LETTER No. 50.

REVISION OF FUNGI IN THE SCHWEINITZ HERBARIUM

By C. G. Lloyd

(Cincinnati, November, 1913.)

Lewis David von Schweinitz, as his name was in full, blazed the trail for fungus work in America. Nearly 100 years ago (1818) he published the first paper on the subject, Synopsis Fungorum Carolineae. He was a Moravian minister, and his interest in fungi was awakened by his tutor, Albertini, while Schweinitz was a student in Europe. He published, in collaboration with his tutor, a work on the fungi of Niesky, where his college was located. On his return to this country he was located for six years at Salem, North Carolina, and his work on the fungi of that locality was recorded in the work cited. Afterwards he removed to Bethlehem, Pa., his native town, and his final work, Synopsis Fungorum in America Boreali, appeared in 1831 in the Transactions of the Philadelphia Philosophical Society. A few years later (1834) he died.

Schweinitz, in these early days, seemed to have been absolutely alone in his studies in this country. His first text-book was Persoon's Synopsis, which he followed in his first work; but before the second work appeared, Fries had come to the front in Europe, and the second work of Schweinitz was based on and followed the nomenclature of Fries' Systema.

Schweinitz' herbarium is preserved in the Academy of Natural Sciences at Philadelphia, and as it is the beginning of fungus work in this country, it is the starting-point of American history of the subject. Every attention is given to the student at the Academy, and my personal thanks are extended to Stewardson Brown for privileges of working with the herbarium during several visits I have made to Philadelphia for this purpose.

This is not the first commentary that has been written on Schweinitz's specimens. There appeared in the Journal Academy Natural Sciences, Philadelphia, 1856, a commentary under the joint authors' names of Berkeley and Curtis. It was very correctly and carefully written, and, with a few exceptions, the determinations were correctly made. It is quite evident to me that while the paper was claimed to have been written by Berkeley and Curtis, that Berkeley alone was the author. In the first place, Curtis had a very scanty knowledge of fungus classification, and was totally incompetent to write a critical commentary such as this; and, in the second place, there are references to specimens in Hooker's herbarium, specimens that Berkeley alone could have seen. It is also evident that Berkeley saw the specimens as contained in the original wrappers of Schweinitz. Curtis did not divide the specimens and send them to Berkeley, for the few little frustules that are preserved at Kew could not have been the basis of this work. It is my belief that Curtis sent the herbarium to Berkeley, and after Berkeley had written the article it was returned to Curtis and replaced in the museum at Philadelphia.

Some fifteen or twenty years ago the specimens were taken out of their original wrappers, new labels were written, and they were numbered systematically by numbers corresponding to the numbers Schweinitz used in his Synopsis in America Boreali. While this makes them very much more convenient for reference, I think it is really unfortunate, for the specimens have lost to an extent their value as absolute type specimens. The work was done by some one who had no critical knowledge of the subject, and it is evident on the face that in a few instances transpositions have been made in numbering the specimens. I have made a note of instances where it seemed that this was probably done, but, of course, I have no evidence on the subject excepting the evidence of Schweinitz' writings.

Schweinitz, who is the only one who has written on American fungi, who was familiar with the fungi from first studies in Europe, referred to European species the greater part of the American species that he met. His determinations of Agarics, of course, can never be checked up, and one is impressed with the number of Polypores that Schweinitz misdetermined. There must be taken into account, however, the condition of the science of the time Schweinitz wrote. His first text-book was Persoon's Synopsis, which contained but brief descriptions of European species, and it was to be expected that many determinations made under these conditions would be erroneous. I doubt if any one working under the conditions under which Schweinitz worked could have done any better.

In the following list the numbers are as the plants are now mounted, referring to numbers in Synopsis America Boreali. Plants in italics were claimed by Schweinitz as new species.

AGARICS

Only a few Agarics are found in the herbarium as follows:

100. Collybia *siccus*—now Marasmius and the common plant that Peck called Marasmius campanulatus.

108. Collybia stipitarius.—This is not stipitarius of Europe, but Collybia zonata of Peck.

147. Pleurotus petaloides.—This is Panus angustatus, of Berkeley and Morgan, Pleurotus petaloides, of Peck. It is a question whether it should be classed as Panus or Pleurotus.

