

**THE DAIRY.****CHEESE AND SOIL.**

Every now and then a statement is circulated that there are only certain limited localities in which it is possible to make the finest grades of cheese. Great importance is attached to some mysterious quality of soil, or some peculiarity of the water, or to some specific variety of grass, or to a multitude of varieties, or perhaps it is assumed to be a question of ploughing and re-seeding, or of not ploughing at all, old pastures being the essential point. Such opinions are not uncommon. In Central New York the Frankfort and Utica districts were at one time supposed to be unequalled for fine cheese in the United States, but it has turned out that just as good cheese can now be made elsewhere.

It is not many years since there was a current opinion among dairymen in the States, and among Canadians themselves, that Canada could never compete with the United States in cheese. There was something, it was thought, in the soil, especially around Ingersoll, where cheese factories were first introduced, which made the cheese hard and insipid and lacking in richness. But all this is now changed. In three competitive trials Canada has beaten the States, and to-day the cheese of Western Ontario, of which Ingersoll is the centre, stands unsurpassed in the markets of England and Scotland. In Great Britain similar notions prevail for which no better reasons have ever been assigned, and which appear to be equally groundless. The assertion that first-class Cheddar cheese can only be made in one or two counties of England and Scotland is not sustained by facts.

The fact is, fancy cheese is confined to no spot in this or any other country. The quality of cheese does not necessarily depend on soil or climate. It is determined by the adaptation of manufacture to the varying conditions of milk. Soil, to a limited extent, affects the quality of milk. It affects both its cheesy matter and its flavouring oils; but, by adapting the manufacture to suit variations, fancy cheese can be turned out anywhere that healthy milk can be produced. The same may be said of butter. The dairyman who complains that he cannot make good cheese in this place or that, because the soil, or the water, or the grass will not admit of his doing so, may safely be set down as not understanding his business. He makes cheese by stereotyped rules—empirically, and without regard to or knowledge of the fundamental principles in the process. Of course, he cannot vary to suit changed conditions, and he makes a failure.

A distinguished butter and cheese maker in Illinois remarked, a few years ago, that it was very unsafe to employ Eastern men to make butter or cheese in Illinois. They invariably brought with them their Eastern customs, which were not adapted to Illinois milk. Their own citizens were much more successful, being accustomed to the peculiarities of the location. But a Western man would be as much at fault in the East as an Eastern man in the West. Both work with very little or no reference to the agencies and laws which control their results. These are, in truth, but

little understood anywhere. They need more investigation to develop them. When this is done, and the laws which govern the operations become known, dairy products will take an immense stride in quality, and their manufacture be a matter of as much certainty as any other manufactured product.—*Professor L. B. Arnold, in New York Tribune.*

**CREAM-POT COWS.**

The "Cream-pot Breed" of cows, famous in the record of operations of Colonel Samuel Jaques, of the "Ten Hills Farm," in Somerville, Mass., furnishes a striking illustration of the differing degrees of capacity for milk production in cows of the same breed, and the possibilities of permanently establishing a family of extraordinary milkers. Mr. Benjamin P. Poore has been indulging in a "talk," in the *American Cultivator*, which recalls this notable effort in breeding for milk. Having observed that one cow in a herd might produce three pounds of butter per week, and another nine pounds upon the same feed, Colonel Jaques thought to affect an improvement which should give the greatest quantity of rich milk, affording the largest return of butter. He is said to have found a "native" cow, raised in the town of Groton, giving milk so rich that it not unfrequently was converted into butter by the simple movement of carrying. It is worthy of mention that Short-horn blood was the selected means of fixing permanently the heavy milking tendency which was doubtless hereditary in this individual. The bull Calebs, imported in 1818, was used, and a course of in-and-in breeding was practised for four generations, so that the progeny became almost full-bred Short-horn, and yet instead of injuring the power of milk secretion, the experimenter was able to boast that he had a cow whose milk produced nine pounds of butter in three days. The Cream-pots are not now known, however; a permanent breed was not established. As there is no evidence that the care and effort were continued, even with or without a similar degree of skill, it was inevitable that the auspicious beginning should fade into failure.

"You can't add different things together," said a school-teacher. "If you add a sheep and a cow together, it does not make two sheep and two cows." A little boy, the son of a milkman, held up his hand and said: "That may do with sheep and cows, but, if you add a quart of milk and a quart of water, it makes two quarts of milk. I've seen it tried."

**CULTIVATE YOUNG ORCHARDS.**

Professor Beal, of the Michigan Agricultural College, says:—"If you have money to fool away, seed down your young orchard to clover and timothy, or sow a crop of wheat or oats. If you want the trees to thrive, cultivate well till they are seven or ten years old. Spread ashes, manure, or salt broadcast. Stop cultivating in August, weeds or no weeds. This allows the trees to ripen for winter. The question whether to cultivate old orchards or not must be answered by observing the trees. If the clover of the leaves is good, and they grow well and bear

fine fruit, they are doing well enough even if in grass. But if the leaves are pale, the annual growth less than a foot on twelve-year trees, and the fruit small and poor, something is the matter, and they are suffering for want of cultivation, or manure, or both. To judge of the condition of an apple tree is like judging of the condition of sheep in a pasture. Look at the sheep, and if they are plump and fat they are all right."

**TREE SHELTER.**

A writer in the *Rural Home* well says:—"Only those who are thus favoured are aware of the comforts and many advantages derived from living on the leeward side of a well-grown orchard, or a belt of forest timber. Our farms have been cleared very absurdly. Instead of the reserve of woods being invariably left at the rear, it should have been left where it would shelter the dwelling, farm-buildings, and wheat-fields from the north-western blasts. We clear our lands to nakedness, and then have to suffer until plantations have time to grow. As a matter of fact, most houses in the country stand out in the open, exposed to every wind that blows. Many who admit the folly of this condition of things, have done nothing as yet to remedy it. The expense and trouble deter them. These, however, are not so great as most people imagine. Close rows of hardy evergreens make an excellent breastwork against fierce winds. Two hundred trees three feet high, costing from \$15 to \$20, and a day's work of two men in planting, will give a shelter fifteen feet high within ten years, through which the sharpest wintry winds will not penetrate. Those who are starting on new places should keep this matter in mind, and, if possible, avail themselves of groves and timber belts already in existence."

**FAT MAKES HENS LAY.**

There is much refuse fat from the kitchen that can be turned to good account by feeding to the hens. Of course where soap is made it will be used in that way, but it is a question whether it is not much easier and more profitable to buy soap, and make the hens lay by feeding them with fat. Everything that is not wanted for drippings for cooking purposes, should be boiled up with the vegetables for the fowls.—*Ex.*

THE weather of the present winter seems to have been thus far unusually unhealthy. We hear of an alarming amount of sickness, scarlet fever being one of the most prevalent maladies. Families in which there are diseases that are known to be contagious should exercise more care to prevent their spread than is frequently the case.

IN California bees are owned largely by capitalists, and are "farmed out"—that is, apiaries of one hundred swarms or so are placed in the grounds of farmers, generally from three to four miles apart. The farmers receive a fixed rent, or a share of the honey, for their compensation, as may be agreed upon. On an average, one acre of ground is estimated to support twenty-five swarms of bees, and the yield of a swarm is generally about fifty pounds a year.