of dust. All mushrooms, of whatever kind, grow from spores. These produce fine threads in the soil known as the mycelium. Upon these threads or vines appear at first tiny knobs or conglomerations of cells about the size of a pin's head. These rapidly develop under favorable conditions of soil, combined with moisture and warmth, and soon lift their heads above the soil and appear as baby mushrooms, which quickly attain to maturity. That which we see is really the fructification or fruit of the mushroom. In the case of the puff ball, there is little difficulty in distinguishing it from all other kinds of mushroom fruit. The only possible mistake that can be made is in confounding a young Amanita, when just emerging from the ground, with one of the smaller species of puff balls. The Amanitas are our most poisonous mushrooms. Though gilled like the common meadow mushroom, they emerge from the ground enclosed in a spherical volva or sheath, and to a careless observer might be mistaken for a puff ball. The slightest examination of the internal structure will show the marked difference. The young Amanita, when broken open, will reveal the enfolded form of the mushroom within, whereas the puff ball will be found to be solid and homogeneous throughout. It is a comforting thought that no poisonous puff ball has been found in any part of the world. From time immemorial the small boy has kicked it aside as a useless and unsightly thing, little dreaming that it contained for him a supply of palatable and nutritious food. The Rev. Dr. Badham, an eminent British authority on mushrooms, expressed his regret that tons of wholesome food were rotting every year on the ground because no one had sufficient knowledge to take advantage of it. The same remark applies with equal force in this country, hence it is high time that something be done to disseminate information, and I know of no association so likely to be interested in the subject, or so capable of understanding it, as the Fruit Growers' Association. I admit that many have been deterred from the study of mushrooms, or micology, by the fear that it was an abstruse subject that was beyond their grasp and fraught with terrible risks. I shall endeavor in this series of articles to show that a very little knowledge will enable the reader to add materially to his "fruit" supply, and with perfect safety to himself. The accompanying diagram is a representation of the internal structure of a puff ball and serves to explain some of the technical terms used in describing it.

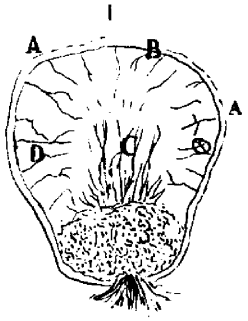

FIG. 1939.

A—Interior rind, bark or skin—peridium.

B—Inner rind or true peridium.

C—Filaments rising from base—columella.

D—Cottony threads or hyphae producing spores—capillitium. The space they occupy is called the gleba.

E—Empty, sterile cells—space they occupy called the sub-gleba.

Most of the puff-balls belong to two genera—Lycoperdon and Bovista. Shall describe a few of the more common species.

Lycoperdon giganteum, or the Giant Puff-Ball. This is the one gathered by Mr. Orr, and of which the photograph is here given. Its great size will readily distinguish it from all other species. Its diameter is usually from eight to fifteen inches, though some have been found whose diameter was