

to a mere vestige, sometimes raised on a short internode which supports three of the stamens, and undergoing partial reversion into green leaves. I find that Mr. Hankenson contributed to the first volume of the BULLETIN (Vol. i, No. 6, June, 1870) a short note upon some of these variations.

A. GRAY.

§ 282. **Agaricus with the odor of Chlorine.**—The note on Truffles, on page 276 (last BULLETIN), reminds me—1st. That these fungi must be very scarce in this country, for I have been looking out for them for the past 20 years without finding them more than once or twice:—2nd. A year ago last August I found a most remarkable new Agaricus. *It was exhaling a strong odor of Chlorine when found*, and continued to do so while it was kept fresh. The appropriate specific name, *chlorinosmus*, has been given to it by Prof. Peck, to whom I sent the specimen together with a few notes of its peculiarities.

* **AGARICUS (*Amanita*) CHLORINOSMUS, PECK.** A very large species, somewhat firm in texture, and nearly pure white. Pileus about 6' in diameter and 1'—1½' thick, convex above, the margin incurved, the under surface flattish and of a very light cream color, clothed on the upper side around and towards the margin, to the depth of a half inch or so, with an extremely light and soft deciduous efflorescence or powder, with a scarcely discernible yellow tint (like lime when but slightly charged with chlorine); towards the centre this powder becomes thinner and more compact, and at length (in the centre) it passes into soft, now friable and then persistent, warts or corrugations. Volva friable and caducous (or none?). Stipe solid, subcompressed (always?), 6' or 7' high and about 1½' thick, and extending about 4 inches beneath the ground.

It was found nearly a half mile from any building or public road, growing among coarse gravel and cobble stones, near the base of a steep (gravelly) wooded ridge with a north-westerly slope, and which was burned over during the preceding spring or autumn.

That the plant was exhaling chlorine there can be no doubt; since there is no other substance known having the same, or even a remotely similar odor. There was no mistaking this odor, which was by no means faint. Several persons besides myself, who were familiar with the smell of chlorine, and who handled the plant when fresh, immediately and positively recognized it. Among these persons are J. H. West, Teacher, (now of Lodi, N. J.), I. A. Zabriskie, Druggist, and Fred. Ahrens, Hotel Keeper. Undoubtedly the chlorine was taken from the soil by the plant in the form of a chloride, most probably the chloride of ammonium, or possibly of sodium.

For the following, and other reasons, I cannot help looking upon this as a most important scientific discovery. Here we have chlorine, hitherto considered a potent destroyer of all organic substances, actually exhaled by a living organism!—another striking proof that organic matter, when under the influence of, and protected by, the principle of life, is not amenable to the ordinary laws of chemistry, and may successfully resist or even create a

* Describ. by Peck. *Bull. Sag.*, II, 137.

destroying power, to which all organic substances brought within its influence *and not thus protected* readily succumb.

In this connection I may remark that *Agaricus edulis* has the odor of *Stachys hyssopifolia*, Mchx. C. F. AUSTIN, Closter, N. J.

[The Californian *Eschscholtzia*, it is well known, has "a colorless juice but with the odor of muriatic acid." We have the best authority for saying that this juice on being tested gave no trace of chlorine. Perhaps the same result will appear in the case of this new *Agaricus*.—EDS.]

§ 283. **Publications.**—1. *New York State Museum: Reports of the Botanist, Charles H. Peck, to the Regents of the University.*—Two of Mr. Peck's valuable and interesting annual botanical reports—the 29th and 30th—have recently made their appearance. The tardy manner in which the State issues these important contributions is greatly to be deprecated, inasmuch as it must not only prove a serious annoyance to those naturalists who originally describe therein species new to science, but also to others working in the same field, and who are desirous of obtaining access to such descriptions as early as possible. Upon consulting the 29th Report, which contains an account of the work done in the year 1875, we find that during this season there were added to the State Herbarium 201 species of plants not before represented therein; and that there were collected and received 153 species, all *fungi* and new to the Herbarium. Of this number, 80 are regarded as new to science. It appears that up to the date at which this report was submitted to the Regents (Jan. 1, 1876) nearly 300 species of *fungi* that attack and inhabit various living flowering-plants had been detected within the limits of the State. Many of these are parasitic on food-plants, and hence prove a serious injury to the Agricultural industry of the country. On the other hand, some of these *fungi* attack noxious weeds, and hinder their dissemination and multiplication, and for this reason must be regarded as the friends and allies of the farmer. Mr. Peck, believing that it is desirable that the life histories of these fungus friends and foes should be better known than they are, and that the means of multiplying or diminishing their numbers should be under control of the farmer, submits, as an appendix, a list of the parasites with the names of their host-plants. As those who have in charge the distribution of these reports, however, keep them out of the hands of the farmer, it is not very plain what good the publication of such a list is to do *him*.

An examination of the 30th Report reveals the fact that during the year 1876, there were added to the Herbarium 130 species of plants not before represented therein. During the same period there were collected in the State 168 species new to the Herbarium, 129 of which were *fungi*. Of the latter 69 are regarded as new or previously undescribed. In the preface to his Report Mr. Peck gives a sad description of the extensive ravages of a beetle (*Hylurgus rufipennis*) among the Spruces of the Adirondacks. The report closes with a list of parasitic *fungi* and their host plants, as a supplement to the one mentioned above, and presumably for the use of the farmer!—2. *Proceedings of the Academy of Natural Sciences,*