

Cows in Summer.

The cows are out at pasture the whole time now, excepting at the milking hours, and are, or ought to be, yielding their utmost at the milk pail, and glutting the market with surplus milk. This is the time of the year when the animals should dispense with all extra feeding. Cows, however, have their own minds about matters, and when I stopped feeding mine they refused to come to the homestead morning and evening of their own accord to be milked, and, consequently, I have had to give them just a mouthful of cake to please them. Apart from the fact that the cows yield extra well at this time of the year—though the milk is likely to be poorer in quality—the rich lush grass is very laxative, and the best corrective of this is an allowance of common cotton cake. This material is more or less a cause of costiveness, on account of the excess of seed hull (or cortex) in it, and it is thus a valuable corrective, and goes well with strong grass—a fact pointed out long ago by the late Dr. Voelcker.

Very soon, however—too soon, indeed—the extra growth of grass will disappear, and we shall be confronted with bare, brown pastures, and a short supply of milk. Then will be found the value of the forage crops that should have been sown last autumn, or early in the spring, while at the time of writing, the maize crop is being planted for a succession to come on later, in August, September and October. In northern districts, or where there is a sufficiency of rainfall, there is not likely to be the deficiency of grass in summer and autumn we have to put up with in the South, and, therefore, not the same need for soiling with forage or feeding with artificial food; but even there a little of this has to be done to keep up the milk yield after the flush of spring is past.

There is another point that wants to be impressed on dairy farmers who are engaged in the new-milk trade. As the cows naturally give a large yield of milk at this time, we ought to have as few of them calving as possible, but have them coming in later on in the season, to help up the supply, and then be ready to rise in yield again when winter feeding starts. This is perfectly easy of attainment, by shutting up the bulls at the proper season. Before me, as I write, lies a circular issued to the members of the Eastern Counties Society requesting them to shut up their bulls during June, July, and the half of August, so that there may be no calvings in March, April and May, and thus reduce the glut of milk at the time when it is naturally most plentiful. The members of the above Society—of which the writer is one—have regularly done this sort of thing for years with the greatest benefit, though, of course, it does not wholly meet the trouble of surplus milk, and many individuals do not follow this lead. There is no doubt, however, that this is a move in the right direction, and dairy farmers all round would be wise to try it, more especially as the thing is very easily done, and there is very little trouble incurred.

A change of pasturage is good for cows, and for the pasture also, if it can be arranged. By this means the animals later on get a new start at fresh grass, while the old fields get a chance to show up some growth of clean leaf once again. The perpetual trampling about of the cattle defiles the herbage, more especially in dry, dusty weather, while even in wet weather it is dirtied, in spite of the washing by rain, and a change of fields helps this trouble. It is, of course, not easy to do this always, but in one way it can be, and that is to turn the animals onto the hay-fields as soon as these are cleared.

When the hot, blazing sun looks down in summer, our cows suffer greatly from the heat and the flies, and shade is exceedingly grateful to them. Trees about the pastures, and high, overhanging hedges are useful adjuncts on a cow-gang, and to them they will repair when the afternoon sun becomes too oppressive and the flies bite their hardest. Shelter in fields cannot very well be made if it does not exist already, for trees and hedges grow slowly, and sheds are not desirable. We can, however, put them indoors in the hottest part of the day, and it will pay to do so. In the hot, sultry weather, if the animals are tied up soon after mid-day, and then given their allowance of forage or cake, or meal, as the case may be, they will return grateful thanks at the pail for help given them in time of need. A cow always returns good treatment at a liberal rate of interest, and this system of management suits her admirably well.

It is a commonplace now to insist on plenty of good water in the pastures. A running stream is the best, but many of us have to put up with pond water. The main point is that it must be free from sewage taint, as there is little or no danger from ordinary water if free from this. If water is not plentiful, and fairly pure, on a dairy farm, both the quantity and quality of the milk will suffer, and the dairy farmer will find

that it pays him to go to some expense and trouble to get a satisfactory supply.

