For the Review.]

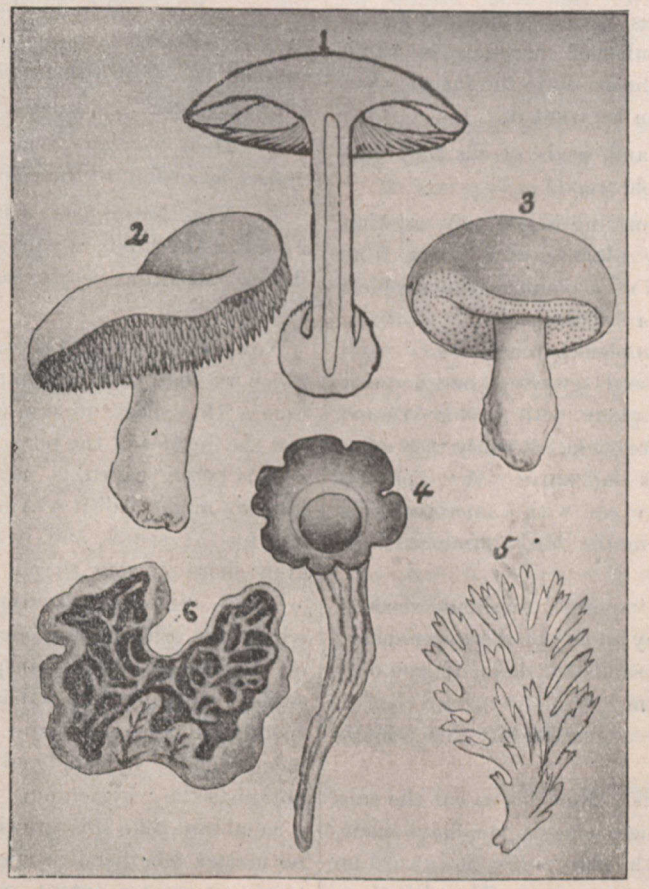
## NATURE LESSONS.

### Membrane-Spored Fungi.

Scholar. Toadstools! toadstools! Lots of different kinds which we got by the road this morning!

Teacher. Yes. Let us sort them. Many of them are umbrella shaped, with curtains or gills running out from the centre to the circumference. Let us put them in one class by themselves. Next let us make another class of those most like them. Now what kind shall it be?

S. Here is an umbrella-shaped one which is filled solid under the umbrella. No, it is not solid; for it is filled with a great number of little holes, or pores.




T. Very good. Break the cap, or umbrella, into two parts to see how far the little holes run up towards the top covering of the umbrella.

S. Why? They are all little tubes as fine as needles and packed close to each other, and they don't run quite up to the skin top of the umbrella. If we call the first class "gill-caps," we might call these "tube-caps," or "pore-caps," because the tubes are as small as pores.

Another S. My "pore-cap" is turning blue where I broke it in two. And wherever I cut it, or pinch its white flesh, it changes color.

T. You may be pretty sure that such a "pore-cap" is one of the poisonous ones, and not fit to eat.

S. Are any of these "pore-caps" fit to eat? We call them all toadstools.

T. Some of them are very good eating when properly prepared, and might be called mushrooms. Toadstools are the poisonous ones, and mushrooms are the ones good to eat.

S. How can we know one from the other, then, they are so mixed up?

T. We can know them only by knowing the kinds which have been tried by somebody. Some good looking ones are always poisonous, and others, some of them not very good looking, are very valuable for food. Children should never experiment with them. It is far better to miss a hundred good ones than to eat one poisonous one, and some are very poisonous.

S. Here is a "pore-cap," but its stalk is not under it like the handle of an umbrella; it is to one side more like a fan, and is quite tough and hard.

Another S. O, yes; I have one here which I got growing out of the side of an old stump, and it looks as if it were varnished above. It is most beautiful. Shall I put it in the class with the mushroom "pore-caps?"

T. Yes, if we are to make "pores" the mark of that class.

S. Then we will have two divisions in this class, the soft and the hard "pore-caps."

Another S. But here is one which, instead of pores or gills, has the under surface of the cap, or umbrella, all covered over with fine soft teeth, as soft as velvet, but coarser. Instead of having tubes, they appear to have the opposite of tubes or pores, soft spines or coarse fur. Will this form another class?

T. You are doing very well. You have already formed three classes out of your collection. That work is what is called classification. You have been classifying some of the *fungi* you have collected. Fungus is a name including not only the mushrooms and toadstools, as they are called, but all vegetation of a similar nature, some of them being so small that you would require a microscope to see them. But we shall talk only of what we can easily see now. When we know more we shall try others. Let us draw on the blackboard and in your "nature" notebook, a specimen of each class, calling the "Gill-caps" No. 1 and the "Spine-caps" No 2. But why do I propose to call the "Spine-