

# FARM

## Topics for Discussion

In recognition of the fact that valuable hints always are obtained from men engaged in actual farm work THE FARMER'S ADVOCATE has adopted the "Topic for Discussion" column in order that our readers may see an open channel through which they may inform their brother farmers as to practices that are worth adopting and warn them against methods that prove unprofitable. Not only do we wish our readers to discuss the topics announced for the various issues, but also we desire that they suggest practical subjects on which it would be well to have discussion.

This notice appears under the "Farm" department, but the questions dealt with cover all branches of the farming industry. Letters should not exceed 600 words and should reach this office 10 days previous to the date of issue. They are read carefully and a first prize of \$3.00 and second prize of \$2.00 awarded each week. Other letters used will be paid for at regular rates to contributors.

March 16.—*What advice have you to offer on running incubators? Are there any little tricks in operating these machines? Let us have your opinion on artificial incubation, whether it is favorable or otherwise.*

March 23.—*What success did you have last season growing clover—red clover, alsike or alfalfa? What acreage did you seed; how did you sow the seed; what quantity per acre; with or without a nurse crop; did you inoculate the soil or seed, if so how; did you mix grass seed with the clover; what kind of stand had you last fall, and from your experience what advice have you to offer on the growing of these crops?*

March 30.—*What advice have you to offer as to quantity of the various grains to sow per acre? Have your experiences of recent years shown that it is advisable to sow more thickly than you did some time ago?*

April 6.—*How would you advise your fellow farmers to proceed to build up a profitable herd of cows for dairy purposes? Give results of actual experiences if possible.*

## The Question of Manuring

In the articles that follow some practical experience is offered on handling and applying farmyard manure. Too frequently the value of stable manure is underestimated and the necessity of its use in the maintenance of the productive powers of the soil not recognized. The contributions published here point out a number of plans by which the grain farmer can make best use of what manure is available, attention to which may be of value to some who are doubtful of the time for applying and the method of applying barnyard manure. The awards are given in the order in which the articles appear.

## Applies Manure to Grass Land

EDITOR FARMER'S ADVOCATE :

In my experience I find that the best times to apply manure is any time there is manure to apply. The most satisfactory way is by the manure spreader, which unfortunately cannot well be used on the snow, or when most of the manure is made. Consequently to save labor and get the full benefit of the manure we spread it out direct from the stables, using an ordinary sleigh. By saving labor I mean that labor is cheaper in winter than summer. We generally have enough grass land to apply the manure on. Sometimes, and especially in very cold weather, the boys do not spread it as evenly as I would like, but they can hardly be blamed. To remedy this as much as possible in spring I use the harrows turned on their back, and by a couple of strokes both ways spread the manure out pretty well. When spreading the manure on grass I

prefer doing so the first or second winter after seeding, so that any seeds may have time to germinate and get killed before the field is broken up. When applying manure for grain crop, I prefer spreading on the plowed land to plowing it under, as it gives markedly better results, especially in dry weather. Manure on plowed land can be easily handled by using a disc harrow and disc drill. I have 40 acres of wet, springy land that has been growing oats steady every year for the last twelve years, receiving a coat of manure every third or fourth year. With this treatment the crop sometimes is too heavy and lodges. Two years ago I hauled eight or nine years' accumulation of manure from a neighboring farm, and after covering a convenient piece of grass land I spread the balance on about 10 acres of an oat field, at the rate of 420 bushels per acre—that is 6 loads to a 70 bushel manure spreader. Before the job was finished the oats were higher than the horse's knees. The manure neither hurt nor benefited that crop. The following season the yield was seeded to grass with one bushel of oats per acre, as a catch crop, cut for hay. The manure benefited that crop 75 to 100 per cent.

As to the benefit of manure to a prairie farm, I should say that the benefit depends a lot on the quality of the manure, and also to a less extent on the soil to which it is applied. Manure made where concentrated feed is freely fed to all stock benefits the soil in the same ratio as the grain used benefits the stock making the manure. I am of the opinion that manure benefits all classes of soil. On rich new land manure ripens the crop earlier, if it does not help the yield; on older and poorer soil it helps the yield and furnishes humus. Manure in conjunction with a grass rotation will not only stop drifting on the lightest sandy soil, but will actually convert such soil to a black sandy loam. If there is 25 cents worth of fertility taken out of the soil for every bushel of wheat sold, surely it should pay to convert at least all the coarse grain and straw grown into humus and plant food, especially since doing so would mean an additional source of revenue.

Man.

