

## DAIRY.

## April Notes, O. A. C. Dairy School.

The most important event during the month was the course for instructors and experienced cheese and butter makers, from April 5th to 15th. The attendance numbered twenty. Besides lectures from the regular Dairy School staff, President Creelman gave an address of encouragement to the workers, and Mr Woodard, of Montreal, the "Official Referee," gave a talk and practical lesson on judging butter and cheese. Special lots of butter and cheese had been prepared for judging. One lot of butter had been treated with different preservatives. All the butter, except one, were pronounced suitable for export. This one sample of butter Mr. Woodard considered to be unmarketable. Further test will be made during the summer.

Two lots of butter made from pasteurized cream were judged. One of these was cooled immediately after separating, culture was added, and it was churned at once. The score for flavor was 42, out of 45. The other lot was ripened in the usual way, and scored 41.5 for flavor. It was another illustration of the practicability of omitting the ordinary process of cream-ripening and yet securing good flavor. Three other lots made—one from pasteurized sweet cream, which was afterwards ripened; one from ripe cream pasteurized, and one from unpasteurized cream—scored, respectively, for flavor, 41, 40 and 40, out of 45. In this case the pasteurization of the cream when sweet added one point to flavor, and the pasteurization of the cream when ripe did not add any value to the flavor.

The influence of the personal factor and variation in judgment to be found among men who are recognized as cheese experts was brought out very markedly when scoring three cheese made by using rennet and pepsin as coagulating agents. The milk was first mixed, then divided among three vats holding three hundred pounds each. To one was added one ounce of pepsin, and to the other two ounces of pepsin, and to the other one ounce of rennet. Each of the three cheese had their advocates among the class. Mr. Woodard thought there was not much difference between the rennet cheese and the one made with two ounces of pepsin, but favored the rennet cheese. A prominent Western Ontario cheese buyer and a prominent Western cheesemaker called one day during the course, and they pronounced in favor of the cheese made with one ounce of pepsin. The probability is that there was not much difference in the quality of the cheese where there was so much difference of judgment among the experts. Of course, the persons judging the cheese did not know at the time how they had been made.

The instructors expressed themselves as well pleased with the course. Some of the cheese and butter makers did not stop long enough to become interested. It is difficult for the average cheese and butter maker to see much connection between bacteriology, chemistry and practical factory work, yet, as Mr. Woodard said, if these men could come in contact with the flavors which buyers meet in Montreal, and would study their relation to bacteriology, and consider the help which may be expected from this science in overcoming bad flavors, every maker would take more interest in the question than he does at present.

In December, 1904, when the creamery course opens, it is expected that this course will include milkmen who are producing and selling milk in towns and cities. This is a class of dairymen who have been overlooked in the past by our dairy schools.

Extensive alterations and repairs are being made in the equipment of the Dairy School for the courses in 1904 and 1905. It is expected to make them more profitable and interesting than ever before.

H. H. DEAN.

## Farm Labor and the Cheese Business.

Mr. C. C. James, Deputy-Minister of Agriculture for Ontario, says that in 1897 there were 820 cheese factories east of Toronto, producing 85,943,000 pounds of cheese, while in 1902 there were 885 factories, producing 107,100,000 pounds, an increase of 65 factories and of 21,000,000 pounds in the output. West of Toronto there were in 1897, 543 factories, with an output of 51,420,000 pounds, while in 1902 there were only 242 factories, with an output of 39,700,000 pounds, a decrease of 191 in the number of factories, and a falling off of 11,700,000 pounds in the output.

In the five counties, Oxford, Middlesex, Perth, Elgin and Norfolk, the cheese center of the west, there has been a falling off of seventeen in the number of factories, and of 1,537,000 pounds in the output, while in the eighteen other counties there are eighty-four fewer factories and the production is less by 10,200,000 pounds.

The western farmers have been driven to the raising of beef cattle, says Mr. James, almost entirely, owing to the scarcity of labor, and had it not been for this difficulty there would have been a much greater increase in the cheese production of the east. Mr. James does not regard the movement as an injurious one, however, because the farmers are making just as much money by raising stock, and perhaps more, and the decrease in the cheese output in the west is more than made up by the increase in the east.

