LETTER No. 43.

Report on specimens received since October 1st. My best thanks are extended to those who have favored me with specimens. I desire especially to thank Mr. Weir, who has sent me one of the finest collections from Idaho that I have ever gotten.

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 private letter as soon as they come into my hands. Foreign correspondents can send specimens to my English address and they will reach me promptly, although in countries where there are direct parcels post arrangements with the United States, it is best to send them by parcels post direct to me. Specimens may be sent to either of the following addresses:

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

C. G. LLOYD,
c/o Mr. S. A. Skan,
37 Holmes Road,
Twickenham, England.

October 15, 1912.

BATES, REV. J. M., Nebraska (a):

Polystictus versicolor.—Polystictus hirsutus.—Irpex lacteus.—Daedalea unicolor, irpicoid form.—Lenzites saepiaria.—Polyporus gilvus.—Lenzites saepiaria, Trametes form.—Fomes leucophaeus.

Fomes pomaceus on Prunus Americana, as named by Mr. Bates, and I think, correctly, although this is of an unusually regular, ungulate shape. Generally, pomaceus is subresupinate with imperfectly formed pilei.

DONOR UNKNOWN, Tasmania (b):

Polystictus cinnabarinus; some have bleached almost white.—Rhizopogon (Sp.).—Polyporus. Probably unnamed, but, according to my notes at Kew, I should like to compare it with hololeucus, leucocreas, and portentosus before stating definitely. It has the appearance of an obese specimen of caesius of Europe, grayish surface, pure white context, discolored pores. The spores, however, are subglobose, hyaline, 8 mic., with a large gutta, totally different from the spores of caesius.

FROGGATT, W. W., Australia (c):

Polystictus cinnabarinus.—Geaster velutinus.—Polystictus sanguineus. —Schizophyllum commune.—Mycenastrum Corium.—Tylostoma McAlpini-

anum.—Polyporus unknown to me, probably unnamed. I have looked through my notes and photographs from Europe and find nothing at all like it. It is close to Polyporus Spraguei, of the United States. Same color, surface, and pores, but more scrupose and spores (3 x 5, piriform) different.—Scleroderma Sp. (very immature).—Scleroderma flavidum.

Clavaria rubroflava. The only truly "yellow" puff ball we have. I have noted that it is "domestic" in its habits, usually found in gardens and cultivated ground in the United States where it is not common. Mr. Froggatt finds it in a garden at Croyden, Aus. It has previously been collected in Australia by J. L. Boorman (cfr. Letter No. 23).

PECKHOLT, GUSTAVO, Brazil:

Hexagona variegata.

PERRIER DE LA BATHE, HENRI, Madagascar (d):

We have received from Monsieur Perrier de la Bathe another very interesting shipment (cfr. Letter No. 39). These specimens all came from the Eastern section of Madagascar.

Polyporus (Ganodermus, stipitate) dubiocochlear. Pileus with a dull, brown, smooth, not laccate crust. Context dark umber, ferruginous. Stipe short, dorsally adnate (or lateral), similar in color and crust to the pileus, tubercular, as if abortively branched. Spores 6 x 10, smooth, truncate at base. Pores minute, hard, compact. I rather suspect that this will prove to be the same as the original Polyporus cochlear from Java, if the type is ever found. It is not the same as cochlear in our pamphlet (Stipitate Polyporoids), but as we there stated, we doubted its literal correctness at the time. As to crust, color, context color, and spores, this plant agrees with the common Fomes applanatus of Europe, but the pores are smaller, harder, and similar to those of Polyporus fornicatus and mastoporus. Besides, applanatus in Europe never has a stipe. The species belongs to Section 2 of our Stipitate Polyporoids, and is the only species in this section (excepting Africanus) which does not have a laccate crust.

Polyporus (Amaurodermus) Bathei. Pileus unilateral (large specimens an inch thick, 1½ inches wide), with a smooth, dull, rugulose, subzonate crust (not laccate). Stipe (5-8 mm. thick, 3-4 inches long), with a long, rooting base, as long as the stipe, dorsally adnate. Surface smooth, dull. Context scanty, umber in old specimens. Pores very minute, cinnamon, with concolorous mouths. Spores globose, colored, smooth, 10-12 mic. in diameter. In surface, shape and stipe attachment (and these characters are of more value in this class of plants than is usually conceded) there is but one other similar species to my knowledge, viz.: Polyporus Alluandi, and it has entirely different spores. The plant is quite close to Polyporus Auriscalpium of South America, and belongs in same section (5 of Stipitate Polyporoids).

