

Our Contributors.

In our December issue we omitted to return our thanks to the numerous contributors who have aided us in making this journal so popular by their able and useful articles and valuable hints. We now return our thanks to you, and trust that we shall be favored with your continued patronage, and that the opinions of those who have already contributed may stimulate a larger number of our farmers to contribute. It is from these open and free discussions that correct opinions can be arrived at and improvements made where errors exist or improper management prevails, or erroneous plans are adopted. The sooner and the more fully such are brought to light, the sooner improvements are apt to follow. Each intelligent farmer from his own practical experience can impart some knowledge that would be of benefit to his fellow men. Each observant mind can notice some omission or commission in his journal that more light might be thrown on. He may see and know, and yet, through diffidence or perhaps bashfulness, allow the present opportunity for doing good to pass. Those who have the interest of the agriculturist at heart, and withhold their opinions from the public, we hardly think are doing as much good as they ought.

As this journal is devoted to the interests of agriculture, we have been under the necessity of rejecting some articles that have been forwarded to us, such articles having been intended to sway the mind for sectional or party purposes, or intended for private advertisements. Lest any one should be offended, we wish you all to consider that those who really wish to do good to agriculturists to the largest extent should take agriculture as the highest and main interest. When it is placed second to other interests, it is sure sooner or later to result in downfall. This may be seen by reading the histories of Palestine, Egypt, Rome or all parts of the world where the farmers have eventually been made slaves or serfs. Therefore let your articles always be on agricultural subjects. This journal, you all know, is the only one in this Dominion that is published for the farmer's interest.

We believe we have the best agricultural writers contributing to our columns. You must have read with pleasure and profit the able and highly valuable contributions from our English, Scotch and American correspondents, and the numerous able Canadian writers every month furnish you with useful information. Though these have been the best we could procure, there undoubtedly are other good writers; but perhaps these may have objects foreign to the interest of the farmer foremost in view, and therefore they prefer to use party publications, but you may depend that the more party interests are allowed to conflict with agricultural interests, the more the latter must suffer, the more the farmers will have to pay, and the least good will they receive for what they pay.

We do not reject correspondence because the articles may not coincide with our views. Sometimes we let them pass without even a remark, but in this issue there appears an article from one of our highly appreciated correspondents—one who has furnished us with much very valuable information, and we trust he may furnish us with much more, despite our present dissension from his views. We refer to our Washington correspondent, page 5, in regard to his remarks about Germany, etc., and we deem it but proper to state that we think some Americans have exceeded the line of propriety in attempting to show that the U. S. has not been as badly affected by contagious diseases as it really has. It is of no use to attempt to shield the fact that millions have been lost to the U. S. from Pleuro-pneumonia, Foot and Mouth

Disease, Scab, Hog Cholera and Trichinosis, all of which do exist in that country; and further, we have no hesitation in saying that some of the above diseases have been introduced into Canada from the States, and that we have personally seen Canadian stock on Canadian farms suffering badly with some of the diseases taken from imported stock from that country. We also believe that many Canadians of prominence have been fully aware of this fact, but have, to the injury of the Canadian farmer, evaded or suppressed the truth, and that the sooner the whole truth is made known the better it will be for the farmers of this Dominion. Canada has nothing to fear if the truth be spread, but the suppression of the real facts will assuredly tend to a permanent stigma and dishonor to our legislature and loss to Canadian farmers and to the British nation.

What I Know about Butter-Making— Here it is.

(FROM OUR ARKANSAS CORRESPONDENT.)

First.—There are only two conditions under which milk or cream cannot be churned or butter successfully made; that is, when the milk or cream has been kept so long that the acid has eaten up all the fatty matter or butter that it contained, or, when the cow that the milk is produced from is very near the time to have a calf. Nature puts a stop to the churning process. The time for this change to take place will vary with different cows, and the milk from one cow, in the above named condition, will spoil the milk of a hundred others, if mixed with it. Milk from twelve to twenty four hours old will churn easier, and produce more butter, than from cream. First, because there is no waste in skimming when you churn the milk. Second, the thinner the fluid the easier you can work the dasher, and the greater the agitation the quicker the butter will come, and, if churned when sweet, the butter will be of a much finer or better quality than can be made from sour milk or cream. There is no standard temperature for churning, and, yet, the production of butter depends upon the temperature and chemical growth of the milk. I have churned butter from milk that had only been taken from the cow twenty minutes, or long enough to reduce the temperature to a churning point, and completed the churning or produced butter in forty-seven minutes. The milk was then set away for twelve hours and then re-churned, and about a like quantity and time produced as before, showing that a certain chemical change or ripening is necessary. Milk from the same cow at twenty-four hours old, sweet, and older and sour, would not make any more.

