

TRANSPORTATION POETRY BOILS OVER.

The "fog" has shifted. No doubt the recent cold spell has come in contact with the "hot air" that usually hovers along the banks of the Ottawa, and produced a greater fog than has been in Bytown. The fog whistle is now blowing so vigorously that the sounds from the sawmills and from Chaudiere Falls are drowned by the noise of the fog-horn. We also, apparently, see less clearly on account of the mist enveloping the subject of refrigerator cars for transportation of butter. May we very briefly try to dispel some of this fog?

FOG NO. 1.

So far as we know, there were no unnecessary delays in the transportation of the butter referred to, and the butter was sold promptly on arrival in London, after inspection, and was not held for a rise in price.

FOG NO. 2.

We might have filled a whole page of "The Farmer's Advocate" with our experiences in getting some accurate information about refrigerator cars, but we did not wish to take up valuable space, especially as we had, at the request of one of the commissioners, laid the details of our observations before the Railway Commission more than two months ago. Doubtless, when that busy, useful but overworked body reaches the question of the refrigerator-car service, all the facts in the case will be made public. We regret that we had not more information to give the Commission, but no one realizes the amount of time required to get facts of this nature until he has tried it. The accuracy of certain statements of ours having been challenged, we tried in our poor way to give certain facts we had observed. These facts are not disputed, but, instead, we are treated to personal diatribe. We commend to the consideration of our friend, Plato's saying, "No man should be angry at the truth."

FOG NO. 3.

The reason we did not report the matter to the Department, where such information properly belongs, is that, on a previous occasion, when we did so, our communication received very scant courtesy, and we did not care to repeat the experience.

As other matters now press for our attention, we have only this to say in conclusion: We could have forgiven all else, and would have been prepared to fall on our brother's neck and give him the kiss of reconciliation, had he not rudely torn away the pseudonym which covered us, thus exposing our nakedness and all our deformities, weaknesses and many shortcomings, to the cruel stare of the cold world. We can now realize to a very slight extent what must have been the feelings of "George Eliot" when the prying world insisted on knowing the real person who wrote Adam Bede, Felix Holt, etc., and she was exposed to their curious gaze as merely a woman enjoying the very plain name of Mary Ann Evans. To a person of sensitive feelings, this is the most unkind cut of all. The shock of exposure is very great to a young, ambitious writer struggling for fame and fortune with a merciless world. All else, O Chief, might have been forgiven, had you spared us this great humiliation.

Said the Chief of 'Frigeration
To the Chief of Marketation,
Who disturbs our meditation
O'er the produce of a nation?

Shall our wigwag by the sawmill
Be o'erthrown by any haw-hill?
Does he think that you or I will
Give a "tinker" for his ice-pill?

Will his little glass thermometer
Raise or lower our barometer,
Or the hot-air anemometer
Affect the readings of our lactometer?

Shall a poor, despised professor
Be the prime and sole possessor
Of ice-car knowledge? I say, yes, sir,
In future you'll be the aggressor.

Said the Chief of Marketation
To the Chief of 'Frigeration,
In any coming agitation
I shall try to help the nation.

When the cars are running right,
I shall keep me out of sight;
But in case of need light,
I'll be there both day and night.

H. H. D.

LINSEED OIL FOR CAKED UDDER.

Editor "The Farmer's Advocate":

I have had good success in using raw linseed oil for caked udders in dairy cows. I thank you very much for your prompt answer to my question re the paper milk bottles. G. H. T.
Bruce Co., Ont.

UNSATISFACTORY ACTION OF CHEESE BUYERS.