148. Pleurotus lamellirugis.—This is now Paxillus panuoides.

152. Pleurotus stypticus.—Correct now as Panus.

154. Pleurotus algidus.—This is Pleurotus atrocaeruleus of Peck's work.

160. Pleurotus striatulus.—This is the little plant which I believe to be correct.

162. Pleurotus *niger*.—I am not sure I know this. Quite similar to above, but seems larger and thicker.

229. Crepidotus depluens.—I should not like to say that it is not correct, but I think it is not.

230. Crepidotus violaceo-fulvus.—Berkeley passed this as being Pleurotus pinsitus of Europe. I do not know it, but I think it is what Peck has called Panus salicinus.

255. Coprinarius disseminatus.—Now Psathyrella, but no specimen on the bark preserved.

267. Favolus alveolarius.—This is the common Favolus europaeus, always misreferred by Berkeley to "Favolus Boucheanus" (which is a Polyporus), and the Schweinitzian reference is also an error, as the old Bosc illustration on which the name is based is a crude figure of Polyporus arcularius.

268. Favolus *abnormalis*.—No specimen preserved.

Lentinus Nos. 269 to 277, not a specimen preserved.

278. Cantharellus aurantiacus.—Specimen poor.

279. Cantharellus cibarius.—Specimen correct.

280. Cantharellus tubaeformis.—Specimen correct.

281. Cantharellus lutescens.—Specimen correct.

282. Cantharellus cinereus.—Specimen poor, but correct.

283. Cantharellus cornucopioides.—Specimen correct as Craterellus now.

284. Cantharellus *odoratus*.—This rare species, which Schweinitz records as having collected once only, is represented by a fairly good specimen. It is an evident Craterellus, as Berkeley states. There are better specimens at Kew. I do not know it otherwise.

285. Cantharellus *roseus*.—No specimen preserved.

286. Cantharellus *cinnabarinus*.—No specimens, but the plant is common and well known under Schweinitz's name.

287. Cantharellus *floccosa*.—Good specimen, as now well known. It is our largest species of Cantharellus, and does not occur in Europe. I have, however, a specimen from Japan.

288. Cantharellus *helossoides*.—No specimen preserved.

289. Cantharellus crispus.—Specimen correct. As Trogia now.

290. Cantharellus *incarnatus*.—Specimen correct as Merulius and the finest species of Merulius that occurs. It is a beautiful plant when fresh. Berkeley incorrectly refers Schweinitz' species to Merulius tremellosus, our most common species, which Schweinitz records in his Fung. Car., but overlooks in his second list. Peck has renamed Schweinitz's species Merulius rubellus.

291. Cantharellus *confluens*.—It is Merulius Corium.

292. Cantharellus *spathularia*.—Specimen correct as Guepinia.

293. Cantharellus *Cupressi*.—This is not a fungus, but an insect gall (cfr. Myc. Notes, page 497). I found it abundantly in Florida recently, and it simulates a Cyphella so closely that Schweinitz can hardly be blamed for mistaking it for a fungus. When fresh it is white, but old specimens are dark reddish.

294. Cantharellus muscigenus.—Specimen poor.

295. Cantharellus fissilis.—No specimen preserved.

296. Cantharellus muscorum.—No specimen preserved.

297. Cantharellus tenellus.—I do not know it, but think more probably a Pleurotus. The gills are too well developed for Cantharellus.

298. Cantharellus cupularis.—Specimen poor.

299. Cantharellus *fasciculatus*.—No specimen preserved.

300. Cantharellus *olivaceus*.—This name should be restored as Paxillus. It is what Berkeley named Paxillus Curtisii, and what Peck has always so determined. Atkinson recently discovered that it was a "new species," and published a fine photograph of it under the name Paxillus corrugatus.

301. Cantharellus *viridus*.—No specimen preserved.

302. Schizophyllum commune.—Specimen correct.

Boletus, Nos. 303 to 319, but one specimen is preserved, viz., No. 315 Boletus floccopus. This is now known as Strobilomyces strobilaceus, and it is doubtful if Strobilomyces floccopus is different, not in the sense of Schweinitz at least.

