

No; it is not necessary to give a drench when using pump. At this period the animal is generally comatose, and has lost the power of swallowing. There is great danger of the drench going down "the wrong way" and choking the animal straight away, or else setting up inflammation of the lungs. It often happens that animals recover from the milk-fever only to die from this cause. If a drench is given, it is best to give it a day or two prior to calving.

Symptoms vary in different cases. Generally the first sign is the animal hanging back in the bail, with the head drooping. She may be uneasy, whisking her tail, "padding" with her hind legs, or kicking at the belly. If the calf is with her she ceases to take notice of it. In some cases, where she can do it, the head is pressed against the wall or post, in a sleepy attitude. At other times there is excitement, bellowing, &c. She becomes unsteady in her gait, and either lies or falls down. She may rise again, but gradually goes down, and is unable to get up. This is the stage where attention is generally called to them. The animal may be found lying flat on her side, or more often on her breast, with her head turned round into the flank. Sensation is lost, and the front of the eyeball may be touched with the finger without any response. Tears run down the face, and saliva dribbles from the mouth, owing to loss of the power of swallowing. In a word, the cow is unconscious, or nearly so. The breathing is usually slower and deeper than normal, and is often stertorous in character. The temperature is usually below normal, and is often higher, as the term "milk-fever" would lead us to believe. Regarding the secretion of milk, this may stop suddenly or diminish gradually; at other times it does not appear to be interfered with. The above are the usual symptoms shown, varying in degree in different cases. The most useful sign from a diagnostic point of view is the loss of sensibility of the eye, and its gradual return is also your best guide in determining if recovery is taking place.

#### MISCELLANEOUS QUERIES.

R. C., Taneatua, Whakatane, writes,—

1. I would like to know what is the value of 100 gallons of both liquid and solid manure from pigs fed on skim-milk, and would you recommend using lime with it before carting out in the paddock? If so, what quantity to 100 gallons, what kind of lime, and when should it be mixed, whether as soon as emptied or just before it is carted out? I am getting a 100-gallon tank with a large tap for the purpose. What would you recommend for the cow-shed? Any remarks about the latter will be very acceptable.
2. Would storing mangels in heaps out in the paddocks without any covering do for one, two, or three weeks before carting to the cattle in the winter, or is it absolutely necessary to store them in a house or cave; and what effect would the iron have on the mangels through the frosty weather? Would old sacks prevent any harm to them?
3. Could you tell me the difference in value of mangels when fed without storing, and when stored, say, three months?
4. Is it advisable to graze down rye-corn or let it stool out? If so, at what height should it be grazed? I require the rye for early-spring feed for dairy cows.
5. Would you recommend using basic slag on a green crop to be ploughed in for manure, or after it is ploughed?
6. What is the best time to use kainit—before winter or in early spring—for grass land?

The Agricultural Chemist replies,—

1. Both the liquid and solid portions of the pig-manure are valuable, but no information is available as to the relative values.

The Fields and Experimental Farms Division replies,—

1. Lime should not be used. The tank described should be suitable. More even distribution would result if the liquid were received from the tank into a perforated trough.