## Milking.

Badly-milked cows soon shrink in their flow, which leads to great loss in course of the year where many are kept. The four quarters of the udder are four separate receptacles for milk, are served independently of each other, and may be emptied separately. I have seen it argued that, owing to the near fore and near hind teats being connected, it was desirable that they should be milked out together, and the off fore and off hind teats be likewise taken together. That is where a false doctrine might do a lot of harm to unthinking farmers and dairy folk, for it is precisely the wrong way to abstract the milk. The better plan is to take the two fore ones together and

gether, and acts badly in all the ways the latter plan does.

Again, in almost all heifers, and many older cows, the fore teats are much longer than the hind ones, so that the former may be taken full-handed, while the latter may not, but have to be manipulated with the thumb and forefinger only. This gives unnecessary and unequal labor to the herdsman, and makes it annoying to the cow. Further, it is unfortunately too commonly stated by writers who ought to know better, that it does not matter how one takes the teats, so long as the cows are milked dry and with despatch.

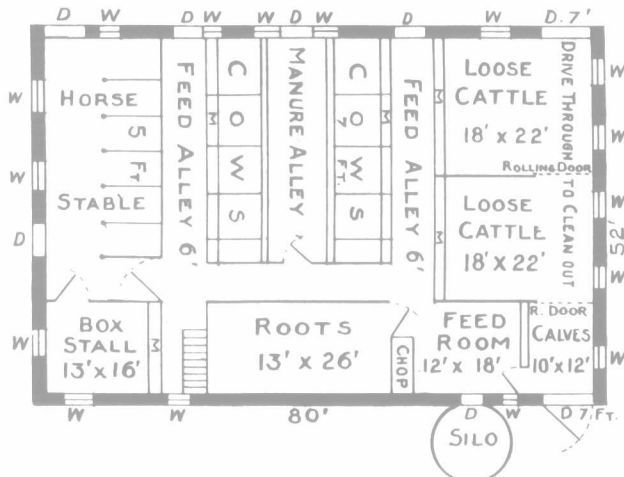
Some men are never tired of advising rapid milking. Milk with despatch is the one idea of he who does his farming over the office table. Very serious accidents, great losses in milk, vice in the cow, or drying off, have been many a time brought about by too rapid milking. I am not advising slow, "lumpy," dawdling performers, though, by any means; they only err on the opposite side; but in too-rapid milking the passage in the teats cannot take the forced flow fast enough, so that it causes the cows acute pain. I have seen the milk-pail kicked across the shed through this over-forced abstraction, and that by a cow naturally quiet, docile and kind on being handled. It is the plan, if persisted in, to make a confirmed kicker, and a decent cow a failure in the dairy. The practical farmer knows that cows occasionally kick like fury if milked by certain hands, while drawn on by others they are quite gentle. So it is that I have found, as a rule, women are the best of milkers, as they are lighter handed and generally more gentle—do not milk away at the forced pace men are liable to do. And even today milking is reckoned for the most part women's work in certain parts of the country, and there dairy farming pays best. Changing milkers plays mischief, and if a change is made from gentle-handed woman to rough-handed man, there is all the bigger shrinkage in the flow.

COWKEEPER.

## About Our "Home Magazine."

The attention of our readers is directed to the announcement entitled, "What do you think," on the second page of the "Home Magazine" department in this issue of the "Farmer's Advocate." It is important, and deserves the consideration of every reader. Look it up, and respond promptly.

