

then covered to keep the milk warm until the curd is formed, which will be in about half an hour. As soon as the curd is formed enough to cut, a long-bladed knife is drawn through it both ways, so as to cut the mass into inch cubes. This causes the whey to separate, and when this separation has been effected, the whey is dipped out or drawn off, and the curd gathered into a mass at one side of the tub, the tub being raised at one side to cause the whey to drain off. The tub is kept covered to retain the heat, or if the curd has cooled considerably the whey that has been drawn off is heated up to 100 degrees and turned on to the curd until it is warmed through again, and the whey is then drawn off. The curd remains thus for about an hour, until it attains a very slight degree of acidity, when it is broken up fine with the hands, salted with about half an ounce of salt to the pound of curd, and put into the hoop. The hoop for a ten-pound cheese should be about eight inches in diameter and ten inches deep. It has neither top nor bottom. It is placed upon a smooth board or a bench, and the curd is pressed down into it with the hands. When the curd is all loose, a cover is placed upon it, and the hoop is put under the lever, which presses down upon a block resting in the cover. Very little pressure is required, and this only until the curd has become solid enough to keep its shape; 24 hours in the press is quite enough, the cheese being turned twice in that time. The cheese is then taken out and the outside is rubbed with butter and wrapped in a cotton bandage, the edges of which are turned down on the two faces for an inch or so. The cheese is then placed in a cool room or cellar, and is turned every day for a month, after which it should be turned once a week for another month, when it is fit for use. A very nice cheese for immediate use may be made in smaller quantities. The milk is curdled in the same way as above mentioned, but as soon as the curd is set it is dipped out and put into moulds 6 inches in diameter and 3 or 4 inches deep, resting upon clean straw, through which the whey drains off on to the board under it and drops into a pan. The moulds, with the curd in them, are turned daily, and in 3 or 4 days it is firm enough to be turned out of the hoop on clean straw, when it is sprinkled with salt and turned daily for a month, when the cheeses may be put into a cool cellar to ripen for a week or two longer, and are fit for use. Skimmed milk cheese made in this way are very well favored and are very nutritious, and furnish an agreeable change of diet for a farmer's family, and indeed sell very readily in village stores when they are made well.

An Illinois farmer thinks that every farmer should do something in the line of experimenting and report the results to his agricultural paper. We might say that the Illinois farmers already do more of this in a month than all the farmers in Canada do in a year. There are thousands of farmers who put more confidence in this sort of experimenting than in that controlled by legislatures. If farmers would learn a little more of the art of experimenting and report their results in the way above mentioned, they might save millions of dollars squandered by governments for experimental purposes, and the farmers would also be benefited to the extent of as many millions more.

The Dairy.

Gambling with the Weather.

BY PROF. L. B. ARNOLD.

The spring has been unusually favorable for giving grass a strong and healthy start. It is not as far advanced as it often is at this date. The weather has been cooler than usual over the whole face of the country, but it has been quite even, and this has contributed to the welfare of grass, and also to the condition of winter wheat. Both have now made an excellent stand. Though the temperature has been too low to push grass forward rapidly, it has neither been stunted with drought nor frost, nor flooded with excessive wet to make the ground so hard and clammy as to interfere with its future growth. A very wet spring is pretty sure to be followed with a feeble growth of grass afterwards. Excessive drenching of the earth in spring with heavy rains, settles the soil together so compactly that it cannot hold much moisture, and with a little dry weather following, it bakes, as it were, into such a hard and solid mass as to seriously check the later growth. Less moisture in spring leaves the ground in a more friable, light, and porous condition, so that it holds water like a sponge without appearing wet, and retains it with much less evaporation than when harder and more compact. The amount of rainfall has been just about enough, over most of the dairy districts, to keep the grass and ground in good condition, making the prospects now for a good season for grazing very flattering. If the season holds out as it has begun, pastures must be flush and meadows very heavy, and the dairy products of the season overwhelmingly large. Though it all looks promising now, there is no foretelling what a season may bring forth, Vennor and Wiggins to the contrary notwithstanding. About three years out of every five a severe and protracted drought occurs during the middle of the summer through all the Northern States, and the southern part of Canada shares the same fate. Farther north it is not so bad. The seasons are a little shorter between spring and fall, and showers in the summer are more frequent and regular; but even there it is often quite too dry to rely on having good pasture all summer.

In furnishing summer keep for their herds, dairymen generally follow one of three courses. The first is to turn out so much land for pasture that the excess of grass, above what the herd eat, grown in the fore part of the season while the ground is moist, will be sufficient to carry it through the season when it is too dry for grass to grow. A second method is to furnish a range of pasture that will just supply the herd in the best of the season, hoping that the weather will be favorable all summer, and half starving them if it happens to be unfavorable, until they can be let into the grain fields or aftermath. A third custom is to supply grazing till the grass is expected to fail, and then depend on soiling crops to supply the cows till they can live wholly, or in part, upon a revival of pasturage in the fall. Each course has its advantages and disadvantages. The first can only be tolerated where land is of little value, as in the new settlements of the West, where "squatter sovereignty" prevails, or where

land can be had at government price, or a moderate advance upon it—or in other words, where the interest on the investment in extra land is less than the cost of labor for producing the same food on less land. Exclusive pasturage cannot be afforded where land is high, and it is continually receding from the east towards the west as the price of land advances. It is not much followed in the better dairy districts either of the States or Canada, as it requires more capital than dairymen can command.

The second course is the popular method. A majority of dairymen adopt it. Everywhere we see pastures stocked with just animals enough to keep the grass down till a dry time sets in, and then the cows shrink down to diminutive yields, and loud complaints about the weather follow. The extent of the practice is evidenced by the fact that when anything of a drought occurs there is a general shrinkage all over the country and the loss is heavy. If the third course—grazing spring and fall, and soiling in midsummer—was followed, a drought, even a long one, would make little or no impression upon the quantity of milk. I saw a good demonstration of this eleven years ago. I travelled some sixty or seventy miles along the valley of the Mohawk River, about the first of September, and spent several days in visiting farms and cheese factories to observe the current of events. There had been a drought in July and August, and the growth of grass was almost at a stand-still, and the consequence was that the receipts of milk at the factories were reduced to thirteen pounds to the cow as a rule. The cows were dividing their scanty rations between their milk and flesh, and were losing in both. This was general all through that valley, so noted for its leading position in the world of dairying. Had the practice of providing green crops for the customary dry time in the season been general, no such ruinous shrinkage could have happened. But the great body of farmers in that intelligent land—and for that matter it was so all over the State—had made, as was their custom, little or no preparation for the drought, although such droughts were customary. Harris Lewis was the only one I found who had foresight enough to provide for the emergency. He was doing as he had been doing for many years, soiling his cows with orchard grass, and they were giving almost double the quantity of milk that other cows, naturally just as good as his, were giving at the time. Although the drought had lasted two months they had lost nothing in their messes except the natural decrease due to distance from the time of coming in. While the rest of the community were mourning over their losses, and growling about the weather, Mr. Lewis was happy and making money. He was getting a full yield of milk, and cheese was high, because the crop was short. His milk at the time was costing him less per 100 than it was costing his neighbors. The cost of soiling was less than the value of the excess of his milk over theirs, and he had considerably less land involved in the keeping of his cows than they had. His cows being in full flow, made good use of the fall feed, while the starved cows could not rise above their diminutive messes, no matter how good the feed might afterwards be.

The number of dairymen who employ mid-