

# DAIRY

## Wintering Dry Cows on Alfalfa

The Kansas Experiment Station tested the value of alfalfa for wintering cows not in milk. Seven head composed of dairy and beef animals were placed in the feed lot in September and received nothing during the winter except alfalfa hay. The results are recorded in the following table:—

RESULTS IN WINTERING COWS ENTIRELY ON ALFALFA HAY.

No. of cow.	Breed of Cow	Age		Weight, Sept. 2	Weight, April 4	Total gain 213 days	Daily gain
		Years	Months				
1	Shorthorn....	2	7	1000	1330	330	1.54
2	Hereford.....	1	10	840	1111	271	1.27
3	Holstein.....	2	6	980	1268	288	1.35
4	Holstein.....	2	6	950	1238	288	1.35
5	Red Polled....	1	5	450	701	251	1.18
6	Galloway.....	1	10	651	810	159	1.06
7	Galloway.....	1	10	829	1039	210	1.40

It was noted that the cows greatly improved in their appearance while being fed alfalfa.

## Increasing the Profits from Dairying

The profits from a herd of dairy cows can be increased in several ways. Better rations and better cows will increase returns at one end of the line and improved quality and a better selling system for the products will increase it at the other. By better rations is not meant more expensive food stuffs or more food, for that matter, but a better arrangement in the ration of the feeding stuffs available for use. In some cases this may result in a lowering of the cost of the feed, in others it may increase. In some cases the feeds at hand may not be sufficient for the purpose of compounding a balanced ration and certain other stuffs must be purchased to supply the deficiency. But whatever the circumstances are, it pays generally, providing the cows are worth feeding at all, to feed a ration compounded so as to supply the proper nutrient in about the proper proportions for milk production.

It is easy figuring increased profits from keeping better cows, but more difficult sometimes to find the cows than it is to figure profits from them. The most profitable dairy herds in this continent have been built up, got together by selection and careful breeding, built up upon the foundation stock the founder happened to have about him when operations first began, and by judicious selection of the females and the use of sires bred in a milking line, the milk yield has been built up, slowly to be sure, but certainly. It is rather a hit and miss game,—trying to buy better cows than one has oneself. The rational way to improve, is to find out first what your own herd is doing and eliminate from it all cows giving less than a given amount of milk. Good dairy cows are not for sale as a rule, except in the dispersion of a herd, and anyway a man can build up a herd of good producers from his own stock, about as quickly, and certainly at less cost, than by purchasing outright.

At the other end of the line there is the possibility of increasing returns by producing a better

article, and this involves generally nothing more than a little better care of the product, in the handling of the milk and the manufacture and sale of it in whatever form it is disposed of. The dairyman who won't improve the quality of his product, if it is butter, say, until the price of butter gets higher, will never improve at all, will always sell his goods for the lowest price such commodity sells for. Improvement has to come before the price increases. As long as he is content to remain in the axle grease class, he will take axle grease price for his butter. This refers of course to butter made on the farm. Better care of the cows, more efficient help in caring for them, a better and cleaner way of manufacturing the butter, and last of all but essentially important, a modern way of selling the products—these are some of the things that will increase the profits of dairy farming.

## Playing at Dairying

If dairying is ever to become the extensive industry which its possibilities and advantages warrant it in becoming, there will have to be a lot of weeding-out done among the herds that now furnish our milk supply. In every herd of milch cows that one meets every time he is looking for cows, there are one or more that are simply an expense to their owners. And the less attention there is given to the culling of a herd, the greater is the loss through these boarders. The law of averages is the only rule that appears to regulate the quantity and quality of the milk a herd gives. Dairying as an industry is discredited in Western Canada on the ground that it does not pay, yet there is no serious steady attempt made by most cow owners to put the industry on a business basis. Dairying, as it is commonly followed, is like starting a factory with the cast-off machinery of a competitor, or in a broken down plant.

In Canada we have facilities for testing pure bred cows and recording them in their respective herd books, as well as facilities for conducting cow testing associations to weed out grade cows, yet there is not a cow in Western Canada registered in the former, and very few herds that are being improved by the latter. Under these circumstances no one can say with any degree of finality that dairying will not make money for the man who follows it, and the very encouraging partial success of those who practice dairying without testing their cows, indicates that very good money can be made when the industry is run on business principles.

# HORTICULTURE

## Harvesting the Potato Crop

Potatoes are ready to be dug when the vines have died down and are dry. The tubers then are mature, providing of course, that the crop has not been affected with blight, and growth checked prematurely. There are a number of different ways in which potatoes may be taken from the ground. Where a small patch only is grown, a fork or shovel is generally used, the tubers being thrown up on the surface and picked up. The hand method of digging is all right for the average grower who has half an acre

or less to get out, but the cost per bushel of harvesting in this way is too great, and labor too scarce, for the hand method to be followed where any considerable acreage is grown. Digging by hand costs anywhere from three to six cents per bushel, sometimes more, a great deal depending on the skill of the man doing the work. Half an acre is a good day's work for a man with a fork or shovel. The majority of men dig less than half an acre a day.

