

STOCK.

For the CANADIAN FARMER:
HORSE BREEDING.

At the request of the editor of the CANADIAN FARMER, I will give you a few ideas on horse breeding. Being a practical farmer myself and considerably interested in buying and breeding. I have had occasion to visit some of the largest breeding establishments on this continent, as well as some of the most extensive sale stables, and from coming in contact with a great many persons whose business brought them thither from every part of America. I have gained some considerable knowledge in regard to horse breeding.

Horse breeding in Canada has paid very well for a number of years back, and by the aid of favorable circumstances Canadian farmers have bred a great many good stock of their kind. In the days of our fathers many used to breed without any definite object in view, and to-day among a great many farmers the raising of a really good horse is more a matter of chance than of calculation. A draught mare is bred to a trotter and if the progeny does not turn out to be a trotter the stallion is condemned. Again, a fine bred mare is bred to a heavy draught horse and a sixteen or eighteen hundred horse is expected as the result. If they do not get it (which is a mere matter of chance) they come to the conclusion that a dunghill is just as good.

One of the great points of success in all things is to start right and in no respect is this more essential than in breeding. To raise good horses good must be bred from. It is all important that a clear, distinct and well-defined purpose must be kept in view if we wish to produce a first-class horse of any kind. The average run of farmers, I am sorry to say, if they have an old broken down mare that is unfit for labor no matter how coarse, or badly formed, or unsound she may be, she is kept on the farm to breed from. Again, the cheapest horse that travels the roads, no difference whether there is any good points about him or not, so long as he is fat and sleek, is selected and employed to breed from. The result is a good-for-nothing mongrel horse, constitutionally unsound, and although it costs just as much to raise him, he is not worth over one quarter as much as a good one, and commands a price of from twenty to one hundred dollars at maturity. Whereas a good, sound, well-bred animal could just as well have been raised with the same care and feed, with but a slight advance, on first cost, that would have commanded from two hundred to a thousand dollars at the same age. The most ignorant farmer is particular to select the finest and largest ears of corn of the best varieties for seed, because he believes it to be true economy, yet many farmers utterly disregard this law of prudence in the breeding of horses and farm stock in general. The law of like producing like is inexorable. Consequently, if we wish to raise a good draught colt we select a good, large well-bred mare (if we can find one) free from taint, blemish or other objections, and secure the service of a pure-bred horse, either Percheron, Clyde or Shire, as the case may be, and in no case breed from a grade or mongrel where a pure-bred horse is obtainable, no matter how low the fee may be for the services of the mongrel. I have adopted this plan of breeding and have never raised a colt in my life that was blemished or unsaleable from any other

cause. The same rule holds good in breeding trotters. Select only the best mares of good train of trotting blood, those of good form, size and style, and above all other qualities do not fail to have them sound; employ only pure-bred trotting stallions of the highest types of excellence and form, winning stock or still better themselves winners, and the result will be generally satisfactory, as it has been ascertained by actual experience that they have the power to transmit speed at the trotting gait. A great many breeders of horses are under the impression that crossing a trotting bred mare with a blood horse will produce a trotter. This has almost invariably proved to be a mistake, and it is now universally acknowledged, among intelligent breeders, that it is necessary to breed each class of horses distinctly if the highest standard of excellence is hoped to be reached. In some countries in Europe the breeding of horses is controlled by the the government, each one having large breeding establishments where those wishing can procure sound stallions devoid of all hereditary disease. Each stallion is furnished with a certificate from the government. No other stallions are allowed to be used for breeding under a penalty. The result is that you will scarcely find an unsound horse except by accident. Hereditary diseases such as spavin, ringbone, carb, roarer, heaves, etc., is scarcely known. If our Ontario Legislature wished to do the farmers and breeders of this province a real and lasting benefit, they would enact such laws by appointing competent inspectors to grant licenses to those free from blemish or hereditary diseases or unsoundness, and to those horses that have at least a reasonable amount of good breeding. A few years, breeding under such restrictions would materially increase the value of horses in this province and be a real blessing to owners and the country. Of course we could hardly expect such a law to emanate from such a source, as the government is composed of lawyers, doctors and other professional men, who know little of the requirements of the farmers and care still less, as there is more money in looking after the business of large corporations such as railways, &c.

J. A. R.

THE TEXAS SLAUGHTER-HOUSE.

Let us now see what becomes of the cattle as they pass into the hands of the butcher. This term is also somewhat of a "misnomer" when applied to the present system of dressing beef, but we will let it stand, for the want of a more intelligible designation. There are two distinct departments in the large establishments of the day, viz, the "chipping" and the "canning." Into the former come the choice corn-fed animals from the great cereal districts of what can hardly now be called the "far West," as well as the best "grass" cattle which have had the run of the summer range. The latter receives most of the "through Texans," the old cows, and the "scrubs and culls" from the better lots. The process of slaughtering each is substantially the same up to a certain point, where the inferior quality passes from the killing to the canning house.

