

late starting and can therefore be left somewhat later. Many people have recommended June as the best time to transplant an evergreen, or when the new growth is two or three inches in length. It can be done at this time successfully, if careful attention is given, but it is not as good a time to transplant as stated above, just when growth begins. Many trees fail to grow, from the fact that they have not had their roots protected from the wind and sun while out of the ground. It sometimes happens that the trees are shipped in bulk from the nursery with the roots exposed, but perhaps the greatest injury is done after the trees have been received at the nearest town or village where the agent has delivered them. I have often seen farmers go after their trees with a rig too small to properly hold them, and tie them on the back of the buggy, or put them in the wagon box with little or no covering, then tie the horses to a post, there to stand two or three hours while the family are shopping, then be surprised that the trees did not make a good growth; the greatest care in planting will not make up for thus exposing the roots. Ten minutes will sometimes so injure an evergreen, if exposed to a strong wind and bright sunshine, that it will either die or make such a poor growth that it will be of no use. Dig the hole large enough to admit all roots without cramping, cut off all broken or injured portions of the roots, and plant a little deeper than they were in the nursery. If the soil is at all moist use no water; when water is used, put it in the bottom of the hole and let it soak down before planting the tree, and not put it among the roots. If put among the roots it forms a paste or mortar that shrinks away from them when drying and admits air, just what we should guard against. If water is put on top of the ground after planting, do not allow it to come in contact with the trunk of the tree, but put it in a circle at a little distance away. Never allow manure to come in contact with the roots of any tree, plant or shrub when planting—use it as a mulch around the tree and work in lightly; this will hold moisture, especially if stirred frequently during the growing season. It is a mistake to cultivate deep around trees or plants.

Years ago nearly everybody had all the red currants they could use. At the present time I presume not one in fifty has a supply of them. Two enemies have attacked the bushes, which, no doubt, explains the cause. The currant borer, that goes through the heart of the branches and destroys them, may be cut out and burned. The currant worm, that eats up the foliage in a few days, requires watching closely. A tablespoonful of white hellebore, dissolved in a pail of water and sprayed over the bushes when the leaves have grown to about the size of a grain of corn, will prove an effectual remedy. By applying the hellebore thus early, the worms are easily kept in check. If this method is followed up every year, I have usually found one application each spring to be sufficient. With a little attention we can grow just as large crops of this fine fruit as ever.

VETERINARY.

Veterinary Questions.

Will you please inform me through your paper what will cure warts on cows' teats, and oblige, SUBSCRIBER.

Warts on cows' teats are not usually troublesome, and in such cases are better left alone. They may be removed either by the use of the knife, or by caustic, as nitrate of silver or caustic soda.

I have a yearling heifer which has an enlargement on the side of the face about the size of an egg; it is hard and movable. I do not think there is any matter in it, can't say how it came, looks something like lumpy jaw; if you think it is, would it be wise to keep her for a cow or not.

Yours, W. C. WATSON.

There are two general methods of treatment:—The tumor may be removed either with the knife or by the iodide of potassium treatment.

The removal of the tumor by the knife can only be accomplished in the earlier stages of the disease, while it is small and before the bone is diseased. The whole of the tumor must be removed, and some antiseptic dressing used. A good one is corrosive sublimate, one part to a thousand of water. If care is taken to remove all the diseased tissue, a complete cure may be expected.

The iodide of potassium treatment consists in the internal administration of the iodide of potassium in doses of from two to three drachms, according to the size of the animal. In the course of a week the usual signs of iodism occur, such as discharges from the nose, weeping of the eyes, and scurfy appearance of the skin. When these symptoms appear the medicine should be discontinued for two or three days, when it may be renewed for a week, and so on according to the progress of the disease. If the animal will take the iodide of potassium in its feed it may be given in bran mash; if not, it will be necessary to dissolve it in a pint of water, and give as a drench. We would advise drenching, for the practice of administering medicine in the food will often prevent the animal taking sufficient nourishment.

The treatment of this disease is so often unsatisfactory that, unless the heifer is a very valuable one, we would not advise keeping her for a cow.

The above will also answer Mr. Quail's question. We would like to hear from any of our readers who are trying the iodide of potassium treatment as to their success.