About temperature, as I said before, there is no standard; each cow will differ, according to condition and circumstances, from sixty to ninety degrees Fahrenheit. Food dry or fresh, new milch farrow, or a long time since she had a calf, all make a difference in the temperature necessary to produce the same quality of butter. Where the milk from several cows is mixed, you can arrive at an average temperature that will produce the best quality and make the best possible time; but if those cows were churned from separately, you would produce more butter, but you would find the temperature required for each would differ. The temperature necessary, as I have found it by an average churning of about twelve times a day, summer and winter, for three years, is as follows: We will start in the spring, with fresh cows and on fresh grass, will run from about 65 to 75 degrees Fah.; as the season advances you will have to reduce the temperature, from time to time, till you get down to 60. You cannot produce butter

below 60 degrees; along about October, say you have been churning at from 62 to about 65, some day you will discover that there is something wrong; the butter does not come in the usual time, and yet the conditions are all apparently the same; try a little more heat, I have found it jump to 70 and 75 degrees. There are two reasons to be assigned for this; one is, the condition of the food at that time of year and later on in the season, and the other is the tolerably advanced state of pregnancy of the cow. In mid-winter I have found some cows that required as high a temperature as 80, and produce as good a quality of butter as any other cow would at any required temperature.

I once found a cow in Pine Bluff, Ark., in the month of May, when the average cow required about 65 degrees. The cow that I speak of required 90 degrees, and her butter was hard and well granulated; but to churn the milk from almost any other cow at that temperature would have produced nothing but a kind of mucous or something like a slippery elm poultice. All butter should be churned in from one to five minutes. If you churn a long time the grain of the butter is destroyed, and it is beaten into a kind of salve or ointment. Now, a word about churns. If care is observed about temperature, you can make an average time of churning with the old dash churn of from five to ten minutes, and the old dasher principle has never been beat; but the churn can be improved. A churn with parallel sides, with a tolerable tight fitting dasher, is the best. A dasher that will fill the churn top and bottom alike within from one-half to one inch is the best, and you will find in the market several patterns and patents of conical-shaped dashers, which will carry a volume of air down into the milk or cream at stroke, and will add much to the motion of the fluid. I would recommend any or all of the above described dashers.

I might have said a great deal more on the subject, but I have endeavored to make it as brief as possible. If any one wants my opinion on any point that I have not touched upon, or any question, I will answer it cheerfully through you.

[NOTE.—We think there must be an error in the time stated for churning, to wit, five to ten minutes, or the difference of temperature of Arkansas from that of Canada must have a great influence on the time. We insert this letter, as it will be of interest to many who are interested in butter-making.]

Why Does Timothy Run Out?

Mr. T. S. Gold writes as follows in "The N. E. Homestead" of the running out of timothy, and of his purpose to try a plan that has proved successful in the case of clover:

The disappearance of timothy from our natural mowings is variously accounted for. First, it is charged to the mowing machine as cutting too closely. We usually run our machine at medium height, rarely using the closest cut, but would prefer the medium or highest. Here we encountered a difficulty from the fingers clogging with fine grass, so that we could not use the highest cut, and the machine would run over much of the lodged grass. Second, it is charged to too early mowing, as we mow some two weeks or a month earlier than formerly. Timothy runs out mostly upon seedings of the early cut meadows. Third, we agree with those who attribute it to the peculiar character of our seasons rather than to either of the above. Some period of each year for the last ten years has been remarkably dry, and the timothy has never recovered from the effects. As timothy is cut earlier there is less natural reseeding than formerly; also less is foddered out on the fields scattering the seeds. I shall try reseeding with timothy, with top dressing, thirty cart loads per acre, and four quarts of clover seed harrowed in. Two applications will surely prove effectual on any reasonably good land."