

Founded 1866

ask your dog to do anything that you are not sure that he can do. Never punish him unless you have a hold of him, and always keep him beside you until all the excitement is gone. When he does anything well be sure you tell him so. Never speak roughly to him when you don't feel just in the humor. Many a fine dog is ruined by being petted sometimes when the humor suits, and, when it does not, gets kicked. I give the following incident just to show, that a dog does sometimes do a bit of thinking on his own "hook." Having occasion to be late from home at the beginning of this winter I heard the collie barking at something as I got near home. She usually meets me some distance away. This time I had the horse stable without her coming to welcome me. I went to see what was wrong, found the "Kraal" gate open and forty or fifty cattle trying to get at a stack of oat sheaves I had there for winter feed, and the collie keeping them away. She did not let them get a half dozen sheaves altogether. My man said he did not know what was the matter with the dog. She kept barking all night so he could not sleep. How did she know that they should not be there? Then note her staying at least five hours watching. I have sent her to hunt up lost halters on the pasture successfully. One day my watch dropped out of my pocket into the snow when spreading manure in the field. After getting home I missed the watch, I told the dog I had lost it and sent her back on the sleigh track. In a few minutes she was back with it. I could fill pages with what a collie can do on a farm, if trained fairly well and treated kindly. I have said nothing about training for sheep, as, in the space allowed, I could not do justice to the subject, and, unfortunately, sheep seem, as yet, few and far between on Manitoba farms.

Man.

E. McIVOR,

### How to Train a Dog for Farm

EDITOR FARMER'S ADVOCATE:

Training a dog takes time and patience, one dog, one trainer only. Breed is a matter of fancy. I have had good old English sheep dogs and good Scotch collies, and bad ones too, for that matter. There are three ways of training dogs to work. First by motions of the hand; second, by the whistle, third by the voice. The first is practiced when the dog has to go beyond the range of whistle and voice. The second is good and very interesting but the third is the most general. This has its drawbacks as you cannot make a dog understand Scotch that has been taught English and vice versa. That is why I say one dog, one trainer and one master.

Now in the selection of a young dog, I like one that has a good, width of forehead, which shows intelligence, inclined to be frolicsome and mischievous, and one that does not mind a little mild punishment for its tricks. Select one, if possible, when it is suckling on its mother, one that has chosen a hind teat as its share, as there is a greater chance of their being good drivers. Old experienced shepherds rarely pick a pup that suckles in front, as the chances are that it will be a header.

In training, the young dog should never be discouraged by severe punishment, should be taken to the stock by no one except the man training him.

Take him along—led by a cord—whenever you are taking the stock out, or fetching them into the barn, and take trouble to get behind and encourage him to bark. Say, "take them on," if he makes for the head give him a sharp check and teach him to keep behind. When you wish him to fetch them back, or turn them, go with him until you see he is quite as anxious as you are. Talk to him and tell him what you wish him to do and you will be surprised how eager he is to get to work and do it.

There is one very important thing in dogs, driving cattle or sheep. They should be taught to drive them steady or great damage can be done to in-calf cows or in-lamb ewes, so take care to teach the dog that. Keep him on the string until you think you have made an impression on him as to what you want him to do. If one has not the time and does not require the necessary patience, the next best thing is to send a young dog to a man who understands the work, who usually has a well broken old dog, couples the two together and then he is not so long in picking up his business, and when he has learned it he is very useful, but partly learned is useless and often a nuisance.

Man.

J. RICHARDSON.

### Teaching the Dog to Drive

EDITOR FARMER'S ADVOCATE:

In teaching a dog to drive cattle, begin when he is about one year old. By that time he is about over his playfulness and should know what "sicam" and "stop" mean. Take a twine string, about 200 feet long, and tie it to his collar. Take him to the pasture and send him after the cows. Let him keep at their heels, but never at their heads. If he attempts to go to the head give him a smart jerk. In this way, that is, by means of the string, you can also teach him to drive at a moderate pace. Most dogs drive milch cows too fast. When you want him to stop tell him so in a sharp clear voice, saying, "stop," and if he does not obey you at once pull on your string. Put him through this practice once or twice a day for a month and he will know as much about driving cows as you do. If a dog does not start off when bid, after you

jerk him, don't throw half your vocabulary at him, "whip a dog for doing wrong, but never scold him, remember their brain is small."

Now as to running out into the road and barking at teams, give him a good whipping every time he tries it. Make him stay at home, that's where he belongs. Do not even let him follow you to the field or he soon will be everybody's dog. This must all be done in such a way as not to make the dog frightened of you. Notice your dog whenever you come home or when you go away. It will keep him in better spirits. No animal has as sensitive a temperament as a dog, so let him know he is your friend as well as your slave.

