

Recommendations in Lucerne Growing.

While lucerne is being opposed by many farmers who have had little or nothing to do with it, we find those who have given it a good trial and adapted their practice to suit its requirements consider it a great boon to stock feeders. Lucerne for hay must be cut early, just as it is coming into bloom. If left till the fibers become tough it is about as difficult to digest as hemp; but knowing this, we have it in our power to avoid any danger from such a source. No doubt a great many of our readers are just commencing to grow it, and the object of these remarks is to assist such men in commencing right.

Some have advocated growing lucerne without a "nurse crop," but unless ground is both rich and clean the practice will no doubt be disappointing, as it is likely to become quite weedy the early part of the first season. Frequent cutting in such cases would be necessary in order to prevent the weeds from seeding or from gaining supremacy in the competition. Lucerne and other clovers make rapid growth after cutting, and on account of most of our weeds being annuals, or are largely destroyed by cutting, there is usually little difficulty in holding them in check by this process until the clover has gained complete possession, providing the seeding has been heavy enough and the stand even enough to completely occupy the soil. The secret of clean pastures and meadows consists in having plenty of grass or clover, or both. Weeds merely occupy the land that is not properly utilized, and their presence indicates a weakness in the prevailing system of agriculture.

On no account should lucerne be pastured the first season if seeded alone, or the second season if seeded with a grain crop. The reason is that the plant does not for a couple of seasons get a firm hold in the soil, and there is a liability of its becoming pulled up and thus destroyed.

Farm Work for June.

In a system of mixed farming, such as generally prevails in the older provinces of the Dominion especially, the work of the farm is fortunately varied in the summer months to suit the needs of the season. It is important that each season's work be attended to at the proper time so as to give to each crop the necessary cultivation and care, and thus to avoid the checks to the constant improvement of the crops which will most assuredly be experienced if the proper attention be not given at the proper time. The crops which require special attention during the month of June are corn and roots. Corn, we take it, has been planted or sown during the last fortnight in May and first week in June if the land was in suitable condition and the weather such as to allow the work to proceed properly. If the conditions were not favorable it was better to postpone planting until such time as the land could be worked satisfactorily, but if greatly delayed it is a question whether it would not be wise to sow an earlier-maturing variety than was intended had the seeding been done earlier. In successful corn growing very much depends upon the early cultivation after sowing to keep down weed growth, to admit the free passage of air to the soil, and to conserve moisture. It is well to have the land well firmed by rolling both before and after planting, but the harrow should immediately follow the latter rolling, so that a rolled surface may not at any time be exposed more than a day or two to either sun or rain without being again harrowed. The harrowing not only destroys the weeds which have sprouted but disposes of them at a period when they can do least harm. It also promotes the growth of the corn plants by loosening the earth around them, gives the air free access to the land and prevents the evaporation of moisture, all of which processes stimulate the crop to rapid and healthy growth. One of the mistakes the beginner in corn sowing and culture is liable to make is to get it too thick for the best results, and the harrowing process is likely to be harrowing to his feelings when he sees a large proportion of his healthy plants destroyed, but if he has sown the seed thicker than one peck to the acre and it has all grown he can better afford to cut out a goodly proportion of the plants than allow them to remain, for not only are the stalks less valuable as fodder when the plants are too close but the ears cannot develop and mature so as to produce the greatest amount of valuable food for stock. The first prize acre of corn in a competition in the U. S. last year yielded 140 bushels of shelled corn. It was planted in hills 3 feet 4 inches apart each way and four kernels in a hill. Mr. Rennie, Farm Superintendent of the Agricultural College, Guelph, Ont., in his report of the farm work for last year says: "The corn was sown with the ordinary grain drill having all the tubes stopped but two, and so set that the rows were 42 inches apart. Twelve pounds of seed per acre was sown, which may seem to be a thin sowing; but we prefer to have it so, since it produces a better quality of corn for ensilage." The common practice, we believe, is to sow about one half bushel per acre, and when that is done, if the seed has germinated properly, the plants will be sufficiently thick to stand harrowing two or three times, and then if they are too thick it will pay well to cut out with a hand hoe to at least eight inches apart, which is the distance which has given the best average results for ensilage corn in several experimental tests. Cultivation should be continued and repeated at least once a week if the land is not too

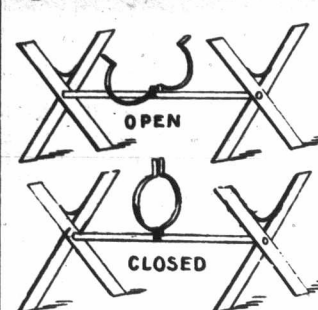
wet. The cultivation should be comparatively deep at first and shallower as the season advances to avoid cutting off the fibrous roots thrown out by the plants. After every shower of rain as soon as the land is dried off so that it will not stick the horse hoe or cultivator should be used to break up the surface and move the soil, thus conserving moisture.