Fomes sculpturatus (cfr. Letter 39). Two specimens, both prolonged into a false stipe-like attachment behind. Spores are elliptical, 12 x 20, brown, sculptured, but I am not so sure that they are conidial, as I had supposed.—Lentinus cirrhosus.—Polystictus affinis.—Cladoderris elegans, only a form of spongiosus of Africa without the thick, spongy surface.—Lycoperdon gemmatum.—Hypomyces (Sp.) parasitic on Hirneola (?).

Polyporus (Sp.). It seems very familiar to me, but I can not place it. Also a Stereum, Polystictus, and a Panus, unknown to me as to species.

SMITH, T. L., Massachusetts (e):

Fomes pinicola, very young.—Lenzites saepiaria.—Polystictus conchifer.—Lenzites confragosa.—Polystictus pergamenus.—Polyporus caesius.—Fomes conchatus.—Fomes carneus.—Hydnum albonigrum, if any different from Hydnum nigrum, which I doubt.—Stereum complicatum.—Poria (Irpex) tulipifera.—Trogia crispa (cfr. Myc. Notes, Old Ser. p. 1).

Hydnum caeruleum, which is doubtfully distinct from Hydnum suaveolens, but a more regular and smoother plant. This is our common American form (=Hydnum cyaneotinctum Pk.).—Hydnum Nuttallii (?). Unknown to me, but I so judge from description.

STERLING, E. B., New Jersey (f):

Polyporus corruscans? The beech trees in his vicinity are largely being killed by a black beetle. On the dead trees Mr. Sterling collects, abundantly, an old fungus that may be corruscans, but more probably is cuticularis. The specimens are old, in bad condition, and I should not like to state surely which species it is. In a previous shipment Mr. Sterling sent me a fine, typical collection of the rare Polyporus corruscans.

UMEMURA, J., Japan (g):

Lenzites saepiaria.—Polyporus adustus.—Polystictus abietinus.—Polyporus arcularius? This is not exactly arcularius, but very close, too close to have a new name for these specimens.

Polyporus Mikadoi. Sessile, dimidiate, imbricate, dark, ferruginous. Surface smooth, but with appressed fibrils. Context and pores concolorous. Pores small, round. Setae, none. Spores very abundant, subglobose, 3-4 x 4-5 mic., deeply colored, smooth. This plant is so close to Polyporus cuticularis of Europe and United States, that without examination it could be taken for same species. The spores are markedly smaller, and there are no hymenial setae as found on cuticularis. It seems to be a frequent species in Japan, and I have it from four collections. Originally from T. Yoshinaga, No. 7, Tosa, Japan (cfr. Letter No. 33); also A. Yasuda, No. 6, Sendai (1910), and No. 75 (1911). This collection of J. Umemura, Okazaki, on Prunus, No. 59.

Polystictus (Section Pelloporus) subpictus. Pileus (probably cinnamon when fresh) very dark in dried specimens, smooth, umbilicate, Stipe mesopodial, bright cinnamon, minutely tomentose. Context thin. Pores cinnamon, turning darker when dried, small, 2 mm. long. Hyphae deep yellow. Spores globose, 6 mic., colored, smooth. Polystictus pictus is one of the rarest of European species. It was found by Fries at Upsala, and a collection is in his herbarium, but, as far as I know, has never been found by any one else. The French records (as well as Bulliard t. 254, cited by Fries) are errors and should be referred to the common Polystictus perennis. It is unknown from the United States. It is very close to Polystictus cinnamomeus, but differs in turning black on drying. This collection (No. 64) received from Mr. Umemura, agrees with Fries' collection of pictus in

general size and in the dark color of the dried pileus. It differs in spores which are globose, 6 mic. (elliptical, 6-8 in pictus), and in the stem which is not "slender, glabrous, attenuate," but is rather thick, bright cinnamon, and minutely tomentose, and retains its color in drying.

