

To make a successful farmer a man must have brains, and use them. The impression prevailing in some quarters that anyone can be a farmer is an entirely mistaken one. When land was new and prices high this may have been the case, but it is not so now. Prices for farm produce run lower, and competition is keener.

Farmers should strive to turn out a good article, as the cost in production between first and second grades is very little, while the difference in market values is often very great.

In taking up work in some line entirely new to us, it is well to find out the experience of others on the subject. Experiments are often expensive, and it may be that others can give us light on the subject and save us from making serious mistakes. The reports of the various Government Experimental Stations are of much service in this connection.

Economy is necessary about the farm. Mixed farming makes it possible to economize, as what cannot be used for one thing can for another, but stinginess is not always economy.

Sometimes people stick to primitive methods when, by the outlay of a moderate sum of money, more modern methods or machinery might be introduced, which would much more than pay for the extra outlay. There are many cases, however, in which, in the interests of true economy, we have to put up with inconveniences.

Farming is a large subject, and there are very few of us but have much to learn.

There are many issues which go to make the profits or losses which are not within our control. To be successful we must try to make the best use of those things which are under our control.

THE KIND OF DAIRYING THAT PAYS.

That the business of dairying is becoming more profitable in Canada, and our dairymen are each year gaining more knowledge as to the best methods of feeding and caring for their cows, is evidenced by the increased number who are making a large profit out of their cows. In these days of keen competition, to make a profit out of any branch of farming requires skill and marked business ability in managing the affairs of the farm. This applies to dairying as well as to anything else. In fact, there is no branch of farm work that will respond to skill, care and attention given it as quickly as the dairy business. Notwithstanding the low values for dairy products there are many farmers to-day making a large profit out of their cows just because they have given strict attention to business and to the little details in connection with the handling of the cow and her products. Unless this is done success cannot be attained.

A good instance of what can be done by applying the best methods is that of Mr. Wm. Willis, of Newmarket, Ont. In 1897 Mr. Willis had twelve cows, which returned him \$50 apiece in cash for the season's work. These cows were made up of purebred Jerseys, Jersey grades, and one grade Shorthorn. Four of the cows were two-year-olds with their first calves. In addition to the \$50 which each of

the cows brought in during the year Mr. Willis had the calves and skim-milk to the good, and milk and butter enough for a family of nine. This is a very good record, and far above what the average farmer gets for his cows per year. Of course nothing is allowed here for manufacturing, as the milk of the cows was all made into butter on the farm and sold in Toronto. But even if a reasonable allowance is made for the making of the butter, the net income which Mr. Willis received from his cows last year is far above that of the average dairyman.

Mr. Willis milks his cows on an average of ten months a year. He has several Jersey cows which give over 6,000 lbs. of milk in one year. One cow produced over 450 lbs. of butter during the year. Mr. Willis makes a practice of feeding some grain to his cows all the year round. His winter ration consists of 40 lbs. of corn ensilage, 10 lbs. of chop consisting of peas and oats mixed per day. He feeds ensilage night and morning with the chop, and oat chaff or hay at noon.

In making the butter Mr. Willis adopts the ordinary gravitation method and uses the shot gun can set in ice-water for creaming. He claims to get very good results from this method. He churns not less than three times a week, and sometimes four times when the weather is warm. The success of this dairy as well as a great many other private dairies is in a large measure due to the women folk on the farm. Mrs. Willis is a very successful butter-maker, and takes particular care that each pound of butter made is of the first quality. There are many other dairymen who are getting good results from their herds. We would like very much if they would let us have these results for publication.

HORSE-BREEDING.

By ALBERT DAVIDSON.

It is with pleasure I introduce the subject, although I know that horse-breeding has become unpopular. During the past few years prices dropped so low that horse-breeders sustained a serious loss. The market has not yet improved sufficiently to warrant any large ventures; still, I prefer to have an occasional horse to sell rather than one to buy. Horse-breeding ceased so suddenly that there may be a shortage of horses and a consequent rise in prices. The low prices of our horses has found them a market abroad, and will introduce them where otherwise they would probably never have gone.

The Canadian horse has proved himself to be among the best of his kind wherever tested, and for this reason those who buy him may want more from the same source in the future. The exportation of live cattle to Great Britain being in a measure restricted, would it not pay us better to send horses, against which there is no restriction? If we refer to the statistics for Ontario, we find that we have over 22,000 less brood mares in the province now than we had in 1894. Thus we find that the low prices of horses has had the effect of putting us in a position from which it will take years to recover.