POLYPORUS

Section subcarnosi

Now known as Section Ovinus. There are no specimens preserved now in this section. From our knowledge of the species that occur and Schweinitz' record, we feel able to interpret his record.

320. Polyporus subsquamosus.—No specimen preserved. The plant that Peck has named Polyporus griseus, and Fries poorly figured as Polyporus subsquamosus, but very doubtful as to "Linnaeus." Compare my pamphlet on section Ovinus, p. 78.

321. Polyporus ovinus.—No specimen preserved. The records of Polyporus ovinus in this country are so doubtful (cfr. Ovinus, p. 76) that it is doubly unfortunate that Schweinitz did not preserve his specimen. From the name Schweinitz first applied to the plant (albidus), it is probable that he did find Polyporus ovinus. It is certainly very rare, if it occurs in the United States, though it is frequent in Sweden. It is the only fleshy, mesopodial species of Europe which any one would be liable to designate as "albidus."

322. Polyporus melanopus.—The specimen is devoid of stem, but is a small plant of what is now known as Polyporus picipes. It is not melanopus, which is a closely related plant of Europe.

323. Polyporus fuligineus (in error evidently as fuliginosus).—It has large pores, and is not fuligineus as illustrated in Europe, which has minute pores, although fuligineus is not a species now known in Europe, being based on an old figure (cfr. Stipitate Polyporoids, p. 168). Schweinitz records Polyporus fuliginosus as being "frequent" in woods, but his specimen is not a species "frequent" nowadays. It is a small specimen of what Peck has referred to Polyporus pallidus, and which I consider as a scaleless form of Polyporus squamosus (cfr. Ovinus, p. 85), a rather rare plant. Sumstine recently discovered that it was a new species, and called it Polyporus Pennsylvanicus. Schweinitz has no record of Polyporus squamosus, and undoubtedly never met it.

324. Polyporus brumalis.—No specimen preserved. As Schweinitz records brumalis "rare" and leptocephalus "common," what he called leptocephalus was probably brumalis.

325. Polyporus ciliatus.—No specimen preserved. Probably the late summer form of Polyporus arcularius, which is depauperate and ciliate. It was called by Berkeley Favolus Curtisii, and renamed by Murrill, Polyporus arcullariellus. Schweinitz records the common Polyporus arcularius in his Fung. Car., but overlooks it in his second work.

326. Polyporus leptocephalus.—No specimen preserved. Probably based on brumalis, for leptocephalus is not known in Europe now except from old figures, and is certainly not "passim" in America (cfr. 324).

Section Coriacei

Now called Section Pelloporus.

327. Polyporus perennis.—Misdetermination for Polystictus focicola.

328. Polyporus rufescens.—Misdetermination for same (focicola) as above. It was misreferred by Berkeley to Schweinitz' Polystictus connatus, and for many years Polystictus focicola passed in American Mycology as being Polystictus connatus (cfr. Pol. Issue, page 10).

329. Polyporus Schweinitzii.—Specimen correct.

330. Polyporus *connatus*.—The "type" specimens are Polystictus perennis (cfr. 327 and 328 above).

331. *Polyporus radicatus*.—No specimen preserved, but is a well-known endemic species, which has no analogue in Europe. It does not belong in this section, however.

Section Pleuropus.

332. Polyporus varius.—No specimen preserved, but it surely is the plant now called Polyporus picipes, which *is the American form of Polyporus varius* of Europe.

333. Polyporus badius.—No specimen preserved; but from Schweinitz' record and reference it is now called Polyporus elegans.

334. Polyporus lucidus.—The species in Schweinitz' herbarium is Polyporus Curtisii, which might be considered as an unvarnished, yellow form of Polyporus lucidus. I think it quite distinct from lucidus.

