

stration that fat arises from the decomposition of albumen in living organisms, Herr Kemerich satisfied himself that the same process goes on in albumen after it has been removed from the body. He found that the fatty matter contained in milk increases in quantity for a few days after it is drawn, while the amount of albumen becomes less. But the formation of fat, in milk freely exposed to the air, is conditional in the development of fungi. If their germs are deranged by the milk being raised to a temperature of 180° Fah., or if means are purposely taken to prevent the admission of fungus germs to it, while the access of air is still permitted, the fatty contents of the milk diminish, the existing fat is oxydized by the air, and no new compensatory supply is formed; exactly analogous processes attend the formation of fat in cheese. Here also the existing proportion of butter is diminished by the atmospheric air on the one hand, while on the other a fresh supply is formed by the influence of the fungi, which are becoming developed. According to the preponderance of the one or the other processes, the fat contents of old cheese will rise or fall in amount.

"Practically," says Herr Kemmerich—in concluding his paper on the subject in *Pflüger's Archives of Physiology*—"the method by which we can regulate the formation of fat in ripening cheeses to any desired degree, has long been known to us. If we wish to produce extremely rich, hard cheeses, above everything, very cool, and not too dry, cellars are required, and care must be taken to pack small cheeses very close together, so as to prevent in some measure the access of air." The philosophy of curing cheese is very imperfectly understood—at least in America. Many dairymen, as well as cheese dealers, do not believe that fat in cheese can be produced in any other way than by the cream which is in the milk; and yet it has been proved, over and over again, that cheese properly cured, though made from milk partly skimmed, is often more mellow and rich tasting than cheese made from whole milk, but not so well cured.

PARASITES IN MILK.

The recent theory of fungus spores, from which all kinds of fermentation, through their developing fungus germs may be produced, was first brought forward by Swan, in explanation of vinous fermentation.

Hallier, who, that milk wh sour and co while the sa months, and Hopper obse atmospheric volume of th up; that thi hours, and th of air greater the whole o Hopper belie process of t additional fa caseine; aga the caseine, containing n material, yet says Prof. M extract, and source. De alcohol, and one litu of quantity, bu magnesia, t material. wh active princ Deschamps precipitates The *chymos* that it may water; and same efficien

Hallier fresh milk cells; and