

the same number of bushels of corn in five years; but with the sure-crop variety he would have corn for his stock every year, and would have it in the poor years when it is high in price. Furthermore, immature corn is low in vitality, and often will not grow at all.

A common practice is to select ears that are too large. It is much better to grow three medium-sized mature ears to the hill than it is to grow three larger immature ears per hill. As a general rule, the larger the crop and the deeper the kernel, the longer it will take for the ear to mature. The size of the cob and kernel will naturally have to be decreased from the southern to the northern part of the State. Indications of immaturity are looseness of kernels on the cob, a high percentage of moisture, chaffiness (or thin, small, poorly-developed kernels), adherence of the tip cap to the cob, and generally a large amount of white starch—Andrew Boss, Minn. Agricultural College.

## THE DAIRY.

### Milk Prices in Britain.

"For some time there has been a growing feeling amongst farmers that they, as producers, are not getting a fair share of the price the consumer pays. After the experiences of the past two months, any doubts on the point have turned to certainties. If producers are to make a determined stand for higher prices, they will never be in a frame of mind more likely to lead them to success than at the present time. Many have been losing money every week during the last two months, and will not be so easy to deal with when the new contract is being arranged. Several associations have already discussed the situation, and there is a strong feeling that prices must be raised. The summer has, of course, been exceptional, but it is foolish to fix prices on the assumption that everything is to be favorable. The sale for casual milk has been better this year than ever, and we have no doubt that the average price for the year will be higher, and all this shows that the state of the market justifies higher prices, and if farmers only take a firm stand and support each other, they will get the increase. There are always a few that are ready to steal a march, as they suppose, on their neighbors by accepting a contract at whatever price they can obtain, and so make sure of having the first on the market, but we should fancy that some of these will not be quite so ready to close with the first offer this autumn. If they would be persuaded to stand by their brother farmers, they need have no fear of being able to dispose of their milk, and at a price satisfactory to all."—[Farmer and Stock-breeder, London, Eng.]

### Then and Now.

Editor "The Farmer's Advocate":

A discussion of the interesting and all-important subject of dairying needs no apology, but to discuss this question before the critical readers of "The Farmer's Advocate" requires, at least, some "nerve."

As a dairyman engaged in the business not alone for health, but to provide bread and butter for myself and mine, I have wondered, aye, almost concluded, after viewing the representations of palatial farmsteads and reading the offerings of cattle of sensational worth, that not many of "The Farmer's Advocate" readers were working under the benediction, "In the sweat of thy brow shalt thou eat bread."

However, all farmers are primarily tillers of the soil; that is, their first consideration is to make the land produce. Having produced the crop, the question then arises, what disposition will be made of it? I do not think it will be questioned that the farmer, who converts the crop he produces into as nearly as possible finished products, in the long run, sells in the best market at the best price. Now, many of us think that the dairy cow furnishes the most attractive market for the general produce of our farms.

