

Many people claim to know a mushroom from a toadstool. This means that there is one variety out of a thousand of which they eat with safety, and it means nothing more. A person might as well select one fish from the sea, and avoid all other members of the finny tribe, on the ground that there are poisonous fishes. It is strange that this general ignorance is most apparent in the case of the English speaking people. The fungus eaters form a little clique in England, but the majority of her people know nothing of this gratuitous offering from Nature's storehouse. No country is richer in mushroom food than America. Were the poorer classes of Russia, Germany, Italy, or France to see our forests during the autumn rains, they would feast on the rich food there going to waste. For this harvest is spontaneous; it requires no seed-time, and asks for no peasant's toil. At the same time, the economic value of mushroom diet ranks second to meat alone. With bread and mushrooms properly gathered and prepared, a person may neglect the butcher during the summer months. This is self-evident to the scientific mind by the simple facts that mushrooms make the same use of the air we breathe as is made by animals, that cooked they resemble no form of vegetable food, and that in decay their odor, in some cases, cannot be distinguished from that of putrid meat. To this feast, abundantly provided by Nature for the poorest as well as the most epicurean, we invite the American people.

T. But we must be careful; so that I will not try now to do more than to point out one of the best known of the very many valuable for food. Now, I pick out as many of the "mushroom proper" as I see in your collections, and give one to each desk so that you may tell me what you see. I shall begin with the "cap," which sometimes gets the Latin name *pileus*. The skin of the "cap" is—

S. Dry, silky, downy.

T. It's shape is—

S. The young ones are roundish, with a veil joining the edge of the "cap" to the "stem." The older ones more expanded, bell-shaped; at last even flat.

T. The color is—

S. White, whitish, greyish-white, whitish-brown, brownish, dark brown.

T. The older ones are darker ones, are they not? Can you peel the skin, "cuticle," off them easily?

S. Yes, we can.

T. Now, if you look under the cap you will find a great number of thin leaves or curtains running out from the stem to the margin of the cap. They are called "gills."

S. What is the good of the gills?

T. The whole surface of the gills produces millions of small, dust-like specks called spores, which are the seeds of mushrooms. Just try the experiment when we are done, of breaking away the stem and placing the cap gills downward on a piece of white paper for a few

hours, say from night until next morning. You will then see that thousands of spores fell from the gills to the paper, forming lines running out from the centre like the spokes of a wheel.

S. Why? One of the specimens left lines of spores beneath it since it was put on the desk this morning. The lines of spores are brownish, or purplish, I think.

T. Quite correct. You will find that the spores of the mushroom proper are purplish brown next morning.

S. Are the spores of all fungi purple?

T. By no means. You see that those which have been resting on this desk for a long time leave different colored lines of spores. I recommend you, then, to put a piece white of paper beneath each of your specimens after you gather them. You will then find that some are pure white, some rosy or salmon colored, or red-brown, or brown, or purple-brown, or even black. And that is one of the ways we can distinguish between the different kinds.

But now tell me if the stem is hollow or solid?

S. Solid.

T. Is it big at the base and tapering smaller towards the cap?

S. It is pretty even in size.

T. That is right. Some poisonous fungi have a large bulb or swelling at the base of the stem. But what is the color of the gills?

S. Mine is pink. Mine, purple. Mine, black.

T. Yes. The young ones are pink, and the old ones may become quite blackish. But you will never find any of them with white gills. What is the odor?

S. Quite pleasant. I think I would like to taste it.

T. Taste it, then.

S. I like the taste. I don't dislike the taste altogether.

T. Did any of you find any of these pink-gilled mushrooms in the woods?

S. No. I found them in an old pasture. I, in an old lane. I, on the roadside.

T. Correct. It never grows in the woods.

S. There is a large soft "gill-cap" toadstool that is so poisonous that they mash it in a little water into which sugar is put, in order to kill the flies which are attracted by the sugar.

T. Yes. But that soft "gill-cap" has a yellowish skin on its cap, which is also covered with wart-like patches. Its spores are white, and the base of the stem is quite bulbous. It is sometimes a very large and fine looking toadstool, but it is very poisonous.

S. Can you tell us some of the ways the "proper mushroom" may be cooked, so that we may tell them to try it?