During the past few years a good horse could be disposed of at some

price, while an inferior animal could not be sold. In this way we were forced to sell our best animals, whether gelding or mares, and thousands of our best mares have been shipped out of the country. We also find that we require over 38,000 more work horses in this province now than we required in 1894, and we know that this demand for home use will continue to increase as each year more land is brought under cultivation, while the number of unbroken horses or colts in Ontario show a decrease of over 60,000 during the same time. It is evident then that horses will be wanted, but as to the kind of horses we should endeavor to breed, there is a great difference of opinion. The horse stock of this country seems to be an admixture of every breed and type of horse in the known world.

Very little intelligent effort has been made to keep the breeds pure. We have crossed in and out until it is only occasionally possible to trace a pedigree for even four generations, without finding an admixture of blood from distant types. To this admixture of blood in the stock selected for breeding purposes is to be attributed some of the disappointments and failures we have had in breeding. We have been told that like produced like, but this is true only of characteristics which have become finally fixed in the ancestry. For this reason we should use a purebred male as a sire, even though we are obliged to use a mare less well-bred. The breeder must first decide what kind of a horse he wishes to produce. Farmers seldom agree on this point, and are, I believe, too ready to change from breed to breed according as there appears to be a demand in the market. If we would cease trying to breed trotters, cavalry horses, or extreme high steppers, and try to produce the kind of horses that are most suitable on the farms, we would have fewer disappointments, and soon a vastly better and more saleable class of horses would appear than we have at present. For the best class of carriage and road horses the price may yet be high, but I do not think that the ordinary farmer can afford to breed for speed. That should be left for gentlemen of means, who, with the choicest of brood mares as well as stallions, may take the chances of breeding a racer, for they are not produced with certainty even by the most experienced breeders, and when produced require an expensive training. The ordinary farmer must raise a horse that he can sell. He must breed from mares that are able to do the farm work satisfactorily and produce colts which at an early age will be saleable. As to what class of horses will be saleable four or five years hence, we can only conjecture, but I believe that there is a growing demand for farm horses, and those will be the most profitable to produce. Electricity or other motive power may displace the horse to a great extent in our cities and from our roads, but it is not likely to do so on the farm for many years. We may differ as to the kind of horse the farmer needs, but he should combine in a fair degree both action and weight.

I prefer a compact, short-legged horse weighing from 1,300 to 1,500 lbs. There is no practical difficulty in producing such horses even from our

miscellaneous bred mares, as well as bred draught stallions have proved themselves successful sires of this class of stock. Such a horse can be raised almost as cheaply as a steer of the same age, the only additional cost being the stallion fee, which is now at a very reasonable figure. There will be little or no expense for training or breaking, and as soon as old enough such a horse will sell readily unless seriously blemished. We have made mistakes in the past in being anxious to produce horses of extreme size and have bred for that regardless of quality. The product was not very satisfactory; they lacked endurance, were apt to have poor feet or unsound joints—especially the hock joint—with legs round and beefy, and predisposed to scratches and other ailments. The depressed horse market and the consequent close discrimination exercised by buyers have shown us the necessity of endeavoring to produce useful animals of superior quality, and to produce such we must select our breeding stock with more care. It is frequently the case that mares which have become worthless through some defect in the feet or legs, or on account of a bawky or vicious temper, are used to breed from, and the probabilities are that they will transmit to their offspring a predisposition to like defects, for defects are as likely to be transmitted as more desirable qualities. It is unprofitable to produce an unsound or vicious horse of any class, and if you wish to breed horses I would advise you to provide yourself with a good-tempered mare free from any unsoundness, and mate her with a sound horse of good quality. The time has gone by when the mere fact of being imported should commend a stallion to patronage, and breeders must be as careful in selecting a sire as they are in selecting a horse for their own work. Size, shape, color, action, and style should all receive some consideration, but undoubted soundness should be made the first requisite. The owner of the stallion or his groom may have very plausible excuses for apparent defects in their horses, but breeders must learn to discriminate very closely if they would produce good saleable horses, and those only are profitable.

FARMERS' EXCURSION TO THE ONTARIO AGRICULTURAL COLLEGE.

Through the secretary we learn that the Welland County Farmers' Institute have arranged an excursion to the Ontario Agricultural College, Guelph, to take place on Saturday, June 18th. The train conveying excursionists will take on passengers at all stations on the G.T.R. between Fort Erie and Stoney Creek via Port Colborne and Welland R.R. Niagara Falls passengers take the early morning train. This is the first notification we have had of excursions this season, and no doubt a large number of farmers from the Niagara district will visit the College and Farm on the above date. The secretary of the above institute is Mr. E. Morden, of Niagara Falls South, who has charge of the arrangements.

You cannot spend five minutes more profitably than in carefully reading this week's list of premiums.