As we come within the gate we reach first the outer inclosure or pen, where may be gathered one hundred head of choice "chippers." They come in quickly and without excitement, and in a few minutes perhaps one-third of them are driven into a narrow alleyway adjoining the single

pens, where each one is in a few minutes to meet his death. This part of the yard is boarded up with heavy plank about six or seven feet high, and open at the top, along which we walk on a single plank running from end to end. As an animal is wanted, a slide door opens, and he passes into the pen nearest him. Here he stands, unconscious of the fate that awaits him, and that his executioner is at that moment loading the fatal weapon above his head and a mild-looking man with a short carbine in his hand drops the muzzle to a point in the centre of the forehead, just below the horns, and pulls the trigger. This steer falls without a struggle or a groan, and he passes on to the next, taking the life of half a dozen in a couple of minutes, more or less. The door at the other end of the pen is raised, a hooking chain passed around the neck, and the animal is drawn out upon a broad platform about fourteen feet wide, at the bottom of which runs a shallow trough to catch the blood. Suspended by the hind-feet, the sticking-knife completes the bleeding process, and then two men step forward and disconnect the head. Four follow, stripping down the hide—two others, in the meanwhile, taking off the feet. Sawing the breast and haunch bones is the next operation, and then the carcass is hoisted preparatory to taking out the inwards. This accomplished, a number are detailed to do the trimming, cleaning and turning to account every scrap and particle connected with the animal, so that nothing is wasted, down to the horns and hoofs. While these several operations are in progress the carcass has been moving along a distance of some two hundred feet, being attached to a track overhead. The men at work maintain their relative positions as one after another of the carcasses come before them, and in the brief space of fourteen minutes from the time of the fatal shot the animal is hung up, "drawn and quartered," and then left to cool in the chill room for forty-eight hours preparatory to shipping. Twenty different processes take place in the course of the fourteen minutes aforesaid, and ninety men are engaged in it. The average weight of this class of cattle, as brought into the slaughter-house, is 1250 pounds, and during the summer season five hundred head are killed daily in the nine hours allotted to the work.—*Harper's Magazine.*

CHEWING THE CUD.

Every child living in the country has stood and watched this curious operation, and wondered what the lump was which he saw come up in the cow's throat, and then go down again after she had chewed it for a certain length of time. And perhaps he may have seen the anxiety and turmoil produced on a farm by the report that some one of the cows had "lost her cud," and as the result of this excitement he may have seen the absurd attempt to "make a new cud," in the hope that the cow would by such means be restored to good condition. There is in the minds of a large proportion of our readers so little correct understanding of the true nature of "chewing the cud," that a few words concerning it may not be amiss.

A very large tribe of animals, of which sheep and cows are only familiar examples, are called in works of natural history *Ruminantia* because they all *ruminant*, they chew the cud. They do so because their peculiar organs of digestion require

it; they can get their nourishment in no other way. They have, it is said in the books, four stomachs, but the statement is not strictly correct, for the entire digestion is done in a single one, that which is called the fourth, the other three being only places for preparatory work. Their food is swallowed without being chewed; the chewing is to come later. When this unchewed food is swallowed it passes directly into the first stomach, to use the common term; but the drink which the animal takes goes straight past the entrance of the first into the second. These two serve only to *sak* and soften the coarse food. When the first has done what it can, the food passes out of it into the second, and then the cow or sheep is ready to "chew the cud."

The second stomach, while busily at work in soaking the food, keeps it in motion, and gradually rolls it up into masses, so that in the small upper part there is formed an oblong solid lump of the size that we recognize as the "cud." This the animal throws up into the mouth, and chews with evidently as much satisfaction as the same act of mastication gives when we put the most delicate morsels between our teeth. When it is sufficiently chewed, the mass is swallowed and its place taken by another which had been rolled up in the mean time.

But the "cud" thus masticated does not return to the second stomach, from which it had come. It passes smoothly into the third, a place for additional lubrication, and then into the fourth, where the true digestion begins and ends.

This is, in brief, the whole story, and we see how naturally the chewing comes in; it is the same as in our own case, only that it is at a different stage of the food's progress. And we see also what "losing the cud" really is. The cow or sheep is suffering from indigestion; the "second stomach" has failed to roll up the little masses suitable for chewing, and there is nothing which the poor beast can bring up. Of course, therefore, the one thing required is to *restore the tone and power of the stomach*; not to burden it with an "artificial cud," which would only increase the difficulty, instead of relieving it.—*Scientific American.*

HORSE STABLING.

Stable accommodation is very imperfect in many farms. The only rule by which the length of a stable can be regulated is, the number of stalls required, and these should never be less than from five feet six inches to six feet wide. It is desirable that the width for farm horses be at least eighteen feet, in order that ample space may be available behind them. It has for sometime been, and still ought to be, a desideratum in the construction of the stable to have the walls built high—it may be higher than any other portion of the farm steading—and the apex of the roof "open." When the building is high and "open" horses thrive much better than in stables which are small and close. Small stables are very objectionable, being generally badly ventilated and injurious to the equine constitution. The temperature in the stable should be about 53 degrees in winter and from 55 to 60 degrees in summer. Purity of atmosphere is essential to the strong, healthy and muscular development of all animals, and especially horses. The partitions between the horses should never be shorter than about nine feet, two feet of which is required for the manger.