

## I. H. C. CREAM HARVESTERS

**Skim Clean—Run Easy—Are Simple and Quickly Cleaned**

**B**UY an I. H. C. Cream Harvester—it has the strongest recommendations behind it, both from the makers and users. For choice you may prefer the chain driven DAIRYMAID, or the simple geared BLUEBELL.

Both are everywhere established as standard, dependable and most substantial machines. They are on exhibition at the International local agent convenient to your place.

You take no chances of disappointment, when you choose a Dairymaid or a Bluebell.

### Butter Fat Profits

Don't waste time and trouble skimming milk by hand, besides losing a large share of the butter fat.

I. H. C. Cream Harvesters separate every particle of butter fat from the milk, giving you the fresh, warm sweet skim-milk for your calves, pigs and chickens, instead of cold, stale or sour milk which you get from the factory or when you skim by hand.

I. H. C. Cream Harvesters make prize products possible—they will get you better prices for your cream or butter.

### Every Machine Tested

Every I. H. C. Cream Harvester, either Dairymaid or Bluebell, is rightly tested before it leaves the factory.

It comes to you in perfect working order—ready to use. Every I. H. C. separator is built to operate with the least possible trouble to the operator—saves time and annoyance because it is so simple and easy to clean.

All parts are so easy to get at or take out and clean that the work of cleaning is quickly over with.

If you need a cream separator, call on the International local agent and talk the matter over with him. He will supply you with catalogs and full particulars. Or, if you prefer, write direct to the nearest office. You will be interested in securing a copy of "Development of the Cream Separator," or colored hanger which will be mailed on request.

CANADIAN BRANCHES: Calgary, Hamilton, London, Montreal, Ottawa, Regina, St. John, Winnipeg.  
International Harvester Company of America, Chicago, U. S. A.  
(Incorporated)

## DISPERSION SALE

### ISALEIGH GRANGE STOCK FARM



Danville, Que.



TEN AYRSHIRE COWS

FIFTY HEAD OF AYRSHIRE HEIFERS, from two months to four years

THREE BULLS, including "Netherhall Robin Hood" (Imp.)

SIX HEAD HEREFORD COWS and HEIFERS

THREE HEAD HEREFORD BULLS

SIXTY HEAD YORKSHIRE SWINE of all ages

ADDRESS—

ISALEIGH GRANGE STOCK FARM, Danville, Que.

A Pure Bred Yorkshire, Berkshire or Tamworth Pig, 4 to 8 weeks old, and with pedigree eligible for registration, sent free for seven new yearly subscriptions to this paper at \$1.00 each.

## The Feeders' Corner

### Pulped Apples for Cows

Would you kindly inform me through your paper regarding the feeding of pulped apples mixed with chopped grain to cows? Are they injurious, or are they productive of an increased supply of milk? What would be a suitable quantity to feed? Some people claim apples decrease the flow of milk—G. S. Waterdown, Ont.

Apples can be fed with profit to dairy cows. Many are of the opinion that apples dry them up, as you state. If fed in too large quantities, this assertion is all too true. When fed judiciously, however, in moderate quantities, they are an excellent food. We have fed them for years and at one time fed large quantities of pumkin from a cider mill. We fed a good sized scoop shovel full to each cow twice a day. Having never weighed the quantity, it is difficult to state just what it would weigh. Any grain fed was mixed on top of the pulped apples in the manger. Of course it is not safe to feed whole apples as there is danger of choking—J. C.

### Early Feeding Pays

Ed, The Dairyman and Farming World.—We believe in stabling our cows at night as early as it becomes cold or wet. When silage is plentiful, we commence feeding immediately from the silo. When the corn is scarce, we feed chaff and roots for a time in addition to a little meal composed of oats, barley and peas. In our experience, the early feeding of cows in the fall pays handsomely. Cows or any other stock should not be turned away hungry in the morning when the grass is frozen as they fail more in one week on such treatment than they will regain in a month.