335. Polyporus umbellatus.—The specimen is Polyporus frondosus.

336. Polyporus frondosus.—No specimen preserved. As Schweinitz determined Polyporus frondosus as being Polyporus umbellatus, and as from his record it is probable that his Polyporus giganteus was Polyporus Berkeleyi, it is probable that his record of Polyporus frondosus was based on Polyporus giganteus, and that he never met the rare Polyporus umbellatus.

337. Polyporus giganteus.—No specimen preserved; but from Schweinitz' remarks it is probable that the plant he determined as being Polyporus giganteus was what is known now as Polyporus Berkeleyi.

338. Polyporus cristatus.—This always passed in American mycology as Polyporus flavovirens, and it is only in recent years that its identity with the European species has been settled (cfr. Note 4, Letter 29). Schweinitz had it right in his writings, and he is the only American mycologist that has had it right. The specimen is a merest fragment, and I would not pass on it, but think it also is correct, though very much changed in color.

339. Polyporus sulphureus.—Specimen correct.

340. Polyporus imbricatus (as intricatus in error).—No specimen preserved. In Europe it is now held to be a condition of Polyporus sulphureus, and so it was no doubt in the sense of Schweinitz.

341. Polyporus *graveolens*.—Specimen correct. As Fomes now.

Section Apus.

342. Polyporus hispidus.—Specimen correct. Specimen appears harder than the species should be and has lost its surface characters. Spores same, however, and specimen no doubt correct.

343. *Polyporus labyrinthicus.*—There is no specimen so labeled now, but I have little doubt that it was the same as Polyporus unicolor or as named by Berkeley, Polyporus obtusus. The description applies to this plant exactly and the description of unicolor with its "stipite centrali umboniformi" does not apply to the specimen so named in the herbarium now. Polyporus labyrinthicus is one of the mysteries of Schweinitz' records. Berkeley and Fries both saw specimens and both commented on what a marked species it was. No trace of a specimen is preserved, however, at Kew or Upsala. The remarks of both (except some minor discrepancies) would indicate that the plant now known as Polyporus obtusus is what Schweinitz had. Ellis first distributed Polyporus obtusus under this name, but sent a correction later.

344. Polyporus spumeus.—No specimen preserved, and as the species is white, and Schweinitz records it subspadiceus, there is probably an error of determination. Polyporus spumeus is a frequent American species not current in our literature because not recognized. Murrill mistakes Polyporus spumeus as being Polyporus galactinus.

345. Polyporus betulinus.—Specimen correct.

346. Polyporus chioneus. This is Polyporus albellus, I believe, although the specimen has a decidedly yellow tinge that I do not know in connection with albellus. The surface and spores are same as albellus. It is chioneus of several (Murrill, Karsten), but of Fries doubtful. It is lacteus of Bresadola, also of Fries doubtful.

347. Polyporus destructor.—I do not know destructor in Europe and I can not say as to this old specimen. It seems to have been a white plant and the pores remind me of those of spumeus. I find large 10-12 subglobose spores, but may be accidental. Schweinitz labeled it with a ? mark.

348. Polyporus lacteus.—Species too poor for comment.

349. Polyporus stypticus.—No specimen preserved. It is unfortunate that there is no specimen in Schweinitz' collection, for it is a species not settled in Europe to-day. What the French call Polyporus stipticus does not agree with the original description, and is Polyporus albidus for Bresadola. I have a suspicion that Polyporus stipticus, in its original sense, is more common with us than in Europe, and I suspect that it is the foundation of Polyporus cerifluus and Polyporus semisupinus, as found in Murrill's work.

350. Polyporus mollis.—Not mollis. It may be galactinus, as some one has endorsed, but that is quite doubtful.

351. Polyporus caesius.—Appears correct to me.

352. Polyporus fragilis.—No specimen preserved.

353. Polyporus tephroleucus.—No specimen preserved.

354. Polyporus alutaceus.—The specimen mounted is Fomes connatus. In the original wrapper I find a piece of a specimen which is probably correct Polyporus alutaceus, but is an entirely different plant from the one that is mounted to represent this species. Polyporus alutaceus appears usually as Polyporus guttulatus in American works.

355. *Polyporus fimbriporus.*—The specimen is quite small, but is I believe Polyporus fragilis as I found it in Sweden. It is a white plant that turns red in drying, (cfr. Letter 43 under Weir).

