

On the Land

GENERAL.

Many horses have very brittle feet, the hoof of which cracks and splits when being shod. A very useful hoof dressing for these cases is composed of neatsfoot oil to which a small quantity of paraffin and lampblack has been added. Linseed and the various other drying vegetable oils are unsuitable for the horse's foot. Stockholm tar answers well, and is very suitable for dressing the frog and sole of the foot, as it is antiseptic and curative in mild cases of thrush.

When milk is allowed to cool naturally it will sour in a much quicker time than if cooled after being drawn from the cow. The longer the time which elapses between the milking and refrigerating the shorter will be the keeping properties of the milk after it is cooled. This is accounted for by the fact that milk is soured by bacteria, and they grow in warm milk at a very rapid rate. Milk sours quickest at a temperature of about 90deg. to 100deg. Fahr., but freshly-drawn milk, which is at 101deg. Fahr., soon falls to the temperature of the atmosphere.—*Australasian*.

Bloat is a form of indigestion due to the excessive formation and accumulation of various gases in the paunch or rumen. The chief symptom of bloating is a sudden distention in the left flank, which swells up and appears as tight as a drumhead when thumped with the finger. Relief must be immediate if suffocation is to be avoided, and consists in providing an artificial outlet for the gas by 'tapping' the animal. This is best accomplished by inserting a trocar and canula at a point midway between the hip and the last rib. To prevent further gas formation administer a drench of two ounces of turpentine in a pint of raw linseed oil or a quart of new milk.

THE MECHANICAL MILKER AND THE LABOR PROBLEM.

There is no doubt that the mechanical milker must come into use on all dairy farms to solve the labour problem. Where one has only a few cows, and it is possible for him to secure such milkers that he is certain his cows will be milked satisfactorily and regularly, there is a doubt as to whether he should change methods. On the other hand, there are thousands of those who milk great numbers of cows, and their lives become burdensome because of the impossibility of having the milking properly done.

In New Zealand and Australia the milking machine has, some time since, come into very general and successful use.

It is true that occasionally a cow will cease to be profitable when milked by the mechanical milker. This is no particular reason why the milking machines should be condemned, however, because it is a well-known fact that on all dairy farms, even where cows are carefully milked by hand, cows are sometimes ruined by erroneous feeding or other causes.

Many of the large and successful dairy farms in the United States are now using the mechanical milker, and where the owners of the farm and the hired help have confidence in the milking machine it has proved exceptionally successful.

One great trouble the milking machine has been compelled to overcome is that when it is installed on the farm everyone who has anything to do with it is pessimistic: and because it is difficult for them to realise that the machine can successfully milk the cows they are at all times looking for and anticipating adversities rather than successes. Owing to this fact the milking machine, like all new inventions, has been compelled to cope with prejudice ever since the conception of the idea.

It has not been many years since a great number of machines were placed in operation, and because of the novelty of the idea and the lack of familiarity on the part of dairymen and farm help with the operation

many of them did not prove successful, and they were abandoned.

During the past two or three years, however, rapid strides have been made in perfecting the milking machine; and in contrast with the unfavourable reports printed by experiment stations, farm and dairy papers a few years ago, to-day most complimentary reports are coming from experiment stations and dairymen who have been using the machines for great and economical production of milk and butter fat, as well as for the production of sanitary and certified milk.

G. A. Smith and H. A. Harding, of the New York Agricultural Experiment Station, after experimenting for a long period of time, summarise as follows in the *New York Bulletin*, No. 355:—

1. The milking machine is of interest mainly because of the labour problem. Using two machines, one man can milk 50 cows.

2. This study of the influence of hand and milking machine methods upon the flow of milk covers a period of over four years, and includes 71 lactation periods, after eliminating the questionable data.

3. The influence of the machine method of milking upon the flow of milk was too small to be measured, even when the other factors were eliminated as fully as possible. It was probably responsible for less than 1 per cent. of the variation in flow under the conditions of this experiment.

4. All of the cows milked well with the machine when they were provided with properly-fitting teat cups. Two cows which were failures with hand-milking were successfully milked by the machine.

5. Machine milking has proved practicable. The problem now is to develop the machines along most helpful lines, and to learn to handle them efficiently.

The fifth point of the summary seems to hit the nail on the head. Those who have given most consideration to the mechanical milker, and those who have had most success with them, have come to the conclusion that there are several types of machines that are so practical that success or failure depends more upon the intelligence of the operator than upon the cows or the machine. It is a well-known fact that men capable of milking cows properly are above the average working man. Furthermore, it is not all labourers who are sufficiently good mechanics to operate machinery. Herein lie two factors upon which the successful operation of the mechanical milker is dependent. The operator must be enough of a mechanic to operate successfully farm machinery, and he must be sufficiently in sympathy with the cow so as to cater to her likes and dislikes. He must be more than a cow man and more than a mechanic. He must be both if he is to secure successful results with the mechanical milker. As a rule, however, failure is more often due to the fact that the operator lacks in ability as a cowman rather than in ability as a mechanic.—*Australian Farm and Home*.

TESTING SOIL FOR LIME.

To test soils for lime, get from a druggist a bottle of slips of blue litmus paper and a wooden lemon squeezer. At different points about the field take soil from a few inches below the surface. Put two lumps in the squeezer with one of the slips of litmus paper between, first having numbered the slips. Number the place in the field where the test is made to correspond with the slip. Grip the squeezer tightly while going to the next place to be tested, and then remove it. If the land is sour and wants lime the paper will have turned reddish. The paper, being damp, will tear easily, hence care must be taken in removing it. Put the test slips in a tin box or bottle, so that exposure to the air will not affect them. Having thus taken a trip around the farm one has a record easily made and of future value.

Happiness does not come to us as a result of having our own way. Only a will to do right can lead us to happiness and satisfaction.

H. LOUIS GALLIEN

(Late W. KINDER), CHEMIST AND DRUGGIST,
"NORTHERN PHARMACY,"
Phone 2028. NORTH-EAST VALLEY, DUNEDIN