DAIRY

Problems of the Dairy

KEEP UP THE MILK FLOW

As I see things in my travels over the country, I think the greatest problem in connection with the dairy is to get people to realize the importance of properly caring for the cows during cold weather. "What's the use? Dairying doesn't pay." Certainly it doesn't in many cases. We can readily believe that. But why? Because so often no special thought or systematic care is given to this branch of the farm work. Select your seed grain, plant and harvest it with the same indifference as is bestowed upon the cows, then note the results.

The cows are expected to go dry in the fall. I saw the milk from five cows brought in the other evening. It filled about two-thirds of a ten -quart pail. Only November, and those cows not to freshen till spring. On another farm, the three cows they kept were being milked once a day, and then at the most convenient hour, either in the forenoon or afternoon.

The part I think of is this:—These cows have to be fed, watered and cared for in some kind of a way. To keep it up all winter means a considerable time and expense. Why not, then, manage in such a way that the work will bring in some remuneration and satisfaction?

Dairying is too often looked upon as only a side issue in farming, and the matter of having profitable cows quite lost sight of. Better to keep two good cows properly housed and fed, than to keep five poor cows and indifferently care for them. The two cows will make a profit, and be a pleasure to look after; the five inferior cows will be both a worry and a loss.

The aim of every dairyman should be to keep up the flow of milk. By having the majority of the cows come in in the fall, there is more of an incentive to give them extra care and food; besides, when spring comes, and they are turned on the grass in good condition, the flow of milk is stimulated almost like freshening again; but in the cows have been dry four or five months and sadly neglected, the calves are not strong, the cows poor and weakly, and the best of the grass season is lost getting them in condition.

I believe half the cows do not get enough water in winter, and this seriously effects the production of milk. A lad said to me the other day:—"How often should cows be watered?" I said, "Twice a day, if the water isn't before them in the stable." "I only water ours once a day." And when he told me the lake was a quarter of a mile distant, from which they hauled the water in bad weather, and where they drove the cows to drink in fair weather, I thought there would be occasional days when they did not get all they wanted once a day.

Experiments have proved that the milk flow is more increased by inducing the cows to drink plenty of water than by inducing them to overeat. If the icy chill can be taken from the water the cows will drink far more. We know that by ourselves. If we are thirsty we will take a glass of water, and sometimes two, if the water is not very cold, before we are satisfied; but if it be ice-cold water, we sip, perhaps, half a glass, and feel we have had enough. Salt creates a desire for drinking, and should be kept before the cows.

Succulent food in some form is almost a necessity in order to keep the cows milking well. Corn silage, of course, is the cheapest, best and most easily handled.

If the stable is well lighted and ventilated, I do not see much need of letting the cows out in the cold and wind of winter. Occasionally, on a sunny, warm day, it is a change for them, but the more exposed to cold the cows are, the more feed it takes to keep up the animal heat. The piercing winds cannot but shock the nervous system, and very materially check the secretion of milk.

I have written this for the person who keeps but a few cows and feels no special interest in their welfare or the tidy profit they might bring in, if only given a chance. I have the greatest faith in dairying, and believe it to be one of the most profitable branches of agriculture.—LAURA ROSE.

What is a Good Cow Worth

We understand that the owner of Colantha 4th has refused $10,000 for her. This looks like a large sum of money for one cow, when we consider the many accidents which may happen to a cow and reduce her value to from $25 to $50, except for show purposes.

A Canadian cow, according to the testimony of her owner, G. A. Gilroy of Glen Buell, Ontario, has produced in stock and milk nearly $8,000 worth, according to an article in the *Canadian Dairyman*. He figures it this way: $3,000 worth stock sold from this cow; $2,000 worth of stock on hand from same cow; $2,796.94 worth of milk, if it had been sold at 5c. per quart. In addition the cow won over $500 in prize money at exhibitions. Surely this is a remarkable showing for one cow.—H. H. DEAN.

The Best Way to Form a Dairy Herd When Starting in Business with a Small Capital

(First prize essay on the above Subject at the New York State Fair. By C. OWEN CARMAN. Trumansburg, N. Y.)

There seems to be no doubt that the best way to form a dairy herd with a small capital would be to begin with a few good dairy animals and increase the herd with the female progeny; until the desired number is reached.

In forming such a herd the question of purebred or grade would naturally arise. While the first cost of the purebred stock would be more, it would be expected that the value of the herd would be correspondingly greater. In either case care should be used in selecting animals adapted to the purpose for which the herd is intended, market milk or butter production. A herd that is established for any particular purpose and bred for a number of years to that end would deteriorate if a sire bred for some other purpose was used, thus changing the line of breeding.

The manner of starting the herd would depend on the amount of capital and the length of time before it would be necessary to realize a profit from the herd. If the capital would allow, and quick returns were needed, the purchase of a few good cows in milk would give the quickest returns, or, if circumstances would allow, calves could be purchased instead. This latter would probably be the cheaper way if a purebred herd were being founded, as the animals could be selected from herds that has been bred through many generations for the particular purpose for which the herd was intended, and the chance of getting calves that would make inferior dairy animals would be much less than when calves are purchased that had been bred in a more haphazard manner.

If calves are to be purchased the selection would have to be made on the performances of their ancestors. It would be better if this could be carried back four generations, to be sure that there is no inferior animal in the pedigree, and that all animals mentioned in the pedigree should be as uniform as possible. A mistake is often made of breeding two animals of widely different characteristics with the hopes of combining the desirable qualities of both. Even if the result was accomplished in the first generation, the succeeding generations would be liable to show a large number of inferior animals. When grade calves are to be used to found a herd they should be selected for individual merit, and for the qualities of the sire, as all improvement in the breeding of grade herds must come through the sire, which must be the best animal that can be obtained, and purebred.