Polystictus (cfr. phocinus).—Fomes (cfr. gilvus?). It has setae and hyaline spores, and is close to Polyporus gilvus, but has strata of pores, hence *not* Polyporus gilvus. Unknown to me.—Irpex (Sp.).—Fomes (Sp.). —Polystictus polydactylis? Seems to me same as my photograph of type, but should be compared.—Daedalea unicolor (very?). Very close, but doubtful.

WEIR, JAMES L., Idaho (h):

A very large and fine collection made in the forests at Priest River, Idaho, an excellent collecting section, judging from the specimens. The collection embraced a number of species that rarely reach me, such as Polystictus aurantiacus, Polyporus alboluteus, and Polyporus amorphus, the latter a common plant in Europe, but very rare in this country, at least in the Eastern States. Mr. Weir's specimens of Polyporus amorphus are the first typical specimens I have seen from our country. The species is not included in our latest compilation (N. A. F.). There are several Western plants in Mr. Weir's collection that are not familiar to me. Mr. Weir also sent many collections of Porias, with which I have not as yet had time to work.

Polyporus borealis.—Polyporus albellus.—Polystictus perennis.

Polyporus tomentosus. These plants are thin and have straight setae and can not be distinguished from Polyporus tomentosus, as it grows in Sweden. The spores (and Mr. Weir sends a spore print, so there is no question) are white in mass, 4 x 5-6, hyaline. On my collection notes made in Sweden, I have the spores recorded "7 x 12, colored," but I can not confirm it from my dried specimens, and I think probably an error. In our Eastern pine regions we have a plant with a *thicker*, upper context layer. I have been calling it Polyporus circinatus, as it corresponds to Fries' Icones and differs from tomentosus, as Fries says it does. As no type is preserved of Fries' Polyporus circinatus (he found it only once), and no specimen is known even in Europe that corresponds to his Icones, it is doubtful if our American plant is the same. Our Western and Eastern plants have the same spores and the same setae and, I think, must be held to be forms of the same species. There occurs in Europe (and I have a few collections from the United States) a species that has curved setae and spores 3½-4 x 6-8, straw colored. This is called Polyporus circinatus by Bresadola and Romell, though it is usually much smaller than Fries' Icones and is pleuropodial.

Resume.—There are, therefore, three (stipitate) forms of Polyporus tomentosus: 1st (typical), with thin context, straight setae; 2d (circinatus, American), thick context, straight setae; 3d (circinatus, European and American), curved setae.

Trametes suaveolens.—Polyporus frondosus.—Paxillus atromentarius? ? —Polyporus. Unnamed, as I believe. Not an Eastern species. Hymenium densely covered with setae. Closely related to Polyporus gilvus.—Bovista

Pila.—Lycoperdon piriforme.—Lycoperdon gemmatum.—Lycoperdon umbrinum.—Lycoperdon cupricum.—Polyporus picipes.—Polystictus aurantiacus.—Hydnum repandum.—Polyporus caesius.—Lycoperdon piriforme (form).—Polyporus chioneus.—Trametes (Sp.).—Lycoperdon gemmatum (form).—Polystictus perennis.—Stereum sanguinolentum.

Polyporus mollis (=Weinmanni). There are two species in Europe that are white in their prime, but spot red on the slightest touch, and turn reddish when old. One (Polyporus mollis) is a large species, dimidiate, usually two or more inches in diameter, and the surface strongly tomentose, strigose. The other, Polyporus fragilis, is small, and generally sub-resupinate, with a pileus effuso-reflexed. There is no question as to what Persoon called Polyporus mollis (Obs. p. 22), but I have long puzzled over what distinction Fries made between the two species, both from his writings and his Icones. I am forced to the conclusion that he only knew one plant under both names, and that Polyporus fragilis and Polyporus mollis, in the sense of Fries, were the same plant (fragilis). And what Persoon called Polyporus mollis, Fries called Polyporus Weinmanni.

Polyporus amorphus. Frequent in the pine regions of Europe, but very rare in America.—Stereum tuberculosum?—Merulius aureus.—Polyporus dichrous, or Gleoporus, if you wish, but not "Gleoporus conchoides Mont.," which, while often applied to this plant in American mycology, should be restricted to the thin, pale, *conchoid, tropical* form.—Polyporus fragilis.—Polyporus altocedronensis?—Irpex unnamed I think.—Stereum sanguinolentum (very?). "On Birch."

