondents who sends it. In fact, the only specimens known to me are those in my museum from Miss Flockton and two old collections at Kew. The color of the dried plant is a rich orange brown, about chestnut of Ridgway. Cooke's figure badly shows it.

NOTE 350.—Stereum Leichardtianum, from Miss Margaret L. Flockton, Australia. The determination is not sure, though probably in same sense as Miss Wakefield has recently used the name. The type at Paris is a single specimen (from Australia), and if this plant, it is a the name, The type at Tarlis is a single specimen (from Adstandy, and it this plant, it is a synthesis and specimen of it. These are old specimens and show glabrous and pubescent zones. The type has no glabrous zones, but that may be a detail of age. In this sense the plant is quite close to Stereum lobatum. Spores teste Miss Wakefield $3-3\frac{1}{2} \ge 7-9$. Owing to the vague character of most of Léveillé's naming, there is no certainty that this is correctly named, but the name is as good, or rather as bad, as any for it, and the plant needs a name.

NOTE 351.—Polystictus oblectans, from Miss Margaret L. Flockton, Australia. As stated in my Stipitate Polyporoids, page 164, this is at best a form of Polystictus cinnamomeus of Europe and United States. I have now six collections from Australia and from them can get a good idea of it. It has the same bright color and only differs in more pronounced, coarser fibrils (sometimes erect) on the pileus. I have also a collection of Polystictus cinnamomeus from Australia, exactly the same as our American plant.

NOTE 352 .- Lycoperdon piriforme var. flavum, from Miss Margaret L. Flockton, Australia. Remarkable for the bright yellow color of the young gleba, and it has a smoother context than the European plant. I think it is really a species, but too close to piriforme.

NOTE 353.—Hexagona similis, from Miss Margaret L. Flockton, Australia. A fine collec-tion of this Australian species, the first I have gotten. It is quite close to Hexagona rigida, but smaller pores. Both species are close to Hexagona tenuis, but thicker plants with fibrillose surface. This is the best collection of the species I ever saw.

NOTE 354.—Bovista plumbea var. nigrescens, from J. M. Grant, Washington. This is for me a dark form of Bovista plumbea, though it might be held to be Bovista nigrescens of Europe, a small form. I think the former is the correct view, for Bovista nigrescens with same spores, etc., as plumbea in Europe corresponds to Bovista pila with us, in grosser characters. Bovista nigrescens type of Europe has never been found in the United States, although I have it from Mexico.

NOTE 355.—Fomes scutellatus, from D. B. Griffin, Vermont. Every time I get this little species, and it seems fairly common on alder branches in the Eastern States, I hunt for the spores, but I never found them until this specimen. Here they are abundant. They are straight, cylindrical, hyaline, about $3\frac{1}{2} \ge 10-12$ mic. I referred (with doubt), Letter 59, Note 297, an Australian collection to our American species. As it develops that the Australian plant, though similar to the eye, has entirely different spores, we are forced to give it a new name as follows:

different spores, we are forced to give it a new name, as follows:

NOTE 356.—Fomes Clelandii. Pileus sessile, small, 1–2 cm. in diameter. Surface black, rugulose, dull. Context isabelline. Pores minute with white mouths. Cystidia none. Spores elliptical, $6-7 \ge 7-8\frac{1}{2}$, subhyaline, opaque, smooth. When this was received it was referred

with doubt (cfr. Note 297, Letter 59) to Fomes scutellatus, an American species, with which it exactly accords to the eye. We have since found that the spores of Fomes scutellatus are entirely different, hence must rename the Australian plant. It goes in Section 57 of our Fomes Synopsis. Type (No. 52) from Dr. J. B. Cleland, Australia.

NOTE 357.—Trametes heteromorpha, from Mrs. A. M. Hadley, Vermont. Named by Fries as Lenzites, but takes Trametes forms also in Europe. The identity of our American plant with the European is not fully established, but I believe it to be the same.