356. Polyporus pubescens.—No specimen preserved.

357. Polyporus fumosus.—Misdetermination for Fomes annosus.

358. *Polyporus undulatus.*—No specimen preserved.

359. *Polyporus isabellinus.*—No specimen preserved.

360. *Polyporus nigro purpurascens.*—Specimen quite poor, but it appears to me to be a Polyporus dichrous as Fries and Berkeley both declare it to be. It is thinner than the next, however, which I do not question is P. dichrous.

361. Polyporus amorphus.—The specimen and record both are based on Polyporus dichrous. Polyporus amorphus, common in Europe, occurs with us very rarely east of the Mississippi. The specimen is typical of the common Polyporus dichrous.

362. Polyporus adustus.—No specimen preserved.

363. Polyporus crispus.—No specimen preserved.

364. Polyporus ulmarius.—Misdetermination. It appears to be a thick specimen of Polyporus gilvus, at any rate has no relation to ulmarius.

365. Polyporus suaveolens.—Specimens much eaten, but no doubt correct as Trametes.

366. Polyporus populinus.—This, in the sense of Fries, is I consider unknown although the name is applied by Bresadola (and those who copy him) to Fomes connatus. The plant of Schweinitz, however, is not Fomes connatus, but a species of Trametes which I have found, as Schweinitz did, on apple wood and which Berkeley named Trametes malicola. It is not known to occur in Europe, but is a characteristic species of America which was not included in Murrill's work. Murrill refers the name as a doubtful synonym to galactinus, which was a very bad guess.

367. *Polyporus unicolor.*—The specimens preserved are now called Polyporus obtusus. This has been known for years, but as the specimens do not accord with Schweinitz' description they were supposed to be an error. (cfr. No. 343.) They are correct, however, as parts still remain in the original wrapper.

368. *Polyporus cervinus.*—No specimen preserved. Something that Schweinitz found only once, and impossible to suggest its identity from description alone. There is a little specimen at Upsala which Bresadola takes in the sense of Polystictus biformis, but which is very doubtful to me. (cfr. No. 384 and also Myc. Notes, page 422.) This common plant is probably not the one that Schweinitz found "only once."

369. Polyporus serialis.—No specimen preserved.

370. *Polyporus pilotae.*—We have been able to prove only very recently that this is Polyporus croceus of Europe. (Cfr. Note 4, Letter 29.) Berkeley called it Polyporus hypococcineus, as he acknowledges.

371. *Polyporus pallido-cervinus.*—The little frustule appears to be Polyporus rutilans.

Section Coriacei (which is called Polystictus now).

372. Polyporus hirsutus.—Specimen correct.

373. Polyporus *hirsutulus.*—Specimen correct, but I hold it only as a form of versicolor.

374. Polyporus velutinus.—The specimen is P. hirsutus.

375. *Polyporus nigromarginatus.*—This name, which has been used as a

cheap juggle for Polystictus hirsutus, is a misdetermination of Polystictus hirsutus. Schweinitz usually so referred it, excepting one collection, which had a new (dark) growth on margin and which he did not recognize. How his mistake in one determination should invalidate the correct name under which he usually knew it, only name jugglery can explain.

376. Polyporus zonatus.—The very poor specimen can not be definitely referred. It is not probable that it is Polyporus zonatus, however.

377. Polyporus versicolor.—Specimen correct.

378. Polyporus stereoides is a misdetermination for Polystictus pergamenus.

379. Polyporus radiatus.—Misdetermination for Polystictus versicolor, to which it has not the most remote resemblance.

380. Polyporus pallescens.—Specimen too poor for opinion, but not correct.

381. Polyporus abietinus.—Misdetermination of Polystictus pergamenus. This, however, is a very unusual, velutinate specimen.

382. *Polyporus virgineus.*—Specimen is same as Polystictus conchifer with no "conch" developed. I am unable to see any resemblance whatever between the specimen and the figure Schweinitz gave.

383. *Polyporus conchifer.*—Specimen correct. A well known, common species, and endemic as far as known.

