

fore getting down to an unprofitable minimum. The cow which does not milk pretty well during the early period of lactation is difficult to increase much, till she freshens again. After the first few weeks, extra feed is liable to go on her back.

The average prices per pound of fat paid patrons by the Guelph Creamery Co., were: 26.49 cents in 1909, 26.61 in 1910, 26.71 in 1911 and 29.95 in 1912. The make of this creamery has showed a rapid increase during the past four years, 564,425 pounds of butter having been made in 1912 and total sales amounting to \$166,446.05. The average selling price of butter was 28.72 cents. The March statement shows a make of 44,896 pounds of butter, in addition to nearly a thousand pounds of fat used by the O. A. C. Dairy Department. The net price paid patrons per pound of fat during March was 33 cents. The average for the month was 19 per cent.

W. G. Pettit, Freeman, Ont., Secretary of the Dominion Shorthorn Breeders' Association, informed "The Farmer's Advocate" last week, that fifteen applications for official tests for the newly established Shorthorn Record of Performance had already been forwarded to Ottawa by him and a good many more are expected soon. One application had been made and additional forms asked for by the Department of Agriculture, Edmonton, Alta., which bought two carloads of heavy-milking Shorthorns last fall, and proposes, it is understood, to give special attention to that class of cattle, with a view to demonstrating the suitability of the dairy Shorthorn for the Western farmer.

Our English Correspondence.

CHEESE MAKING IN CHESHIRE

H. M. King George and his august wife, Queen Mary, have been cheesemaking. They recently visited the Cheshire County Dairy Institute, situated at Worleston, three miles from Nantwich. Some years ago Cheshire farmers experienced a lack of good dairymaids. At the time of the great cattle plague, Cheshire had grievously suffered by the decimation of its fine stocks of dairy cattle, and the cheese trade had, of course, suffered too. As a matter of fact the London market for Cheshire cheese has never been fully regained. There have always been fine dairies in Cheshire but the art of making cheese was not a growing one; indeed it stood still. It occurred to a few of the foremost men concerned in the Cheshire cheese trade in those days that something might be done to improve the uniform quality of the staple article. Whenever there was a slump in the cheese trade some of the inferior sorts became a glut on the market, and farmers suffered severely. The cheesemaker did not trouble himself very much about science or scientific methods; in many cases the "rule of thumb" was practically followed, and the results varied in greater or less degree. Good land and good cattle did not necessarily mean the primest of cheese.

In 1877 Canadian and American cheese had driven the medium and common qualities of real Cheshire-made cheese out of the market, even today Canada is still a forbidding competitor.

The launching of the school or institute scheme had this excellent effect—it directed the attention of many of the landowners to the importance of the great dairy interest in the county, and to the desirability of encouraging their tenants in every

way, by the provision of suitable buildings and apparatus to produce dairy products of the highest quality. More attention was devoted by tenants to the breeding and feeding of the best cattle for the dairy, and for improving dairy rooms in every possible way, and there is no doubt that with the opening of the institute the cheese-making industry received a great impetus. In quite a short time not a few farmers admitted, that, as a result of lessons received at the Institute, by wives or daughters, they were making from ten to twenty shillings a cwt. more for their cheese. The Institute is a farm on the estate of Colonel Sir Edward Cotton-Jodrell. The kitchen has all the character of an old farm-house kitchen. Its low ceiling and massive oak beams supporting it at once charmed Her Majesty, Queen Mary. There was some character about this, and its roominess and its oak beams, which prompted Her Majesty to exclaim "What beautiful old beams. This is the loveliest kitchen I have ever seen." A little later the King and Queen entered the dairy where Miss Foster, the manageress, explained the process of cheesemaking. The treatment of milk and curd through all the five stages when coloring and rennet are added to the ripening milk, when the milk becomes coagulated, the curd is stirred, and put into cloth and aerated, turned and tested, and milled, salted and put into moulds, and lastly ironed and bound with calico, was demonstrated by the dairymaids engaged at the five vats. The final demonstrations took place in the press house, where the cheese was ironed and calicoed. From the dairy the King and Queen proceeded to the butter dairy, where again, their Majesties saw the making of butter from the initial to the final stages. Hence, butter was shown in grain, when being worked, and when made up and packed. The king expressed his admiration of the cream cheese, and said he would like to take away a packet of these, and also a pound of butter. Samples of each Lord Stamford chose, and stowed away in his pocket. These and a sixty-pound colored cheese, made on the long-keeping principle, passed to the King as mementoes of his and her Majesty's visit to the Dairy Institute of Cheshire. The cheese was formally presented by Miss Foster on behalf of the County Council of Cheshire.

