

a straight top and underline; a short head, wide between the eyes, with large nostrils, indicating a good respiratory system. The eyes mild, indicating a quiet animal; neck of medium length, blending nicely into the shoulders, which should be smooth and well covered with flesh, and well laid back into the ribs, compact and moderately broad on top; brisket prominent, with fore legs well set apart; fore legs straight and short; arm broad and well muscled. The body should be deep, with good spring of rib, and large heartgirth, leaving no depression back of the shoulders, indicating a good constitution; back, broad, straight and evenly covered with flesh—this is important, as it is here we get the highest-priced cuts of beef. Flank full, and even with underline; hind quarters should be wide and smooth between the hook bones, and should be well-filled back to the pin bones, smooth and not patchy; the thighs full and deep; legs straight and short.

In addition to the above description, a beef animal should have a nice mellow feel under the hand, with rather long silky hair, which is an indication that the animal is in a thriving condition.

There are different methods of feeding, and we have to consider the feed at our disposal, the main object in successful feeding being to keep the animal gaining in weight (not merely existing) at the lowest possible cost. In fattening steers for export, I prefer having them as uniform in size as possible, having them all dehorned, and feeding them loose.

G. T. THOMSON.

Kent Co., Ont.

Don't Kill the Breeding Sows. □

Owing to the recent low prices of pork there will be a strong disposition on the part of many farmers to slaughter the breeders, and thus curtail production. Some say there is little enough in hog-raising when prices are fifty per cent. better than they are this season, and the majority will agree that when they are as low as now, with present prices of grain, there is little if any margin of profit. Yet the wise man will not slay the breeders because for the present the price is too low to please. With many there is a tendency to drop out of business at the first signs of depression, when that is the very time to keep cool and stand firm. The shifting, speculative individual, drifting with every puff of wind, is not the successful one in the race. This, in reality, is a most opportune time for the producer to look about him and take his bearings. When the demand is slow is the best time to secure good foundation stock for breeding purposes, and the farmer who has a poor strain, unprolific, delicate in constitution, slow maturing, hard feeders, or bad type for the trade, may find it most economical to get rid of the bad and secure those which will be more remunerative. Then, when satisfactory prices return (as they surely will), he is ready with a first-class article. If the depression should have the effect of ridding the country of the useless, undesirable quality so damaging to the market, so much the better.

However, the market for hogs is no worse than for cattle, and there would be but little gained in turning off the hogs and increasing the cattle stock. Horses now are in good demand, with very attractive prices, and they offer an alluring field for some, but by the time one raises a horse to a marketable age there may be less demand and lower prices, and during that time hogs may be high and low two or three times, if past experience is any criterion. There is room on any farm for all the classes of stock mentioned, and more, and the sensible farmer will have a variety and will keep up his standing stock through good and bad markets alike, being careful to avoid becoming overstocked. Then when markets are good, he is at his best, and when bad he is better prepared to meet the conditions, for the best quality will always find ready buyers and bring the top prices.

It is the height of folly to sell out the last hoof and let the pens stand idle. They have cost money, and should bring in their share of revenue with all investments on the farm. Every year the farmer is out of business in any line of stock-raising he loses just that much time by the experience he misses, all of which he needs if he would be successful. Besides, most farmers have grown a certain amount of hog feed that will pay better if fed to hogs than if sold from the farm, especially if the manure is turned to good account. The best way is not to sell off all, but to use economy with the usual numbers, by keeping nothing but the most profitable type of pig; by using the cheapest food available, if suitable, and by feeding and managing so as to get the best results from the food given—find leaks and stop them. There certainly is not any money in the business for the man who will not study the situation from every viewpoint. After all, it is far safer to stick to the pigs and not shift from one thing to another. They will soon have their innings again, and on the whole they are moneymakers when given fair play. Besides, a few hogs are necessary on every farm to use up stuff which would otherwise be wasted.

J. R. H.

Wentworth Co., Ont.

Another Premium Winner.

I beg to acknowledge receipt of premiums, and to congratulate you on your good judgment in selecting ones of such high order of merit. Wishing you and your esteemed publication the greatest success that you deserve in the coming year.

E. R. BRECKON.

Halton, Ont.

