ER IR-

504

EER

ting. 25-2

TS

eat.

that

r to

ing.

hird

the

: un-

here

nally

re or

tined

ie of

e the

er to

ist or

farm

avily.

d for

dress-

at the

3 thee s thou

ments

ke re

ecome

1 thee

· fibre

mixed

e crop

protect

y and

re the

t is of

wheat

hands

hird of

llowest

or thee

ostance.

received

employ-

nd while

opening

e reply.

night."-

around



FLEMING'S VETERINARY REMEDIES

Cure Lump Jaw, Spavins, Ringbone, Fistula, Poll Evil, Heaves, Colic and the common ailments in horses and cattle. Fleming's Farm and Live Stock Annual for 1915 and Fleming's Vest Pocket Veterinary Adviser FREE for the asking, within 30 days. FLEMING BROS., Chemists, 47 Church St., TORONTO

".Made in Canada"

T.N.B. DUMP RACK



Thoroughly tested in the field for the last two seasons; fits any wagon or truck; unloads a load of sheaves without stopping; saves the thresher half the bundle teams. Sold direct from the manufacturer at Watrous,

Racks, 8 x 14, 3 foot sides, less floor, \$40 f.o.b. Watrous Cash.

Sold and guaranteed by The T.N.B. Mfg. Co. Ltd.



A Strong, Durable, Seamless Shaped COTTON

Grain Bag

Send Your Order to Bemis Bro. Bag Co.,

Winnipeg, Man.

WANTED

Experienced Miller with \$2,500.00 to manage and take interest in North Dakota Mill and Elevator property. Write or wire for detailed information.

F. E. CORSON & CO. FARGO, : : NORTH DAKOTA

CALIFORNIA—Get Your Railway Fare Applied. Going to the Exposition? See "Our Meney-Making Homes in Orange Land." Round Trip Refunded if you buy. No extra expense to see the orange groves. Write for information. Be our agent. Sierra Vista Ranch Company, 1100a First National Bank Building, San Francisco.

RIDER AGENTS WANTED



WHEN WRITING TO ADVERTISERS PLEASE MENTION THE GUIDE

BACTERIA-GOOD AND BAD

Bacteria are the dairymen's friends and his worst enemies, for, like Indians, some of them are good and some are bad. The knowledge of bacterial growth has become a matter of great utility as applied to the dairy industry and how to encourage and de-velop the growth of the friendly bac-teria, and at the same time to discourage and prevent the development of the undesirable ones, are important parts of the dairymen's educational equip-

We are informed by bacteriologists that germ development in milk is very rapid. First, there are a hundred germs, then two hundred, then four hundred, later eight hundred and so on in geometrical progression, doubling their number several times an hour. A temperature of fifty degrees favorable to their growth, but they scarcely develop at all under forty-five degrees. Therefore, if the milkman wants to prevent the growth of either good or bad bacteria, he must keep his milk below forty-five degrees Fahren-

The ripening and curing of cream are caused by the development of the bac-teria by germs of ferment, and these are the dairyman's friends for they help him to produce a good grade of butter when he churns. There comes a time when enough bacteria have developed to make the cream just right for churning; at this time more would be too many and less would not be enough. For this reason it is best to keep all the cream sweet until enough for a churning has accumulated and then allow the bacteria to work on the whole mass at once. Bacteria six hours old, twelve hours old and a day old will not mix to-gether well. Generally the bacteria start to work in cream before they are wanted, but sometimes they are rather slow at starting. In this case fermentation can be begun by mixing a small amount of milk, cream or buttermilk in which the bacteria are at work, with the sweet cream and soon a veritable army of them are at work and the churning can be done as soon as experiment and experience directs.

Their Other Name

Undesirable bacteria are but another name for filth, and where they get a start on the dairyman it is impossible for him to produce a prime product. They import bad odors and unpleasant tastes to the cream and butter, and and cause disease and death to humans who consume infected products. Tho too small to be seen by the naked eye, the work of these filth germs soon be-comes apparent. They thrive in poorly kept barns and on unclean cows. They abound in darkened stables, for sunlight is their worst foe. They drop into the milk pail by the thousands, from the milkman's unwashed hands and milk cows' dirty udders. The dairyman has to fight them on all sides and a few of them persist in getting into the milk in spite of every precaution. To prevent their development the first and last rule is cleanliness, and the watchward is sanitation.

Humanity would have a hard time to get along if it were not for the good bacteria, for there are numerous others besides the ones which cause the cream to ripen, all of which contribute largely to the good of mankind. We have no need, however, for the others, and the more we can do to discourage their development the better off we are

HOW TO CIRCUMVENT PRO-HIBITION

In view of what will come upon the province on July 1, it gives us great pleasure to pass on the following timely and helpful suggestion appearing in the and neiprul suggestion appearing in the columns of a contemporary across the border, which was evidently anticipating a dry spell: If The Town Goes Dry.