DAIRY.

Branch Dairy Convention.

One reason why the FARMER'S ADVOCATE has been able to accomplish what it has is because it goes regularly freighted with practical information directly to the agriculturist. Just so in dairying. The men who are handling cows or their products must be reached personally in order to awaken enthusiasm and effect improvement. The wisdom of the directors of the Western Ontario Dairymen's Association in holding branch district conventions, four in number, this season, was more than vindicated, for example, by the immense gathering held at Tilsonburg. The large hall was crowded to the door, in fact a number were actually crowded out, and every speaker was given the very closest attention. Judged by these conventions and the local cheese factory meetings, the interest in dairying was never anything like as great as at present. The forenoon of the Tilsonburg meeting was spent by the visitors inspecting the premises of Mr. E. D. Tilson, whose mammoth new dairy and stock barn, with brick (cement plastered) silos, will, when completed, be probably the most elaborate and costly in Canada.

President John Geary, of London, in his opening address, felt grateful that farmers were appreciating the efforts of the association. He expected that winter dairying would bring the export of Canadian butter up to \$5,000,000 or \$6,000,000 in a few years. This summer fifty or sixty cheese factories would divide the pay of their patrons by the Babcock test.

Secretary Wheaton read a telegram from Hon. John Dryden regretting his inability to be present owing to the death of a relation, but conveying his best wishes and promising to render Ontario dairying all the aid in his power. Mr. Wheaton, who is doing excellent work as secretary, ably justified the continued need for this Association to promote dairying, to maintain the co-operative system, and to furnish the people information on new phases of the work. Since his appointment he had attended over fifty meetings, addressing some 4,000 patrons of factories. Everywhere he found an increasing interest in this business instead of selling raw products.

Mr. J. A. Ruddick, of Prof. Robertson's staff, gave the results of seventy-five experiments at the Perth Experimental Dairy Station, from which he drew the conclusion that paying for milk at the cheese factory by the fat percentage was a fair and just system.

The following table exhibits the result of his experiments, June, July and August milk being used:

Lbs. Milk.	% Fat.	Lbs. Fat.	Lbs. Cheese.	Lbs. Milk per lb. Cheese.	Lbs. Cheese per lb. Fat.	Price, per 100.	Value Milk per 100.
5,000	3.2	160	452½	11.03	2.83	9½	\$.88
"	3.3	165	458½	10.89	2.78	9½	
"	3.5	175	468	10.67	2.67	10	.93
"	3.7	185	477	10.48	2.57	10½	
"	3.9	195	503½	9.92	2.58	10½	1.03

As 3.50 per cent. milk was the average quality used in these experiments the price of cheese made from 3.50 milk was fixed at ten cents. Prof. Robertson's estimate is that every two-tenths of one per cent. increase in fat in milk increases the value of the cheese one-eighth of a cent per pound. The difference in quantity of cheese alone would not make quite the difference the table shows. As a striking object lesson he displayed on the platform two cheeses, one made from 700 pounds 3.2 per cent. milk, the other from 700 pounds 3.9 per cent. Both were made in the same way by himself, about the same time, contained about the same amount of moisture. At three weeks old the 3.9 per cent. cheese weighed 72½ pounds, while the 3.2 per cent. cheese went but 61 pounds. That the former was several inches larger was evident to everyone in the hall. The fat lost in the whey was not in proportion to the fat in the milk. As a rule the richer milk was more easily worked, being in better condition through having been well stirred and aired. Good milk and good dairymen went together. Patrons should be particular to stir the evening milk thoroughly, else the cream would rise and become leathery, part of it being lost, and so a proper sample of it would not be got for the Babcock. He took samples every day and tested once a week. The maker would need some extra help, and the apparatus would cost about \$30 and the acid \$10 per season. On the whole the rich cheese did not shrink so much. Took milk samples from weigh can with small dipper holding about a gill. This system would prevent adulteration. It would tend to improvement, that was sure, and consequently there should be better returns. No one desired to force this plan on the patrons; it was a matter for them

to decide. "How does my milk test?" (in addition to how much) is now the universal question.