NOTE 358.—Polystictus planus, from Mrs. A. M. Hadley, Vermont. This is a rare plant and this is the best specimen I have ever gotten. It was named as above by Peck. It occurs in Europe, but is very rare. My collections from Europe are all very scanty. Bresadola, who tried to substitute the name Trametes stereoides for Trametes mollis of Fries, or, as I call it, Daedalea cervina of Persoon, considered this a small-pored variety which he named var. Kmetii. I do not consider it a variety of Daedalea mollis. Romell takes it as the true Polyporus stere-oides of Fries, basing his opinion on a specimen in Fries' herbarium, so labeled by his son Robert Fries, although there is a specimen of Daedalea cervina labeled by Fries himself in the herbarium as Polyporus stereoides. Fries describes the pores as "majusculus," so shows them in his Icones and states the plant grows on Abies and has white pores. The pores are always minute, cinereous, and it does not agree with Fries' Icones and is never known to grow on Abies. I therefore cannot agree with my friend Romell. I think Polyporus stereoides of Fries is only a synonym for Daedalea mollis and has nothing to do with this plant, even as a form. Fries, in my opinion, called the pileate form of Daedalea cervina as Polyporus stereoides, and the resupinate form Trametes mollis. Polystictus planus has the coloration of Daedalea cer-vina, but otherwise with its minute pores is entirely different. The spores are 4x10, cylin-drical, straight.

NOTE 359.—Sistotrema confluens, from C. C. Hanmer, Maine. I collected the plant once in Sweden, but these are the third specimens I have from this country. It is rare. It is an ambiguous plant as to classification between Hydnaceae and Polyporaceae, but It is an ambiguous plant as to classification between Hydnaceae and Polyporaceae, but should be included in the latter in my opinion. Bulliard called it Hydnum and Persoon and Fries both included it in Hydnaceous plants. The plant has pores which are sinuate, daedaloid, with walls prolonged into teeth-like projections. When fresh as you look directly at the face of the hymenium, the walls of the pores are continuous and there is no question about it having pores. It is only a side view that gives it an Irpex appearance. The old genus Sistotrema of Persoon, which was based on sinuate pores prolonged into teeth, would not have been a bad genus, but the Friesian treatment of restricting it (mainly) to this one species and splitting off the genus Irpex is not so good. Banker's recent proposal to include it with species having definite, awl-shaped teeth is about as about a port of make who knew anything about the classification.

absurd a proposition as any one could make who knew anything about the classification.

NOTE 360.-Hydnum Peckii, from Miss A. Hibbard, Massachusetts. I name this only from the description and, of course, it is doubtful. It is a rare plant, and this is the first time I have received it. It belongs to the section with hard, subwoody context, but the pale color distinguishes it from all others known to me in this section. Spores are irregular, light colored, tubercular.

NOTE 361.—Polystictus pubescens, from Burtt Leeper, Ohio. Fine, typical thick speci-is. Polystictus pubescens and Polystictus velutinus are the same species. If it is thick, mens. it is Polystictus pubescens; if it is thin it is Polystictus velutinus. Dried specimens are always yellowish, but when fresh, as I have collected them in Sweden, they are white, acquiring a yellowish tinge in drying. Polystictus Greyii is also close, but differs in more glabrous pileus. We do not know it in Europe, but with us it is abundant on beech late in the fall, and white when growing, turning yellowish in drying. It is thin and has been called a smooth form of P. velutinus, but for me it is a good species.

NOTE 362.—Polyporus trabeus. Recently on a trip to the mountains of West Virginia we found Polyporus trabeus a number of times, and have also received a fresh specimen from Burtt Leeper, Salem, Ohio. When fresh and wet it is grey with zonate, grey flesh. When dry, pure white in all parts. The surface is minutely pubescent and the flesh soft and spongy. The word "crumbly" in our previous description refers to the dried flesh. When fresh it is just the opposite from "crumbly."

NOTE 363.—Lenzites subferruginea, from John E. A. Lewis, Japan. This is frequent in Japan and replaces Lenzites saepiaria and has the same bright context. I have over twenty collections of it, mostly from Japan. There are bright forms and pale forms. The latter are the most common. The bright forms are same color as Lenzites saepiaria, but are smooth in-stead of hirsute. The gills are more distant. I have sorted the specimens into four lots, but I do not pretend to say that they are species.

No. 1, The usual form in Japan with bright context but pale or dull surface. No. 2, Bright smooth surface and context. Thick form with broad gills. No. 3, Bright smooth surface and context. Thin form with narrow gills. No. 4, Bright form with pubescent surface. It cannot be told from Lenzites saepiaria and I have so labeled the two collections I have from Japan.

Forms 2, 3 and 4 are perhaps nearer Lenzites saepiaria than Lenzites subferruginea.