Editor "The Farmer's Advocate":

In reading your valuable journal, as I do every week, I have been very much surprised not to see someone taking up a great wrong under which the dairy farmer is at the present time working, which is the very unsatisfactory way cheese buyers buy cheese. For instance, our salesman goes to the London Cheese Board and sells our cheese, and comes home well satisfied with his day's work. In the meanwhile, during the next week, or between the sale and the shipping date, cheese drops in price, and Mr. Buyer refuses to take the cheese. Now comes the funny part: If cheese goes up in price, and we want the raise, does Mr. Buyer give it to us? Oh, no! "I bought your cheese at such a price, and I want it," and we have to let him have it. There is an old saying, "It is a poor rule that don't work both ways." To say the least, it is a most unbusinesslike transaction. I would like very much to hear what others think of this matter, and how to right it. G. A. DISBROWE.
Elgin Co., Ont.

SALTPETRE FOR TURNIP FLAVOR.

A Western Ontario cheesemaker tells us that, in his factory there has been less trouble this season with tainted milk than usual, and he says he had no trouble with the turnip-top nuisance, though some turnips had been fed. Where done in moderation after milking, little or no trouble resulted. If the odor be apparent, he dissolves a teaspoonful of saltpetre in water and thoroughly stirs it in the vat of milk before applying heat, thus working off the turnip flavor.

GARDEN & ORCHARD.

HORTICULTURAL PROGRESS.

Prepared for "The Farmer's Advocate" by W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa.

NOVA SCOTIA FRUIT-GROWERS' ANNUAL REPORT.

The 1906 report of the Nova Scotia Fruit-growers' Association shows careful editing, and is a credit to the Association and the Secretary, Mr. S. C. Parker, Berwick, N. S. It contains a number of useful papers, among these being the President's address, "Orchard Management," "Spraying," "What Varieties Shall we Plant?" "Packages and Packing," "Forest Preservation a Factor in Fruit Packages."

There is enough information in this report to prevent beginners in fruit-growing making many mistakes and losing many dollars. Even experienced fruit-growers will get suggestions from reading it.

MISCIBLE OILS FOR SAN JOSE SCALE.

The lime-and-sulphur mixture is now the standard remedy in Canada for San Jose scale, but, owing to its caustic character, which makes it disagreeable to use, and the length of time required to make it, fruit-growers would be much pleased if another spray just as effective could be found which would be pleasanter to handle, and could be more quickly made. Several experiment stations have been working for some time with this end in view. Some of the most promising new sprays are the miscible oils (oil preparations which form emulsions when mixed with water), and it is of these that Bulletin 79 of the Delaware Station treats. The bulletin is in two parts, one by C. L. Penny, on "Homemade Miscible Oils," the other by C. O. Houghton, on "Orchard Tests of Miscible Oil."

Past experience has proved that kerosene emulsion is not sufficiently effective to destroy the San Jose scale, unless the kerosene used is in a very concentrated condition, and the evaporation is so rapid that the full effectiveness of the kerosene is not obtained. On the other hand, the heavier oils, such as paraffine oil, which are of a more viscous and gummy nature than kerosene, are effective in killing the scale, but frequently injure the trees when applied by themselves. The oils in the experiments reported on in this bulletin were emulsified by using a "soap solution" for this purpose; and, as this soap solution is an important part of the oil emulsion, the description of how it is made is given in full below:

The Soap Solution.—Formula No. 28: Menhaden oil (fish oil), 10 gallons; carbolic acid, 8 gallons; caustic potash, 15 pounds. Heat to 290 degrees or 300 degrees F., then add at once, while still hot, kerosene, 14 gallons; water, 22 gallons. Cost, after addition of kerosene and water, 15.7 cents per gallon.

The caution is given here that this mixture is inflammable when hot, and disagreeable fumes are given off from the carbolic acid. Hence, for comfort, as well as safety, the operation should be conducted out of doors, or at least with good ventilation and freedom from fire risk. A suitable vessel for the boiling is a deep iron kettle,

such as is used for heating water. Of course, its size should depend on the amount of soap to be made. A capacity of 25 to 50 gallons is usually suitable, though generally the larger the better, since it should not be much over half full to provide against foaming.