384. *Polyporus Symphyton.*—No specimen preserved. The description indicates that it was Polystictus biformis, a common, American species, not otherwise accounted for in Schweinitz' records.

385. *Polyporus decipiens.*—No specimen preserved.

386. *Polyporus parvulus.*—This is Polystictus abietinus.

387. *Polyporus scutellatus*, correct as Fomes.

Section "Biennes."

388. Polyporus sanguineus.—No specimen preserved.

389. Polyporus cinnabarinus.—Specimen correct.

390. Polyporus fraxineus.—Misdetermination for Fomes conchatus.

391. *Polyporus aesculi* (originally as Boletus aesculi flavae).—The specimen (which is Daedalea ambigua) disagrees with Schweinitz' description in every particular. It should be held as the "type" of the inaccurate work that was done in arranging and labeling the specimens rather than a "type" of Schweinitz.

392. Polyporus resinosus.—No specimen preserved.

393. Polyporus Benzoinus.—Misdetermination for Polyporus cuticularis.

394. Polyporus odoratus.—This is for me a trametes form of Lenzites saepiaria, which Fries illustrates (Icon. t. 191) as Trametes protracta. It is not Trametes odorata, a species of Europe that is not known to occur in America.

395. Polyporus nidulans.—Correct, but a synonym for Polyporus rutilans.

396. Polyporus cuticularis.—The specimen is Fomes conchatus, but probably a transposition of specimens for 393 (q. v.).

Polyporus brunneus.—This is found in a capsule and not included in Schweinitz' list nor mounted now in herbarium. It is Polyporus radiatus. I can see no resemblance to "croceus Fr." or "cupreus Berk.," as referred by Berkeley.

397. Polyporus rutilans.—No specimen preserved.

398. *Polyporus gilvus.*—Correct and the "type" of the common species.

Section Perennes (now Fomes).

399. Polyporus marginatus.—Correct, but a synonym for the next (Fomes pinicola). Some priorists use the name marginatus now, but generally make it more farcical by writing "Cooke" after it.

400. Polyporus pinicola.—Misdetermination for Fomes leucophaeus.

401. Polyporus annosus.—Misdetermination surely. I find no spores, but do not question (from color of context) it is a young specimen of Fomes rimosus. I would refer it to Fomes robustus if that grew in Schweinitz' region.

402. Polyporus dryadeus.—Misdetermination for Polyporus gilvus.

403. Polyporus fomentarius.—Misdetermination for Fomes applanatus (American form leucophaeus). No wonder Schweinitz records Fomes "fomentarius" as "vulgaris."

404. Polyporus nigricans.—Misdetermination for Fomes marmoratus of the tropics. Schweinitz' species is from Florida.

405. Polyporus igniarius.—Misdetermination for Fomes rimosus.

406. Polyporus Ribis.—Correct as Fomes.

407. Polyporus conchatus.—Possibly correct, but I doubt it. Not ligneous enough. More probably a thick species of Polyporus gilvus.

408. Polyporus microporus.—This is Polystictus byrsinus of Montagne. The specimen is from the South.

409. *Polyporus lobatus.*—This is based on a "contortion" of a plant since named Polyporus reniformis by Morgan, in its normal form. The recent use of the name lobatus for the plant under these known conditions is about as crooked a proceeding as the specimen on which it is based.

410. Polyporus *Pini-canadensis.*—No specimen mounted. I believe there is one in original wrapper, but I neglected to look it up.

PORIAS.

Schweinitz lists about sixty species of Poria of which eighteen were claimed to be new species and the remainder referred to European species. I question if there are any, certainly few, American Porias correctly referred to European species in this or any other paper.

American traditions and determinations. In Europe there is great difficulty with the genus Poria to this day, and in America the lists are not worth citing. Of the forty species Schweinitz referred to European species I believe most all are incorrect, and as they have little bearing on even the history of the subject, I shall not go into them in detail excepting as to the "new species."

413. *Poria favescens.*—This is the resupinate part of the plant now known as Trametes sepium. Otto Kuntze would probably call it Trametes favescens (Schw.) McGinty.