NOTE 364.—Lenzites murina, from John E. A. Lewis, Japan. These are the first I have received of this species, which for me is a good species (cfr. Letter 36, page 3). It has been referred (in error, I think) as a variety of Lenzites betulina.

NOTE 365 .- Stereum Galeottii, from Rev. Louis Mille, Ecuador. This is only the smoothish form of the common Stereum lobatum of the tropics. These plants are almost glabrous. I have one collection from Madagascar with smooth and pubescent specimens in same collection, hence the species based on the smooth pileus is hard to maintain. It is rare, however, for on going through my lot of Stereum lobatum I find only one other smooth collection, which was from Brazil.

NOTE 366.—Lysurus horealis, from Herbert P. Ramsey, District of Columbia. Found in quantities on the Arlington Experiment Farm near Washington, D. C. Formerly this was supposed to be a very rare species, but it has now become established in many localities, mostly Eastern. Cleveland and Cincinnati are the furthest west it has yet been found.

NOTE 367.—Polyporus neofulvus, sent by Rev. J. Rick, Brazil. Surface context and pores concolorous, pale yellowish (chamois). Pileus dimidiate, $4 \times 8 \times 1 + \text{ cm}$. Surface glabrous, dull with slightly uneven zones. Context firm, somewhat soft. Pores minute, round, 2-3 mm. long. Cyst. none. Spores abundant, irregular subglobose, 4-5 mic., hyaline, smooth. This plant is close to Polyporous subfulvus as to pores, surface, color and general appearance. The context, however, is concolorous with pore tissue, and in subfulvus the context (almost white) is much paler than surface and pore tissue. Besides the context is more punky, thicker, and the plant is broadly attached, and not disposed to be petaloid. I received it from Rev. Rick before and sent it to Europe, where it was determined as Polyporous nivosus. I satisfied myself at Kew it could not be nivosus (cfr. note top of page 311, Polyp. Synopsis). Types from Rev. Rick (two collections).

NOTE 368.—Polyporous hispidus, from E. B. Sterling, New Jersey. A fine, large specimen, received fresh. It consisted of several imbricate pilei and measured 7x11 inches. The surface hairs were orange brown, about amber brown of Ridgway. None of the figures in European works show the color of the plant well. Bulliard, t. 493, fig. B., is about as close as any and shows the nature of the hairs better than Boudier's figure. Also color is closer but a little too red. Bulliard, t. 210, is not hirsute enough. Sowerby, t. 345, is too yellow, and Greville, t. 14, much too red. Gillet is much too pale and yellow. The color of the pore mouths is a peculiar, dirty yellow, about olive lake of Ridgway.

Polyporus hispidus is by no means a common plant in the United States. Mr. Sterling finds it on oak in New Jersey, but not many of my correspondents send it in.

NOTE 369.—Polyporus giganteus, from E. B. Sterling, New Jersey. A very large specimen, measuring when fresh 20 inches in diameter. Notwithstanding its name, Polyporus giganteus rarely gets as large as this. Mr. Sterling has an extended article in the Trenton Times-Advertiser, September 19, 1915, on the plant. He states that "when young and tender it is edible." I doubt if Polyporus giganteus is often young and "tender" enough to be of very much value as a food plant.

NOTE 370.—Polyporus borealis, from Wm. C. Stevenson, Jr., Pennsylvania. The form growing upright. In going over our specimens we note an error in our account of the plant in our recent pamphlet. It should be described as "usually growing upright" and reduced at the base, rarely dimidiate, and the flesh spongy when fresh, but drying light weight, but hard and tough.

NOTE 371.—Fomes (Ganodermus) applanatus, from Rev. C. Torrend, Brazil. A large specimen with a thick, distinct stipe. It is usually sessile in the temperate regions.

NOTE 372.—Cordyceps nutans, from A. Yasuda, Japan. Collected in Province Chikugo, Japan. The upper portion is orange, while the greater part of the stalk is black. It grows on several species of "Randwanzen."

I hope my Japanese correspondents will keep a special outlook this season for Cordyceps. I am much interested in them.

NOTE 373.—Leotia atrovirens, from A. Yasuda, Japan. We referred this plant, when received, to Leotia chlorocephala, in sense of Durand, but on going into the subject again, we doubt if the slight, paraphyse difference between the Japanese specimens and the European is enough on which to maintain a species. In addition, it is illogical to apply the name chlorocephala to a plant with both head and stem green, notwithstanding the evidence of Schweinitz' herbarium, which is not always conclusive, as in the case of Mitremyces lutescens (Cfr. Myc. Notes, 30, p. 395). We think we shall take the name chlorocephala for the only plant to which it logically belongs, believing that either Schweinitz or the party who mounted his herbarium has gotten the specimens mixed.