Sask.

F. W.

### Some Hints on Training

EDITOR FARMER'S ADVOCATE:

In answer to your question of March 17th, how to train a dog to be a useful animal around the farm, I will give my system, as the dog I have now and his full brother, also trained by myself, are the best dogs I have seen in the country. My dog is just an ordinary collie, but both his parents are fair dogs. As soon as the pup is able to follow one, I take him with me wherever I go on the farm but never off it. I make him keep behind, a very small switch in your hand is a good teacher. When he has learned your call and minds when you speak to him you can try him on sheep or pigs, not on cattle till he has confidence in himself, as the cattle will be sure to kick him, then he will go for their heads. Take about thirty feet of binder cord, and tie one end to the collar, and hold the other in your hand. Tell him to drive them on. When he gets about five feet away from the sheep or pigs, shout "steady" and stop him with the cord. After a few practices he will stop as soon as you shout "steady." Then tell him to go before them, waving your hand at the same time and run with him a time or two till he begins to catch on. Then send him by himself. Always stop him with the cord when you shout "steady." Send him first one side of the sheep, and then the other, after you have taught him to go around them and to stop when you say steady. When he is on the far side of the flock tell him to bring them on, and you start to walk away. The sheep will turn and follow you and you tell the dog to stay behind. He will learn this quicker than anything else. You can go ahead and open gates, etc., and the dog will bring the sheep in. Never let him bite a sheep, but you can tell him to heel up pigs or cattle, but make him stop when you say steady. Always motion with your hand when you want him to do anything and he will go as far as he can see you. Never play with him or allow anyone else to. Never allow him to follow you to town or around the neighborhood where he will get acquainted with other dogs, but tell him to go home. I have sent my dog home ten miles when he had followed the buggy unbeknown to me. Of course you cannot teach him everything in a day, but with patience and a little common sense you will have a good dog when about ten months of age.

Man.

OLIVER BROWN.

Reporting on the quantities of grain, hay and roots on hand in Canada at the end of February, and the condition of the live stock in the country at that date, the Census and Statistics office, at Ottawa, has estimated the amount of wheat then in farmers' hands in the whole Dominion at 20.22 per cent. of last year's crops, which would be 22,747,000, out of a total of 112,434,000 bushels. Of oats, there were 43.62 per cent., being 109,222,000 out of 250,377,000 bushels. Of barley, 33.56 per cent., being 15,692,000, out of 46,762,000 bushels. Of buckwheat, 29.05 per cent., being 2,078,000 out of 7,153,000 bushels. Of potatoes 44.10 per cent., being 32,542,000 out of 73,790,000 bushels.

## FARM

Letters Upon Farming Operations Welcomed.

### Topics for Discussion

To afford an opportunity for the interchange of ideas, and to provide a place where information may be given and received, we will publish each week at the head of this department a list of topics, which our readers are invited to discuss. Opposite each topic is the date of publication of contributions on it, and readers are reminded that articles contributed on any of the subjects given, must be in our hands at least ten days earlier than the subject is scheduled for discussion in our columns.

For the best article received on each topic, we will award a first prize of Three Dollars, and for the second best Two Dollars, paying the latter sum for other contributions on the subject received and published in the same issue.

Articles should not exceed 500 words in length.

#### ORDER OF SUBJECTS

April 21.—What method of preparing the land, seeding and after care, have you used with best success in (a) the growing of red clover or alsike

(b) the growing of alfalfa. Prizes are offered for both A and B. What we want is the experience of those who have been successful in the growing of either the ordinary clovers or alfalfa.

April 28.—Tell how to prepare the land for a crop of roots, either turnips, mangolds or carrots; how the seed is sown, cultivation given and whatever practical suggestions you think necessary.

May 5.—What has been your experience in harvesting grain after it is up? Have you adopted it as a fixed practice? Tell why you do it, and give what you consider practical hints.

May 12.—What method do you follow in keeping cream in the best condition for delivery to a cream-gathering creamery?

