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## The Feeders' Corner

The Feeders' Corner is for the use of our readers who are interested are invited to ask questions, or send items of interest. All questions will receive prompt attention.

### Feeding Value of Skim Milk

What is the feeding value of skim milk when fed to hogs or calves along with grain or roughage?—W. Hyde, Norfolk Ont.

The value of skim milk for feeding purposes is usually stated at 20c a cwt., but the value varies widely depending upon the amount of feed and the age and kind of animal to which it is fed. This winter it is more than 20c on the average, as all other feeds are high in price.

Professor Henry of Wisconsin, as a result of experimental work, found that 3.27 lbs. of skim milk was equal to one pound of corn meal when two to three pounds of milk were fed to each pound of grain; when three to five pounds of milk to each pound of grain it took 4.46 lbs. of skim milk to equal one pound of grain in feeding value; 5.74 where five to seven pounds were fed, and 5.62 lbs. of milk to equal one pound of meal, where seven to nine pounds of milk were fed. An average of all experiments showed that 4.75 lbs. of skim milk equaled one pound of meal in feeding value. At present prices for corn this would give to skim milk an average value of about 30c a cwt. Hogs and calves will make about equal use of skim milk so far as gains in weight are concerned. Older animals will not make as economic use of the skim milk as younger ones.

Stating Henry's conclusions in another way, if corn is 50c a bushel, milk is worth 28c when fed in proportion of three to one; 16c when fed in the proportion of nine to one. If corn is worth 60c the relative values are 31c and 18c, and when corn is worth 84c the value in the first case is 36c and in the second 27c.

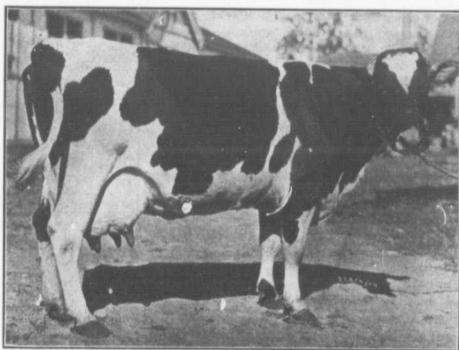
### Live Stock Notes

The successful stockman must know what each of his animals is doing each day. With the dairy herd, it is comparatively easy to keep track of each cow's record, simply by weighing the milk each time the cows are milked. It requires but a fraction of a minute's time each milking, and enables one to know at once if for any reason one or more cows are falling off in their milk; and to remedy the cause before a serious loss has been sustained. Testing for butter fat need not be done oftener than once or twice a month; but the milk should be weighed at each milking.

It is not always the heaviest feeders who get the best results. Every animal requires certain nutrients, that enable it to perform its best work. If these nutrients are not supplied in the proper proportion, it means that the animal must consume and adjust larger amounts of some of the elements that it cannot use, in order to get enough of the others. Economical feeding requires that nutrients be supplied to animals in the proportion needed. As a rule, farm feeds are lacking in protein. This is especially true this year, when there is a scarcity of clover hay. If one is feeding cornstalks or wild hay, the farm grains not clover will be necessary to meet the animals' needs for best work. This is especially true of dairy cows and young stock. When this form of roughage must be fed, some such feed as bran, mangelings, or oil-meal must form a reasonable proportion of the grain ration, in order that the protein supply may be maintained.

Just as one enjoys eating an apple occasionally—especially during the winter, when less fruit and vegetables are used than during the summer—just so the live stock in the winter, when their rations consist largely of dry feed, need and appreciate some form of succulent food. There is very little added expense in supplying animals with a reasonable amount of succulent food, either in the form of roots or silage. For a herd of 12 or more cows, this succulent food is most cheaply supplied by the use of silage, but for the smaller herd, or for a man without a silo, roots afford an excellent substitute for silage.

By care in preparing the soil and growing the crop, from 15 to 25 tons of roots, like mangels, rutabagas, or stock carrots can be grown per acre. They can be stored under the feeding alley, or in a pit outside of the barn, at a very little expense. Twenty tons of roots will supply 10 cows 20 pounds a day each for 200 days, and can be grown and harvested at a cost of less than \$40. The nutrients contained in 20 tons of roots are worth \$30 when bran is worth \$20 a ton; so the feeding value of the roots is sufficient to



A Grand Good Cow and a Champion

Jemima Wayne Johnson, the cow here shown, was lat in her class and grand champion female at London Fair, 1911. She has an official record of 21.65 lbs. butter in 7 days, and 563.09 lbs. milk at 5 years old. She is now 7 years old and has given 15,076 lbs. milk in 10 months. She is owned by M. L. Haley, Springfield, P.O. Ont., who is consigning several Holsteins from his herd to the Southern Ontario Breeders' sale at Tillsonburg, next week. See gossip notes in this issue about his offering—Photo taken eight months after calving.

pay for the cost of production, beside the additional advantage of their supplying the succulence needed by the animal.

Based on the average farm price of feeds for the last 10 years, oats are worth on the farm \$19.37 per ton, and have a feeding value of \$21.10; barley is worth \$17.50 per ton, and has a feeding value of \$21.98; corn is worth \$13.63 per ton, and has a feeding value of \$22.66. In other words, at the average farm price, a dollar's worth of feed in oats costs 92 cts.; in barley, 80 cts.; and in corn, 65 cts. The feeding value is figured on the basis of bran at \$20 per ton. On the same basis, a dollar's worth of food nutrients could be supplied in clover hay for 40 cts.; in fodder corn 57 cts.; and in timothy hay for 60 cts.; in ensilage for 78 cts.

In view of the above facts, it is plain that a combination of corn and clover will make a most economical feed.

I received my pure bred Tamworth sow for securing six new subscribers to Farm and Dairy, and think she is real beauty. Please accept my thanks for same.—Mrs. Robt. Twist, Halton Co., Ont.

## CITY MILK SUPPLY DEPARTMENT

### Anent Homogenized Milk

Editor, Farm and Dairy.—I notice by two recent issues of Farm and Dairy some remarks, and doubts, in regard to the new process of homogenizing milk. Homogenizing appears to be making its "debut" to the farmers of Ontario. We have had a factory in our little county the last 18 months and I feel quite safe in saying it has passed the experimental stage.

Like all other new industries that have started for the benefit of mankind, we found lots of men to prophesy its downfall; indeed some take a special interest in spending all their idle moments in convincing their glib, suspicious neighbors that it will not work.

The company is face to face with strong opposition in getting milk, as there is a pasteurizing plant shipping milk to Sydney's five cheese factories,



A Grand Good Cow and a Champion

hundreds of private dairies making butter and numerous farmers shipping milk and cream to the coal-mining towns. But the Hygienic Fresh Milk Co. is increasing its output, and raising its price to the farmers, importing feed and cows for the farmers and helping out in many other ways in the production of good, clean milk.

I am not writing this as one interested in the company. I am not one of its patrons, as I had a good market for my milk before they came. ABOUT THE PLANT ITSELF The plant is situated in a four-story brick building with a driveway right around the building. The machinery is the very finest and latest design, mostly all of it being imported from France, where the process had its origin. I am sorry I am unable to give you an account of the different parts of machinery that constitute the plant.

We are proud of this plant, the second, I believe, in Canada, and I hope the farmers, in justice to themselves, will do all in their power to boom it along by keeping good cows, giving the butcher the poor ones, weighing and testing the milk, feeding them well and providing comfortable stables and kind attendance and being supplied with more milk.—F.A.M., Antigonish, N.S.