NOTE 374.—Polyporus sambuceus, from A. Yasuda, Japan. Sessile, applanate, 7-13 x 10-22 cm. When fresh, juicy and heavy, but when dry it becomes very light, spongy, pithy. Surface with thin, smooth, light brown, separable crust. Context soft, spongy, cottony, white. Pores white or discolored, small, rough, with thin walls, which often split, the pores becoming irregular. Spores globose, 3-4 mic., hyaline, smooth.

irregular. Spores globose, 3-4 mic., hyaline, smooth. When dry this is a very light, fragile species and closely allied to Polyporus Eucalyptorum in Section 80. In some of the specimens the thin crust has mostly peeled and only fragments remain, in other specimens the crust is indistinct. Prof. Yasuda wrote me it grew on old stumps and is widely distributed in Japan. Two of his collections, Nos. 3 and 311, are typical as described. Two others, Nos. 101 and 235, are probably younger conditions of it. The pores are shorter and regular, the context, while soft and spongy, is not so light and fragile. The surface has no distinct crust. The name adopted is to associate the pithlike context with elder pith.

NOTE 375.—Polyporus orientalis, from Prof. A. Yasuda, Japan. Cfr. Stipitate Polyporoids, page 193. This specimen is mesopodial, same as the type specimen figured (No. 499). Prof. Yasuda sent some time ago (No. 243) a pleuropodial specimen which I did not recognize

at the time. While we placed it in section Pelleporus, it really belongs in a section by itself which might be called the "stipitate gilvus section." The soft, pubescent pileus and hard texture are prominent features of the plant. It was sent as Fomes, but we believe it a Poly-porus. There is no indication of any perennial nature in either of the three collections that we have.

NOTE 376 .- Cordyceps Tricentrus, from Prof. A. Yasuda, Japan. Stipe slender, 1 mm. by 6 cm. Head nodding, smooth, 1½ mm. by 7 mm. Entire plant pale yellow. Perithecia not prominent. This species grows on Tricentrus and is very similar to Cordyceps nutans (also from Japan, cfr. Letter 56, Note 250, and Fig. 709). It differs in its host, Tricentrus, a name we have not located in any entomological work in our library, and in its color pale yellow in all its parts. Cordyceps nutans has a black stem below and deep orange above, as is the club. We have specimens of Cordyceps nutans from J. Umemura, but our material of both species is so scanty we do not wish to cut it to examine the spores. We are indebted to Prof. A. Yasuda for the specimen, also for the name of the host. We will shortly present a photograph of the plant. There is another Cordyceps that has about the same stature and color, viz., Cordyceps sphaecocephala, which grows on wasps in the West Indies and rarely in Europe. This differs

by its prominent ostioles, and I think there is no record of it in the East.

NOTE 377.-Polyporus frondosus. Mr. Leeper finds that this species, unlike the closely NOTE 377.—Polyporus frondosus. Mr. Leeper finds that this species, unlike the closely related Polyporus umbellatus and Polyporus Berkeleyi, does not form a true sclerotium, but a mycelial mass binding the earth together. I believe P. frondosus is always attached to buried roots, as I suspect all three species are. The "sclerotium" of Polyporus frondosus is of the na-ture of that of Polyporus tuberaster (cfr. Section Ovinus, page 74), excepting that it is not so strongly developed. The ball of earth is scarcely bound together firmly enough so that any one would class it as a "sclerotium." Our best thanks are extended to Mr. Leeper for light on this unbict, and for a beautiful photograph illustrating it subject, and for a beautiful photograph illustrating it.

NOTE 378.—The Sclerotium of Termite Nests. I have on two occasions received from Rev. J. Gillet, Congo, Belge, Africa, specimens of a sclerotium found on termite nests in Africa. As, of course, the sclerotia give me no clue to their identity, I forwarded them to Prof. T. Petch, Peradeniya, Ceylon, who has made a special study of fungi on termite nests, and he has informed me as follows:

"They are Sclerotium stipitatum Berk. & Curr., known to occur in termite nests in India, Ceylon, and Madagascar. They are the sclerotia of a Xylaria whose earliest name is, I believe, Xylaria nigripes, Klotzsch, 1883. I know it as Xylaria escharoidea (Berk.), 1843, as I have seen the type of that. I have not seen the type of nigripes. Its latest (?) name is Xylaria termi-tophilum Jumelle and Perrier de la Bathie, and it has numerous others between. I hope to publish shortly a résumé of the work which has been done on Termite fungi."

