

with 90 cents from the same section to England *via* Halifax. It is even hinted that when account sales are received the freight charge is not 90 cents per barrel, as advertised, but \$1 per barrel.

According to this the Nova Scotians have a real grievance, and it is all the more aggravating because the steamers sailing from Halifax are heavily subsidized by the Dominion Government, while those from Boston get no subsidy whatever. It is claimed that there are more steamers running from Boston, and, therefore more competition from that port. But surely a substantial subsidy from the Dominion Government should counterbalance this competition, and keep freight rates from Halifax as low as those from Boston. Some of our Nova Scotia exchanges contend if the subsidy does not do this it does little or no good, and had better be withdrawn.

Another grievance that the Eastern fruit men have is that of improper handling and want of ventilation, etc., on board the steamer. The steamship companies collect the same freight per barrel whether the fruit is injured or not in transit. An effort is now being made to induce the Government to compel the steamship companies to assume part of the risk of shipping by withholding the subsidy for any trip in which the fruit is landed in a bad condition. It is also hoped by this agitation to secure cheaper freight rates for next season. To sum up, the fruit growers of Nova Scotia are demanding (1) cheaper freight rates; (2) Government inspection of subsidized boats, the subsidy for each trip to depend upon the condition in which the fruit is landed; (3) cold storage facilities to assist in developing trade in perishable food products between that province and Great Britain.

CORRESPONDENCE

South American Competition in the Cattle Trade

To the Editor of FARMING:

I observe an article in your last issue, remarking on the rapid increase of the cattle trade of Argentina as compared with that from Canada, attributing in a great measure this result to the large importation of pedigreed stock by the former. I noticed in a previous issue of your journal that the High Commissioner (Lord Strathcona) seems to be of the same opinion, quite ignoring the real cause of the trouble, viz.: the difference in the monetary condition of the two countries. Argentina does business on silver basis and Canada on a gold basis; consequently, we have to pay wages, taxes and all accrued indebtedness in gold, and fifty per cent. premium as compared with similar disbursements in silver standard countries, consequently they can afford to so seriously undersell both in cattle and grain that there is no profit or encouragement to compete with them.

F. C. SIBBALD.

Sutton West, Dec. 10th, 1898.

Soft Bacon

Notes from Professor Day on some Experiments at the Ontario Agricultural College, Guelph

To the Editor of FARMING:

SIR,—As Canadian packers have recently had a great deal of trouble with what is known as "soft bacon," perhaps a few notes on the subject may prove of interest to the many farmers who read your valuable paper. One of our leading packing houses makes the statement that, during the months of May, June, and a part of July of the present year, the number of soft sides ranged from 20 to 40 per cent of the whole. This means that Canada placed upon the English market this year a large quantity of inferior bacon; and though this bacon was not misrepresented, but was sold strictly upon its merits, at the same time it was Canadian bacon, and tended to bring discredit upon

Canadian bacon as a whole. It requires no argument to convince any intelligent man that the condition of affairs just described means an ultimate loss to the farmer, because, when our packers meet with losses of this kind, their only remedy is to pay lower prices. It is therefore a matter of great importance, not only to the packer, but more especially to the farmer, that less soft bacon should be placed upon the market; and the problem of how to produce firm bacon should be carefully studied by every man who has a pig to sell.

Soft bacon does not mean fat bacon. It means a soft condition of the fat, which develops while the bacon is in the salt, and reduces the value of a side according to its degree. An absolutely soft side is comparatively worthless, and between this condition and firmness there are all shades and degrees of tenderness. Sometimes softness is noticeable before the bacon is put into the salt, but apparently firm sides frequently come out of the salt decidedly tender and soft.

Various speculations have been indulged in regarding the cause of softness. Corn, clover and lack of exercise are perhaps the chief things which have been blamed, but there is considerable diversity of opinion regarding the matter. For some months past, experiments have been in progress at the Ontario Agricultural College to ascertain, if possible, some of the causes of softness, and to study methods of producing firm bacon. In these experiments the hogs are shipped directly to the factory, slaughtered, and the different groups packed separately in salt. When the bacon comes out of the salt it is carefully examined by experts, so that there can be no mistake as to its firmness or softness. Our investigations are by no means complete, but some interesting results have been obtained. Full details of the experiments will be found in the College Report of 1898; but the following are some of the principal points brought out by the work up to date:

1. Though corn has been commonly blamed for producing soft bacon, it apparently has no evil effects when used for finishing hogs that have had plenty of exercise until they reach 100 pounds' live weight.
2. Neither does corn appear to cause softness when used for finishing hogs that have had no exercise, but have been fed skim-milk with a mixed grain ration until they reach 100 pounds' live weight.
3. What has been said of corn may also apply to rape, when a two-thirds meal ration is fed with it.
4. Hogs confined in pens and fed wheat middlings during their early growth, and peas, barley and shorts during the finishing period (without either skim-milk or whey), have a marked tendency to softness of fat.
5. Hogs given plenty of exercise, and fed as just described, produce firmer bacon than those confined in pens and fed the same ration.
6. The evil effects arising from lack of exercise can be overcome by the judicious feeding of whey or skim-milk with the meal ration. From two to three pounds of whey or skim-milk to a pound of meal will be satisfactory.
7. Whey and skim-milk appear to have a greater influence than exercise in producing firm bacon.
8. Unthrifty hogs are more likely to produce soft bacon than growthy, well-fed hogs.

The influence of whey and skim-milk in these experiments was especially marked, not only in making rapid and economical gains, but also in producing a fine quality of bacon, in spite of lack of exercise. While corn produced firm bacon when used for finishing well-grown hogs, it must not be assumed that it will not cause softness when used under other conditions. Its influence on younger animals has yet to be tested. In Danish experiments corn was found to be decidedly injurious to firmness when fed to very young animals.

It is to be hoped that feeders of hogs will carefully study this question of producing firm bacon, for it is a matter of vital importance if we are to retain our profitable English trade.

Yours, etc.,
G. E. DAY
Ontario Agricultural College, Guelph, Dec. 14th, 1898.