418. *Poria spissa.*—Fries described this from specimens sent by Schweinitz, and it has also been named by Montagne and Peck. It is a species that changes color so markedly in drying that the description that has been made of it from dried material is not suggestive even of the plant as it grows in the woods.

422.—*Poria Juglandina.*—The type is not very ample and I do not recognize it, and it may never be recognized. Evidently it has no resemblance to Poria spissa however (which Fries states). I judge it is related to ferruginosa, viticola, etc. Schweinitz observes it as "durissima, immersa, compressa, difformis," if that described anything.

423. *Poria viticola.*—This is a species named by Fries from specimens sent by Schweinitz. The type is hence at Upsala, but it is same as specimen so preserved in Schweinitz' herbarium. It is a species very close to Poria contigua.

426. *Poria pulchella.*—This is the yellow (trametes) Poria that passes as Poria vulgaris in American traditions. It is only yellow when protected from light, but fades out to white when the light reaches it. Hence the white condition which is most commonly met was not recognized by Schweinitz as the same thing and was by him called Poria vulgaris. I do not know the plant as a European species.

432. *Poria vitellinus.*—The specimen is very unsatisfactory, but I do not question from the description that Morgan has correctly interpreted it. It is a rare yellow species with large pores and loose subiculum. I have only collected it once.

435. *Poria xantholoma.*—Specimen does not tell much. It is described as thin, with large pores and fimbriate margin. It appears closely adherent. The plant that Morgan referred (incorrectly) to Poria xantholoma, Schweinitz evidently referred (incorrectly) to Poria obducens of Europe.

436. *Poria rhododendri.*—The specimen so labeled now is probably resupinate Trametes sepium, but surely not what Schweinitz described. I believe I know the species as Schweinitz has described it in detail and I think characteristically, but it is not the specimen now in his herbarium nor has it any "affinity to Poria contigua."

437. *Poria Sassafras.*—The description and the scanty specimen do not accord, as noted by Berkeley, and I question if it will ever be known. It seems to be a white species with large pores.

438. *Poria superficialis.*—Fries claims it is same as Poria viticola, which I believe is also true as to the specimen at Upsala. Berkeley says it is the same as Poria nigro-purpureus, and while I do not know what the latter really is I do not believe they are the same on comparison. For me the most satisfactory conclusion is to consider Poria superficialis as a synonym for Poria viticola on the basis of specimen sent Fries.

439. *Poria nigropurpurea.*—I do not recognize either the description or the little piece of type in Schweinitz' herbarium as anything that I know.

440. *Poria cinerea.*—No type preserved now.

441. *Poria Coryae.*—This is one of those nondescript growths which vary. I think it is what is known now as Poria subacida.

442. *Poria papyracea.*—Very thin, white, with large, round pores, about what Peck calls "Trametes serpens." Berkeley compares it to Polyporus Stephensii, which Fries refers to "Trametes serpens." Notwithstanding, I think Poria papyracea will prove in time a good species.

456. *Poria tenuis.*—This is a thin, white species with medium, firm, round pores, otherwise not recognized by me.

467. *Poria decolorans.*—Specimen very scanty, but is probably Poria sanguinolenta from its color change and color now.

468. *Poria candidissima.*—A thin, soft, white species with large pores and loosely adherent subiculum. I think I have collected it.

469. *Poria interna.*—No specimen found.

472. *Poria lilacina.*—No specimen found.

POROTHELIUM.

It is my conviction that there is but one species, Porothelium fimbriatum, in Europe and United States, hence all three of Schweinitz' species (Porothelium subtile, fimbriatum and *Pezizoides*) for me fall into one (P. fimbriatum). There is no specimen of his "new species" Porothelium pezizoides" in his herbarium, but I have seen authentic material in Europe and consider it only a young condition of P. fimbriatum.

DAEDALEA.

Under this head Schweinitz classed what are now called Daedalea and Lenzites.

476. Daedalea biennis.—Our American plant takes usually an abortive form called Polyporus distortus. That it is only a geographical form of Polyporus rufescens, or Daedalea biennis a synonym, there is no doubt in my mind. There is no specimen in Schweinitz' collection.

