

Carbon Bisulphide for Ground-hogs.

Editor "The Farmer's Advocate":

Having used carbon bisulphide for getting rid of some of these pests, a few lines on the method of using and my experience may be of use to your many appreciative readers.

This liquid can be purchased at any druggist's at about 5 cents an ounce—cheaper in large quantities, and an ounce is quite sufficient for one hole or nest. I have reason to believe there is quite a variation in the strength or quality of the fluid, as some has a much stronger smell than other samples, and, of course, the better the quality, the less need be used for the desired effect.

My method has been to spot out the holes which I knew were habited, and then, about sundown, with bottle and bits of old woollen rags or waste of any kind, go the round and doctor each one. Roll up a little piece of rag about the size of a hen's egg, not too tight, and saturate this from the bottle, pouring on until the rag has all it will hold. Then reach down the hole as far as you can and deposit it there, after which cover up the entrance with sods or loose earth, and tramp solid, being careful not to allow the earth to roll down and cover up the rag, else this might stop the volatilization of the liquid into the deadly gas which suffocates the animal. This gas is heavier than air, so penetrates to the bottom of the hole, and kills all living things. Covering the hole is probably unnecessary, as the gas, being heavier than air, would go down and exclude the air; but when you cover the end of the hole, or holes, as the case may be, you can see, if you go back, whether the ground-hog has dug out or not. If not so, in a day or two, you may conclude he has been despatched.

This method is much ahead of traps or shooting, as it takes very little time, and is quite inexpensive. When you have administered the dose and covered the hole, the ground-hog is dead, and buried in the grave he dug himself. A. L. C. Oxford Co., Ont.

Split-log Drag in Michigan.

It is the opinion of some good farmers of Michigan, says a correspondent in that State, that the split-log drag is almost, if not quite, as effective in keeping roads in good condition as the very much more expensive road scrapers. At that he has greatly understated its value, for if the farmers of Michigan have not found that it is several times as valuable as the grader for maintaining earth roads, they have fallen far short of learning its real value. The use of the drag, says the Michigan writer, is not so general as it ought to be, but in districts where it is used the improvement is plainly noticeable. The highway, instead of being in a rutty condition, with pools of water after every rain, is changed into an evenly-graded, smooth road, over which it is a pleasure to travel. Judging from Canadian experience, this is exactly what might be expected.

THE DAIRY.

Making Hard Milkers Easy.

One of the trials of the dairy stable or yard is the presence in the herd of hard milkers, which waste time, weary muscles, and dishearten beginners. Jas. Weir, an East Middlesex, Ont., cheese-factory patron, always on the alert for improvements in practice, has made a couple of hard milkers easy by a very simple method, which he passes on to other readers of "The Farmer's Advocate" who may be similarly troubled. He tried it first on an old cow that for years had been a "tough one" to milk, and then on a valuable heifer that he was inclined to part with for the same reason. The trouble he found just at the orifice of the teat, the hole being so small as to let through only a very fine stream of milk. The problem was how to make it larger, without causing some other injury. Grasping the teat firmly with one hand, he pressed the point of a sharp, small penknife blade into the opening, making a slight incision quickly in one side. Often there are just two teats to treat, as the fore pair are usually hardest to milk. He found at once that the stream of milk flowed larger and more easily. Lest there might be leakage at first, or the slit healing up close again, he made a smooth, little pin of wood, with a shoulder, and, after putting on a few drops of some healing oil, he pressed it up into the hole, leaving it there till next milking. The cow is regularly milked, and in about a week the incision was nicely healed, and no trouble whatever has resulted. Mr. Weir does not purpose tugging at any more hard milkers, when so simple a remedy is at hand.

The Irish Butter Trade.

A Departmental Committee has been appointed to inquire into the various trade names applied to different grades of butter, and, if possible, to devise measures to prevent loss or injury to the Irish butter trade from the use of false trade descriptions. From market reports, we know that choice Irish butter ranks very high in the English markets, being quoted higher than either United States or Canadian creamery, and second only to choicest Finnish, Swedish and Danish, which are classed as one.

This committee held its first meeting in Dublin lately, and took evidence from several important witnesses. It appears from the statements of these men that inferior butters of foreign make are often sold as genuine Irish goods, the seller thus securing a higher price and profit, and at the same time the reputation of the Irish product is seriously injured. Much the same kind of game was charged against American shippers of cheese in the early years of the cheese business. It was suspected that inferior American cheese was by them branded Canadian, while the choicest grades only of both American and Canadian makes were sold as of American manufacture. It is to be hoped that the Irish committee may be able to devise some means to render impossible the evils complained of in their case.

The committee aims to have definite descriptions of the various classes of Irish butter offered for sale in Britain, and a distinctive name for each class, so that the buyer may have a reasonable assurance that he is getting what he pays for. At present, as mentioned by one witness, there are too many names used, the inference being that some of them were given for fraudulent purposes.

Whatever the cause, the serious fact is that the Irish butter trade, according to figures submitted by another witness, has declined greatly in the last twenty-five years, and it is hoped that the efforts of the committee to improve trade conditions in the Green Isle may result in some real advance being made.

Reply to Mr. Porter.

We trust no one considered that the publication of Mr. Porter's communication, headed "Quality of Milk, Butter and Cheese" (issue June 17th), signified concurrence with the views expressed. Correspondents must needs be granted some degree of latitude in the expression of opinions, and merely because a letter appears in "The Farmer's Advocate," is no guarantee that we endorse or approve everything contained therein. We stand by editorial utterances only.

In the present instance, Mr. Porter, while raising two or three points worthy of attention, contrived to weave into his article some erroneous statements and implications of fact, together with quite a number of opinions which do not square with the facts established by scientific dairy investigation.