The kettle should be covered by boards or otherwise to prevent the mixture from taking fire. A thermometer, passing through a hole in the cover, affords the readiest means of determining the progress, and finally the end of the operation. When the temperature approaches 255 degrees or 260 degrees F., foaming begins, and continues until the temperature approaches 270 degrees F. During the most active foaming, the fire must be checked somewhat by withdrawing a part of it, or otherwise, as by throwing sand on it. After the foaming partially subsides, the fire is increased, until the temperature of 300 degrees F. is reached, when the fire is withdrawn and the soap made. Overheating a few degrees—10, or even 20 degrees—does not spoil the soap, but it should be avoided, as it increases the fire risk. At the beginning, it is best to stir the mixture with a stick or an iron rod, to keep the potash from caking on the bottom of the kettle, but it is unnecessary to continue this after the mixture is warm. A small wood fire is sufficient to boil a kettleful. The operation may last from half an hour to an hour. After the fire is removed, the requisite amount of kerosene and water are added to the hot soap mixture very conveniently in an open barrel to which the soap has been transferred, the kerosene always first, since otherwise there is danger of an explosion from pouring water on the hot oil. The whole is then thoroughly mixed by stirring. It should form a uniform liquid, very slightly ropy, and without any separation, on standing, into layers; fluid enough at the freezing temperature to pour readily, and a portion mixed with a large volume of water, five or ten times its own volume, should dissolve to a uniform liquid, perhaps a little turbid, but without any free oil. The soap thus made, seems to suffer no deterioration from age or exposure to the air. A sample, kept for eight or nine months in an open barrel, was found unimpaired and unchanged. It does not separate into parts on standing, and hence, when once made, it requires no further mixing.

In place of potash, it is possible to use caustic soda, but it hardly seems to be advisable. The reaction with the soda is less active than with the potash, and frequently a residue of soda is left unacted on, so that the proportion of alkali is somewhat uncertain. While the soda is cheaper, and often easier to obtain, the potash seems to be preferable. If, however, soda is used, the weight should be about the same as given for the potash, and care should be taken that the soda is all dissolved. But soda is not recommended. All of our experiments have been with the potash soap, and at present, at least, we cannot advise the use of any other.

The object in adding the kerosene and water to the soap is partly to keep the mixture fluid. The soap proper—that is, the mixture before the water and kerosene are added—is quite solid when cold, and hence, to dissolve it in the various oils would require either heat or a long time, both requirements quite inconvenient. But, in a liquid form it mixes with the oils readily. There is the further advantage that, out of a number of proportions tried, the one given seems to make the best emulsions. It will be seen that of the final mixture, hereafter to be called the "soap solution," only one-third is soap and carbolic acid, the remainder being kerosene and water. This, of course, requires larger containers. If it is preferred, the kerosene and water may be omitted, and the soap and carbolic mixture may be prepared in the form of solid bricks, to be melted when they are mixed with the oils. This would save much in the cost of packages, but would be far less convenient, as heat would be required, whereas the "soap solution" mixes readily with oils in the cold.

After the making up of the "soap solution" just described, all subsequent operations are carried on in the cold, with no other appliances than barrels or other tanks for mixing the liquids. Herein is the chief difference between the miscible oils and the lime-and-sulphur wash, as to the work required in preparing them. For every gallon boiled to make a miscible oil, from 50 to 200 gallons of the lime-and-sulphur wash must be boiled, to give the same amount of spray material in each case.

Once this soap solution is made, the emulsion can be made without further heating, merely by mixing the soap solution in the proper proportions with the oil and water, by agitating with a dasher until the mass is of a uniform consistency, or emulsified. Different oils require different quantities of water to make good emulsions. In making the miscible-oil emulsions, no special order is necessary in adding the ingredients, unless it is necessary to add water, when it should be put in last, adding it until there is a satisfactory emulsion.

Twenty-three different formulas are given in