The cultivation which roots require is generally well understood and differs from that required for corn only in that the harrow cannot be safely used. Frequent stirring of the soil is of prime importance, and the checking of weeds while young should never be neglected, as they are more difficult to manage when grown older, and they rob the soil of moisture and fertility that should go to the support of the crop. Thinning or singling is the first operation, the preliminary part of which is narrowing or cutting down the drills with a suitable implement. Singling should not begin till the second or permanent leaf has been well formed, and plants left at a distance of from 10 to 12 inches apart, except in the case of carrots, which require to be left nearer together.

"How We Managed Our Corn Crop."

To the Editor FARMER'S ADVOCATE:

SIR,—In the first place we prepared the land the summer previous by plowing a piece of meadow land after the hay was cut very shallow and harrow it occasionally during the summer, then later in the fall we plow it pretty deeply for the winter snow and frost to act upon. In the spring we gave it a dressing of about twelve loads of manure to the acre, which we worked in with the gang plow about four inches deep and harrowed it well; then let it stand until time for planting, about the 5th of June, by which time what seeds were in the land or manure had commenced to sprout and grow; we then rolled it, when it was ready for planting. In planting we opened out a straight furrow and plowed around until we had two furrows about three feet apart and about three inches deep (which can be done by putting a wheel on the plow to regulate the depth); then we commenced to plant by dropping four or five kernels about eighteen or twenty inches apart in the row, which we cover with the plow, and plant every third furrow. A good smart boy can plant it almost as fast as one can plow, as he commences to plant as soon as you start to open the drill, and before you can get around twice, which it takes to open and cover the seed, he can get around once and have it planted; he can then rest while you plow another round, when he is ready to follow again; by this way two can plant about one and one-half acres a day, and the land is in the best shape for the corn to start, and you save a great deal of hoeing by the plowing. After the corn is up it may be harrowed, which will loosen the soil and kill weeds. After the rows of corn show plainly, we use the scuffle as often well on in the season as we have time, which retains moisture, always going up one row and down the other, and every time working the same way and hand hoeing the space between the hills. It is all right now until time for cutting.



We have not a silo, therefore have to save it in the shock. We cut with the sickle, laying it in sheaves and in rows. We let it lie for three or four days; we then tie it up in sheaves, and by using a contrivance like the accompanying sketch it can be done much easier and quicker; it is made like an ordinary sawhorse, with a strong piece connecting the two ends, in center of which place irons for squeezing the corn up tight, which any blacksmith can make. Mine just cost twenty-five cents, and you can make the horse yourself. It should be made to hold a sheaf eight or nine inches through, as larger than that is too heavy to handle if the corn is very tall. Two of us tied an acre in one day, which produced twelve loads; we used binding twine. We pick up the corn and lay it lengthwise on the horse; one of us takes the iron handles, one in each hand, and putting the knee on the corn, bring the handles together or past each other; it can be pressed together much tighter and easier than any other way I know of, and held while the other brings the twine around and ties it (the sheaves need not be all of one size). We then stook it in the ordinary way. I think it pays to tie it, as you can handle it much quicker, and it does not take up nearly so much room as when loose. Last fall we left it out until the beginning of November, when we drew it in, standing it up on end any place where we could find room. It should be moved once or twice during winter to keep from settling sideways, and to keep mice from working in it. Some of ours spoiled by settling over, but what stood upright kept beautifully. We cut it together with a quantity of straw, which the stock appear to relish very much. We planted half of our crop with Southern Sweet, the other half with Mammoth Cuban or Cuban Giant. The Southern Sweet matured well, producing a good crop of stalks and leaves, together with well-matured ears. The Giant grew about two feet taller (about twelve feet); good stalks and leaves, but no ears; it seemed to be two weeks later than the other, and not so

well matured, as both were planted the same day. We had a very early frost, which froze the outside rows and tops of the whole crop, which spoilt it a great deal, therefore we must try and have it matured early and cut before there is danger of frost striking it, as it is one of our best fodder crops. HURON CO., ONT. JAMES HAYDEN.

