sclerotium, it begins to become dry, and is much deformed. The ergot, on the contrary, increases in all directions, and some appears above the glume. As it augments, the thin coating which it has received from the spermatopherous tissue, especially below, gradually becomes thinner and seems to disappear; so that its surface, instead of being uniformly violet-black, is only here and there covered with the remains of the tissue, or by a deposit of the conidia or "spermatie." Nevertheless, the sphacelia, deformed, shrunken, and worn away by rains and other causes, remains long at the top of the ergot, along with the abortive ovary &c., and may even continue to adhere when the ergot is detached from the plant.

The time required for the full development of the sphacelia and the ergot or sclerotium varies, no doubt; but a rapidity of growth has been claimed for it which the truth will not warrant. The period has even been estimated at three days; but this is much too short. In an example under the observation of M. Tulasne at least a month elapsed after the appearance of the sphacelia before the growth was completed.

Apart from an obscure resemblance to the seed of the plant supporting it, the ergot has absolutely nothing in common with the normal grain, and it is surprising how it should have come, after investigation, to be considered as the hypertrophied seed. The anatomical structure and all the physical characters of ergot are those of mushrooms, or rather of a sclerotic mycelium (a tirm body from which a mushroom is developed.) The parenchyma, which is white, dry and brittle, consists in all its parts of minute utricles, (little bags or bottles) globular, with rather thick walls, intimately united and filled with a limpid oil, but feebly colored with iodine. The superficial utricles, which alone are colored, have an outer wall thicker than the inner, and the color of these is what gives its characteristic hue to ergot. Not the least trace of starch is to be detected.

The germination of the ergot, and the growth of a minute mushroom, are the last stage in the development of this fungus. About three months after ergot has been planted in a suitable soil, evidences of germination are seen in the sprouting of little globular prominences at points on its surface, which gradually enlarge, and raise themselves from the surface upon cylindrical stems, imitating in a diminutive way, the growth of ordinary mushrooms. These little fungi, belong to the genus *Spharria*. As they increase, the interior of the ergot becomes exhausted, no doubt by contributing to their growth; so that this product seems to act the part of certain tubers, in the higher forms of vegetation, containing germs and nourishment for their development. Falling to the ground in its natural course, the ergot in