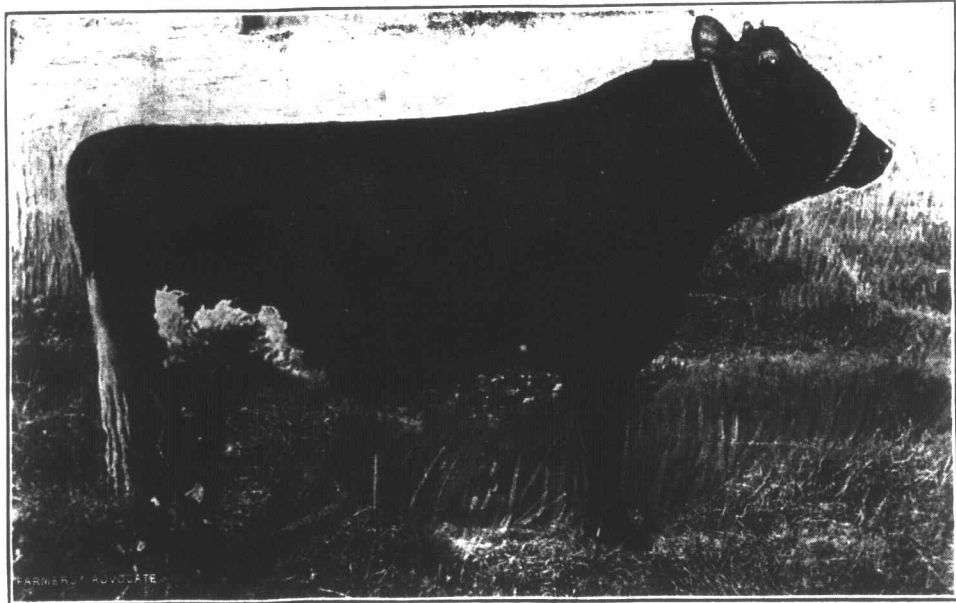
What Constitutes a Good Pedigree.

It is a very evident fact that this question cannot be properly answered by many who should be able to do so. At the outset I may say that I am writing from the viewpoint of a Shorthorn breeder; however, I feel safe in including breeders and patronizers of all classes of blooded stock.

To be a successful breeder or handler of stock it is very important to be a good judge of individual merit, and not one iota less important is it to be well posted and schooled in pedigrees. We often find very good judges of individuality who are wholly at sea when it comes to summing up the inherent qualities of an animal as set forth in its lines of breeding.

In studying a pedigree one should endeavor to learn as much as possible of the characteristics and breeding of the individuals included in each line of descent. If all the ancestors of an animal have been good individuals, conforming to a fixed type of excellence, and being free from serious defects, its inherited peculiarities should be valued not only in the individual itself, but for the reliance one can place in it to transmit the dominate characters of the family to the offspring. If, on the other hand, the ancestors have possessed less merit, or if they present striking variations of conformation and quality, the dominate characteristics of the animal as determined by inheritance cannot be foretold with any certainty, and it cannot be depended upon to transmit the most desirable qualities of its ancestors as dominate characters to its offspring.

Of course, it is impossible for us to acquire complete information about an animal's breeding, on account of the long line of ancestors, but there is much that may be known if our inclination causes a desire to fathom the labyrinths of pedigree lore. All true breeders love to look over a well-nigh perfect specimen of their chosen breed, but, it strikes me, much of the enchantment in store for a breeder is not enjoyed unless he is a student in pedigrees.



Count Cecil.

Shorthorn bull. Born September, 1903. Bred and owned by A. W. Smith, Maple Lodge, Ont. (See Gossip.)

Just to make my point: I think we should value cattle that have been in the hands of any of the master breeders for some generations above those bred by men who have had no definite standard of excellence in view. All breeders believe in the principle of atavic descent, which is simply a phase of the law of heredity. Since this is the case, we must value an animal from the herd of a careful, competent breeder more highly than one from the herd of a breeder who has shown lack of skill. An animal from the judiciously-bred herd can be relied upon to produce something comely with much more certainty than one from the promiscuously-bred herd. The latter may even be the better individual (by chance), but it is not supported by so strong an array of ancestors, and, as a consequence, is correspondingly weak in transmitting its individual qualities to its offspring.

