

For the reason already stated, this assembling and feasting is usually concealed but in the history of the majority of these plasmodia there comes a stage of maturity or a condition of environment of the plasmodia moving them to enter a protected resting state or to emerge into the open air to spread over the surface of the matrix or to climb up the sides of contiguous plants or stems where they pass into aethalia or sporangia and become masses of dusty spores.

To the transitional stage, often a quite conspicuous one resembling beaten egg, or dirty honey or blood stained mucilage, the novice is more apt to experience aversion than any other feeling. It was this stage that suggested their commonest name—slime-moulds. But let him wait—I was going to say a minute—to observe the wonderful transformation. Different species follow different methods. Some of them build spore houses of many adjoining rooms, others spread out and in separated plasmodia develop into little tops or balls or lenses the prettiest conceivable, and still others creeping up leaves of grass or stems of plants or sides of stumps or trees resolve into rows of almost microscopic puff-balls. Many of them are more beautiful than the uninitiated can imagine until they have examined with the microscope the iridescence of their walls or the delicate lacework of their internal structure. After making such an examination the mind must be a dull and unimaginative one indeed if it does not become curious to know something of the life-history of these beautiful and curious little animal-plants.

It would make too long a story to summarize here the observations of De Bary, Cooke, Schroeter and many other students of the order. I can specially commend to readers who have access to the *Annals of Botany* a paper by Arthur Lister in Volume II, 1888. Anyone who begins to read the article will surely peruse it to the end. That observer kept plasmodium of a species of *Badhamia* under fairly continuous observation for a year at a time. One might almost say he trained it to come to be fed. He found out at least certain kinds of food it preferred to other kinds. A plasmodium that he had confined several days in a glass box had spread itself out over the clean glass in a widely meshed network of narrow lines. "To a point", he writes, "on the upper edge of the net-work I applied a thin pulp of the scraped hymenium of *Stereum* (a common fungus). There was at