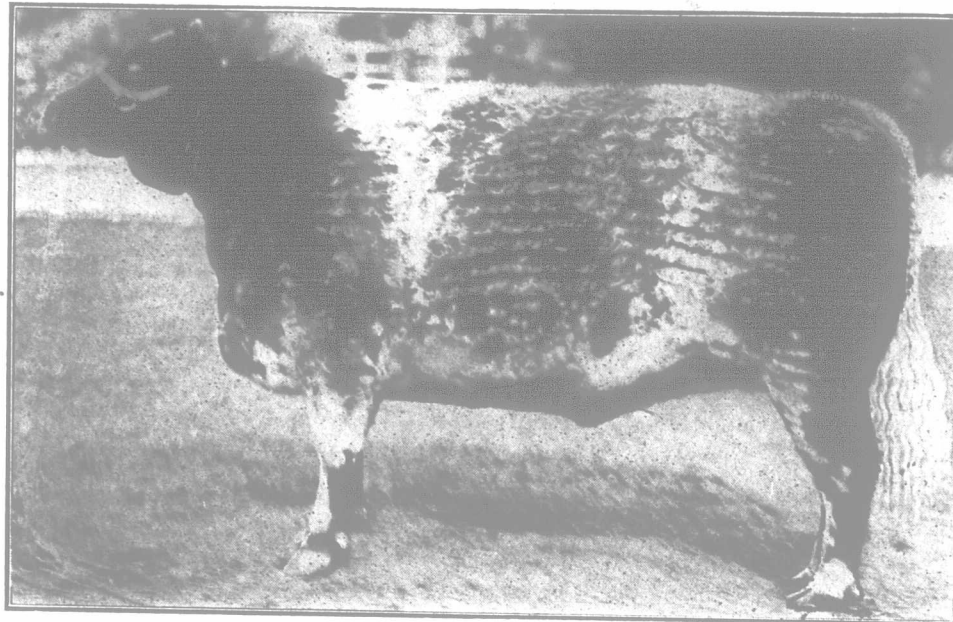
We charge the cow the highest prevailing price for what she consumes. We expect her, not only to meet this expense easily, but to show a reasonable manufacturing profit, to produce a calf which if a heifer will at maturity excel its dam, and all the while accumulate a credit for turning the waste from our concentrates and rough fodders into the most approved plant food. This last is not the least important. Theoretically we may be the owners of the land we till, but, as a matter of fact, we are but tenants in trust. We owe it not only to ourselves and ours, but to our successors and the State, that the maintaining of soil fertility (and, in fact, the increasing of it) should claim a large share of our attention. The man who allows the fertility of his farm to be depleted is following the criminal course that has wrecked so many financial institutions. He is paying dividends out of capital.

I well remember the time the Dominion Gov-

ernment established an experimental creamery in this district, about eighteen years ago. That fall I added to the herd six cows fresh or soon to freshen. As for feed, I had about eighty tons of silage, together with some fodder corn and a quantity of grain, roots and hay grown on fifty acres.

Now, in balancing things up in the spring, I found that the amount received for butter would not pay for feed bought. I had a bunch of very fine looking calves. The trouble was that they were only calves. If a purchaser had wanted a Durham grade I could have supplied him; if he insisted on Holstein markings I could have supplied him; or if he were choice in his tastes and wanted a strain of Jersey blood I could have supplied him—something of everything, and yet nothing!

That winter's experience convinced me there was something wrong. There was evidently "too much to chew and nothing to eat." In May following I sold the whole lot, with the exception of two, and bought a Jersey calf, and later bought her dam and two sisters. My object was dairying, not breeding. However, all the animals in the herd to-day are pure-bred. My first attempt at winter dairying was a qualified failure. Comparing the results obtained during that attempt with the results for the winter just closing would justify the action I took at that time of disposing of the herd I then had. The ad-



Dale's Gift.

Senior and grand champion Shorthorn female at Toronto, 1911. Owned by Carpenter & Ross, Mansfield, Ohio.

vantage in regard to feed was, I think, in favor of the former winter.

At that time those delivering milk to the experimental creamery were allowed twenty-two cents per pound for butter (if my memory serves me). I am making up last year's statement on the basis of twenty-five cents per pound. The difference in the price received for butter is not material.

While I have not weighed each cow's feed, it is fairly easy to calculate the totals by measuring the hay in the mow, the grain in the granary, the mangels in the root cellar, and charge corn by the acre. Allowing twenty-five dollars per acre for corn, ten cents a bushel for mangels, forty cents for oats; hay, ten dollars per ton for all sorts. The direct income from the herd during the time they are in the stable will meet these charges. Allowing that the twenty head of all ages now in the stable, owing to growth and nearer approach to usefulness—there have been no fresh milkers since June last year until February 20th this year—are more valuable than the twenty head that went in the stable in October. Then this item, whatever it may be, is the profit on the winter's work.