One can repeat that the work of the Worleston Institute has given a stimulus to the Cheshire cheese trade. In Leicester and Derbyshire cheesemaking has been going down, but during the past twenty years the weight of cheese produced in the Cheshire cheese-making district has doubled. Shropshire is perhaps the county nearest akin to Cheshire in its pastures, and for some years Cheshire farmers have been going into that country in increasing numbers, and making cheese on the Cheshire principle. The land is well adapted for it, and at present a great weight of Cheshire cheese comes from Shropshire, where there are fewer sheep and less corn growing than formerly.

Nearly as much Cheshire cheese is now made in Shropshire, Denbighshire and Flintshire combined as in Cheshire, the quantities being roughly, County of Cheshire, 25,000 tons, and the other four counties combined 20,000 tons, or approximately a total output for the whole five counties of 45,000 tons annually of the Cheshire article. Canada is now sending to this country 90,000 tons of cheese a year. Its merit lies in its being of level regular quality; it falls short of the finest Cheshire; but it makes at the present moment £65 per ton in the market, and it is a serious competitor with the common sorts of Cheshire. Dutch cheese comes in considerable quantities, but its attraction is not high quality

so much as its lowness of price. New Zealand has lately entered this marathon-like race of cheese-making, and her goods are increasing in favor each year.

London, Eng.

G. T. Burrows.

HORTICULTURE.

If a number of the plants in the strawberry patch are wilting and dying, dig down at the root, and it is more than likely the white grub will be found doing the damage. The only remedy is to kill the grub after found.

A trip from London to Toronto via Hamilton, which takes one through some of the finest fruit country in Ontario, viz., the Burlington district, showed a few days ago, a wonderful prospect for fruit, but sharp frosts following may have materially lessened the setting, and the crop may not be as heavy as at first promised.

The tent caterpillar is said to be prevalent in some districts this season. These worms hatch out early in the spring and begin feeding on buds or young leaves. They always build a silken tent in a fork of the branches of the tree, in which they remain while not feeding. The nests are readily seen, and when small are easily removed and the contents crushed. In orchards which are regularly sprayed with arsenate of lead for the codling moth, these, and all other leaf eaters are killed.

Many tree pruners would be more appropriately termed "wood butchers." An orchard was visited the other day, which, previous to pruning, was very thick, and which, after pruning, had very little left but a few of the larger branches—scarcely enough foliage-bearing wood to keep the trees alive. A pruner must, to make a success of his work, have some knowledge of the fruit trees upon which he works, the fruiting habits and form of growth.