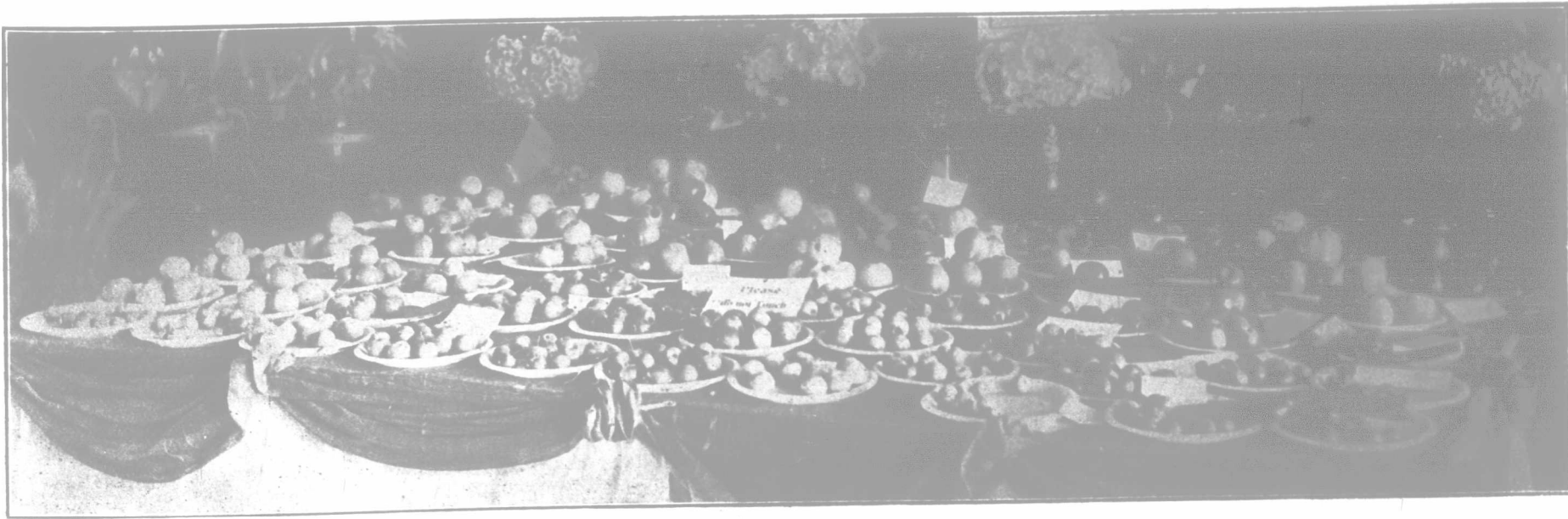
Where several acres of potatoes are grown a mechanical digger becomes an economic necessity. It is almost impossible to procure labor for potato digging in this country, and while the outlay for a digging machine amounts to a hun red dollars or more, it will harvest the crop at less cost per bushel than can be done by hand. By mechanical diggers we do not mean the shovel plow implement used in some places, where five or eight men with a team of horses will take up two acres or so a day, but a machine that will dig five or six acres a day, separate the tubers from the soil, and leave them in a row, clean and free from vines or earth where they may be easily picked up.

These mechanical diggers differ somewhat in construction. In the potato growing districts of this continent the type used largely is the shovel-point machines. These machines are built with two-drive wheels, one on each side of the digging, and with shaking apparatus, straddling the row that is being dug. The digging device consists of a shovel point, about eighteen inches in breadth and bluntly pointed. It is forced under the row of potatoes and the row lifted and deposited on the elevator. The elevator is five, six or more feet in length, made of iron slats fastened an inch and a half or so apart. An attachment from the drive wheels keeps the elevator in motion as the tubers, soil and vines are carried up it, and by the time the upper end is reached, the soil has fallen through and the vines and tubers go over the rear end. Here, on some machines, there is a contrivance for removing the vines and throwing them to one side, so that the tubers are deposited in a row behind the machine and are readily picked up.

Three or four horses are required on most diggers. The horse power required depends to some extent on the depth the tubers are below the surface and on the character of the soil. The machines work satisfactorily in all kinds of soil and may be used wherever and whenever digging could be managed by hand. The advantages in favor of machine digging are that it costs less to get the crop out, (two cents a bushel ought to cover all expenses), it makes a better job, leaves few tubers in the ground, cleans them off pretty well, and leaves the land in excellent shape for the succeeding crop.

## Strawberry Grower's Experience

Last June I sent you a letter on growing strawberries in Alberta, and promised at the same time to tell your readers something of this season's crop. Well, now that the season is over, I am sorry to say it is not as satisfactory as I should have liked. We had nine days' successive rain just when the plants were in full bloom. The rain washed all the pollen from the bloom, so that the fruit did not set properly. Some of the bloom that came before the rain set the fruit all right, and I had some of the finest and best fruit that I ever had from the same variety,



FRUIT DISPLAY OF MR. A. P. STEVENSON AT THE WINNIPEG HORTICULTURAL SHOW.