NOVEMBER, 1890

THE FARMER'S ADVOCATE.

Hogs Wanted Early in the Season. BY WM. DAVIES.

You will be glad to know that our efforts , aided by you, the Bureau of Agriculture and other auxiliaries, have very considerably increased the supply of hogs. Farmers appear to be realizing that it is a remunerative branch of stock raising, but they have yet to learn that it is to their interest to have them ready early in the season. In May last we were paying as high as \$5.70. In June \$5.60. At the same time we were buying in the Western States for nearly two cents less. In July we paid for Canadians \$5.25, in August \$5.50, in Septemberas high as \$5.65, and we were compelled to supplement our supply very largely from Chicago, St. Louis and Kansas City. At this writing we are getting quite as many as we can handle of Canadians, thus you will see that the farmers by not having them ready early in the season, are losers to a very considerable amount. It is well known that hogs fatten more rapidly through the warm weather. There is one other point to which we wish to call the attention of farmers. There are too many heavy hogs being produced, and if they want the highest price they must first produce a long, lean, well fed hog, weighing from 140 to 200 lbs. alive, and have them for sale in June, July, August and September. A man who has his hogs for sale when every one else has gets left.

Mr. W. Kough's Cattle were not Specially Prepared for the Show Ring.

In your report of the Galloway cattle at the Toronto Industrial an injustice is done them when you lead your readers to infer that my herd had received blanketing and grooming to bring them to the bloom in which they then were. Since the first year I showed Galloways, viz., in 1886, I have not used a blanket when in or out of the stable. The facts are that the cattle with me are in better bloom on the grass, a rocky boulderland pasture, than they were when shown. Of course in order to make them stand the hardships of long railroad journeys, and the fatigue of the show ring and show stalls, where so many of the visitors think they have a perfect right to rouse the cattle when lying down, heavy bulls and in-calf-cows are from necessity stabled part of the time a month before they are brought to the shows, and given some grain to harden their flesh, but this detracts from their bloom and shining coats which they have when on pasture without grain. So soon as my cattle returned from the show they were turned out to grass without grain, and they are now in their old sleek condition. WM. KOUGH. [We are very glad to receive and publish the above letter. As many of the breeders know we did not spare expense in procuring the best known experts to report all the live stock classes at the Toronto Industrial. Although very capable and honorable men were employed, we expect errors were made ; if they did not make errors they would not be human. If any of our readers discover any of these errors we would be glad to hear from them. Our object is to give fair, impartial reports in all cases. If we make mistakes we are always willing to correct them.-Ed.]

The Dairy.

Sugar Beets vs. Corn Crop in Feeding, Milch Cows,

A bulletin of the Ohio Agricultural Experiment Station gives the results of an experiment in feeding sugar beets to milch cows, made during the past winter, together with a summary of two similar experiments, one made by the Station in 1889 and one by the Farm Department of the Ohio State University in 1879.

In the last named experiment eight cows were kept under test for eleven weeks; in 1889, twelve cows for eight weeks, and in 1890, twelve cows for nine weeks, the cows in each case being weighed daily, as well as their feed and milk.

In each of the three experiments the cows ate more hay and more total dry matter when feeding on beets than on other foods (hay, meal and bran in 1879, corn silage in 1889 and 1890) and in each case more milk was given from the beets than from the other foods, but it is not yet demonstrated that the increase of milk was produced economically.

For twelve years records have been kept on the farm now occupied by the Station, which shows that the average yield of beets over this period has been nearly sixteen tons per acre, against an annual yield of about fifty-five bushels of shelled corn per acre.

But a crop of fifty-five bushels of shelled corn, with its fodder, will contain nearly twice as much dry matter as sixteen tons of bcets, and these experiments indicate that, whether fed dry, as corn meal and dry fodder, or as corn ensilage, the dry matter of the corn crop will be found about as effective, pound for pound, as the dry matter of the beet crop.

It is possible to raise much more than sixteen tons of beets to the acre. One crop of two acres is reported at 37½ tons per acre, and smaller areas have given still larger yields, but such crops require very rich land and thorough culture. Whether it is possible to produce a pound of dry matter in beets as economically as it can be done in corn is not yet definitely settled, but the probabilities are against it.