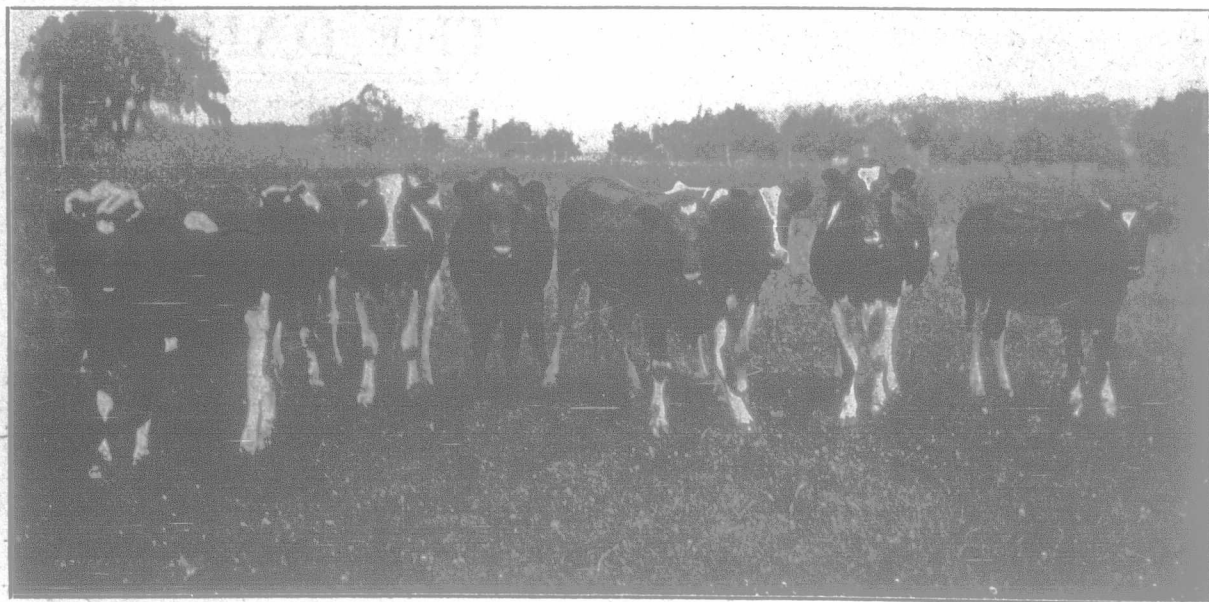
Spray the Potatoes this Season.

If you are growing potatoes plan to spray them. Potato growing demands spraying almost as much as fruit growing. Three distinct advantages are to be had from spraying potatoes: (1) It insures against loss from blight; (2) It protects against insect damage; and (3) it stimulates the growth, and thus increases the yield. The Vermont Experiment Station after twenty years of work, has this to say with regard to how to spray:

"In general commence spraying when the plants are six to eight inches high, and repeat the treatment at intervals of ten to fourteen days, in order to keep the plants well covered with Bordeaux throughout the season. During epidemics of blight, it may be advisable to spray as often as once a week. Usually six applications will be required. The Bordeaux should contain four pounds of copper sulphate to which 40 gallons in the first two sprayings, and six pounds to forty gallons in subsequent sprayings. Whenever (potato) bugs or flea-beetles are plentiful, add 1 or 2 pounds of Paris green, 2 quarts of arsenite of soda stock solution or 3 to 5 pounds of arsenate of lead to the quantity of Bordeaux required to spray an acre.

"Thoroughness of application is to be desired at all times, but is especially important when flea-beetles are numerous or the weather favorable to blight. The more frequently and thoroughly the plants are sprayed the better. There is no danger of injuring the foliage by too much spraying. Using the same quantity of Bordeaux, frequent light applications are likely to be more effective than heavier applications at long intervals; that is, when a horsepower sprayer carrying but one nozzle per row is used. It is better to go over the plants once a week than to make a double spraying once in two weeks. In the first two sprayings, while the plants are small, one nozzle per row may be sufficient, but when the plants become large, at least two nozzles per row should be used. Large vines are especially liable to blight and should be sprayed very thoroughly. Such vines will be somewhat injured by the wheels of the sprayer, but the benefit from spraying will far outweigh the damage done.

"A single spraying is better than none, and will usually be profitable, but more are better. Spraying may prove highly profitable, even, though the blight is only partially prevented. It is unsafe to postpone spraying until blight appears. Except, perhaps, on small areas, it does not pay to apply poisons alone for bugs. When it is necessary to fight insects Bordeaux mixture and poison should be used together. For the best results spraying should be continued as long as the plants live. It is a mistake to discontinue spraying be-



The Young Herd.

One of the surest methods of increasing production is by keeping the best heifers from the best cows.