

Successful Calf-raising.

Where calves are raised by hand—that is, fed milk from the pail, as is the usual practice in dairy herds or in those of the general farmer—it is important that good judgment be used in the method and manner of feeding, in order to avoid derangement of the digestive organs of the young animal and the troubles that are liable to follow. In the first place, there is certainly no better course for the welfare of the calf when it is born than to allow it to draw from the udder of its dam in the natural way small quantities at a time of the colostrum or first milk of the cow. This is nature's provision for bringing about the action of the bowels and giving the calf a safe start in its new line of life. The cow, in her affection for the calf, if left alone with it usually shifts her position frequently while it is sucking, thus allowing the calf to take but little at a time, and as often as it desires. It is all the better for the calf if it is left with the cow for two or three days before being taught to drink from the pail. The opinion probably prevails that this is not the best practice in the interest of the cow, as the longer the calf is allowed to remain with her the more she will fret when it is removed, and the common practice, we believe, is to take the calf away from her sight as soon as born or to allow it to suck but once. It is worth while to consider whether this unnatural course may not account for most of the cases of so-called milk fever, from which so many cows are lost. From extended experience with cows of the beef breeds allowed to suckle their calves, the writer fails to recall a single instance of milk fever, though some heavy-milking cows were owned. The experience of an English dairy farmer, published in the "Farmer's Advocate" a few months ago, confirms the theory that milk fever may be avoided by allowing the calf to suck its dam for a few days, as the writer referred to deposed that in a large herd of heavy-milking cows he had not had a single case of fever in many years, and his practice had invariably been to leave the calf with the cow for at least three days, and in no case to milk her out clean during that time. Whether there is anything of value in this theory or not, and we are inclined to believe it is quite as reasonable as most of the other assumptions on the subject which have been published, it is certainly important that the calf be fed in small quantities and often from the first milk of its mother, warm and fresh from the udder. In feeding it, the good old plan of giving the finger to the calf to suck while partaking of the milk cannot be too highly commended, as this is the nearest approach to nature's way, unless a rubber nipple be used, as it is one of the very best correctives of digestive disorders. When the finger is so given, the calf drinks more slowly, and in the act of imbibing uses its tongue and jaws so freely that a large quantity of saliva is poured out and mixed with the milk, aiding digestion and abstracting the most nourishment from the milk. The ambition of the average calf-feeder is to teach the youngster as quickly as possible to drink without the finger in order to save time and trouble, but for the welfare of the calf it is a grave mistake to so hasten the process, as the gulping of the milk hastily is almost certain to cause derangement of the stomach.

The secret of successful calf-raising after the initial period is passed lies in feeding little at a time and often during the first two or three weeks, and always having the milk fed at about the temperature of milk as it comes from the cow. Whole new milk should be given three times a day for the first two weeks, then one-half the quantity may be skimmed milk, and at the end of a month skimmed milk fed warm may be the whole ration, though a little flaxseed jelly may be added with advantage, and the calf should early be taught to eat good hay and a little bran and oats or meal of some kind. During the hot summer months calves will do better kept in darkened sheds, with screened windows to exclude flies, or if kept out on pasture, should have a shed to protect them from the hot sun or from cold rains. With careful and common-sense feeding, calves are liable to few ills; but if, from injudicious treatment, scours, their commonest ailment, if taken in its early stages may generally be corrected by giving a dose of castor oil, followed by a raw egg or two, shell and all, and lessening the quantity of milk for a day or two until the digestive organs are restored to their normal condition.

Take a day and go to the Short-horn Breeders' sale in Hamilton, on Aug. 13th.

Dairying in Nova Scotia.

BY LAURA FOSK.

To see the best of a country one must needs drive through it. Then can right conclusions be formed as one has time to study conditions and an opportunity of meeting the people.

