

this class of butter, and certainly no honour. If it goes abroad it is only to bring reproach upon the country—to make the country, like the butter itself, a stench in the nostrils of people in whose favour we would wish to stand well. It is therefore a praiseworthy act on the part of the Government to make provision for schools of butter-making in the Province. If the services of skilled managers are obtained there is no reason why they should not attract a desirable class of learners. The course of instruction would be largely one of routine, the care of cream, its temperature, the churning, the curing, and the packing would necessarily be the same from day to day, so that in a few weeks at the outside any observant person might learn all that could be known of the various steps in the process. Let it be shown that a good article of butter can be as easily made as a bad one, and we may depend that those at all events who take the creamery course will no longer regard this branch of the dairy industry with indifference. They will look on it from the paying side. We see in the market reports of New York city that when gilt edged butter is quoted at 35c. to 40c. per pound, the common dairy is quoted at 15c. to 20c. Here is certainly a very wide margin, and one that is full of encouragement. An addition of even five cents a pound to the butter produced in Ontario means an extra \$2,000,000 yearly to the farmers—and all from the same quantity of raw material. The profits are always found in the margin above the cost of production; and if as the result of establishing Government creameries producers get better prices and consumers a better quality of butter, all parties will have cause to be well satisfied.

THERE are two points well established as to clover-growing on farms:—(1) The soil is rapidly exhausted if the clover is sold off the farm; (2) its productiveness may be maintained and slowly increased if clover is grown and fed on the farm.

ONE of the valuable features of the Agriculture and Arts Association's report for this year—if indeed it is not the only valuable thing in it—is the contribution by Prof. Brown of the Agricultural College, on the live stock show of the Provincial exhibition. Prof. Brown has always something interesting and valuable to say on such subjects, and his report is sure to arrest the attention of cattle-breeders.

SELL, sell, sell, all the fat bees and swine as soon as they cease to make flesh at a profit. Sell now all animals that will not gain during the winter more than the food they would consume would amount to, together with labour, interest and risk. Thousands of farmers waste hundreds of tons of good hay and grain by feeding it to cattle of inferior grade, or to beasts which are past the point of profitable increase.

FOR keeping apples, the essential requisites may be summed up thus: Pick without bruising; store without heating; winter without frosting; use one or more thermometers; preserve an unchanged temperature; guard against air currents; give needed ventilation; remove ripe specimens before decaying; separate the fruit room from all other apartments. With these precautions and care, says *Farm, Herd and Home*, such apples as the Baldwin, Red Canada, Swaar, Fameuse and Northern Spy may be kept fresh into June and July, as we have had an opportunity for testing.

UNITED States breeders of Shorthorns realize the necessity of having only one Herd Book for the whole country, and at the annual meeting of the American Shorthorn Breeders' Association held at Chicago a few weeks ago, an important step was taken to that end. They unanimously decided to purchase the books of three of the principal Associations in the United States, and are calling upon breeders throughout the country to support them. The advantages of having but one Herd Book are so obvious that they need not be enlarged upon; convenience of reference and cheapness of registration suffice to commend it. But when we see this course taken by breeders in the United States, what must be thought of the action of our own breeders in establishing two Associations and two Herd Books for the Province of Ontario? It was a mistake. It is a worse mistake to place the records in the hands of incompetent men. The editor of a Herd Book should know his subject, and he should be able to write in a style that would not stir the risibles of a Shorthorn.

### GLEANINGS FROM MANY FIELDS.

A CURRENT story in New York city is that James Gordon Bennett, owner of the *Herald*, is on the lookout for a fast pacer, and when one that suits him is secured will christen the side-wholer with the name of his paper and enter him at the prominent meetings.

THE *London Garden* says, speaking of potatoes, "that the more abundant producers of today, the new kinds, although a fine form, are deficient in flavour, and it is a fact that some of the old fashioned, ugly tubers, with deep eyes, stand far higher in flavour than many of the much vaunted exhibition sorts."

In favour of farming it may be truly said that a greater proportion of those who begin by working on a farm, rise to competence and moderate wealth, than in any other pursuit. Farm wages may be low, but they usually include board, while the temptations to dissipation in the rural districts are much less than in cities.

GOATS' milk is sold in London at thirty-seven to fifty cents per quart. It is preferred by many for the food of very young children. English and Welsh cottagers find the keeping of goats for their milk a profitable business at the prices paid. The yield is generally very small, but a goat picks its own living with less expense to its owner than any other animal.

THE *Chicago Times*, referring to the Bureau of Industries of this Province, organized by the Mowat Government, pays a high compliment to the Bureau and its able and energetic secretary, Mr. A. Blue. It commends the reports as being of great value to farmers, and issued in time to be of practical advantage. The promptitude shown, the *Times* thinks, might furnish a model for the United States authorities.

THIS is the time of year when a careful watch must be kept of the young apple trees. Field mice foraging for provender under the snow may ruin an orchard in a single night by gnawing the tender bark from the trunks. An easy way to check the mice is to tramp the snow around each tree, as often as a fall occurs.

THE *Rural New Yorker*:—Successful farming will depend, in the future, largely on avoidance of waste. We are learning how to make land productive; how to market crops advantageously; when to sow and when to reap,—are we learning how to save? We lose from negligence, from unskilful manipulation of farm products; from keeping unprofitable stock; from wastefulness in feeding; from hiring cheap and insufficient help. These losses seem intangible, but they represent "hard cash."