The Cow-testing Association furnishes a fairly accurate record, and also a basis on which to calculate the year's work of each cow. Taking these records as a basis, and allowing twenty-five cents per pound for butter and thirty cents per one hundred pounds for skim milk, the 1909 herd made an average income of one hundred dollars. A very careful estimate made the cost of feed forty dollars per cow, pasture disregarded. Calculated on the same basis, the herd of last year secured an average of ninety-three dollars. This drop is accounted for by the fact that two cows were sold, which together secured a record in 1909 of two hundred and twenty-five dollars, and two heifers were added, one of which did not freshen till June, 1910. In comparing the records for '09 and '10, I find that four cows of the '09 herd milking an average of ten months and a half gave less milk and less fat than the same four milking an average of eight months and a half during '10. It would appear, then, that the man who allows energy to accumulate is not wrong. In other words, the man who rests is as far ahead as the man who works all the time.

Circumstances may affect this. If there is a necessity for a supply of milk continuously, more money may be realized by having a small quantity for a longer period than by having a large quantity for a shorter period.

I confess I do not know how to select and weed. I have found that where a cow is not up to the standard in some one point she has probably some outstanding good quality to compensate. If the scope of dairying is confined to one branch of the business, then, probably selecting and weeding may be easy, but when the production of butter and raising of heifers are considered equally important, the practicing of weeding and selecting is made somewhat difficult. However, some years ago I decided to put it into practice, and raise heifers from only a few selected cows. But that year the ravages of that disease, the dread of all dairymen, left me only one chance; that was to raise a heifer calf from a cow not among the select few, or raise none at all. This calf has grown to about a mature cow. She freshened March 7th, 1910, and for the year ending March 6th, 1911, she has a record of 8,838 pounds milk and 459.6 pounds fat. She was milked regularly up to March 20th, and not again until she freshened ten days later. The calf was smart and active, and the cow's udder was in perfect condition. This cow's work for the year, at twenty-five cents for butter and thirty cents per hundred pounds for skim milk, is

\$155.00, or at least \$100.00 above cost of feed. I am raising all the heifer calves now.

Indiscriminate weeding may be as effective as an effort I made to put into practice the idea of selection in the orchard. I had a healthy tree grafted to Baldwin scions, and was told to cut out a lot of the old wood the next spring. So at the right time I sent the man who was helping me to the orchard to do some trimming. For some reason—chance, I suppose—he started at this tree. When I got there I could have picked up between one and two armfuls of limbs from a foot to two feet long, and on one end of almost every stick were two very nice growths. I suggested to the man that he was doing more harm than good, but he answered, "I am trimming the tree," and I could not dispute it.

As in politics, so in dairying, there are many methods and practices any one of which may lead to success, provided always that certain basic principles are not disregarded and aids are not magnified to the position of essentials.

J. N. CHAMBERS.

### Australian Butter Standard.

Under a pure foods act in Australia, a new standard is being prescribed, which defines butter as the "clean, not rancid, fatty substance obtained by churning milk or cream." It was decided that it should contain not less than 82 per cent. of milk fat, not more than 15 per cent. of water, and not more than 4 per cent. of salt, and that it should not contain any foreign fat or oil, or any preservative or other foreign substance, excepting harmless vegetable coloring matter. This, when approved of by the Executive Council, will be the standard for butter for home consumption.

## GARDEN & ORCHARD

### Fruit Industry Booming in Nova Scotia.

Conditions as to weather in the Annapolis Valley are almost ideal now. The weather since August 15th has been cooler, with quite cool nights, hence not so hard on the early apples, while frequent rains have started everything into new life again. Apples are growing very rapidly now, and coloring splendidly, also. The crop is still clean, and no destructive winds have visited us yet.

The crop will be 40 per cent. larger than has ever been harvested yet. All available help is being engaged for the busy season of picking, which lasts from October 1st to October 25th, approximately, and steps are being taken to im-