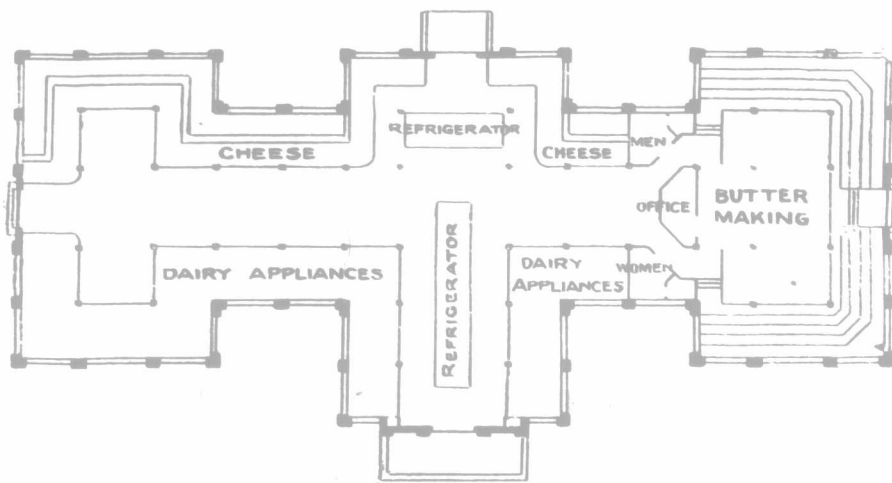
Lately, I left Truro, Nova Scotia, in a covered van to travel by horse through the counties of Pictou, Antigonishe, and Guysboro', to give practical demonstrations in dairying.

Pictou is counted as one of the best counties in the Province, and as I drove through the valley of the West River, the general appearance of the well-tilled fields and large, comfortable-looking farm homes indicated both intelligence and thrift.

Dairying is not so extensively gone into as one would like to see, for I contend it is really the only branch of agriculture a farmer here can hope to make much money at. There is not the land available to raise large grain crops, but there is plenty of rough land suitable for pasture and a splendid home market for the dairy products. Where the farmers err is in not making provision for winter feeding so as to keep up the flow of milk. Practically no corn and very few fields of roots are to be seen. The well-matured corn and fine mangels and turnips I saw on the Provincial Farm at Truro last fall was proof that these crops can be successfully grown in Nova Scotia.

From what I can learn, a great many cattle in the winter time are both badly housed and fed, and with such conditions not much money need be expected either in winter or summer. Cows so treated get run down, and it takes half the summer to bring them into condition again. Another general practice is putting the young calves in the pasture field and allowing them to remain there through all kinds of weather, very often with no shelter at all. Such treatment results in a stunted growth and the calves never develop into the large, healthy cows they would have had proper care been exercised.

As is the case in Ontario, enough thought has



PLAN OF NEW DAIRY BUILDING, TORONTO EXHIBITION.

not been given to the breeding and selection of good dairy cattle. Judging from the cows we pass along the road, I should say many are not paying for their keep.

In our work we test considerable milk, and, taken as a whole, the test is high, many samples running from 4.5 to 6 per cent. butter-fat. I noted the same high per cent. in the milk we tested last year in Cape Breton, and came to the conclusion it was largely owing to the small quantity of milk many of the cows were giving; but I do think that throughout the country the milk is richer here than in Ontario—perhaps because we find more Jersey and Ayrshire blood, and less Holstein.

Quite an interest is taken in the explanation and running of the cream separator we carry with us. The majority of the spectators have never seen one before. When we compare the skim milk from it to that which the people have brought us to test, it reveals to them in a most forcible way the serious loss many are sustaining by their method of creaming milk. The other day I really felt pity for one woman. The sample of milk she brought tested one per cent. butter-fat, and, with a most sorrowful look on her face, she said: "I knew we were losing a lot of the butter." "Yes," I replied, "where you should get four pounds of butter you are only getting three." The separator agent is abroad in the land, and if he follows in our path, his road is partly paved for sales.

So far, our largest meetings have been in Durham, where Mr. Chas. Bryan, Sec.-Treas. of the Nova Scotia Farmers' Association (and at whose home we stayed), left nothing undone to make the meetings a success.