Polyporus lucidus, typical, except this is more obese and horizontal, and lucidus in the East is "auriscalpium" shape. I presume this is what has been called "Ganodermus Oregonensis."—Polystictus velutinus, pale and smoother form than usual.—Fomes annosus.—Daedalea unicolor.—Daldinia (Sp.).—Fomes carneus.—Polyporus. Unknown to me. Thin, soft, conchoid, white. Spores 2 x 5.—Polyporus Berkeleyi. "Common at base of old larches."—Merulius niveus.—Stereum versicolor.—Irpex lacteus.—Polyporus (Sp.).—Clavaria Ligula.—Dacryomyces (Sp.).—Spathularia flavida.—Cudonia circinans.—Clavaria inaequalis.—Polyporus alboluteus.—Chlorosplenium aeruginosum.—Polyporus dichrous. On Cedar, a rare host.—Trametes. A Western species. Unknown to me.—Fomes conchatus, very??

Polystictus versicolor, brown form very close to what Fries called Polystictus zonatus.—Peziza (Cochlearia) aurantia.—Polyporus unknown to me.—Hydnum (resupinate).—Polyporus adustus.—Lenzites saepiaria, on birch.—Irpex lacteus.—Merulius aureus, fine specimen.—Polyporus amorphus, with reddish hymenium. In Sweden amorphus occurs with white, yellow, and red hymenium. In this country in the East it is rare or absent.

Polyporus radiatus.—Merulius (Sp.).—Polystictus versicolor (on Larix, unusual host).—Hirneola auricula-Judae.—Merulius pulverulentus (=M. brassicaefolius Schw.).—Lentinus lepideus.—Merulius molluscus.—Polyporus spumeus.—Polyporus volvatus. A very large specimen, 2½ inches in diameter.—Polystictus hispida.—Trametes pini. One of the collections (the thin one) has a more strongly zonate surface than usual.—Fomes laricis.—Polyporus Schweinitzii.—Polyporus benzoinus.—Fomes pinicola.—Polyporus sulphureus, on hemlock.—Hydnum coralloides.

YASUDA, PROF. A., Japan (i):

Several of these collections are from an historical locality, "Bonin Island," from which an early collection was made by the U. S. Explor. Expedition and named in Europe.

Hydnum ochraceum.—Polyporus pubescens.—Polyporus squamosus.—Polystictus biformis, exactly the same as we have in the United States.—Polystictus pterygodes.—Trametes Dickinsii.—Stereum (Section Hymenochaete).—Lenzites (or Panus). (Sp.).—Hyphomycetes.—Polyporus (Ganodermus) lucidus.—Polyporus ostreiformis? The type from Philippines seems to be the same, according to my notes and photograph.

Hexagona bivalvis. This was named from the island of Rawak. It is same as to pores and surface, as Hexagona tenuis of the American tropics, and I have thought they were the same thing. This specimen, however, I can see is not so rigid (as tenuis), more of the Polystictus order, but if the Eastern species is held to be a different plant from our tropical American plant, it will be very difficult to distinguish them except by locality.—Apiosporum pinophilum?—Tremellodon gelatinosum.—Polyporus Mikadoi (as named in this letter, cfr. Umemura).—Polystictus vernicipes. Specimens from the type locality, "Bonin Island."—Polyporus foedatus?

Polystictus unknown to me. Probably unnamed. It is a pure white and glabrous species. Has rather large, rosy pores. It is reduced at the base and might be classed in Section 26 of my recent Stipitate Polyporoids.—Polyporus unknown to me.—Stereum. Probably "versicolor." Old.

NOTE 29. We have received from Mr. E. B. Sterling, Trenton, N. J., very large specimens of Polyporus Berkeleyi. These specimens weigh respectively 19 and 24 lbs. each. Polyporus Berkeleyi is the largest species of Polyporus we have in the United States, and attains a greater size than the similar plant, Polyporus giganteus, notwithstanding the name of the latter.