It is plain to be seen that the value of an animal for breeding purposes does not depend entirely upon its individual merit, but also upon its pedigree, which represents the sum of its inherited qualities.

In choosing breeding stock, if we can secure the happy combination of rare individuality and choice breeding, we are fortunate indeed; but where it is not possible, the purchaser should not lose sight of the fact that excellence in conformation alone is not a safe bar to ill effects that are apt to follow from the use of an animal lacking in strong ancestry.

It seems to me that all men who feed or breed cattle, be they grade or pure-bred, should be posted along this line. It may seem unimportant to the breeder and feeder of grade cattle, but he depends upon those cattle for his breed and better; then why not put your best thoughts and endeavors into your work? Do not be content to breed to any grayhound specimen of a beef animal, use the best attainable. The best is never any too good.

There are many breeders of Shorthorns, in a small way, who take very little pains to post themselves in

this line, and when they come to purchase or select a bull for use, it is pretty much a game of "blind-man's-buff" with them, so far as the value of the bull's breeding is concerned.

As in other studies, there is no royal road to learning in this line, but a constant perusal of tabulated pedigrees, careful reading of footnotes, and the intelligent reading of good stock papers like the "Farmer's Advocate" will work wonders in the way of enlightening one.

When I think of the mistakes made, and the narrow escapes experienced (unknowingly) by some breeders, I do not think I can do better than close with the lines from Pope:

"A little learning is a dangerous thing;
Drink deep, or taste not of the Pierian spring;
There shallow drafts intoxicate the brain,
And drinking largely sobers us again."

Wellington Co., Ont.

A. EDWARD MEYER.

FARM.

The Education of the Young Farmer.

By D. Lawrence.

Quite a number of years ago I had the privilege of hearing the Hon. G. W. Ross, then Minister of Education, deliver an address at the opening of a Collegiate Institute, in which he remarked that while the Education Department was no doubt anxious to teach the three "R's," yet he felt that the principal object was to train the youth to think for themselves, and to weigh every question in their own minds. He believed that the bondage of one mind to another was the principal cause of the too prevalent partisanship in politics and religion, and a cause of great ignorance. The farmer's son who is to be the coming farmer should

remain at school until he has passed the entrance examination, and, if possible, should take a year or two at a Collegiate Institute. He should by all means take up Latin, because so many of our words are derived from that language that it is almost a necessity to have the groundwork of the Latin language in order to understand our own. The young farmer should avoid trashy novels, but since he is so dependent upon the God of nature, he should delve deep into nature study, and take up chemistry and botany. The chemical formation of the different soils should be closely studied; and as we are now so much interested in the work of the different kinds of bacteria and microbes (some help-

ful and some harmful), the young farmer ought to know all about these almost unseen forces around us. He is so dependent upon the animals that he ought to be a diligent student of their wants and requirements, and should find out with what conditions and rations they will best grow into money. He should also study the best works on veterinary surgery. Every farmer should be able to treat all ordinary cases of sickness, and should always keep in mind the old adage, "An ounce of prevention is better than a pound of cure." A course at the Veterinary College would be very good to those who can afford it, but a young man can get to be very well informed by reading, careful study, and intelligent observation. Above everything, he should learn to be kind to the animals—they respond very much to kind treatment.

It would be a good idea for the young farmer to work for a good carpenter for a few months, to learn to be handy with tools, and be able to make repairs. He should be a close student of the "Farmer's Advocate," which, beyond all controversy, is one of the very best agricultural journals. He should not only read the articles from the pens of experienced and successful men, but he should think and experiment for himself along the lines indicated. Another point I would strongly urge is that of perseverance in any given line. So many try one line, say dairying for a time, and perhaps change to keeping steers, and perhaps after a further number of years take to raising pure-bred cattle; now he will not be nearly as likely to achieve success in that way as if he made a careful selection of a system and stuck to it.

Doctors and nurses take what are called post graduate courses, and so should the coming farmer. He should learn to do all kinds of work thoroughly well at home, and then should go and hire out for a year at least, with the most successful farmer that he can find, who follows the system of agriculture or breeding that he is intending to pursue. It would be better to