At the three day sessions the average attendance was twenty-five, while in the evening the hall was packed. I felt our efforts were appreciated. The ladies present took right hold of the work. It was new to them to stop churning when the butter was in the granular form. And the lever butter-worker! Well, that was just the finest thing they ever saw.

The young and the old are alike interested in the work. At this morning's session there was a dear old lady, ninety-three years old, who had walked a quarter of a mile to the meeting. Her step was firm and her mind as clear and bright as ever. As she laughed and chatted with the younger people, it seemed difficult to realize her great age. But in my travels in the east I have met a great many vigorous old folks. Their simple, contented mode of life and healthy climate must account for their longevity.

Pictou Co., N. S.

Dilution Cream-Raising.

In Germany one of those hydraulic or dilution "separators," which have so frequently been exposed in the "Farmer's Advocate," was tested by Dr. Klein, with the result that in 25 trials the skim milk tested from .52 to 1.25 per cent. of fat. Most of the best hand separators do not leave more than .15, and often less. The use of these so-called "separators" lose from .37 to 1.1 lbs. of butter-fat for every hundred pounds of milk "set." The average loss was .59 or .44 more than with the hand separators, and this means with an average cow giving 4,000 lbs. of milk, an annual loss of 17.6 lbs. of butter-fat, which, at 18 cents per pound, means a loss of \$3.16 per cow. One of the alleged separators which the "Farmer's Advocate" had tested at the Toronto Exhibition, in 1900, actually showed a loss of one-quarter of the fat in the milk!

Individual Value of Dairy Cows.

At the Illinois Experiment Station a record of the food consumed and the milk and butter-fat produced by two ordinary-looking dairy cows has been kept for the past year. They were fed the same ration and treated alike in every respect. One consumed 6,478 lbs. digestible dry matter and produced 11,329 lbs. milk and 565 lbs. butter; the other consumed 6,189 lbs. dry matter and produced 7,759 lbs. milk and 299 lbs. butter. On the same feed basis, the difference in the value of the butter produced was \$47.09. This should be a strong suggestion to every dairyman to look carefully into his herd and induce him to weed out the "paupers" at the earliest opportunity.

The Petrolia Butter Factory has just issued the first cheques for the season to the patrons of the Wanstead skimming station. All milk is tested and paid 20 cents per pound for butter-fat. The tests range from 3.1-10 to 3.6-10, and for June milk requires from 28 to 32 pounds of milk to make one pound of butter. This appears high, but the month of June was very wet, with frequent rains during night, when no doubt considerable water got into the cans setting in exposed places. J. OSBORNE.

Lambton Co.

GARDEN AND ORCHARD.

Thrips Destroy Onions.

For several years the onion crop of the Niagara district has suffered from what was thought by gardeners to be a fungous disease. The leaves first became marked with small yellow dots, and finally the vitality was so affected that the top of the leaf itself turned yellow. Upon close investigation this season, a small insect identified as thrip was discovered secreted in the axils of the leaves, which, upon further observation, was found to be responsible for the dying of the leaf. These insects are small in size, slender, active, and with head so narrow that they seem pointed at both ends. In the larval state it is yellowish in color, but when mature is dark brown or blackish, and possessed of narrow, transparent wings. They puncture the leaves and extract the juice. Hot, dry weather is the most suitable to their development, while, on the other hand, cold rains retard their progress very much. The most effective remedy for this pest is to spray with kerosene emulsion diluted ten times, or whale-oil soap, one pound in four gallons of water.

Picking Plums.

The following seasonable pointers are given by Prof. Waugh, of Burlington, Vt.:

Plums which are used for jelly should be picked as soon as they begin to color, and long before they are mature. Those which are picked for canning should be taken in the early stages of maturity, while those which are destined for dessert or table use should be allowed to become dead ripe before they are removed from the trees. Plums for shipment to market must be picked about as soon as they are well colored, some varieties even earlier. They must be taken from the trees before they show any tendency to soften. Many varieties, particularly of the Japanese group, will bear earlier picking and will ripen up well in the fruit packages in which they are shipped to market.