Our ration is composed of silage, chaff, cut hay and straw fed twice a day. The meal is spread over it in the manger. The silo is the only profitable way to feed cows. All our coarse grains are fed at home. Our cattle are allowed out each day for water and exercise. A sheltered yard + a shed under the barn is provided for their convenience.—Walter Thompson, Halton Co., Ont.

### The Proper Way to Milk

The operation which consists in milking, is as is well known, a "rational" message which has as its result the drawing from the cow's udder a far greater quantity of milk than that which it contained at the beginning of the operation. It is known says a writer is the "Monitor" that the udder of a good cow contains, before milking about 3½ pints of milk already formed, but that if milking be well carried out no less than 2½ to 3½ gallons may be secured. According to the experiments carried out by M. Lepointe, it is also known that the method of milking exercises considerable influence on the proportion of fatty matters contained in the milk.

The above authority has shown that this is due to the peripheral excitation of the nerves of secretion which, in their turn, by reflex action bring about far greater excitation of the granular cells. If we consider the usual way of milking, which consists in milking two quarters at the same time, we find that the effect produced is, not the same for the whole period of milking. The milk from the first two quarters generally contains more fatty matters than that of the last two, and the richness of the milk will be enhanced if the milking be done diagonally instead of laterally.

This phenomenon is at least singular, even if it be not incompre-

sible, and it is explained by the fact that by milking diagonally excitation extends to all the nerves of the gland whilst, when the operation is done laterally, excitation is only produced on the side which one operates. In every case the influence of the matter of milking on the proportion of fatty matters is demonstrated by the following experiment of M. Lepointe. The same cow was milked repeatedly and at the same time by two different persons, who changed sides with each milking, and the milk coming from each side was kept distinct. One of the persons who operated merely exercised alternate pressure on the teat, whilst the other operated by longitudinal massage. The milk produced by this latter process was more fatty than the other, the difference being between 45 and 55 per cent. The way in which the cow is milked has therefore a great influence on the quality of the milk, and this influence can only be explained by the excitation produced.

The milk obtained at the beginning of the operation, consisting in longitudinal massage, is found to be as fat as that at the end of the process. Until now this phenomenon was explained by the fact that slightly prolonged milking ended by detaching the particles of butter adhering to the coatings of the lactiferous vessels. This, however, is not the opinion of M. Lepointe, he observes that the operation is usually more vigorous at the end than at the beginning, and that consequently excitation must be stronger, and the reflex action greater on the mammary tissues, thereby producing a lactiferous secretion richer in fatty matters.

### Overhead Pipes for Water

A unique method of conveying water from the wind-mill to the barn was noticed recently by a representative of The Dairyman and Farming World, while visiting at the farm of Mr. Gordon Manhard, of Manhard, in Lennox County, near Brockville. Instead of laying the pipes under the ground, as is commonly done, Mr. Manhard ran them up at the wind-mill 25 feet and from there direct to the barn. The distance from the wind-mill to the barn is 120 feet.

In order that the water might run through the pipes rapidly, the pipes were given a five-foot slant. The pipes have been up for four years, during which time they have given perfect satisfaction. Our representative asked Mr. Manhard how it was that the pipes, being exposed to the air, did not freeze in winter. Mr. Manhard explained that the water runs through the pipes so quickly into the tank in the barn that it does not have time to freeze.

"Only once or twice have I had trouble from freezing," said Mr. Manhard; "In each case it was due to slight dews having been made in the pipes with all the water to select. The pipes froze at those points. It was easy to tell where they had frozen. All I had to do was to take the pipes apart at that place and thaw them out. I have had a great many people visit my farm and nothing has attracted their attention more than this system of carrying water to the stable."

**Feed More Roots.**—The dairyman of Canada, do not appreciate the value of roots as feed for dairy cattle. They are easy on the land, they are a good crop for cleaning the soil, and freeing it from weeds, and they leave the soil in better condition for the crops that are to follow—John Fisher, Mgr. MacDonald College Farm, Ste. Anne de Bellevue, Que.

We want a new name for The Canadian Dairyman and Farming World. Can you suggest one? Notice our announcement on Page 8.