

Questions and Answers.

If there is any subject bearing upon this or any other department of our JOURNAL upon which you desire information, write us, and we shall be pleased to intrust your query to competent persons and publish the answer thereto in our earliest issue, and if an immediate answer is required, such will be gladly given if a postage stamp is enclosed. Write the queries on paper detached from all matters of business, sign your full name and address as a guarantee of good faith, and write only on one side of the sheet. We request the assistance of our readers in making this a useful and interesting feature, and we shall always be pleased to hear from any either desiring information or obliging enough to give it for others, upon any topic within our field.

RAISING COLT ON COW'S MILK—E.L., Canterbury Station, N.B. I have an imported Clyde mare that foaled one week ago, and would not own her colt, and though forced to suckle it commenced to dry up in two or three days. We are raising the colt by hand. Please let me know the best method of feeding the colt. Is it a common thing for mares to disown foals? What is the probable cause and is she likely to act so next year? [The absence of the maternal instinct is an unaccountable peculiarity. Foals soon learn to drink out of a vessel, and cows' milk is the best and cheapest substitute. If it appears to be too rich, causing any disagreement of the digestive organs as scouring etc., add water to the milk in the proportion of one part of water to three of milk. If the bowels become costive add some molasses, honey, or sugar, to the milk occasionally.]

FORESTRY MATTERS—Subscriber, Canboro, Ont.: (1.) Will the black walnut thrive on clay soil, if so where can I get the nuts to plant, or would it pay better to get young trees from the nursery? (2.) In the May number of THE JOURNAL you spoke of the grey willow for fence posts but as I have none on my farm to take limbs from, please let me know if this willow produces seed and where I could get some? (3.) Is there a forestry report printed in Toronto every year, and if so to whom should I apply for it? (4.) What time of the year should the black walnut be planted, also the Norway spruce? (5.) Will the hickory tree grow from the hickory nut, and if so how should it be planted and where? (1.) Yes, though it prefers rich bottom lands of strong loam. If you have the time and can take the trouble to grow them, procure the nuts from any seedsman or friend living in districts where they grow. You will get better trees from nurserymen than you can grow yourself. (2.) The willow produces its seed in the spring. Your best plan is to secure cuttings or sections of roots from nurserymen, as they are much easier propagated in that way. (3.) Address R. W. Phipps, Department of Agriculture, Toronto, Ont., for Forestry Reports which are issued annually. (4.) Plant the black walnut in the fall if possible, if not store outside in sand during the winter, and plant in early spring. Gather the cones of the spruce in the fall, hang them up in a fine muslin bag in a warm dry place, and the seeds will soon drop out. The seed should be kept dry and planted the following spring. (5.) Yes. Plant in the fall in nursery rows about four feet apart each way, and transplant after one year to their permanent situation. Weed and cultivate well until beyond the weeds. In transplanting do not cut off the tap root. Hickory and butter-nuts may not germinate the first spring, and yet grow well the second. — Ed.]

The Dairy.

At the English Jersey Show held sometime ago, the cow that won the gold medal and fifty dollars in the butter contest, gave 41.1 lbs. of milk, from which was made 2 lbs. 3¼ oz. of butter.

Of the £5000 granted by the Board of Agriculture of Great Britain, for the encouragement of agricultural instruction and research, the largest sum devoted to any single purpose, £2,055, was given for practical instruction in the most approved methods of dairying, including the manufacture of both butter and cheese.

As well try to twist a rope of sand as seek to make a success of dairying by supplying the cheese factory with water tinted a sky blue with milk. Only from good milk can be made the best cheese, and it is only the best cheese that brings the highest price. In sending out poor milk the dairyman flings from his hand the boomerang that is going to descend on his own head.

A NEW departure in the storing of ensilage has been introduced and patented by an English firm, which consists in using an exhaust fan to withdraw the air from the silo, thereby preventing the fermentation that would take place through the presence of the air. When the silo is sufficiently filled, it is made air tight, and then the exhaust fan and pipe are attached, and the air withdrawn.

WRITERS nowadays make mighty efforts to connect cause and effect, but the statement we quote credited to a prominent experimental station in the United States, is the most dogmatic and absurd we have yet met—"Sloppy food makes soft, wet butter." The feeding of sloppy food is not justifiable—but to say that the moistness of the food affects the amount of the moisture in the butter, which is determined by the nature of the washing and working, is clearly unfounded.

BEFORE the New York Dairy Association Professor Myers, of West Virginia Experimental Station, brought forward a new idea in buttermaking. The milk was run through a separator as soon as received, and the cream was at once churned in the ordinary Blanchard box churn, and after the butter gathered the butter-milk was put into the centrifugal separator which threw out whatever butter was left in the butter-milk. He claims by this course he can obtain all but about one-tenth to one per cent. of the butter fat of the milk, and that he has separated 1121 lbs. of milk in 83 minutes. The most noticeable feature is that the cream is churned without being ripened.