K. McIVER.

## Handling and Applying Manure

EDITOR FARMER'S ADVOCATE :

The winter is the best time to draw out manure, as hauling it then saves a lot of expensive and hard labor in the summer; that is, to take the manure direct from the stables and spread it as evenly as possible on the fields. There is then no loss to speak of, unless on very rolling land. On such land, if there happened to be very heavy rains in spring before the frost was out of the ground, it might wash some.

However, if there were many weed seeds in the manure we think it an advantage to pile manure up in a heap in a sheltered place, where the snow will not drift over it, and let it heat say for a month or six weeks, mixing horse and cattle manure together, tramping it down with a horse after the stables have been cleaned onto the pile. In this way the manure will not "fire," as we call it. Then a few days before we want to draw to fields we start and pile the fresh manure from the stable to one end of the heap instead of putting it on top, so as to get it started to heat before we draw out the main pile. This is what I am doing this winter and the manure handles fine, spreads well and will not interfere with the plowing so much as the green manure. Another important thing is that it will not leave the soil so open.

I may say that we are spreading the manure on land we intend for barley. I do not think it is advisable to put manure on land that is to be plowed or seeded early, as it holds the frost in too long. If we have manure for the summer fallow we put it on the poorest places in the field. This is where some make a mistake. They put the manure on the most convenient place in field, very likely the land that needs it least, and the year may be an extra good growing year with a very large growth of straw, the grain lodges before it is right headed and when we come to thrash

there is a small quantity and a poor grade of grain and the manure gets the blame. Probably if this land had been well packed after sowing it would have helped matters to a great extent, as it would then have grown a stronger straw.

My opinion on the value of barnyard manure if applied in the right manner and right place is that it will speak for itself in increased dollars and cents to the farmer's pocket, besides the great satisfaction of seeing how well the crop grows where the manure has been applied. Besides I think it a wrong to ourselves, our country and future generations to rob the earth of its fertility by cropping year after year without putting anything back to sustain the soil's fertility.

Now I would advise any brother farmer with a heap of manure, the accumulation of years, to get a manure spreader or hire one and get busy as soon as seeding is done next spring and transfer that pile to some of the poorest land on his summer fallow. A word of caution in conclusion: Don't let your manure get fired in the pile, as it is practically worthless if it does. Firing is apt to occur if manure has to be piled up in a heap, especially horse manure in summer. In dry weather throw a few pails of water on the pile once in a while and keep it solid by tramping.

Man.

THOS. AITKEN.

## Barnyard Manure For Prairie Farms

EDITOR FARMER'S ADVOCATE :

Barnyard manure should be spread during the fall and winter on the fields which are to be summer fallowed. If left in heaps to be spread in the spring the liquid content will be lost, as it runs over the hard frozen soil. Besides, if spread on the land shortly before being plowed, the straw portion of the manure is not flattened by the snow and rain, which it must be if the plow is to turn it under satisfactorily. By the time the seed is sown the following spring the manure spread in winter and plowed under in July will be rotted sufficiently to be available for plant food. In this or some similar way the fertility of the farm can be maintained, as it is obvious that the ordinary manner of summer fallowing, viz., putting nothing into the soil, simply hastens exhaustion. That hoary-headed fable of "inexhaustible fertility" dies very hard and, I do not doubt, is responsible for the many worked out farms in the older parts of the Northwest.

Manure may also be applied after the seed is sown, and this will improve the yield to a certain extent, as it prevents the drying out of the soil and helps the plant to withstand dry weather until the rains come. Care should be taken, however, not to apply it after the plant is up. In the fall this manure is plowed under and partially rotted and by the next spring it will be quite decomposed.

Applying manure in the winter and plowing it under in the spring is not satisfactory for several reasons. The manure cannot be completely buried; it catches in and rolls around the coulter, and if it has been carelessly spread, which sometimes happens on a cold winter day, it has to be in many cases burned off before the plough will work, especially in low places; also it is liable to hold too much snow, making the land too wet for satisfactory working. When it is finally plowed under and the seed sown I believe the stiff unrotted straw holds the soil open and permits too much drying out.

The foregoing observations apply to green manure. In my opinion this is the best way for the small prairie farmer to use his manure. I suppose the farmers who have the proper accommodation for storing and rotting barnyard manure and for conserving the liquids might be almost counted on one's fingers. Besides for this kind of manure a spreader is required, and this is a big expense for the small farmer, though doubtless if we farmed as we should, it is necessary.

Sask.

H. E. YOUNG.