



FIG. 15.—A stalked fruit-body (spore-bladder, filled with spores) of one of the Myxomycetes (*Physarum albipes*) not much enlarged.

roundish bladder, often several inches in size, filled with fine spore-dust and soft flakes (Fig. 15), as in the case of the well-known puff-balls (*Gastromycetes*). However, the characteristic cellular threads, or hyphæ, of a real fungus do not arise from the germinal corpuscles, or spores, of the Myxomycetes, but merely naked masses of plasma, or cells, which at first swim about in the form of *Flagellata* (Fig. 11), afterwards creep about like the *Amœbæ* (Fig. 10 *B*), and finally combine with others of the same kind to form large masses of “slime,” or “plasmodia.” Out of these, again, there arises, by-and-by, the bladder-shaped fruit-body. Many of my readers probably know one of these plasmodia, the *Æthelium septicum*, which in summer forms a beautiful yellow mass of soft mucus, often several feet in breadth, known by the name of “tan flowers,” and penetrates tan-heaps and tan-beds. At an early stage these slimy, freely-creeping Myxomycetes, which live for the most part in damp forests, upon decaying vegetable substances, bark of trees, etc., are with equal justice or injustice declared by zoologists to be animals, while in the mature, bladder-shaped condition of fructification they are by botanists defined as plants.

The nature of the *Ray-streamers* (*Rhizopoda*), the eighth class of the kingdom Protista, is equally obscure. These remarkable organisms have peopled the sea from the most ancient times of the organic history of the earth, in an