The production of an ample supply of good milk depends on many things, of which the above are a few, and the more of these we attend to and keep right, the more likely are we to succeed. —[Primrose McConnell, in Creamery Journal.]

Canadian Cheese Boxes.

The large dealers in Manchester, Eng., report that boxes from Canada are arriving in good condition, and that the weights are stencilled, and these are very desirable conditions, and a continuance thereof is hoped for. Considerable Cheshire cheese is at present offered, and realizes slightly higher prices for choicest than for new colonial cheese. Common Cheshire is selling at lower prices than colonial. The feeling of the trade is that prices will fluctuate very little during the summer months. Rain that was very much needed has fallen pretty generally throughout England, and the prospects promise well for an abundant harvest.

POULTRY.

Cause and Treatment of Gapes.

My chickens gape and wheeze as though they had a cold. They are from four to six weeks old, and have been fed barley meal scalded, and have been free to range all day. We gave the first chicken so afflicted, two drops of turpentine twice, and two half-teaspoonfuls of coal oil. It recovered, but the second chicken similarly treated died. Now two more are afflicted in the same way.

J. N. P.

Ans.—The chickens are likely suffering from gape worms, congestion of the lungs, pneumonia, or tuberculosis. Before the subscriber could be sure what the trouble is it would probably be necessary to hold a post-mortem examination. If the chickens are affected with gape worms, the windpipe will be found to be more or less covered with small worms, somewhat reddish in color. The closer these worms are together and the more there are in the windpipe the harder it is for the chicken to breathe. The chicken usually stands with its mouth open and gapes for breath. If the chickens have lung trouble, on examination the lungs will be found to be more or less covered with white spots; in some cases the lungs appear to be filled with air bubbles. In a few cases, but not very many, the windpipe appears to be coated with a yellowish substance; in many cases this is somewhat lumpy, and in others it is about the consistency of rich cream.

The lung troubles are usually due to over-crowding in the coop, and insufficient ventilation. These diseases affect brooder chicks much more than hen-hatched chickens, for the reason that in many instances when the chickens reach from four to six weeks of age, there is a tendency for the chickens to become overheated; or, in other words, crowd in the brooder, unless they are taken care of.

There are a great many treatments recommended for gapes, some of which are more or less satisfactory. Personally, I have had no experience with this trouble, but I have seen a great number of cases on the American side. The disease is an old one, but is not very common in Ontario; a few cases have been reported from Western Ontario. The disease usually makes its appearance in chickens from four to eight weeks, and rarely attacks birds over three to four months old. Where one has time to treat each chicken individually, perhaps one of the best treatments to be used by a farmer would be to strip a feather of all but some down at the end. The feather should be moistened in spirits of turpentine. This does not mean that the feather should be soaked, but simply moistened. After moistening the feather, open the chicken's mouth and put the feather down the windpipe. Be sure that the feather is down the windpipe and not down the throat. The operation causes the bird to sneeze, which in most cases will throw the worms from the throat. The turpentine is claimed by some to kill the worms, and by others that it simply makes them relax their hold on the lining of the windpipe. A very good thing as a preventive is to add a little camphor to the drinking water, giving no other water to drink. All that is required is sufficient camphor to flavor the water. Others recommend using a little spirits of camphor, rubbing the same on the outside of the throat.

There are quite a number of theories regarding the cause of gape-worm trouble. The general belief is that gape worms are due to filthy conditions and feeding in damp places. It is also believed that earthworms are the cause of the disease. It is known that where chickens are kept off the ground until they reach the age of eight weeks, there is little or no trouble with gapes. I would suggest that where people have had trouble with gape worms that the ground on which the affected birds have run be well limed and plowed, and that the next season all chickens be raised on new ground, care being taken to keep the coops clean, and move the coops to fresh ground each day, if possible, and also to feed young chicks off clean boards and not on the ground.

W. R. GRAHAM.

Ontario Agricultural College.

Fowls with Liver Trouble.