Prof. Robertson, the Dominion Dairy Commissioner, recently returned from a trip to England, brought a hopeful message for the farmers of Ontario. Our cheese still holds its place of pre-eminence. The British consumptive demand is for finer foods—finer butter and bacon—for which they will pay handsomely. In view of the fact that 87 tons of butter, worth \$500, only took from the farm as much fertility as one ton of hay, sold for \$10, the dairy farmer really could not help producing wealth. The air was full of lamentation about agricultural depression in England and broken-down farms; but on land not any better naturally as much rent as \$10 per acre was paid and the tenant was prospering, because of more intelligent methods and a change from continuous grain selling. He urged the necessity for improved and better equipped factories, and recommended makers this spring to thoroughly sprinkle the interior (ceiling included) of their make rooms with a solution of bi-chloride of mercury and water, one part of the former to 4,000 of the latter. They should be careful not to over ripen the milk. A large sized cheese (68 to 70 lbs.) was wanted. Bandage should be a little smaller than the hoop. Strong boxes should be used and about twice as many nails as usual, as there were great losses from breakages. Make them neat and close fitting. The brands should be neat also, 4 or 5 inches long, the letters about ¾ of inch in length. The word "CANADIAN" should be branded on the side of every cheese, so that we may get the full benefit of our reputation. Stencil the weight on the box. By the use of numerous charts he outlined the subject of animal nutrition and the feeding of dairy cattle. The main point was to keep the cow's skin in good condition, supplying her with such foods as will promote the largest flow of the best milk of which she is capable. He announced that enough seed for 2½ acres, at a cost of about \$2.00 or \$2.70, of the new (Robertson) ensilage combination would be distributed (freight paid) to farmers applying to him by letter or card at Ottawa. It consisted of corn and English horse beans sown together, and Mammoth Russian sunflowers, making a perfectly balanced food and marvellously cheap. In a test at Ottawa, increasing the meal in a ration fed cows (prior to test under good feeding) had not been followed by an increased fat percentage in milk. The cheapest silo, and one he recommended, was single boards (tongued and grooved) inside the studding, tar paper being put under the boards outside the studding. Covered the silo with 2 or 3 inches cut straw, and longer straw above that. Twice as much butter was made at the Mt. Elgin and Woodstock creameries this winter as last. One patron, Mr. Price, reported that the skim milk paid for all the extra feed he had to give his cows in winter, so that he had the butter money clear. Shallow pans would take more cream out of "stripper" milk than deep setting, but adding "fresh" cow's milk would facilitate creaming.

[Ordinarily, however, farmers would do well to bear in mind that they will have their cream in far better condition with less work by deep setting. We would not advise any one to discard deep setting in favor of shallow pans, especially in winter. Better have a fresh cow coming in now and then through the winter.—EDITOR.]

Mr. E. Caswell remarked that the short, fat, chunky hog would not bring the long price. The Canadian Packing Co. preferred the medium Yorkshire style of hog, not corn fed.

Mr. John S. Pearce entered a strong protest against the cry of "hard times" among farmers. He took a more hopeful view of things, and urged progress and improvement. If certain farmers were hard up it was probably because they had not kept pace with the times. Many did not raise as much wheat per acre as their fathers did, while they were living far more expensively. They should increase the grain yield and the capacity of their herds, and cheapen production, as they could not regulate prices.

Mr. Macdonald, Superintendent of the Geary Butter Factory, alluded to the wonderful strides made by Quebec in cheese making, intimating that Ontario would have to look to its laurels sharply. What was called the "Canadian Jersey" of Quebec was not a Jersey at all. She was a small cow, entirely black, giving very rich milk. He tested one going 8 per cent. fat. They were descended from the ancient Brittany cows. By richer feeding a farmer could get more milk, and so a greater quantity of butter.

Mr. Andrew Pattullo, of Woodstock, spoke vigorously in favor of improved methods of road making, such as grading, draining, beautifying the sides, making repairs when needed, and the more general use of road machines, stone crushers, etc. He suggested that the men who were responsible for piling huge piles of boulders (called gravel) in the middle of the roads in Oxford this winter should be arrested and fined.

Dr. McKay, M.P.P., of Ingersoll, also spoke in favor of better roads, and congratulated the dairy farmers of Oxford on their progress.