

the stem, or may  
In the fall the  
that look like dirt,  
of the potatoes.  
potatoes are not  
ected when such

with dry stem rot,  
conducted at the  
ph, to see if the  
ced by selecting  
istic little black  
th of corrosive  
on gives the best  
Selecting tubers  
without any treat-  
nt of badly dis-  
3 per cent. Seed  
treatment with  
which 31.1 per  
disfigured by this  
corrosive subli-  
of water for two  
to 5.2 per cent.  
blimate, strength  
disfigured tubers  
one to 2,000 for  
tubers to 7.2 per  
1,200 reduced the  
e results of these  
f this disease can  
y selecting seed  
black lumps or  
ed with corrosive  
ry results, both  
cticed.

#### Farm Use.

employed to destroy  
read of infectious  
es as tuberculosis,  
ortion, foot-and-  
s, can be partially  
which will prevent  
thy stock. Many  
use, some of which  
oride of lime, etc.,  
purchased at any  
uch as the various  
ial preparations,  
of success. One  
e applying disin-  
s of the building  
ossible, the refuse  
removed or burned

t and most useful  
ne Department of  
College, Guelph.  
is first slaked by  
er quart of lime,  
each one hundred  
king is hydrate of  
which four quarts  
lk of lime. It is  
y the milk of lime  
It soon loses its  
y be kept a day or  
ed lime is of no  
ial. Milk of lime  
itewash brush, the  
use, however, the  
fine sieve in order  
quicklime is some-  
e of animals dead  
equal to twice the  
the carcass in a

infectant and de-  
f exposed to the air,  
ept in glass sealers.  
r cent. of available  
products put up  
only 20 per cent.,  
er cent. available  
liquid or powdered  
adding six ounces  
first mixing with  
mps. Made in this  
full strength to be  
uncertain strength  
ive to metal, with  
not be considered  
pt for disinfecting  
s and teat cups.  
A stock solution  
pared as follows:  
A. C., Guelph;  
oride of lime with  
es with a wooden  
gallon. Dissolve  
two quarts of luke  
Then mix the two  
r or allow to settle  
ation and fill into  
cool, dark place.  
ately 1 per cent.  
chloride of lime.  
s of drinking water  
stand for half an

hour, when injurious bacteria would have been de-  
stroyed and the water rendered safe for drinking.

For disinfecting milking machine tubes, mix one pound full-strength chloride of lime with ten pounds of water in an enamel pail or crock or wooden tub, and allow to stand with an occasional stir for two or three hours, then take the clear liquid and add enough water to make one hundred pounds, throwing away the white sediment. Rubber tubes and teat cups may be immersed in this solution, which will last for about two weeks in summer, and about three weeks in winter. Before and after immersion in the solution, rinse the parts with cold water. Commercial preparations of chloride of lime are satisfactory disinfectants, and although more expensive than the solution made at home, are more convenient and ready for immediate dilution.

Carbolic Acid is known as a good disinfectant, but the pure acid or phenol, is not a satisfactory general disinfectant for farm buildings because of its high cost, its corrosiveness, and the fact that it is not altogether effective. Crude carbolic acid is a mixture of oils and tar acids, the latter being the active principle. The percentage of tar acid in commercial crude carbolic acid varies considerably so that the percentage which a sample contains should be known so that it can be diluted to the proper strength. Thorough stirring is necessary to bring about complete solution of the acid which should be diluted so as to make a two per cent. solution. The oils are insoluble and will float when mixed with water. It is better to apply this material with a spray pump and the solution should be agitated during the spraying so that the oils will be evenly dis-

tributed. Crude carbolic acid, like the pure acid, is somewhat corrosive.