I have a disease in my hens which is doing a good deal of havoc. They first go lame, then get weak, and can hardly walk around; their heads, combs and wattles get a very dark red; they also have diarrhoea with it—sometimes the lameness is preceded by diarrhoea. The house has been thoroughly cleaned and fresh earth put in. We had gravel in for a time, then we took gravel out and put in clay. We thought the gravel damp, which was causing the trouble, but it made no difference. The disease is just as bad with the clay bottom.

S. T. M.

Durham Co., Ont.

Ans.—In all probability the chickens are affected with liver trouble, possibly due to over-feeding, particularly during the winter months, and the excessive usage of such feeds as corn and fat meat, with a lack of green feed and exercise. These conditions would have the effect of producing a few chickens with similar ailments to those mentioned in your letter. If the whole flock was affected as mentioned in the letter, or even 25%, I would certainly advise the correspondent to send one or two of the sick birds to the Bacteriological Laboratory here for examination. It is quite possible that these chickens may be affected with tuberculosis or enteritis, possibly both. My experience has led me to believe that it is a wise precaution where any birds are sick to have them examined in a laboratory, and sometimes the disease is quite different to what we might expect from outward appearances. Furthermore, if it is an epidemic one knows how to combat it. The fresh earth that was used in the house no doubt did good. I would suggest that all the sick birds be isolated, and be fed food such as bread and milk, wheat, and perhaps a little boiled rice. I also think that a dose of salts, perhaps every other day, to each fowl would be found beneficial. An ordinary dose for a chicken is ½ teaspoonful of dry salts. Simply open the bird's mouth and pour the salts down the best you can from a spoon.

I would suggest that the henhouse be whitewashed, using fresh lime and carbolic acid, or some similar disinfectant. Put this on while it is warm; also cover the floor of the henhouse with fresh slacked lime. This should give it a thorough cleaning.

If the chickens are not valuable—that is to say, if they are not worth from three to five dollars apiece—I would not entertain the idea of doctoring them at all. The doctoring of sick chickens has, in nearly all instances, been a losing speculation, and it is much better, under average conditions, to kill the chicken and bury it; or, better still, burn it. W. R. GRAHAM.

Ontario Agricultural College.

APIARY.

Let the Honey Get Ripe.

July and August are the months in which most of the honey is extracted in Ontario, and the more of this work that is left until August the better. There are several different methods of removing the honey from the hives and extracting it, and the correspondents of the publications devoted to the beekeeping industry generally have more or less to say in regard to the details of the different systems. But it makes no difference in the end whether a man takes the honey from the bees by means of bee escapes, smoking, shaking, brushing, kicking or jouncing; whether he carries it to his extracting house in his hands, on a wheelbarrow, a truck, a wagon, or a flying-machine; whether he uses his uncapping knife hot, cold, wet or dry, or in what particular kind of extractor he throws the honey from the combs. The resulting honey is practically the same in either case, provided care has been taken to have everything clean, and as it should be. The great and important point in the extracting operation is that the honey shall be ready to extract, and the bees have not finished their work on it until they seal it up in the combs. If extracted before it is sealed, it is practically impossible to keep it in good condition any length of time, and it is almost certain to turn sour and ferment in the course of a few months. When the consumer buys a can of this honey and finds it "off," he does not know what is the matter with it, and thinks it is adulterated, and doesn't buy any more for a while, perhaps not at all. Then the beekeeper wonders what is the matter with the honey market, and thinks things about the "mixers" in the cities. There is practically nothing to be gained in the way of quantity by this extracting "green," as it is called, and very much to be lost in the way of quality, as stated above; but still it is done on a large scale in many sections. Some people do it because they think they get more honey that way, and some because they don't know any better, and think it is the right way; but a great deal of it is due to impatience or excitement, or some similar disease which strikes the beekeeper, especially if he be young in the business. When the bees are fairly falling over themselves piling the honey away in the extracting combs, there comes an almost irresistible impulse to the beekeeper to get in a hurry to take the honey from the bees and pile it away in his honey house. If asked why he was doing it, it might bother him to answer. Nine times out of ten it is simply because he wants the honey where he can see it and watch it grow, and figure up how much money he will have when it is all sold at the top of the market. A whole lot of honey in a tank strikes far more forcibly on the sense of possession than the