NOTE 379 .- Polystictum caperatus. This was named from Africa, but is more common in the American tropics. The African plant is not as strongly zoned and the surface is soft, pubescent and more even than the American form. The context color is also darker. I do not question but that the American form, which was always referred to P. caperatus by Berkeley,

is what Fries called Polystictus comatus, but which is not surely known, as no type exists. At Kew I referred a plant from J. Unemura, Japan (Nos. 80 and 83) to P. caperatus, but on comparison with my specimens at home find some marked differences. The surface is as in the African form, but more strongly zoned. The context, however, is much paler than the African form and even paler than the American form. The Japanese plant is a distinct form, if not a distinct species.

NOTE 380.—Polyporus radicatus. Our reference to Note 319, Letter 59, should be Polyporus radicatus, not Polyporus radiatus. What a vast difference a single letter makes. Of course, speaking of the sclerotium in connection with Polyporus radiatus shows the error on its face. In spite of all precautions, typographical errors will creep in.

NOTE 381.-Stereum pallidum in the United States. Recently at Eglon, West Virginia, I found this species growing in clay banks. I have never gotten it from a correspondent, and think it is not recorded from our country. A detailed account of the plant was given in our Stipitate Stereum pamphlet. The following description, drawn from the fresh plant, differs in some regards from my previous description drawn from dried specimens.

Fleshy-cartilaginous, more fleshy than Stereums usually. Color dirty white, or pale clay color. Caespitose, imbricate, growing on bare, clay bank somewhat in the manner of Thele-phora vialis. Pileoli 1-1½ inch in size, narrow at base, but not stipitate. Upper surface fibrillose. Hymenium concolorous, in folds. Cystidia none. Spores ovate, 5 x 7, transparent, with a large, opaque gutta. A section shows the tissue of rather loose, hyaline hyphae. On comparison with European material I conclude that this is same species.

NOTE 382.-The color of the pore mouths of Fomes applanatus. We have been very much puzzled, as stated in our Fomes pamphlet, over the varying colors of the pore mouths of the Fomes-applanatus group and in a letter recently received from T. Petch he stated the yellow coloring is developed in drying and that they are all white when fresh. We cannot say as to that, but we have never noted yellow pore mouths excepting in dried specimens. Still, if this is the case, it is a curious fact that in certain sections of the country, for instance, California, the most of the dried specimens received have yellow pore mouths, while in our Eastern States they almost invariably dry white. Also in Europe there is but one species where we have found yellow pore mouths on dried specimens, namely, Fomes laccatus, and that has always yellow pore mouths.

NOTE 383 .- Fomes badius. I sometimes think I must be a very poor collector. The average collector can go off a few hundred miles and come home with a bagful of what he calls "new species." I spent three weeks last March in Cuba and I never saw but one polypore during the trip that I could not name at sight. I did find one Fomes that had the largest pores I ever saw in a Fomes, but when I got home and compared it I concluded it was only a large-pored form of Fomes badius. I found but a single specimen. Fomes badius (cfr. Fomes Synopsis, page 249) is for me only a large-pored form of Fomes rimosus, but the largest pores I had previously seen, a specimen from D. Griffiths, Texas, measured 300 mic., which is double the normal size.

The specimen I found in Cuba has pores again double from 500 to 600 mic., and to the eye seems different, but with the same characters, otherwise it would be folly to propose a species on it, for specimens of Fomes badius, I have previously noted, vary as to pore sizes. In fact, to my mind a tendency to vary in some feature, like the pore sizes of this species, the hymenium configuration of Lenzites flavida, is *the character* of the species. There is some variation in all species, no doubt, but some are *characterized* by a tendency to vary in a certain line. To propose as "new species" each species" that encumber Saccardo are based on just such vague basis.

NOTE 384.—As soon as you read this note, sit down and drop a postal card to the United States Department of Agriculture, Washington, D. C., and ask them to send you a copy of Bulletin No. 175, entitled "Mushrooms and Other Common Fungi," by Flora W. Patterson. It is the best general introductory work that has ever come to our notice. It embraces the common species and is illustrated with fine photo-engravings by which they can be identified. No one who is interested in the study can afford to be without a copy of the bulletin, and it can be had for the asking.