### Prevention of Hail

A recent issue of the Literary Digest contains an interesting article on the prevention of hail, translated from *La Science Illustrée*. The writer first reminds us that hail is a local phenomenon of thunderstorms, rare in the tropics, unknown in the polar regions, and of greatest frequency in temperate zones, especially in hilly localities, where they follow valleys and avoid forests. He briefly states the various theories of its formation, from that of Volta, in which electrical attraction and repulsion played a part, to the one generally accepted at present, which assumes that the hailstones are sustained, during their formation, by a rotary air current. All these theories of hail, however, are of more interest to the meteorologist than to the farmer, who is most anxious to know how to protect himself against its effects. How can he do this? First, of course, there is insurance, and many agriculturists avail themselves of this; but there is now a method by which hail-storms may be actually prevented. Says *La Science Illustrée*:

The question of defense against hail was solved when it was proposed to combat it with artillery. Powder was first used in this way on the assumption that it would cause rain, and later, by M. Albert Stieger, with the idea that it would prevent the formation of hail.

This idea may seem absolutely original, but this is a great error. There is nothing new under the sun! The ancient Romans were acquainted with the phylloxera before us, and they used, like us, artificial clouds of smoke to protect their vines from nocturnal frosts. We will doubtless be told some day that they would also have known of the hail-protector mortars, only powder was not invented in their day. But although the Romans had not these mortars, it is plainly shown by ancient accounts that various farmers of the seventeenth century used the explosion of powder to prevent hail from falling on their fields. It was also believed in that day that thunder-storms could be driven off by firing guns and ringing bells.

These facts were completely unknown to M. Stieger, and of course do not detract from the credit due to him. In 1896 this proprietor of vineyards, the burgomaster of Windisch-Freistritz, having replanted part of his lands on the Schnitzberg, adopted the following plans to protect the young plants against hail-storms, to which this treeless region is now much exposed.

Along a line about 6 kilometers (3½ miles) and at elevated points, he set up six brass mortars weighing each about 80 kilogrammes (180 pounds); each mortar was about 3 centimeters (1½ inches) in diameter and was 50 centimeters (20 inches) long. M. Stieger organized a corps of volunteers composed of inhabitants of the neighborhood.

During the first experiment, black and threatening masses of clouds advanced from the neighboring mountains. The fire of the mortars began, and after several minutes the clouds stopped, dissipated, and dispersed without sending down hail or rain on the protected region. The experiment was repeated six times in the course of the summer, always with success. So in 1897 the number of stations was increased; there were thirty-three in that year and fifty-six in 1898 in the same region.

The effect of a violent disturbance of the air in preventing a hail-storm may be explained if we suppose that the superfusion of water plays a part in the formation of hail. The little drops would solidify separately on formation, and could not unite to form large hailstones. The phenomenon would thus be in some sort regularized. On account of the excellent effects obtained with hail-protecting mortars the farmers of Venetia and Piedmont have established associations of defense against hail.

It seems certain now that a mortar fitted with a conical mouthpiece can protect a circular space 500 to 700 meters (1,650 to 2,300 feet) in diameter. It is thus sufficient to space these novel pieces of artillery from 1 kilometer to 1½ kilometers apart. Experiments have been lately made at Monza, Italy, to determine the best form for the conical mouthpiece, its proper dimensions, and the charge of powder necessary to give a satisfactory result. They seemed to be quite conclusive.

Our southern cultivators of the vine, who suffer such injury yearly from devastating hail-storms, are beginning to be moved by these facts. During the discussion of the agricultural budget a question was put to the minister on the subject. He promised to encourage experiments, and these will take place during the course of next summer.

### Purpose Dog

not rear a collie on milk, given plenty in is easily settled, in in the original ous dog. I begin four months of age, to fetch and carry. t or glove, or any- throwing it a short back, at the same is very important for this purpose and prefer carrying it in f scent being always to play with when nake them careless. on daily for four or e the time to spare, when the pup does for him, throw it up old of the pup and ow it away. In a up.

s and fond of it, I n I get him a short glove and walk on ying: I lost. Let s few times. You ce at each succeed- and the game. So e is no obstacle. I the famed Wishaw h my pockets and back on my scent my saying a word, tions one would be l to sporting dogs view I take of it: al purpose one, and ar with that is so lie. I get mine to ither, equal if not g now to the most aining, I may say, e more or less satis- k it is quite neces- tage of his blood pect much success. nths of age is soon n cattle. I've had they started work. a bunch of cattle ives him a better One good way of g cattle along the very often starts to ie first lesson a dog the cattle. Never st but to go clear making it a point ou must have him do this you must words and signals same word for the e to short, sharp lesirable habit of

a well bred collie e them away. The he cattle towards get in front of the after me. Then behind, checking ont. With some ured of him. In out the stock being l, and, by waving g to the right, and when the dog gets as to go altogether o miles across the ance without him

e space at my dis- be useful. Never