The selection of the cows to found a dairy herd should be based on their past performances. The Babcock test and the scales will give a very good idea of what can be expected of them under the conditions in which they have been kept. If the environment is improved, an improvement in production can be expected. If no past record of the animal can be obtained, it will be necessary to make the selection on individual merit. When the herd is composed of grades this is likely to be the case, and if the selections are carefully made by a good judge, the results are likely to be satisfactory; but authentic records should always be obtained when possible.

By far the most important factor in the breeding up of a dairy herd is the sire. He should be of a breed best suited to the conditions and requirements of the herd. If the herd is small and a first-class sire is in the neighborhood it might be cheaper to hire the bull than buy one outright. If the bull must be purchased, too much care cannot be used in his selection. Should the herd be composed of young cows they should be mated with a mature bull, but a mature cow that has a record for breeding may be mated with a young bull and the result of the cross noted, although a tested sire should be used when possible. Many bulls that have good breeding qualities are disposed of each year and their places filled by young and untested males. A farmer is often able to buy a bull that has proven his ability as a sire as cheaply as, or more cheaply than, a calf of superior parents would be sold for.

The selection of the young females to maintain and increase the herd requires careful consideration on the part of the breeder. If the herd is a purebred one, the sire being the same strain, and very much like the females, the offspring will be fairly uniform and the calves from the best producers can be selected, unless they show some physical weakness or other reason for not being taken into the herd. When the herd is to be composed of grade animals the sire should be purebred, and if possible the selection of the females to maintain the herd should be made when they are old enough to be tested, and the selection made of their individual merits. When it is necessary to select the females before they can be tested they should be from dams that respond the quickest to the changed environment of the herd.

If a number of cows are placed in better environment the calves should be selected from the cows that show the greatest increase because of the better conditions. The bull will be most likely to be most prepotent over the females which respond the most readily to changed environment. The most improvement can be expected in the first generation, as there are likely to be many reversions in the second generation, some being much better than their dams and some much poorer. By this time the offspring of the best producing females can be selected for the herd as a line of breeding will have been established. If the bull produces offspring that are uniform, strong and vigorous, he can be safely bred to his own daughters, as inbreeding is the greatest factor in preventing reversions, but if another bull must be procured he should be related to the old one and resemble him as much as possible.

However, no matter what attention is paid to the breeding of a herd it is all lost unless the feeding and care of the herd are what they should be. No amount of breeding can take the place of careful and regular feeding, pure water and sanitary stables. The results of careful breeding and selection are soon lost by the farmer who does not give his stock the care that has raised it to its high standard.

POULTRY

Some English Poultry Notes

The Crystal Palace Poultry and Pigeon Show becomes every year greater in extent, and more bewildering in the variety of the exhibits. This year there are almost 11,000 entries—a record number, and about half are poultry exhibits, the balance being pigeons and pet stock.

Some of the judges had enormous groups of birds to deal with, but most of the awards were made before the exhibit was opened to the public. As showing the relative popularity of the different breeds, Orpingtons with 782 entries, and Wyandottes with 545 seems to have quite distanced the old-time favorite Cochins. Leghorns have increased wonderfully in popularity, and there was a new class on exhibit—Partridge Leghorns. It is claimed, with good reason, that since 1900 the egg yield in Great Britain has increased at least 20 per fowl annually.

There was a very extensive display of poultry appliances and patent foods. Fine weather has conduced to excellent patronage by the public, and the show has been a complete success from every standpoint.

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The total imports of foreign eggs into the United Kingdom in 1907 reached the almost incredible figure of 2,228,148,000. Russia was the greatest source of supply, sending 861,473,000, Denmark following with about half that amount. Even uncivilized Morocco figures in the list for 25,248,000, against Canada's contribution of 13,905,000.

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An interesting experiment has been carried on at the poultry farm of the University College, Reading, to determine the cost of raising pullets to laying age. Thirteen white Wyandotte pullets were hatched in March, reared in brooder and ordinary poultry house to the end of May, when they weighed 25¼ lbs.—nearly 2 lbs. each. On June 21st the pullets were placed in a portable poultry house and allowed freedom of field. They were fed liberally three times a day—7, 12, and 5 o'clock. The morning meal was four parts of barley meal, four parts toppings, and one part meat by weight—cost ¾d. (1½c.) a pound. At midday and evening, equal parts of wheat and oats—cost .7d (1½c.) per pound. All the food was weighed. The first egg was laid on July 16th, and two days later half the birds were laying.

The cost of pullets to laying age (19 weeks) is summarized as follows:—Cost of egg, 1.4d.; incubation, .3d.; brooding, .2d.; food (first 12 weeks) 7.2d food (last 7 weeks), 10.2d.; total, 19.3d. (about 39c.) No allowance is made for labor or interest.

The point is strongly insisted upon that birds for laying early and abundantly must be hatched in England not later than April 1st. When hatched in May, or later, they cost double to rear before returning a single penny. It is allowed, though, that much depends upon the precociousness of the breed.

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The writer recently visited the poultry farm of Mr. Frank Cockcroft, which is situated on a picturesque, though exposed hillside in the Lancashire and Yorkshire border region. A specialty is made of the sale of day old chickens. This year about 5,000 chickens were hatched in the nine incubators in use, and of these