NOTE 385.—Fomes annosus and Trametes Persoonii. I have been handling these two species in quantities for a long while, and never suspected that there were any very close resemblances between them. Recently I received from Rev. C. Torrend, Brazil, a specimen that I referred to Fomes annosus (annual form), but noting that in his letter Father Torrend had referred it to Trametes Persoonii, I began making some comparisons that surprised me. While the pileus and context colors are similar, usually there is no confusing the thin, tropical plant with large, usually elongated pores, (T. Persoonii), with the small pored, rigid plant of temperate regions (Fomes annosus). But the specimen in question had medium, round, and regular pores, and on comparison I could hardly tell it from a specimen I have from New York of Fomes annosus, with same sized pores. The spores, however, show the difference, elliptical $3\frac{1}{2}$ -4x8 in Trametes Persoonii and globose, $3\frac{1}{2}$ -4 mic. in Fomes annosus. Since my attention has been drawn to it, I question a determination I made for J. Umemura, Japan, (No. 126) as Fomes annosus. I do not find spores in it and I rather suspect it may be a small pored, regular form of Trametes Persoonii.

NOTE 386.—Daedalea ungulata. Pileus sessile, ungulate, 2-3 inches thick, surface pale, minutely and densely pubescent. Context antique brown, varying to raw sienna. Pores sinuate, daedaloid, with thick walls. Hymenial surface pale, alutaceous, contrasting with the context color. Hymenium pubescent with projecting, subhyaline hyphae. Spores not found.

Though smaller, this has same shape and hymenial configuration as Daedalea quercina, but the coloration is like Lenzites saepiaria. I am satisfied it is only an ungulate, daedaloid form of Lenzites saepiaria, but no such form is known elsewhere than in Japan. Of this the color and shape are similar to Daedalea Guyoniana from Algeria, known from one old specimen at Paris (as Frametes). At first I so referred this collection, but I have since noted that Daedalea Guyoniana has colored spores and belongs to Prof. McGinty's "new genus" Phaeodaedalea, hence can not be the plant from Japan.

NOTE 387.—Stereum australe, from Geo. E. Morris, Massachusetts. (Cfr. Note 115, Letter 48.) This species which corresponds to Stereum fasciatum (and I think is so called by Burt), with the exception that the hymenium "bleeds," I found in Florida, and was under the impression that it did not occur in the North. We shall have to correct that, now that we have it from New York, but we can not concede that it is Stereum fasciatum, which Schweinitz records "vulgate et maxima Pennsylv."

NOTE 388.—Xylaria Cornu-Damae, from Geo. E. Morris, Massachusetts. Usually referred to Xylaria digitata (in error) in American lists, as for instance, Frost's New England list and Kauffman's recent New York list.

NOTE 389.—Laternea bicolumnata in California. In a letter received from L. C. C. Krieger, California, he informs me that the specimen of Laternea bicolumnata that was found in California, (Cfr. Letter 59, Note 305) was developed in some earth that contained phaenogamous plants from Japan. It is therefore probable that the specimen was only adventitious. It would be interesting to learn, as the years go by, if this species becomes established in California, as Lysurus borealis has become established in the Eastern States.

NOTE 390.—Lycoperdon subincarnatum, from J. B. Cleland, Australia. This is a peculiar species, characterized by the little pits on the peridium like those of a thimble, and its hyaline, septate capillitium. It is rather rare in the United States, and is (excepting the common L. piriforme) the only puff ball we have that habitually grows on logs. (Cfr. Myc. Notes, page 233.) We collected it in Samoa, and we believe that the scanty material representing Lycoperdon purpureum at Kew, from Bonin Island, is the same plant, but the "type" is too poor to consider.

NOTE 391.—Polyporus Berkeleyi, from Eose M. Taylor, Michigan. Growing on fir logs. The well known Polyporus Berkeleyi of our Eastern States is developed from a sclerotium (Cfr. Letter 49, Note 23), and usually occurs at the base of oak trees. Mr. Weir finds it common in Idaho, a root parasite of the fir (Abies), and now Miss Taylor sends it from Washington, growing on fir logs.

