Effect of Nitro-Culture.

Editor "The Farmer's Advocate":

You will find enclosed small print of alfalfa plants, showing difference between plants from treated and untreated seed (nitro-culture).

Last spring I sowed three acres, at the rate of ten pounds seed to the acre, leaving seed of four widths of the drill untreated. Last season there was no marked difference in plants, but now the strip of field sown with untreated seed is very noticeable, being a sickly yellow color, while the rest of the field is deep green.

In digging the roots, it was almost impossible to procure them uninjured, on account of the dryness of the soil. The roots of the treated plants shown in print are not more than half as long as they should be if whole root had been dug up, while those from untreated seed are not broken much. These plants do not show the extremes, but each in its class is representative.

The seeding should have been at least five pounds heavier per acre, as last seasons very dry weather was unfavorable.

ALBERT BERLANGUET.

Help on the Farm.

Editor "The Farmer's Advocate":

I do not propose to quarrel with the Middlesex correspondent of "The Farmer's Advocate" who says the most serious problem in farm practice is the problem of weeds. But this is complicated with another, viz., the lack of farm help, which explains why so many thousands of weeds are going to seed, and why, in yield and quality, our crops are not one-half what they might be. What are we going to do about it? Lay the land down to grass? Strike a higher scale of wages? Sell about one-half of our land? Use more labor-saving machinery, or adopt the plan of local co-operation among neighbors? To my mind, under the usual circumstances, the latter affords perhaps the most satisfactory way out of the trouble, since efficient men are not now available, no matter what rate of wages were being offered. At times when work, like haying, harvesting, silo-filling, threshing, the cutting of the year's wood, and other like operations, are to be performed, why not unite forces? It is an old maxim and a true one that many hands make light work and promote good cheer. Costly machinery, such as engines, can be owned jointly, thus materially reducing the outlay for all. I would very much like to see, in "The Farmer's Advocate," letters telling how others have successfully overcome the lack-of-help difficulty in the manner described, or otherwise, and I know of no one subject more important than this, and trust the editor will find space for all the information that can be given, which will help us in this hot weather quite as much as the pros and cons of reciprocity. I have learned this in somewhat closely following the correspondence in "The Farmer's Advocate" for some years, that requests like this frequently bring to light unexpected details of information about some method or plan pursued in one county with very great advantage, while perhaps in the very next district it was never heard of.

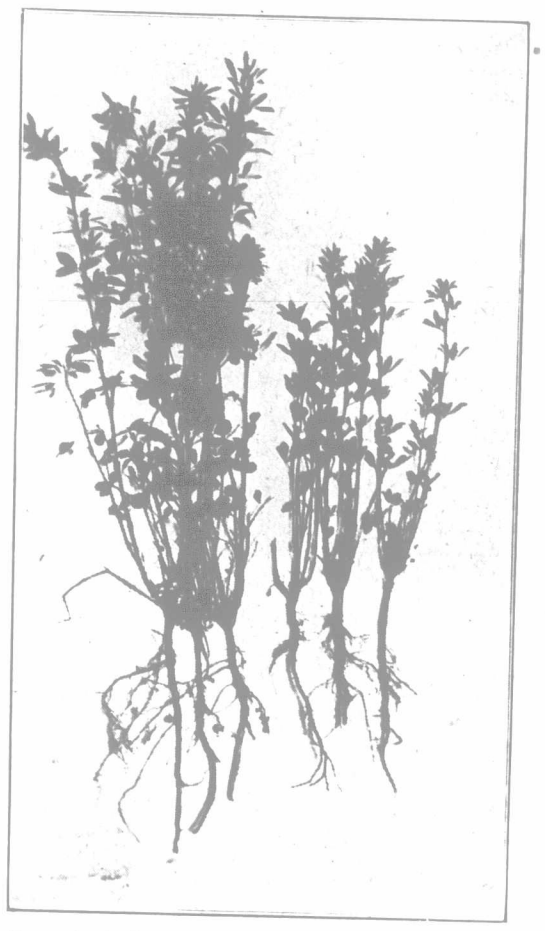
READER.