Cream Raising by Dilution.

It has been recommended that in the absence of ice the addition of an equal quantity of water either hot or cold to fresh milk in deep cans would secure rapid and complete creaming. To compare this method with the ordinary one of setting the milk in deep cans in ice water, and further to test the efficiency of creaming by diluting the milk with water in various amounts and at different temperatures, experiments have been taken at Cornell University Experimental Station.

was diluted with an equal weight of cold water and set in a Cooley can in the open room. In other cases milk was taken for the settings that had been carried on the milk route for about an hour and a half. All such cases are marked in the tables with an asterisk (*).

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Skimming from deep cans was in all cases done by drawing the skim milk from the bottom of the can, care being taken not to draw the the skim milk off so closely as to disturb the cream.

Trials were also made in which a smaller amount of both warm and cold water was added to the milk, and a few trials were made with deep setting in the open air without the addition of water, of setting in shallow pans, and of setting in the creamer with the water of the University waterworks at a temperature of something over sixty running through it.

In the following table the results of the comparisons between setting in ice water and diluting with an equal bulk of cold water are shown, those on the same horizontal line being in all cases from the same sample of milk. The percentage of fat in the skim milk has been corrected for the amount of water added.

TABLE I

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Set in Cooley Can in Air and Diluted with Equal Weight of Cold Water.	No. of hours	2.7.5.8.9.88.8.8.3.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.
	Temperature of Room.	*********
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	Temp. of water added.	122222222222222 1222222222222222222222
	Per cent. of Fat in Skim Milk.	1.56 1.68 1.68 1.68 1.68 1.68 1.68 1.68 1.6
	Weight of Milk, Ibs.	18.50 9.50 18.75 18.75 18.75 18.75 38. 20 38.50 38.50 10.255 10.255 15.75
Set in ice water in Cooley Creamer, Temp. 44 deg.	Per cent. of Fat in Skim Milk.	<u> </u>
	Weight of Milk, Ibs.	18. 18. 18. 18. 18. 18. 18. 18. 18. 18.
	No. of bours set.	<u>817888388</u> 8128832
	Fer cent. of Fat in Milk.	4 4 4 33 56 5 4 4 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	Temperature of Milk.	8848888
	AND TIME SETTING.	00.7.00 a.m. 00.7.00 a.m. 11.5.450 p.m. 11.5.450 p.m. 11.5.450 p.m. 11.5.450 p.m. 15.5.30 a.m. 15.5.30 a.m. 17.5.33 a.m. 17.5.33 a.m.
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Are not great men models of nations? For what is a state but the many's confused imitation of one?

The milk was in all cases the mixed milk of the University herd, the cows of which are about two-thirds high grade Holstein and one-third high grade Jersey. About one-third of the cows were fresh and the rest had been in milk from five to eight months. The analyses were made by Mr. Harry Snyder, Assistant Chemist.

A large number of trials were made in which portions of milk diluted with an equal weight of cold water were compared with portions from the same milkings set in ice water in the Cooley creamer. The milk in some instances was brought directly to the dairy house after milking, thoroughly mixed and one portion set at once in ice water in the Cooley creamer, the remainder



*Carried on route. †The milk in these two cases had been carried on the route, but was heated up to 100 degrees before setting.

Armsby found in between two or three hundred settings of the milk of single cows, Jerseys and Jersey grades, an average of .35 per cent. of fat in the skim milk. We may therefore use our results with the Cooley creamer as a standard of comparison. It will be seen that when the milk was diluted with water there was contained in the skim milk nearly six times as much fat as when the milk was set in the Cooley creamer with ice water, or in other words, while 95.18 per cent. of the fat in the whole milk was recovered in the cream under the cold deep setting process, but 69.19 per cent. of the fat in the whole milk was recovered in the cream when set in the diluted process. That is, in 100 lbs. of milk containing 4.12 lbs. of butter fat, under the Cooley process, there would be a loss of but .20 lbs. of butter fat, and under the dilut-