Ordinarily plants that grow on wood are different from those that grow in the ground, for habitat is usually one of the best characters a species has. But there are exceptions, such as Polyporus Schweinitzii, and as I believe now, Polyporus Berkeleyi. From the interesting note Miss Taylor sends, the plants were large, caespitose, and developed from branching stem which accords with the habits of the epigeous form. "The young specimens have an acrid taste, old specimens very peppery." This is a new observation in connection with Polyporus Berkeleyi, and I do not know that it has ever been noted on the usual, epigeous plant. The context, spores, pores, texture are exactly the same in both forms, and had Miss Taylor's specimen been sent without notes I should have referred it to Polyporus Berkeleyi without knowing that it was anything unusual.

NOTE 392.—Polyporus spongia, from Rose M. Taylor, Michigan. This is only a small pored form of Polyporus Schweinitzii, and has been given by me as a synonym. Fries distinguishes it by its small pores, a distinction not borne out by his specimens at Kew. This plant, though, does have small pores and the name under Fries' definition can well be applied to it.

NOTE 393.—Ptychogaster, from L. J. K. Brace, Bahamas. Many fungi in addition to the basidial or ascus spores bear spores direct from the hyphae, called conidial spores. Sometimes specimens for some unknown reason have a preponderance of these conidial spores, and certain species as Polyporus rufescens, have a tendency in this direction. There are all gradations, from specimens with the hyphae largely conidial bearing, to specimens mainly composed of these conidial spores. The latter are called Ptychogaster (or Ceriomyœs in Saccardo), though it is not a genus, but a sort of monstrosity. Mr. L. J. K. Brace sends a colored spored specimen of a Polyporus with such abundant, conidial spores borne on the hyphal tissue, that it readily crumbles into a powder mainly composed of these spores. I think it is a derivative of Polyporus cuticularis, but I would not so state with any certainty. Several of these monstrosities have been named as species, as Ptychogaster albus (Cfr. Myc. Notes, Polyporoid Issue No. 2, page 31), Ptychogaster cubensis, Ptychogaster fici, etc., but there is enough trouble in getting names for normal species without worrying over the freaks, or encumbering the subject with names for them.

NOTE 394.—The New York Species of Marasmius, by L. H. Pennington. When we published our article regarding Professor Peck in Mycological Notes No. 38, we stated that in our opinion the monographs issued by Professor Peck were the most valuable work that had been done in American mycology. We are very glad to see this work continued in the same style by L. H. Pennington, for it will eventually become a handbook, which is badly needed. It has been some time since we have paid any particular attention to agarics, but we believe that Prof. Pennington has published a very critical and accurate account of the species of Marasmius, which will be of great value to those working on the agaric subject.

NOTE 395.—Clathrus gracilis. I have received from Chas. C. Brittlebank, Australia, a description of Clathrus gracilis made from the fresh plant as follows: "Color, white. Volva irregular, more or less oblong, from 30 to 50 mm. Receptacle large, varying from 40 to 110 hgh. by 50 to 70 mm. broad. Mesh large, in some cases the openings are from 20 to 25 mm. or larger. Branches tough, white, formed of two or more tubes welded and in sections $3\frac{1}{2}$ -4 mm. in width, but often reaching 5-6. In some specimens there is a large area of from 30-40 mm. long and wide composed of large, flattened branches, generally at the apex of the receptacle. Gleba surrounded by mesh when young, but at age clinging to inner side of branches. Spores, olive green in mass $3-4\frac{1}{2}x1\frac{1}{2}-2$ m. Odor, sour, like French mustard, or vinegar poured on cabbage. Very acid when tested with blue litmus paper. Your figure on page 60, Synopsis of the Known Phalloids, is very good indeed for a spirit specimen. When growing it would be extended as are those on the opposite page. The receptacle is free in the volva when once expanded."

Practical notes, such as Mr. Brittlebank provides, are what are needed regarding foreign phalloids in order to get an accurate knowledge of them. I think more misinformation has been promulgated regarding phalloids than any other one subject of mycology, though all are bad enough. We have from Mr. Brittlebank a set of fine drawings and notes on all the phalloids that occur in his region, and we have been intending for some months to get up a pamphlet to illustrate them and make the information available to others. So much work has accumulated in other departments that we have never gotten to it, but we hope to do so in a few months.



Lloyd, C. G. 1915. "Letter No. 60." *Mycological writings of C. G. Lloyd* 4, 1–16.

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