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Agriculture.

Inoculating Grass Land.

The extreme difficulty of forming good permanent pastures on arable lands has recently met with a rather novel solution in England. Instead of the usual fallowing, seeding-down, top-dressing &c., a system of inoculation has been tried, that is, transplanting sods from natural pastures to the ground prepared, and locating them at distances of from one to two feet apart, thus obtaining enough from one acre to sod ten or twelve. When first introduced, the system was attended with considerable expense owing to the amount of labor it entailed. The sodded meadow was cut and cross-cut, the sods then lifted in pieces of about a foot in length by four inches in breadth, and again cut into lengths of four inches before they were transplanted. Recently however, the Duke of Manchester has introduced an improved system of operation which obviates cross-cutting altogether, and consequently reduces the expense of inoculation from about £4 10s. to £3, ($15) per acre. The novelty in the Duke's system consists in cutting out narrow strips of turf, instead of long mats to be re-divided afterwards; and it is a decided improvement on the system of "cut-crossing" squares of 4 inches wide. The implement used may in its frame-work be a common scarifier, in which are fixed two bent rectangular tines, which are so adjusted as to cut a strip of sod 2 inches deep and 2 inches broad. These tines cut out ropes of turf which may be of any length, and may break in lifting into the cart into any size, for they would seldom break in shorter lengths than 2 inches at least. Instead of having to cut them into small squares by the spade or other means, which considerably increases the amount of labor, the ropes of turf are readily broken off in suitable sizes by the hands of the women or boys carrying them during the process of plantation. Of old, also, the usual way of marking the land into lines for transplantation was by the use of a scarifier. The introduction of corn-drills allows of a more rapid means of marking the land, by scoring it with the coulters of an empty drill. The women and children at Kimbolton, having these lines 9 inches apart to guide them, use their own judgment in placing the bits of turf at proper distances—irregularly, of course, yet still, as a whole, carefully and systematically done. The small pieces of turf are pressed down with the foot after they have been placed in position by the hand, and the whole is rolled over soon afterwards, and again at any time it may be deemed necessary, as usually advised when inoculation is practised.

When to Apply Plaster of Paris.

EDITOR CANADA FARMER.—In the May number of the CANADA FARMER there is an article on plaster of Paris. A., B. and C. have experimented and have arrived at different conclusions as to its action on the soil and its value as a fertilizer. I, too, have experimented largely, and have arrived at a decision which is, I think, at variance with all their conclusions. The action of plaster on the soil is different from that of any other manure. All manures except plaster have a tendency to render the soil dry and porous, while plaster makes it damp and compact. It acts as a fertilizer chiefly by drawing moisture from the atmosphere to the roots of plants. Some time ago while cleaning out an old house, we came unexpectedly on a barrel of it. The house had the earth for a floor, but the roof and sides were water-tight. The barrel had no bottom in it. The floor around the barrel was quite dry, but the plaster, strange to say, was as wet as water could make it, but perfectly fresh and good; and, though it had lain in this condition for at least twelve years, had the full weight of newly ground plaster. These facts do not appear so strange when we consider that plaster is simply ground stone, that all stones draw dampness, and that they do not decay. I believe plaster will lie in the earth for a number of years in almost the same state as when applied.

Plaster, if properly used, has a marked effect on the crops for a number of years. It should not be applied more than once in five years. If it is applied often it does an injury. I have heard farmers say that they had applied it to fields till they would raise nothing. It should not on any account be applied very early in spring, and it should not be applied unless the ground and grass are thoroughly wet with rain. Three barrels may be applied to a field of ten acres; or two barrels mingled with about the same quantity in bulk of wood ashes. Plaster may be used on all kinds of land, but I would recommend its use especially on poor and exhausted farms, as it increases enormously the quantity of straw, and thus enlarges the yearly manure heap. It is most effective on peas and clover.

WYMBOW

Leaves from Farming Experience—No. 10.

Feeding and Dairying.