Owing to its large size it is strange to me that it is not referred by Mr. Murrill to Polyporus colossus. It has as much resemblance to Polyporus colossus as the plant that he has so referred, as neither of them have any resemblance to it whatever, except in being "large." This process of guessing at the identity of a plant from the name ordinarily has not much to commend it, but after visiting the museum where the type is preserved, then to come home and make such a "break" only illustrates the "scientific" value of the superficial work that is done on these cursory visits.

Mr. Sterling also sends me two very fine photographs of the species as it grows, but they are about the same as the photographs that we have previously published (Fig. 362) of this species in Myc. Notes Pol., Issue p. 37.

NOTE 30. Polyporus Chaperi (Amaurodermus). A specimen received from G. Peckolt is the second specimen known. This is a finer specimen than the type at Paris. The surface is rugulose zoned, but glabrous. Color reddish brown. Stipe mat with sterile branches as in the type. This species has a structure that I did not note when I examined the type. The fibrous tissue of the tubes consists of long deeply-colored pointed hyphae, the ends often projecting into the tubes and appearing like colored setae of other species. I have noted a similar structure in Fomes pachyphloeus, but if this is a character of the type specimen of Polyporus Chaperi (and it must be if this is correctly named), I did not notice it. Spores are globose, smooth, pale colored, 10-12 mic.

NOTE 32. Irpex coriaceus is a plant of the American tropics said to have several synonyms. The teeth have a peculiar, greenish olive color by which it is known at once. Rev. Rick distributes it as Poria portoricensis, which was named, I think, from the description, as I have never found any type at Upsala, though there may be a cotype at Berlin. Hydnum trachyodon, as guessed in Saccardo, is the same thing (type at Paris).

NOTE 33. **Fomes fasciatus.** In a letter from Mr. Romell, March 15, 1912, he writes me that "neither Prof. Lindman, the present Intendant of the botanical collections at the Riksmuseum in Stockholm, nor Dr. Malme, nor Prof. Juel, who have also been working there, know anything of the fungi collected and described by Swartz. A search was made for them some years ago, but without result. Some of the collections are, however, scarcely accessible now from want of space, so that a thorough search can hardly be made at present, but must be deferred until the new, more spacious building is ready.

I was recently told that some of Swartz's species are represented in Thunberg's herbarium at Upsala; viz., Boletus fasciatus, hydnoides, villosus, but Boletus supinus does not occur there, I am informed.

What you sent me seems to be young specimens of the species which I refer to under the name of Fomes plebeius in Hymen. austroameric. And if Swartz called it *Bol. supinus,* his name can hardly be accepted, as it means resupinatus, a condition which is by no means characteristic for this species.

As to Bol. fasciatus, of which you told me in another letter that a specimen so named in British Museum is identical with Fomes subfomentarius, I can now report that Prof. Juel has compared Fomes subfomentarius with the authentic specimen of Bol. fasciatus, which occurs in Thunberg's herbarium, and he says that the two are *distinct,* Bol. fasciatus being a flat, thin species, about 4 mm. thick, with no tinder, upper surface radially striate, with black concentric zones. Thus, if the specimen at British Museum is really my Fomes subfomentarius, the name Boletus fasciatus seems to cover two species.''

The specimen in the British Museum, I am quite sure, is the same as marmoratus of Berkeley or subfomentarius of Romell. Mr. Romell seems to lay stress on the specimen in Thunberg's herbarium and is not disposed to accept fasciatus as a name for the species. It seems to be one of those cases where the history of the naming is clouded from the fact that the author himself did not know his own species.

NOTE 34. Fomes graveolens, odor of it.

We made a note, number 19, regarding the ''odor'' of Fomes graveolens from a statement made by O. M. Overholts, who collected it fresh, and stated that he was unable to note any fragrance. It has always had a general reputation of being a fragrant species. We have recently had a letter from Mr. James R. Weir, who writes as follows:

''Every farmer in this region knows Fomes graveolens by its sweet odor. This is an assured fact. I have often collected it in this condition. The old specimens sometimes retain their odor.''

NOTE 35. **Polyporus radiatus.** Mr. Romell, in a letter written me on May 19th, is very positive that the spores of this species are hyaline. He states that his previous observations, when he had supposed them to be colored, were due to his mistaking them for Polyporus vulpinus. Bresadola published that the spores of Polyporus radiatus are faintly colored. I have never observed them in mass, but they appear to me hyaline under the microscope.