A REPORTER of the *New York Sun* asked Mr Robert Bonner the other day if the trip to Kentucky, from which he has just returned, was made with the object of buying horses. Mr. Bonner said: "Not exactly. I went on a visit, and saw some twelve or fourteen stock farms, but bought one colt only. It was from Maj. McDowell's farm, a very promising colt by King Rene, a famous stallion out there. Some other purchases may follow from my visit, but none are determined yet. I have seen a report that I went out to see and buy the trotter Jay-eye-see, but it was entirely untrue. I had no such purpose."

THE *N. Y. Tribune*:—It should be generally known that THE SPROUTING OF POTATOES is prevented by a short exposure either to cold—near the freezing point—or to a scalding heat. This does not affect the appearance of the tubers, while it preserves them in a marketable and available condition until new potatoes come again, or longer, without showing a sign of a sprout. Pouring scalding water over them and drying quickly is a convenient way of distributing the necessary degree of heat equally through a mass. It is an evident corollary to this that seed potatoes must be carefully protected from such a degree of either cold or heat as might destroy their germs, from 40° to 55° being safe, which limits are not exceeded two feet below the surface during the winter, or in good cool cellars.

A CORRESPONDENT of *The Home Farm* locates himself in reference to the temperance and economic aspects of THE CIDER APPLE QUESTION in this terse way:—"With some of us farmers what little we do know we have acquired through sad experience. Twenty-five years ago it was said by nearly every farmer that apples were of 'no account' to give cattle or horses, and hardly fit to give hogs, but even the

smallest and poorest were 'plenty good' to grind up and make cider for hogs with two logs to guzzle down and make homo inebriatus. We farmers live and learn very moderately. In the last few years I have saved many tons of best English hay by feeding 'cider apples' to my neat stock and horses. The secret:—Don't give them all they want at first but increase, according to your apple pile, through the winter."

It is said by a correspondent of *The Toronto Globe* that from 30 to 60 per cent. of the farm land in the attractive fruit, grain and dairy region of Norwich, Canada, has already been TILE DRAINED, with, as was to be expected, most satisfactorily results, "even on soil naturally dry."—Mr. Losce assures me that as matter of actual test his underdrained lands yield one-third larger crops than his undrained fields, although the same treatment in other respects is applied, and the land is of the same character throughout. The average wheat yield of his undrained land is twenty bushels per acre, while the tiled fields yield an average of thirty bushels. As the cost of draining on his farm is estimated at \$20 per acre, this preparation of the soil pays for itself in two years. Mr. Losce's experience is that of several others I have met, and appears to be as applicable to deep sloping sandy soil as to clay."

A FRENCH chemist, M. E. Duclaux, has made some interesting experiments in cheese making, with a view mainly to discover the causes which determine the flavour. It has often been asked why cheese made in different districts, in a precisely similar manner, vary greatly in flavour, while those of one particular spot, although manufactured in very different ways, are almost precisely alike to the taste. The researches of M. Duclaux tend to prove that neither climate, soil, food, manipulation, nor variety in the breed of cows largely affects the quality of the cheese. It would appear rather that a fungus mold, allied in some cases to yeast, in others to mold, is communicated by germs in the atmosphere to the cheese, and this it is which gives it its distinguishing flavour. Sanguine people already look forward to the time when the farmer will be enabled to inoculate his cheeses with a variety of ferments, so as to produce Cheddar, Stilton, Parmesan, or Gruyere at will.

AN old horseman says:—"If you want to buy a horse, don't believe your own brother. Take no man's word for it. Your eye is your market. Don't buy a horse in harness. Unhitch him and take every thing off but his halter, and lead him around. If he has a corn, or is stiff, or has any other failing, you can see it. Let him go by himself a little ways, and if he staves right into anything you may know he is blind. No matter how clear and bright his eyes are, he can't see any more than a bat. Back him, too. Some horses show their weakness or tricks in that way when they don't in any other. But, be as smart as can, you'll get caught sometimes. Even an expert gets stuck. A horse may look over so nice and go a good pace, and yet have fits. There isn't a man could tell it till something happens. Or he may have a weak back. Give him the whip and off he goes for a mile or two, then, all of a sudden, he stops in the road. After a rest he starts again, but he soon stops for good, and nothing but a derrick could move him."

A WRITER in the *Christian Union* says: "Comfortable barns save fodder and at the same time promote the growth and thrift of the stock. Cattle kept in warm barns require less food to keep up the temperature of their bodies than do those who are kept in cold ones. The temperature of the body must be maintained at its normal position, ninety-eight degrees. If the surrounding temperature is down to zero it is evident that there must be a great loss of heat from the animal. Every one knows that if the animal were killed the temperature would soon fall to nearly the same degree as that of the surrounding air, yet the great change that would then take place is no more rapid than is constantly going on from the body of the animal. This great loss of heat has to be supplied by the burning up in the system of some of the food taken in the fat of the body. If the animal is exposed to a very low temperature it will require nearly all the food ordinarily eaten to keep it from freezing. This is a method of keeping cattle warm that does not pay. Farmers are realizing the truth of this, and are making barns warmer than they were accustomed to formerly."