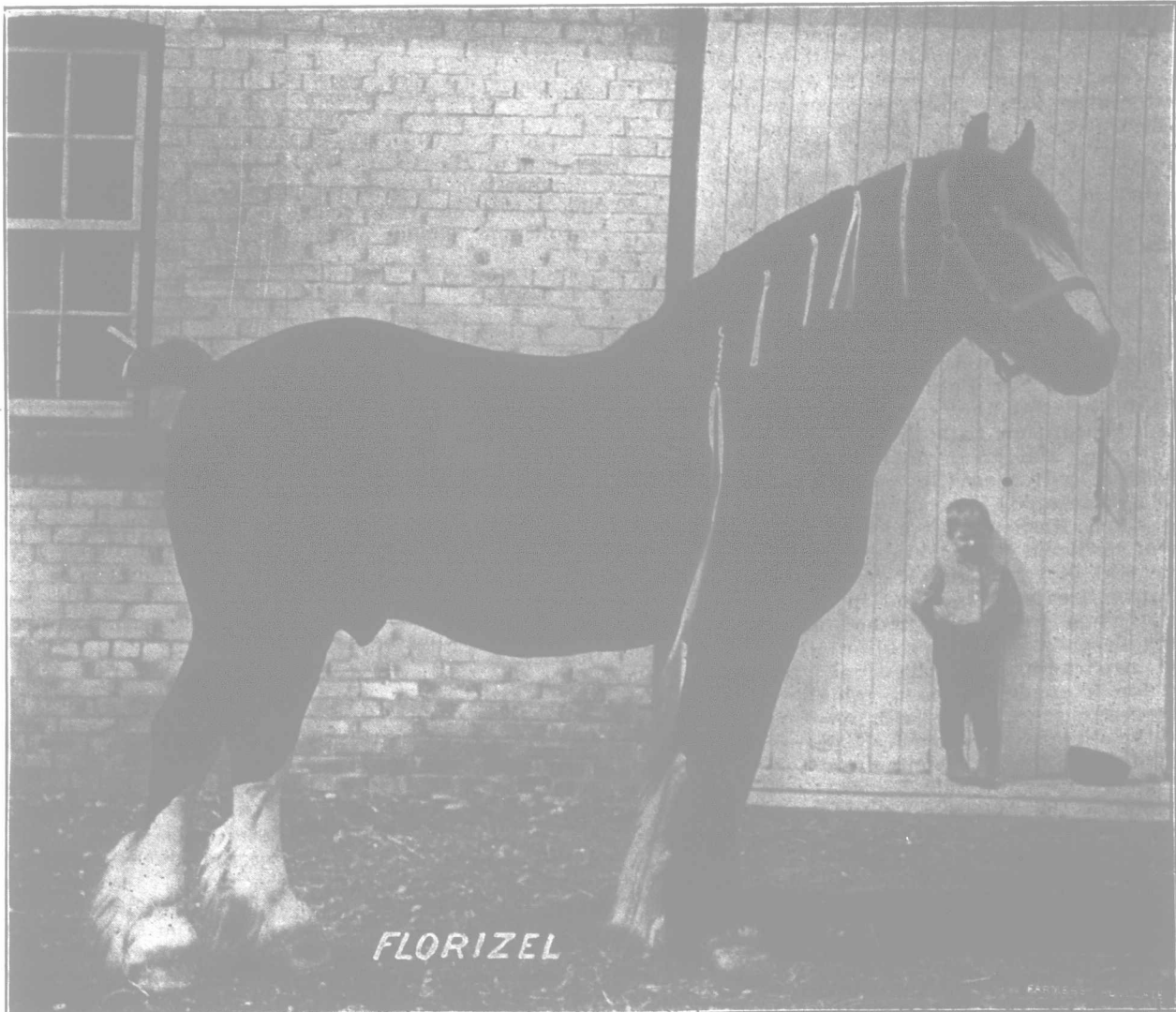
Cows like corn ensilage on account of its palatability; the man who feeds his cows, and weighs the milk, need not be told it is a great feed for winter; it sluices the milk-flow—the old cow's recollection of summer is consoled when she has a bellyful of it. Have enough put up every fall, in all conscience sufficient unto the day until the cows can get out to rummage for themselves.



Plan of Barn Proposed by Mr. Thos. Johnson, Perth Co., for Mr. Jno. Caldwell, Barrie, Ont.

the two hind ones together. In most cows there is a more equal quantity of milk in the two fore and in the two hind than in a fore or hind coupled. Thus you find, when you take the teats as advised, the two fore quarters are emptied pretty nearly or quite together, and so it is with the two hind ones. But, on the contrary, take a fore and a hind quarter, and one will be emptied before the other, and then you will have to go on milking with one hand only until the other quarter is emptied. Not only is this latter plan more tedious and hindering to the milker, but it is tiresome for the cow; and if it be a nervous, impatient heifer she will not unlikely resent, and perhaps kick the pail of milk over. It tends, too, to dry the cows prematurely, as does any way of drawing off the lacteal fluid but the right.

Cross-hand milking, by which is meant to take the near fore and off hind teats together, is as bad as taking the two teats on either side to-



(Photo by Senior, Exeter.)

Florizel.

Four-year-old Clydesdale stallion, imported and owned by Mr. T. J. Berry, Henfall, Ont. (See Gossip, page 661.)