NOTE 36. ''Polyporus flavo-virens.'' It is well established that Polyporus flavo-virens, which is a rather frequent plant in America, is same as Polyporus cristatus of Europe (cfr. Syn. Section Ovinus, p. 80). Worthington G. Smith, in Vol. 1 of the British Mycological Society's Transactions, records Polyporus flavo-virens as a British plant, but from the spore size that he gives (7-8 x 15-18), it is not possible that it is correctly determined. Without the specimen it is impossible to say what Mr. Smith has so identified, but the probabilities are that it is Polyporus Pes-caprae, which is a similar species as to color with spores such as he gives.

NOTE 37. **Polyporus frondosus and Polyporus intybaceus in England.** Although these two species are carried in most of the mycological books of Europe, I have never been able to find but one plant and have about reached the conclusion they are synonyms. There is a very common plant throughout Europe as well as America that is undoubtedly Polyporus frondosus in the sense of Fries, but I can not locate Polyporus intybaceus as a different plant. From Fries's records intybaceus seems to have been a very rare plant which he collected at but one locality in Sweden (Halland), and hence it can not be the common plant that every one finds in Sweden and which is known in English tradition as Polyporus intybaceus.

Mr. Carleton Rea writes me: ''I have always thought I could distinguish between frondosus and intybaceus. The former has punctate spores 5 x 6 mic., the latter smooth spores, 3 x 6-7 mic.'' I feel that Mr. Rea's reference to Polyporus intybaceus with smooth spores should be Polyporus frondosus, but what the plant is that he calls frondosus with punctate spores, I do not know. The only plant in Europe to my knowledge with punctate (or tubercular) spores is Polyporus montanus, but it does not seem possible to me that it has been confused with frondosus.

NOTE 38. **Polyporus colossus.**—The type specimen of Polyporus colossus is in a jar at Upsala. It has typical Ganodermus spores, which are so abundant in the specimen that it is impossible to make a microscopic mount without seeing hundreds of them. They are elliptical, deep colored, and are truncate at the base. Patouillard has decided that Polyporus colossus is a new species and calls it Polyporus obokensis, but that is another story.

Mr. Murrill after visiting Upsala, where the type is preserved, came back home and had the assurance to publish that he had discovered Polyporus colossus to be a ''new genus'' that he characterized as having globose, hyaline spores, 4 mic. in diameter. These spores have about as much resemblance to those of Polyporus colossus under the microscope as a billiard ball has to an eel.

The plain truth is (probably) that after visiting the museum where Polyporus colossus is preserved, that he knew nothing more about its identity than he did before he made the visit, and on receiving specimens from the tropics (probably Polyporus Talpae) which were large, he thought they were Polyporus colossus, from the name. On this vague data he proceeded to erect a ''new genus,'' which he calls ''Tomophagus.'' The genus would have been more appropriately named had it been called ''Tommyrot.''

NOTE 39. **Hirneola Auricula-Judae.**—I have just made comparisons of the large amount of material of the genus Hirneola that has accumulated at the museum, and I am forced to the conclusion that there is really but one wide-spread species. It takes several forms. The thin form of the temperate region is Hirneola Auricula-Judae typically, and

the thick form of the tropics is Hirneola polytricha. Usually the hymenium has a purplish cast when dried, but specimens often reach me where the hymenium is brown. I do not consider this as of any specific value, as specimens lose the purplish cast when they are moistened. As to spore measurements, there is a little variation in size, but they are essentially the same. It is a very common species in every country of the world, and the slight variations found in different locations are remarkable when the distribution of the species is taken into account.

As to the genus, we believe the genus Hirneola should be maintained and not merged into Auricularia, as is the tendency with modern writers. Hirneola has its hymenium superior and Auricularia has its hymenium inferior, and the position of the hymenium has always been held to be of generic importance in the Friesian system. Since Brefeld's classical work was published on the basidia of the tremellaceous plants, it seems that modern classifiers can see no characters in this class of plants except the basidia.

