

# The Farmer's Advocate

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### EDITORIAL.

#### A YEAR OF TEST.

Nineteen-seven was a year of test. It knocked the bottom out of shaky securities; squeezed some of the juice from watered stocks; weeded out a number of ill-conceived and injudiciously-managed enterprises, and helped to bring high finance down within hailing distance of a sound economic basis. In the process, good businesses have suffered to a certain extent, some more than others, depending somewhat on the nature of their commodities and the field of their operations. Articles which consumers are disposed to dispense with in a pinch, naturally do not trade briskly in a season when work is slack, profits contracted and industry disturbed. Again, some regions are harder hit than others. The much-discussed financial stringency was more acute in Western than in Eastern Canada, and firms catering to the former market have naturally experienced more difficulty with their collections. Making due allowance, therefore, for these and other variations in the state of affairs, it is safe to say, in a general way, that business enterprises that were solidly established in good centers, catering to a real demand, and conducted along sane business principles, have weathered the financial storm and piloted past the rocks of disaster with few casualties and very few wrecks. Some will experience diminished profits, and some have merely kept things going during the slack season, but others will actually have to their credit increased earnings.

On the other hand, enterprises rashly conceived, imprudently managed, and depending on visionary hopes of an uncertain demand, though possibly they have enjoyed a semblance of prosperity in the halcyon years, have, during the test year, been forced into liquidation, amalgamation, and all sorts of expedients in order to keep eyes, nose and ears above the water-level. On the whole, it is well that such periods come occasionally to try out financial concerns and starve sickly plants out of the field of legitimate business. It is a hard lesson for the victims, but the laws of supply and demand, and the survival of the fittest, are inexorable, and rapid extinction is better than lingering death.

Meanwhile, it is gratifying to the publishers of "The Farmer's Advocate" to find that the financial year of 1907-8 promises to prove the banner year in the history of the paper—better even than the previous banner year of 1906-7. Circulation returns are keeping up splendidly, and are particularly satisfactory during the month of March, having, up to date of writing, exceeded by 20 per cent. those for the corresponding portion of March, 1907. We attribute these results to the fact that the success of "The Farmer's Advocate" is built up on the solid basis of merit. It gives value many times over for every dollar received, and the agricultural public, recognizing this fact, are more liberal in their patronage year by year.

While highly pleased with the showing made, we appeal to our subscribers to continue yet more vigorously their canvass for new names, thereby introducing more and more farmers into the domain of advanced agricultural science and practice, at the same time enabling us to still further excel, enlarging the size, increasing the number of select illustrations, and improving the quality of the reading matter as fast as resources permit. We feel sure that our readers understand, from our record, that, in helping us, they are helping themselves. "Give and it shall be given unto you," is a motto we endeavor to apply both ways. We believe "The Farmer's Advocate" has always been a credit to agricultural

journalism. It is our ambition to make it a still greater success. By your help we shall do it.

#### THE WHEY-BUTTER QUESTION.

There has been considerable discussion during the past year in regard to the making of butter from fat obtained by skimming the whey at cheese factories. This whey always contains a small percentage of butter-fat, varying in quantity, according to the condition of the milk received and the skill of the cheesemaker. In the average factory it would probably run .25 to .3 per cent., or about one-twelfth to a thirteenth of the amount of fat originally contained in the milk. The idea of running this whey through a cream separator, recovering the fat, and making it into butter is not new. It has been tried long ago at the Dairy Schools and elsewhere, but, as Prof. Dean brings out, the results were never very satisfactory. The butter, though quite fair when made, lacked grain, body and keeping quality. It was not of such a grade that it could be safely sold to the regular trade. If this were the case, what would happen were this butter to be manufactured extensively for the export trade, or even for domestic consumption? In all probability a law would have to be enacted compelling the special branding of whey butter, and possibly prohibiting its export.

Assuming that a satisfactory market could be found, what would be the profits of making whey butter? These would depend. A large, combined butter and cheese factory might skim the whey and make the butter up at a profit, but in a small factory, not already equipped with butter-making machinery, it is very doubtful, indeed, whether there would be anything left after allowing for the cost of fuel, for skimming, labor, packages, marketing, sinking fund and interest on plant, and repairs.

