loma imbricatum Quél., and *Amanitopsis vaginata* Roze, no such clamp connections appear. According to Harper (Bot. Gaz. 1902), there are no clamp connections between the basidia and the subhymenial cells in *Hypochnus subtilis* and *Coprinus ephemerus*. Buller (Researches on Fungi, 1909) figures no clamps at the bases of the basidia in a number of *Coprinus* species. My own studies on *Coprinus micaceus, C. ephemerus,* and *C. stercorarius* (unpublished) fail to show clamp connections on the basidia of these forms. In over twenty species of Boleti (Bull. Torr. Club, 1913) no clamp connections were observed on the basidia. Yates's figures of his histological studies of certain Boletaceae (Univ. Calif. Publ. 1916) also show no clamp connections.

Kniep fails to trace the hyphae in the trama and to tell definitely whether or not he found clamp connections in these hyphae. Kniep's theory of the clamp cell is not supported by sufficient evidence and it still remains to trace out the origin and the history of the binucleated hyphae through to the basidia. This undoubtedly will clear up many questions on the morphology of the higher Basidiomycetes. MICHAEL LEVINE.

A VERY DANGEROUS MUSHROOM

The poisonous mushroom described below was brought to me for critical examination on May 1, 1916, by Mrs. Rufus Hatch, of Pelham Manor, New York. It grew plentifully in her mushroom beds the past winter, almost to the exclusion of the common cultivated mushroom, and was eaten by Mrs. Hatch and four members of her household with nearly fatal results. A full description of the effects will be published; but it is considered important to send out a warning immediately that *poisonous mushrooms may apparently develop from commercial spawn and that growers must be careful to eat or sell from their mushroom beds only the common mushroom with white cap and pink gills, Agaricus campester.*

Panaeolus venenosus sp. nov.

Pileus thick, fleshy, hemispheric when very young, sometimes hatshaped, at length expanded, cespitose, 3–5 cm. broad; surface

moist, slightly viscid when very young, hygrophanous, bay becoming fulvous or isabelline according to age and moisture conditions, glabrous, smooth on the umbo, rugose and folded on the broad rim when in the hat-like stage; margin entire to lobed, not projecting, smooth, entirely free from fibrils or remnants of a veil, incurved when young, marked with a water-soaked, dark-fulvous zone about 3 mm. broad; context white or slightly yellowish, very thick at the center and very thin toward the margin, the odor and taste resembling that of the common mushroom; lamellae squarely adnate, without sinus or decurrent tooth, plane, somewhat semicircular in shape, at least when young, inserted, fuliginous, gray or whitish on the edges, not distinctly marbled, purplish-fuliginous when viewed from below, of medium distance, about 8 mm. broad; spores ellipsoid or ovoid, somewhat pointed or narrowed at both ends, black, smooth, opaque, 11–13 $\times$ 7–8.5 μ; cystidia not found; stipe thick, fleshy, sometimes equal but often much enlarged upward, whitish or rosy-isabelline, not polished, longitudinally striate at the apex, whitish, pruinose above, whitish-tomentose below, conspicuously hollow, 6–10 cm. long, 5–10 mm. thick.

Type collected by Mrs. Rufus Hatch in her mushroom beds at Pelham Manor, New York, May 1, 1916 (herb. N. Y. Bot. Gard.).

At first sight, the specimens suggested the genus *Psilocybe*, since the gills were purplish-brown and the margin did not project beyond them; but the spore-print proved to be black and the spores typically those of the genus *Panaeolus*. The species is aberrant and might be placed in a different group or subgroup with species like *Panaeolus digressus* Peck and *Panaeolus acidus* Sumstine. Other species of *Panaeolus* have been considered somewhat poisonous, but apparently none have exhibited such poisonous properties as this.

W. A. MURRILL.