477. Daedalea quercina.—Correct without question, although there is no specimen in the collection.

478. Dadedalea betulina.—Correct as Lenzites.

479. Daedalea saepiaria.—Correct as Lenzites.

480. Daedalea abietina and

481. Daedalea trabea and

482. Daedalea confragosa and

483. Daedalea Pini are all four misdeterminations for Lenzites saepiaria.

484. Daedalea unicolor.—Correct.

485. Daedalea variegata, a form at best, of Lenzites betulina.

486. Daedalea gibbosa.—Specimen so eaten it can not be referred, excepting that it has no resemblance to Daedalea gibbosa of Europe, which is not known to occur in the United States.

487. Daedalea albida and

488. Daedalea discolor and

489. Daedalea rubescens are all three Daedalea confragosa.

490. Daedalea angustata and

492. *Daedalea zonata* are the thin, zonate, Lenzitoid, Southern form of Daedalea confragosa, better known as Lenzites corrugata.

491. Daedalea aurea.—This has a soft, pubescent pileus, but otherwise appears to be Lenzites saepiaria as referred by Berkeley. I think it is an unusual form.

493. *Daedalea subtomentosa.*—No specimen. Probably same as recently called Daedalea juniperinus.

494. *Daedalea Meruloides.*—Probably Paxillus olivaceus (cfr. No. 300).

MERULIUS.

495. Merulius tremellosus.—Correct. Why Schweinitz should have referred the very similar species Merulius incarnatus (cfr. No. 290) to a

different genus (Cantharellus) is a mystery to me. Merulius tremellosus and Merulius incarnatus are so similar that they were confused as one species by Berkeley, who only knew them from dried specimens.

496. *Merulius strigoso-zonatus.*—Correct as Phlebia (cfr. Letter No. 46, where a detailed history of this much-named plant has been given).

497. Merulius rufus and

498. Merulius serpens.

I think that in Sweden both of these plants, in the sense of Fries, are one species, and Schweinitz' 497 seems to be correct. His 498 has no affinity.

499. Merulius crispatus.—Misdetermination for Merulius Corium.

500. *Merulius pallens*=Merulius Corium.

501. Merulius fugax.—No specimen preserved.

502. Merulius lacrymans.—Specimen correct.

503. *Merulius brassicaefolius.*—No specimen, but probably correctly interpreted by Berkeley (cfr. 506), in which case it is same plant (really a thin form of Merulius lacrymans) called pulverulentus by Fries.

504. Merulius vastator and

505. Merulius molluscus and

507. Merulius Porinoides.—I would not wish to pass on the specimens that represent these three, excepting I am sure they are *all wrong.*

506. Merulius himantioides.—This is referred by Berkeley to No. 503 (q. v.) and is the same as Ravenel has distributed under the name Merulius brassicaefolius. In Europe there is more than one opinion as to the identity of Fries' Merulius himantioides (Cfr. Myc. Notes, p. 454), but according to my conclusions the true species as I believe I have found it at Upsala, has no resemblance to this.

FISTULINA.

This genus is now classed in Polyporei, though Schweinitz listed it in Hydnei.

508. Fistulina hepatica.—Correct.

509. *Fistulina radicata.*—There exists no such species, the "type specimen" being a distortion of something, and it is impossible from an examination to say what it would be if it were anything.

"SPHAERIA."

1167. *Sphaeria pocula.*—This is a unique, little species of Polyporus (cfr. Myc. Notes, Pol. Series, p. 44). Schweinitz' specimens so labeled as above are the undoubted plant. Recently the claim has been published that Schweinitz first referred the plant to Peziza digitatis, afterwards changed to Cyphella pendula, and they would even change the name of Polyporus poculus on such vagaries. Schweinitz preserved the species in his herbarium as Sphaeria pocula, so sent it to Europe, so illustrated it, and there is not a shadow of evidence in his herbarium that Schweinitz ever called it Cyphella pendula or anything else but Sphaeria pocula. When men, under the influence of Kuntzeism, propose changes of plant names on such "evidence" they should not go into print with the claim that such work was done after an investigation.