In April and May they got a little bran or bruised oats daily; they were watered once every day; put on grass about the 20th of May; fed all summer by themselves, and housed the first cold or wet nights; fed all winter and spring same as the winter before; pastured by themselves as last year, and housed the first cold nights in October. As they will come in calf divide them into two houses, and about the new year tie them into stalls and card them. Handle them kindly and often, and they will not kick. The cow should have a calf at two years old or less, and should cost about $34. She is now put among the other cows, and should give 13 or 14 quarts of milk daily until near the first of November. Then it will begin to fail. In January the young should get a warm drink every day, better twice daily, of bruised oats, salt and water, and should be milked as long as she will give any. Next year she will give you about 18 quarts daily for the first six months after calving, and more the following year. Selected cows fed as stated in this paper, and about 1,000 to 1,100 pounds in weight, will give 4,000 wine quarts of good milk, and make 13 tons of manure during the year. Of many different kinds of food used, hay, bruised oats, and peas, appear the best for both cheese and butter, and hay and oilcake the worst. Milk may not be mixed with water designedly, and yet there may be 2½ per cent. more solid matter in one cow's milk than in another's. Experiments show that butter varies from the same cow's milk from 3 1/8 to 6.7 1/2 per cent., according to the kind of food, or one man might take 2½ lbs. of butter out of every 100 lbs. of milk, and yet his cheese be better than his neighbors. But suppose that less than half that weight, or one pound of butter be taken from every 100 lbs. of milk, which would help to pay for the grain used as food, and leave as much butter or more in the cheese than is found in good factory cheese by the usual way of feeding. By this practice there would be a profit made on each cow of about $14 more than is made in the usual way of manufacturing the milk. There does not appear to be so much difference in the amount of caseine in milk, only about one per cent.; the price of cheese has not varied much these many years. The price from the farmer, selling in Glasgow bazar, was from 5½d. to 6d. sterling, per pound, for Dunlop or Ayrshire sweet milk cheese. Skim milk cheese was 3d. per pound in August 1821 The average price of good cheese may be 11½ cents, and of butter 22 cents per pound. Twenty pounds of sweet milk will give two pounds full milk cheese, 22½ cents. From 18 to 22 pounds of milk is expected to give 1 pound of butter at 22 cents, but it will take 25, or more, pounds of poor milk to make one pound of butter. Twenty pounds of milk of a good cow, fed on 30 pounds of good hay and 9 pounds broken oats or corn, may be expected to yield one pound of No. 1 butter, so that at these prices, 20 pounds of milk are of about the same value, either in butter or cheese. Milk should be tested to find whether a cow is good for butter or not. About one-fifth by weight of milk should be cream, or in 20 pounds of milk there should be four pound of cream, two quarts, or one pound of butter. When we made butter in summer and the temperature over 55°, the pans were placed on the clay floor of a large cellar in a stone house, well aired. When the temperature is below 55°, the milk pans should be placed on a shelf two feet above the floor. The temperature should be over 50 degrees. When the weather got cold and cheese-making was stopped, I took out the upper part of the cheese vat and set in the pans of milk into the lower part, two gallons or more in each pan, and let on the heated water up to over 90°. In the morning the milk was cold, and the whole of the cream up. The cream was put in a vessel and well stirred. The next cream was added to the first and stirred. It was partly covered to keep out flies, and a crust gathering on the top, we added cream, stirring it often until there was enough to churn. If it was not sour enough we stirred among the cream some acid buttermilk, then let rest 6 or 8 hours, then drew out a spile at the bottom of the vessel. A quantity of bitter, bad-smelling water escaped, enough to spoil a large quantity of butter. If the cream was too thick, we tempered it with water. The temperature to begin with is different according to the way it is to be operated on. If to be done by hand, stopping sometimes, the temperature may not rise, but rather fall. The heat at the first may be 58° and not rise over 65°, time 1¼ to 2 hours. If made by horse or cow or ox-power, if the plunge churn is used, going at the rate of 45 double motions per minute, experience makes the best temperature at the beginning 53½° and when done, 57½°, time 75 minutes; quantity of butter, 2¾ lbs. from one gallon of cream, of the very best butter.

Wire Fencing.

There are many localities where no materials suitable for making fences can be obtained at a cost which will admit of their use by the farmer. Wood and stone are the materials most generally employed for this purpose, but these not being universally abundant, sometimes substitutes are greatly in demand. Hedges will do, but it takes too much time to produce them, if a man is in a hurry to get a secure enclosure. Iron wire is now being employed quite extensively for fences, and if not too small, and then well sustained by strong posts, it answers very well. Many a wire fence, however, has proved to be of little use in turning stock, owing to the lack of proper materials being employed—the idea of cheapness having led the builder to overlook the more important merit of efficiency.

We lately saw a specimen of wire fencing in Philadelphia, which seemed to combine both the useful and ornamental in a greater degree than any other which has come under our observation. It is composed of a top rail of gas pipe, iron posts and six strands of galvanized cable wire passing through the posts. This cable or double-strand wire is not only fully as strong as a single wire of the same weight, but the twisting adds elasticity, which is quite important, especially when iron or stone posts are used in the erection. This cable fencing is of course more expensive than the common single wire, but it is enough better to pay for the additional cost. In answer to an inquiry in regard to the cost of this cable fencing, we have received the following reply:

In answer to your inquiry of a few days back, relative to the cost per rod of our cable fencing, if made with 2 and 3 cables high, I beg to state that the wire alone of our usual quality, made of 5 strands of wire twisted into cable form and thoroughly galvanized, will cost 11½c. per foot,