[Note.—By all means let us have a mail bag full of letters on solving the farm-labor question. —Editor.]

THE DAIRY.

Mold on the Butter.

It is a well-known fact that mold-infected butter becomes unsalable in a comparatively short time, and involves not only heavy financial losses and unpleasant business relations, but also a serious loss of prestige and standing on the market of the person or firm who make and sell such butter. It is important, therefore, that everyone who handles butter, either as a manufacturer, or as a dealer, should know something about the nature of mold. He should know the conditions which are favorable and those which are unfavorable to its growth. Such knowledge will enable him not only to successfully check the scourge when present, but also prevent its further growth.



Inoculated and Uninoculated Alfalfa.

Science tells us that mold is a plant, though of a very low order. Like other plants, it grows from seed called spores. Mold spores, like many other micro-organisms, abound in the air around us, and, given favorable conditions and a suitable medium, they will settle and grow. Settle they will under favorable conditions, but unless they find a moist surface to rest upon, they are likely to be carried up again by aerial currents and will not grow. Dampness, bad ventilation, medium temperatures and absence of light favors the growth of mold, but the opposite conditions, i. e., dryness, good ventilation, high temperatures and light will retard or even stop its growth. If, and when, dryness, good ventilation, high temperatures and light are present, and given the proper application in creamery work, the buttermaker need not worry very much about mold or its effects. Dryness, good ventilation and light in any workroom add greatly to the comfort and pleasure of the workers, so there should be no need of specially urging anyone to apply these conditions in creamery work for the purpose merely of preventing the growth of mold. These conditions should also be provided in the places used for storing supplies, such as salt, packages, parchment paper, etc. The use of lime for whitewashing walls and ceilings, and for scrubbing wooden utensils and floors, will be found very helpful in keeping the creamery and utensils in a sanitary condition, free from mold.

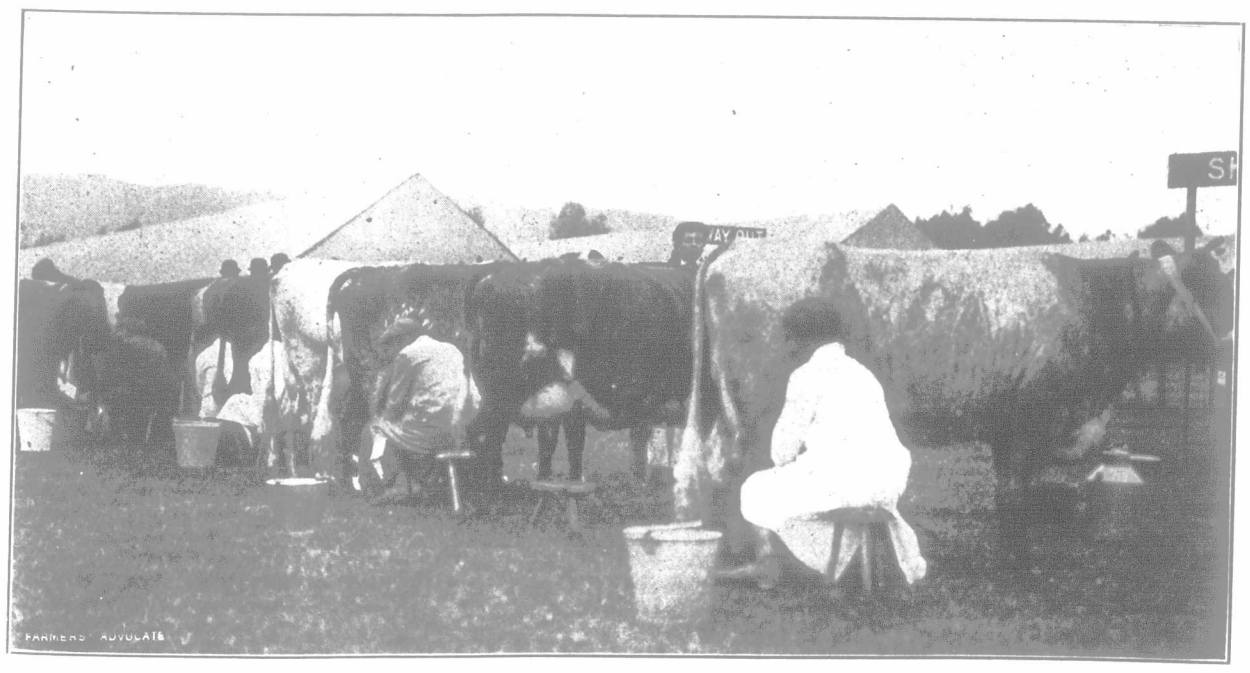
The high temperatures spoken of may be employed in the form of boiling water, with or without the addition of lime or washing soda, for the final scalding of floors and utensils, and also in the daily re-boiling of the brine in which the parchment liners and print wrappers are prepared. In this connection, let me refer you to note 10, attached to a copy of dairy-inspection form, which reads: All parchment liners and wrappers prepared by being immersed for at least six hours in a solution of salt, re-boiled each time fresh papers are put in; butter-box material to receive a thin, even coating of paraffin wax, and to be carefully nailed. All boxes to be thoroughly rinsed out and lined before using.

