appears as yet to be somewhat limited. If in summer you expose warm milk in vessels for several days you will observe with the naked eye, upon the wrinkled, drying surface of the cream—and, indeed, chiefly in its small hollows—a delicate downy mould. This belongs to the form (Fig. 1.) It was designated by Dr. Bail, in 1857, as jointed fungus. Hoffman, in 1865, and Hallier, in 1867, found it in various stages of development upon sweet-wort, and it has been described and represented, especially upon milk, as *odium lactis* (Fig. 2 and 3.) Following closely upon this form, and also more fruitful is *mucor-racemorus* (Fig. 4), whose connection with the jointed fungus of Bail and Hallier has been affirmed. Both forms, especially the latter, appear not only upon milk, but upon other substances rich in nitrogen. Bail showed that *mucor-racemorus* is always upon the boiled steepings of malt; and it is well known that the *mucor-varietus* are chiefly inhabitants of the animal intestinal secretions. Both these forms of mold—*odium lactis* and *mucor-racemorus*—always form themselves spontaneously upon milk which is exposed to atmospheric air under proper temperature. Hallier, who regarded the *odium* only as a form of transition, mentions as proper milk molds, *pencillium crustateum*, *aspergillus microsporus*, and *torula infesceus*. Yet the account Hallier gives of their development awaits the confirmation of other mycologists. Bail's observation showed that for the normal development of the *pencillium crustateum* and *pencillium glancum* (Fig. 5), the milk may by no means be a favorable ground. Letzterer, in 1870, found upon milk, long standing in regular layers, two to four inches deep, those interesting organisms which have only recently been physiologically studied by Dr. Bufield, and assigned the name of *dietyostelium mucoroides*. The spores of these fungi are communicated to the milk, partly from the air, and partly, as stated by Hopper, from the udder, the milk duct of which appears to be inhabited by fungi of this nature. Hopper found that goat's milk, which he excluded from the atmospheric air in glass vessels, curdled after three days, at ordinary temperature. On the other hand, the same glass vessels, filled to one-third their contents with milk at 59° to 77°, and subjected to a continual stream of carbonic acid gas, or of hydrogen, for the space of half an hour to an hour, and then hermetically sealing the ends of the apparatus, the milk, after the gas was run through it, showed no perceptible alteration; but after two or three days it was coagulated. Another portion of the