By way of correction, we submit the following interview with a well-known, well-informed, and scientifically-trained dairy authority in close touch with the commercial end of the dairy business. The expert in question does not wish his name to appear, but, to preclude a possible suspicion, we may explain that it is not Prof. Dean.

"First of all, Mr. Porter expresses the opinion that one cause for the increasing amount of poor-quality butter and cheese is the substitution by patrons of low-testing cows for cows that give less milk but testing higher, hence of a better quality and flavor. Now, no one wants to advocate the adoption of low-testing cows, but the fact of the matter is the substitution of low-testing cows has no effect on the commercial value of creamery butter, nor does it necessarily affect the quantity made. A cow giving 40 pounds of milk testing 3 per cent. fat would yield to within, say, half an ounce as much commercial butter as a cow giving 20 pounds of milk testing 6 per cent. (losses in the buttermilk being the same in each case). The half ounce referred to is an allowance for the slightly greater residue of fat left in the larger quantity of skim milk from the 40-pound cow. And the fact that the milk tests higher has nothing directly to do with the quality of the butter. While it may be true that cows of the Channel Island breeds give milk making a rather firmer and possibly a naturally better-colored dairy butter, it is not established that this is because of its higher fat content, but it is probably due to the greater firmness of its fat globules. It is likely a case of coincidence, not cause and effect. Then, again, however it may be in a home dairy, under creamery conditions, where all the milk or cream from different herds is mixed together, the effect of a few herds of Jerseys or other cows would make no appreciable difference in the quality of the output.

"Without specifically saying so, Mr. Porter leaves the impression, unintentionally, no doubt, that Mr. Medd discussed the question of milk supply in relation to cheese, as well as butter-

making. Mr. Medd did not say a word about effect of milk on cheesemaking, nor have any of your recent correspondents, so far as I remember.

"Mr. Porter undertakes to absolve Canadian women from responsibility for any carelessness in care of separators, utensils, etc., claiming that our Canadian women are as cleanly as any under the sun. This is good stage talk. It may or may not be true, but is not saying overmuch even if it were. The fact that Canadian women—and men, too, for that matter—were as cleanly as any in the world, would not by any means argue that they were bacteriologically clean, or that all of them took as good care of their dairy utensils as they should, for we know that many do not. The number of separators kept in the barn, and washed only once a day, as the dairy instructors report, gives food for thought. There may also be an occasional creamery that is not bacteriologically clean.

"Then, Mr. Porter betrays a curious lack of information concerning the subject he is writing about, when he suggests (referring to the creameries) that there may be fault in their system of paying for milk, paying by quantity of milk, not by quality. Now, there is not a creamery in Western Ontario, and none that I know of anywhere else, that pays by quantity of milk. They all, without exception, pay according to the amount of fat. Only a small percentage of the cheese factories do so, however, and in this he is to a certain extent justified in his claim, though the true basis of payment for milk at cheese factories would not be strictly according to fat content, but say according to per cent. of fat, plus two, allowing two to represent the cheesemaking value of the casein.

"At the conclusion of the second paragraph, we are ambiguously told that where the mistake lies is that farmers, to get the quantity, are displacing the old, high-testing Canadian cows with the Holstein, this being followed with the inference that, no doubt, the old blood is fast dying out by the introduction of the beef breeds. Are we to conclude that it is the Holstein or the beef breeds that are coming into favor?

"My contention is," says Mr. Porter, "that the higher-testing milk is, the more cream it makes, the firmer cream it makes, hence the better texture, quality and flavor on the same feed, for no doubt feed has something to do with quality, as well as quantity." I am at a loss to know just what he means by some of these assertions. Nobody will dispute that a hundred pounds of rich milk will make more butter than a hundred pounds of thin milk, but it does not follow that a patron with a herd of Jerseys will send more cream or richer cream than a patron with a herd of Holsteins. The richness or quantity of the cream from a given standard of milk depends upon the adjustment of the separator. The idea that rich milk gives a firmer cream is inaccurate. What he meant was a firmer butter-fat, and even this is not absolutely true, although, as explained above, the two breeds that are noted for giving rich milk, are also, as it happens, noted for giving milk containing large, firm globules of fat, which churns readily into a firm butter. Mr. Porter's assumption in this matter is too sweeping.

"That feed permanently affects the richness of the milk to any noticeable degree has been long since disproven by experiment. It does, however, influence the color and flavor, as well as the quantity of milk, and therefore the total amount of fat.

"Bear in mind, too, that firmness of fat is not a very important factor in the production of a firm, marketable article of creamery butter. The firmness of the body of butter depends to a great extent upon how it is churned. A high temperature for churning and washing tends to produce a soft, weak-bodied butter. With a thin cream—which, I repeat, you may get from any breed, depending upon the adjustment of the separator—the creameryman has to churn at a high temperature. For instance, a cream testing 20 per cent. fat might require to be churned at 60 or 65 degrees, producing a weak, soft body, whereas a cream testing 30 or 35 per cent. might be churned in the same length of time, at 50 or 52 degrees, with the result a much firmer body and less loss of fat in the buttermilk.

"From a creameryman's standpoint, Mr. Porter very much overestimates the advantage of Jersey milk. I could take the butter made from a creamery supplied with Holstein or Ayrshire cows, and that from one supplied with Jerseys or Guernseys, put the butter into cold-storage, bring in any butter-buyer, let him put a trier in each sample, and he will pay as much for the one as the other, assuming, of course, that each sample is equally well made.

"I shall leave Mr. Medd to explain whether he meant to imply that the quality of the butter depended on the selection of patrons' cows. My understanding of his concluding paragraphs was that selection of cows was needed to insure a more abundant supply of milk or cream, the quality of the butter depending upon a more careful study of production and manufacture."