There is another very important point of which patrons should not lose sight. The whey will be worth less for feeding. The constituents of whey that make it valuable for feeding are the nitrogenous substances, chiefly albuminoids, which average about .8 per cent., the fat averaging, say, .28 per cent., and the ash, sugar, etc., averaging 5.8 per cent. While it could hardly be said that the fat is the most important of these, yet it is of considerable consequence after all. It has usually been claimed that, while butter-fat is valuable for feeding, there were cheaper substitutes, such as starches and sugars, that could take its place in the ration. While this is true to a considerable extent, yet experience proves that when we attempt to substitute the fat entirely, young animals do not digest their food well nor thrive as they should. A small percentage of fat in skim milk or whey adds greatly to its feeding value, especially for calves. In this connection we are reminded that, in the ordinary whey tank, much of this fat simply forms a scum, that adheres to the tank and becomes a stinking nuisance, afterwards thrown away. However, where the whey is heated, as it should be, and as many factories are proposing to do this year, the fat remains in the whey, and its full feeding value is obtained.

Say that 2½ pounds of butter could be made by skimming 1,000 pounds of whey. Value it at 20 cents a pound, or 50 cents. Consider that the whey unskimmed would be worth 7 cents per cwt., which is a low estimate. One thousand pounds would amount to 70 cents. While we have no definite experiments to base opinions upon, it is probable that this quantity of whey skimmed would be worth 15 to 20 cents less. If so, it would mean that about one-third of the value of the whey-butter made should be taken as repre-

senting loss to patrons in the feeding value of the whey. It is possible the loss would not be as much as this if fed to well-grown shoats or calves.

Experts are investigating the whey-butter question. Until they pronounce the idea successful, factorymen and patrons will do well to defer action. It is curious how the factories take up anything of this kind, on which there is little or no accurate information in favor, and how slow they are to adopt some other improvements, such as cool-curing rooms, on which there is the fullest information. There are no two opinions as to the importance and value of having the necessary facilities in connection with a cheese factory to secure a proper control of temperature. It would not cost very much more than to fit up a factory for making whey-butter. Factorymen, like others, it would seem, are prone to neglect a solid substance and jump after a long shadow.

#### CLEANING SEED GRAIN.

The thorough cleaning of seed grain is, we fear, not generally so well considered and practiced by farmers as its importance demands. It stands to reason, and carefully-conducted experiments have demonstrated that sound, plump, well-developed seed will, as a rule, under similar conditions of soil, culture and weather, produce several bushels more per acre than will small, light seed of the same variety. This being the case, there is economy in thoroughly cleaning grain for seed, as the smaller and lighter grain is of some use as feed for stock, but is of little or no use for seed, since, if it grows, it grows but feebly, and if it produces, the product is like the seed, light and imperfect, greatly reducing the yield, as compared with that of first-class seed. The too-common practice of running the seed once through the fanning mill is but a shiftless and insufficient preparation, and should be displaced by at least twice cleaning, and that by the strongest blowing capacity of the mill, in order that only the best of the grain be saved for seed, and that all weed seeds be screened or blown out. The precaution is especially advisable this year in the treatment of oats, since the crop last year, from what cause is not fully understood, was a partial failure in most sections of the country, and, although this may have been due to weather conditions at a certain period, which may not recur, the fact remains that an uncommonly large proportion of the grain is light and unsuitable for seed, and for this reason it may be advisable for farmers who have doubts as to the germinating quality of their seed to make a test of samples in soil in a box in a warm place, or between the folds of a damp woollen cloth, between a couple of plates, one inverted over the other. If the test is unfavorable, secure by purchase reliable seed from a favored district. If smut to any considerable extent was noticeable on the oat crop last year, it will pay well to treat the seed for this disease, which is infectious, and reproduces itself. Smut is a parasitic plant, the spores or seeds of which germinate with the oat, grows as a minute thread inside the plant, enters the grain, and matures its seed or spores while the grain is in the milk stage, leaving nothing but foul smut spores and a weakened straw, and thus not only seriously reducing the yield of grain, but increasing the danger of future dissemination of the smut evil. The most effective and satisfactory treatment for smut is by the use of formalin, which may be secured from any druggist. This treatment has been published more than once in "The Farmer's Advocate," but, for the benefit of new subscribers and those who have not filed their back numbers, it is elsewhere repeated.