NOTE 40. **Lentinus dactyliophora.**—I receive this frequently from the East and Africa, and it is evidently the most common species of Lentinus in these countries. It is light yellow color, smooth, has narrow yellow gills, and the remnant of a veil is quite evident on most specimens. It is without question Leveille's species which he well illustrated, but it probably has other names, as most of Leveille's ''new species'' have. I have never worked over the foreign Lentinus in the museums, and while there have been about a hundred ''new species'' discovered, most of them will probably prove to be synonyms.

NOTE 41. **''Fomes torulosus.**—This species belongs teste Lloyd, Myc. Notes, Polyporoid Issue, No. 3, p. 48, to Fomes fusco-purpureus Boud. Spores globose, hyaline, 4 mic. in diameter. In Fomes rubriporis Quèlét, the author himself indicated the spores as ovoid, 5 mic. long, pale fulvous. Is it a different species?''—Sacc. Sylloge Fungorum, Vol. 21, p. 294.

No, it is not a different species. The spore discrepancies are due simply to inaccurate work on the part of Mr. Quèlét. Boudier was the discoverer of this species, and he sent it to Quèlét under the manuscript name Fomes fusco-purpureus. Before he had a chance to publish it, however, Quèlét came out and published it as Fomes rubriporis. This proceeding was a little indelicate, not to say a word more severe, but as Quèlét originally received the specimen from Boudier, and as Quèlét himself has acknowledged fusco-purpureus is a synonym for rubriporis and claims the validity of rubriporis on account of priority (and he might have added, a little rascality), we think it is not worth while at this late date to question the synonymity of the two species on the strength of spore discrepancy.

NOTE 42. **Thelephora pedicellata.**—We have in this country a plant known under this name, which of course is no Thelephora in the modern sense of the genus, and which differs from most fungi in not being saprophytic on its host, neither is it parasitic, although it grows on the living stems. The genus is called in Europe now Septobasidium, based on some abstruse anatomical character, and in a conversation that I had with Professor Petch, of Ceylon, he told me that the genus was quite common with him and probably the same species we have in the United States. According to his investigation the young plant starts from a scale insect. Prof. Petch has written a paper on the subject some time recently, but I have not seen it. The subject has been brought up by some specimens having been recently received from Prof. John Dearness, London, Ont., concerning which Prof. Dearness writes me: ''This occurs with me on Cornus. It is associated with aspidium, or an allied scale insect.''

NOTE 43. **N'abusez pas du microscope.**—The introduction of the microscope into modern classification of fungi is very popular because it changes fundamentally the names of the old system. Except the advantage in making new names, we think it is of doubtful utility and that its use would in general be better in the subdivision of the old genera. The Friesian system of classification, based on macroscopic characters that are obvious to the eye, is certainly the simplest and generally the most practical and best way of classifying fungi. Under the system one can tell a Stereum as soon as he sees it. Under the modern method, one has to take it home and look at it under the microscope, to see if it is a ''Stereum,'' ''Hymenochaete,'' or ''Lloydiella.'' The microscopic characters may be a convenient method of subdividing the genus Stereum, but it appears to me to be straining a point to base genera on the characters of the hairs of the hymenium whether you call these hairs setae, metuloids, or cystidia, and is in principle the same and just about as logical as it would be to classify mammals by the nature of their fur coats.

We would not have it inferred, however, that we decry the use of the microscope when it reveals fundamental difference, as the nature of the basidia or essential organs. While we believe this is carried to excess at the present day, in principle it is right. But to base a genus on every shape and kind of hair that the microscope reveals on the hymenium is only an abuse of microscopic characters.

NOTE 44. **''Xylaria'' fiabelliformis.**—I am quite familiar in our woods around Cincinnati with a conidial plant that passes in our literature as ''Xylaria'' flabelliformis. I get the same plant from Africa. It was named and figured by Schweinitz, who claimed that it was ''rarely fertile.'' Ellis referred it as a conidial form of Xylaria corniformis, but I think without any evidence, and I do not believe it has anything whatever to do with any Xylaria. I have often seen it, and watched it to see if it develops into a ''Xylaria,'' which is quite improbable. I never have found any perithecia. Peck in his early day described it as a ''new species'' Thelephora rosella. The last time I was at Albany I had a good laugh with him over it, for he has long since learned that it is no species of ''Thelephora'' either new or old. All we can say at the present time is that it is a mystery and should be classed with Isaria until its perfect form (if it has one) is found out.