Cresol is a mixture of materials that are all superior to carbolic acid as disinfectants. It contains practically no coal tar oils and usually contains from 90 to 98 per cent. of tar acids. Generally it is relatively cheap and suitable for disinfecting stables. A two per cent. solution is approximately as effective as a 5 per cent. solution of pure carbolic acid. It should be thoroughly dissolved in warm water before using. Cresol is not quite so poisonous as pure carbolic acid. The best practice for stable use is to make a compound of cresol with soap which will be readily soluble in water. Warm the cresol and stir in an equal quantity by weight of green soap until it is completely dissolved. Green soap may be bought at a drug store. Make a 2 or 3 per cent. solution with soft water. Hard water will cause the soap to break up and separate in sticky masses.

Speaking of some of the commercial disinfectants Circular 29, O. A. C. Guelph, says: "Such commercial disinfectants as Zenoleum, Germol, Disinfectall, Carbo-leum, Kresol, International Dip, Car-Sul-Dip, Daytho-leum, etc., are widely advertised and much used. In general they all contain coal-tar products belonging to the phenol and cresol groups to which they owe their active properties. In general appearance they are very similar and their odors are nearly alike. Some appear heavier and thicker than others. They mix with water in all proportions forming an emulsion which is more or less milky in appearance. They are non-corrosive. On account of these properties they are preferable in many ways to crude carbolic acid.

Used as spray disinfectants for stables etc., they are very effective in 2 or 3 per cent. solutions in water. They should be kept well stirred up when being applied."

## THE DAIRY.

Hot weather milk needs careful attention if it is to be marketed in good condition.

Protect the young calves from the hot sun and the flies. They will be more thrifty and will grow more rapidly.

Are you planning to show a few of the best animals of the herd at the local fair this year? It would pay to do so if it can be managed.

If none of the cows have been tested either for quantity or quality of milk the sooner it is done the better. Anyone will make a mistake if he works in the dark.

The dry cows should be given a chance to flesh up before freshening. At least a six to eight weeks rest is desirable and grain fed before calving is worth more than the same amount afterward.

Watch the feed market and provide for next winter's feed. Cows cannot milk well in winter without a proper ration and the more economically it can be fed the lower will be the cost of producing milk.

# What Scotsburn Means in Nova Scotia Dairying.

How a Creamery Reformed a Neighborhood and Influenced a Whole Province.

THE word "Scotsburn" in Nova Scotia is the short for good creamery management and large production, while in the produce trade it is a synonym for butter of the highest quality. In 1912 Dr. Cumming took W. A. McKay from the little creamery that was fast becoming famous, and commissioned him to "Scotsburnize" Nova Scotia, and for almost eight years Mr. McKay has been endeavoring to inoculate into the dairy industry of Nova Scotia a vaccine cultured from the co-operative and enterprising spirit that has made the Scotsburn creamery an outstanding institution in the Maritime Provinces.

Early on a June morning a representative of "The Farmer's Advocate" strolled into the Scotsburn creamery looking for information that would explain the success of what was once known as "Ruddick's Pet Lamb." There at a bench stood the genial manager, Robert Stewart, soldering the bottom into a can that on the previous day had voluntarily opened and spilled a patron's cream. "I cannot send this can back to that fellow without a bottom in it," Mr. Stewart remarked, "for he has no means of mending it." "Will he lose the cream?" he was asked. "Oh no, it was an accident, and no one will lose." This incident typifies in a striking manner the workings of the little creamery of Scotsburn. It is a patron's factory, and no stone is left unturned to produce the last ounce of first-class butter from every can of every patron's cream. Service is the guiding motto of the staff. Alvin Graham, the butter-maker, and his efficient help, are not working to put in time, they are working to put out good butter. The manager and his staff are serving not one individual but one thousand farmers around the little hamlet of Scotsburn and along the Short-Line towards Oxford.