Churning Whole Milk

Writing on butter-making, Dr. Aitken, in the *Farmer and Stock Breeder*, brings forward a number of arguments in favor of churning whole milk, instead of following the ordinary method of separating the cream and churning it. He claims that it takes up little room and requires few apparatus; that it takes less trouble and care than creaming; that it does not involve so much risk of loss through accidents of various kinds to which cream is liable; that it yields or can be made to yield the maximum quantity of butter, and that it is very well adapted for small dairy farms of about twenty or thirty cows, especially if they are near towns where a ready market can be had for buttermilk. Among the disadvantages put forth may be mentioned that it takes longer to churn the whole milk into butter. And if there be anything in the claim that ripening of the cream adds to the butter flavor, then this also would stand against the practice of whole milk churning. It is claimed that for many years past it has been the custom in Norway and Sweden, as well as in various parts of Holland, Belgium and Germany, to churn the whole milk. The statement that, by following this method, the maximum quantity of butter may be obtained, should be better qualified before being generally accepted. It would be possible to get equal returns with the other method of churning the cream, but it would be necessary to ripen the whole milk, similarly to the cream, and this means that there will be no sweet skim milk, but in its place sour buttermilk. The method followed on the European continent is as follows: The milk is usually put into a barrel and left over night. To this the morning milk is added, and also the mid-day milk, when it is customary to milk thrice daily. The mixture is allowed to stand until the oldest milk is thirty-six hours old, when

it has attained to ripeness. Under conditions when buttermilk would be as valuable as sweet skim milk, this system might be followed perhaps with advantage.

Silage Squibs.

The silo is one of the best agents for lessening the cost of production that the farmer could adopt, and it is to be remembered that cheapening the cost of production of all articles of the farm, lessens the price of articles that are bought.

Land rich in vegetable matter, deeply ploughed in the fall, and lightly cultivated in the spring, has given the best results.

Corn grows best following sod. Farmyard manure well worked in shows its effects in a greater growth, earlier maturity, and a greater yield of nubbins.

To enable corn to reach maturity plant early as possible. To lessen the loss of kernels not germinating, plant shallow (2½ in.), and it has been recommended strongly to heat the corn seed before sowing.

Plant in rows 3½ feet apart and eight inches in the row. Level cultivation has given most satisfactory results.

Harrow the corn twice at least from the time it is two inches high until it has attained a growth of six inches. At the Central Silage Convention, held at Ohio, and admirably reported in the *Ohio Farmer*, E. Whillbey gave his method as follows: I put about 20 loads of good manure to the acre on five acres, and I planted it with a common grain drill, putting the corn about 3½ feet apart. The corn came up nicely, and as soon as it got dry enough while the corn was small, I put a Thomas harrow on that field and harrowed it thoroughly, straddled each row with a harrow and lapped over, so that it was all harrowed over twice. When I got through with it that field was about as sick a cornfield as I ever saw. I concluded I would not build a silo, I thought my corn was about ruined, and I stayed away from it a week or more, but it came up again and looked much better.

The difference between sour and sweet ensilage is a difference in the degree of sourness, and the adopted conclusion now is that sweet ensilage results when fully matured corn is put in the silo, and sour when immature and wet corn is put in.

Though it is not established by chemists that any improving change takes place in the silage owing to being stored in the silo, yet practice clearly demonstrates that silage is in a better condition for feeding, being more easily masticated, that it is more palatable and more digestible than cured fodder corn for feeding purposes.

The smallest silo yet heard of is one in Pennsylvania 4 x 4 feet and 18 feet deep, and it is said to do splendid work for one cow alone.

The difficulty at present facing siloists is the moulding of the corn in the corners. This may be obviated by fitting a board into the corner so as to break the angle. Another reason for the spoiling of the ensilage in the corners is due to the fact that the ensilage is not spread properly as it leaves the carrier. If not carefully spread the stalks will all be deposited in the centre, and the lighter portions flutter to the sides.

Ensilage is not a complete food, it should be supplemented with grain foods. Many expect to feed it alone and get the best results. It is merely a part substitute for hay or roots and should not be fed alone, but sprinkled with bran, chopped oats, or other foods that might be fed.

At the Central Silo meeting, many expressed themselves in favor of lathing and cementing the inner wall, claiming that it is far more durable. The moist ensilage certainly has a tendency to swell the boards, causing them to warp and rot, but that may be obviated by using crude kerosene for painting the inner wall. Mr. Robinson spoke strongly in favor of the lath and cement, using the following words in support of his claims: "The cement keeps the frame