Buy a gallon of your favorite brand and turn it over to your wife. Do all your drinking at home. Every time you

take a drink, pay your wife 15 cents.

When the first gallon is gone your wife will have \$8.00 to put in the bank and \$2.00 to buy a new supply, each gallon averaging 65 drinks.

averaging of drinks.

"In ten years at your present rate you will be dead and your wife will have enough money to go out and marry a decent man."—Saskatoon Phoenix.



You need a New SEPARATOR

If you are still using some gravity or setting process of creaming

BECAUSE YOUR WASTE IS greatest and quality of product poorest in mid-summer when the milk supply is heaviest.

BECAUSE TIME IS OF GREATest value on the farm at this season and the time and labor saving of the good separator counts for most.

BECAUSE THE SKIM-MILK IS poorest without a separator in hot weather and often more harmful than helpful to calves.

BECAUSE THE WORK OF AN improved De Laval Cream Separator is as perfect and its product as superior with one kind of weather as with another.

2nd If you have a very old De Laval or an inferior separator of any kind

BECAUSE THE LOSSES OF THE poor separator from incomplete skimming and the tainted product of the hard-to-clean and insanitary separator are greatest at this

BECAUSE OF THE GREAT economy of time at this season in having a separator of ample capacity to do the work so much more quickly.

BECAUSE AN IMPROVED DE Laval is so much simpler and

more easily handled and cared for than any other, and you cannot afford to waste time these busy days "fussing" with a machine that ought to have been thrown on the junk-pile long ago.

BECAUSE THE DE LAVAL SEParator of to-day is just as superior to other separators as the best of other separators to gravity setting, and every feature of De Laval superiority counts for most during the hot summer months.

These are all facts every De Laval local agent is glad of the opportunity to prove to any prospective buyer. If you don't know the nearest De Laval agency simply write the nearest main office, as below.

DE LAVAL DAIRY SUPPLY CO., Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole distributors in Canada of the famous De Laval Cream Separators and Alpha Gas Engines. Manufacturers of Ideal Green Feed Silos. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER 50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



A Manitoba Engine For Every Power Need on the Farm

Illustration shows only one type of the many Manitoba Engines "Made in the West for Western Needs." Then there are our other lines:—

WINDMILLS The only kind manufactured in and perfect enough to hold the field against all competition.

Saw Frames (steel and wood), Feed Grinders and Roller Crushers, Stock Troughs, Wood Pumps, Windmill Lift and Force Pumps, Canadian Peters Double Acting Force Pumps, Pump Jacks, Power Washing Machines, Emery-wheel Grinders, Spark Colls, Spark Piugs and Dry Cells, Beiting, Pulleys, Shafting, etc., etc., Increase in Tariff has not affected our prices—Manitoba goods are made in Canada WRITE FOR OUR NEW 64-PAGE ILLUSTRATED CATALOGUE

Address Brandon If you live in Manitoba or Saskatchewan; address Calgary if you live in Alberta or British Columbia.

Brandon, Man. Manitoba Engines Limited Calgary, Alta.
P. M. Ames, Gen. Mgr. Authorized Capital: \$200,000 C. W. Northcott, Mgr.

HAWKEY'S VETERINARY BOOK A Valuable Book on Diseases of Stock and How to Cure Them. Mailed Free by H. R. HAWKEY & CO., Winnipeg, Man. This Veterinary Book is well worth hav-

ing. It is a size that can be conveniently carried in the vest pocket. Contains 96 Ranch, comprising: 12 Registered pages of valuable information showing in a clear and plain manner, in words that can be understood by all farmers, all diseases pertaining to Stock, and each disease is treated under four distinct paragraphs: Definition, Cause, Symp-toms and Treatment. It should be in the hands of every farmer.
All that is necessary is to drop a card

or letter to H. R. Hawkey & Co., Winnipeg, Man., and this book will be mailed, while the edition lasts, free of all costs. Write for it before they are all gone. It will pay you.-Advertisement.

BELGIAN HORSES AUCTION SALE

WEDNESDAY, JULY 7th

AT FAIR GROUNDS, CALGARY, 1.30 O'clock 12 Registered Stude, 11 Registered Mares.

JULY Sth-At the Ranch, 18 miles North of Calgary

70 Head High Class Belgian Grades, 84 Head Cattle, all Farm Machinery, Automobile. The Ranch also will be offered for sale.

LUNCHEON

Catalogues, Terms, etc., apply-

A. LAYZELL, Auctionser 520 Centre St., Calgary. Phone M. 2273