Lack of cleanliness in the place where it was made is undoubtedly the most frequent cause of mold in or on butter, or it may be to carelessness in the storing and preparation of the packages—boxes, parchment paper, and coverings—prior to using. A frequent, thorough and critical inspection of the work and storage rooms and utensils at the creamery will reveal the presence of mold before it gets a chance to do much damage. Knowing how to combat it, the person in charge must shoulder the responsibility of dealing with it promptly and vigorously. In the light of what we have said in the foregoing, the following recommendations are made respecting the care and preparation of butter packages:

1. The material used in the making of butter boxes should be dry and well seasoned, and the boxes stored in a dry, clean and well-ventilated storage. The inner surface of every box should be evenly coated with paraffin wax. The jute bags, where such are used for covering the butter packages in shipment, and the parchment paper-box liners, and print wrappers, should also be stored in a dry, clean, and well-ventilated place.

2. The parchment papers should be immersed for at least six hours before using in a receptacle containing brine made of salt and water—just strong enough to float a potato. The brine should be re-boiled after a fresh batch of paper is put into it, in order to destroy by heat any mold spores adhering to the paper. An indurated fibre tub is about the best thing to use for holding the brine it which the parchment paper is prepared.

C. MARKER,
Dairy Commissioner for Alberta.



Milking Dairy Shorthorns at the Royal Show, June, 1911.

GARDEN & ORCHARD.

Under existing conditions in New York State, spraying with iron sulphate is not an effective method for eradicating dandelions from lawns. This conclusion is reached after two years of spraying, making twelve applications in all, on a strip of lawn at the New York Agricultural Experimental Station, Geneva.

Variety testing, as a direct means for the selection of kinds of fruit to recommend for other sections of the State, has been practically abandoned by the New York Experiment Station at Geneva; but new varieties and seedlings are grown in large numbers, in connection with plant-breeding work, and to ascertain the habits and qualities of the varieties. The results of such work with strawberries during the past two years are reported in Bulletin 336 of the Station.

The annual potato-spraying bulletin of the New York Experiment Station at Geneva for 1910 is No. 338. As in 1909, dry weather severely tested the practice of spraying; since blight and rot were not common, and, where they occurred, not very destructive until late in the season. Still, spraying was profitable in 16 of the 19 tests reported; while the average gain on farms not at the Station, for 304 experiments made during the past eight years, is more than 45 bushels to the acre.

The importance of careful packing and correct labelling of apples is well known by all apple dealers, yet, when apples are scarce and high-priced, there is a tendency to place inferior fruit on the market. Last year apples were exceedingly high in the Old Land, and from all reports they will be in good demand this year. It is said that some Canadian shippers took advantage of the scarcity of fruit last season, and shipped apples that would not pass as first quality in a year of abundance of fruit. Andrew Chalmers, of Glasgow, Scotland, states that the most popular