#### AN UPHILL ROAD.

The history of the Scotsburn creamery is unique and intensely interesting. When Dr. J. W. Robertson was Dairy Commissioner he recommended that a creamery be established at Scotsburn, and that the Government should meet all deficits for a period of three years. Scotsburn has not, nor did it have any advantages to recommend it over other locations in Nova Scotia, for such a venture, except that it was just an ordinary farming district like hundreds of other localities in Nova Scotia, and the people were Scotch. The feeling was entertained, no doubt, that if a creamery could be made a success under these circumstances, others would thrive in typical Nova Scotia districts. The Dominion and Provincial Governments supported the project financially as well as morally, and a local company was formed with shares selling at \$5 each. The investment for the farmers was gilt-edged, but it will never be allowed to pay more than 5 per cent.; nevertheless, the eighty farmers who purchased stock are keeping these modest little documents as souvenirs of an investment that brought something good to their neighborhood and became a guiding star to the dairy industry in their Province.

Like many other good things, this creamery was not a success from the beginning. It was a hard struggle to keep it alive from 1901, when it was started, until 1908, and a great deal of credit is given locally to the continued support and determined efforts of Commissioner J. A. Ruddick and Geo. Barr to make the Scotsburn creamery a success. The plant came to be known as "Ruddick's Pet Lamb," and Geo. Ransome, the manager, worked hard indeed to keep life in the delicate young thing.

For seven years whole milk was received and separated, but such a system did not permit of growth or expansion. In 1908 Hugh McLeod happened to be visiting in the State of Wisconsin, and there he saw for

the first time a thriving cream-gathering creamery. He brought the news home, and the supporters of the local plant adopted the new method with considerable hesitancy. That was the turning point, however, and since then Scotsburn has gone rapidly ahead. In 1909 the creamery was without a manager, and they found in W. A. McKay a good dairyman and one temperamentally qualified to put Scotsburn on the map. Since 1912 Mr. McKay has been busy Scotsburnizing Nova Scotia, and Robert Stewart, Secretary-Treasurer since 1903, has been the efficient manager of an increasingly prosperous concern.

SEVEN HUNDRED PATRONS SUPPLY THE CREAMERY.  
Last year seven hundred patrons shared in the



The Guernsey Herd of Alex. McKay, a Patron of Scotsburn Creamery.

success of the creamery; 446,171 lbs. of butter, or approximately 223 tons, were manufactured, and this was worth in the neighborhood of \$243,235. Cream came in from a distance of 70 miles, and patrons received 63 cents per lb. butter-fat, net. The books revealed the accounts of many successful patrons, some herds averaging from \$150 to \$200 per cow, gross. One herd of five cows returned their owner \$909, gross, last year, but the largest contributor was E. G. Stevenson, who totalled \$3,126 in 1919, from a herd averaging fifteen milkers.

On the day of our visit to the creamery, 2½ tons of butter were manufactured from the cream received.



Scotsburn Creamery Where Approximately 300 Tons of Butter Will Be Made this Year.

Up to that time there was a 40 per cent. increase in the make over last year. Mr. Stewart was certain that they would make 45 tons of butter in June, and the production for 1920 would approximate 300 tons.

As the County of Pictou supplies practically all the cream, it has the first call upon the butter made at Scotsburn; this takes about ten tons per month. There is a keen demand throughout Nova Scotia and New Brunswick for Scotsburn butter, and connections are enjoyed with a very select trade as far west as Montreal. Needless to say the highest market price is obtained.

#### THE CREAMERY.

Efficiency is the most outstanding thing about the Scotsburn creamery. The equipment is not elaborate,

but it is complete. The patrons are urged to send in good cream and then an effort is made in the factory to manufacture every ounce of butter-fat it contains into first-class butter. Space will not permit us to mention in detail several little devices which contribute to the over-run and the excellence of the product, but suffice it to say that nothing is overlooked. Mr. Stewart considers it his duty to see that a patron's cream is

efficiently handled, and that no leaks occur between the farm and the market. The over-run in this creamery sometimes amounts to 22 per cent. One feature we desire to mention, however, and that is the storing-room, which was built according to Government specifications. It has a seventeen-inch wall, and the rooms are perfectly dry and sweet; no mold was in evidence anywhere. The insulation is so perfect that only about fifty tons of the ice stored melts during the summer. The ice-storing compartment has a capacity of about 150 tons, and there is ice in the bottom of this room that has been there for years.