DAIRY.

Perfumed Butter.

Perfumed butter on the dinner table is the latest fad of some wealthy people in London, Eng. The dairies where this butter is made are as odoriferous as a florist's shop or the laboratory of a perfumer. In the first place, the butter is made in small pats like those in ordinary use. Each pat is wrapped in a bit of fine muslin and placed on a bed of rose leaves specially prepared in an earthen jar. On top another layer of the fresh and delicate rose leaves is placed before the jar is filled with a solid chunk of ice. Then the jar is placed in a refrigerator and allowed to remain there for ten hours, when the pats are ready for the customer.—*Farmer and Stock Breeder.*

Superintendent of Dairying in the N.-W. T.

Mr. J. A. Kinsella has been appointed superintendent in charge of all the Government creameries in the Northwest Territories. Since his appointment he has been attending to the completion of buildings, installing plants, etc., and anticipates having them all fully equipped and in operation by the middle of June. Mr. Kinsella is a thoroughly competent young man for the position. He has been superintendent for seven years of the large combination of over sixty butter and cheese factories owned by D. M. Macpherson, M. P. P., Glengarry, and last winter he was instructor in buttermaking at the Kingston Dairy School. He has a thorough practical knowledge of the building and equipment of creameries, is a worker, and has a reputation of attending strictly to business.

Loss of Fat in Cheesemaking.

To the Editor FARMER'S ADVOCATE:

SIR,—We have had many enquiries this spring regarding "greasy" curds and loss of fat in pressing cheese. The main causes for these are:

1. Milk which is two or three days old when delivered at factory. Many factories started up by hauling twice or thrice a week. Old milk is more likely to give "greasy" curds and loss of fat in pressing.
2. The milk supplied to our cheese factories has a tendency to increase in richness or fat percentage since the introduction of "paying for milk according to quality." Such rich milk our makers have not yet learned to handle in the best manner.

REMEDIES.

1. Have milk delivered every day if possible.
2. Instruct patrons to keep the cream down and mixed with the milk by stirring and aerating.
3. Set vats as soon as possible or as soon as milk is ripe enough. A judicious use of a good "starter" will prevent delay in setting, which nearly always means loss of cream and butter-fat.
4. Cook to a higher temperature than usual—about 100°.
5. Keep curds at a lower temperature after milling and mill early ($\frac{1}{2}$ to 1 inch of acid on hot iron). Use knife mills. Peg mills are great wasters of butter-fat.
6. Salt earlier than usual by half an hour, and allow curds to stand three quarters to one hour in the salt before putting to press. Curds from rich milk may be salted heavier than usual by one quarter to one half pound per 1,000 pounds milk or 100 pounds curd.
7. Cool to 75° to 80° before putting to press.
8. Apply pressure gently at first.

H. H. DEAN.

Pasteurization.

To the Editor FARMER'S ADVOCATE:

SIR,—The subject is a rather difficult one to treat in a short letter. Let us first consider the theory of pasteurization. The ideal milk for consumption is perfectly sterile; that is, free from all forms of bacterial life. The sources of infection are so numerous and the difficulty of getting milk free from germs so great that this may be said to be impossible. It is only after the milk has been secured in some suitable vessel that it can be sterilized. But sterilized milk has a cooked or boiled flavor, and this spoils it for most purposes. Milk begins to take on the boiled flavor at anything over 158 degrees Fahr. Even at this temperature there is a slightly cooked flavor, but it passes off on cooling. Now it has been demonstrated, principally by Pasteur (hence the name), that most of the injurious bacteria as well as the lactic acid bacilli are destroyed at 158 degrees. The bacillus of tuberculosis is said to be killed if kept 15 or 20 minutes at 156 to 158 degrees. Diphtheria bacilli are not so resistant, therefore they also will be killed. In fact, nearly all the known pathogenic germs are destroyed if treated as above. It must not be forgotten that the milk must be cooled to a point 60 degrees or lower as soon as possible after heating and kept in sealed vessels to protect it from further contamination. As to the methods that may be employed to carry this out much depends upon the quantity of milk to be treated. For a few gallons, it may be