On Training Steers.

The great secret of all government is self government. The man who does not govern himself is unsuitable to govern a school, a family, or even a team. A neighbor recently remarked to me, "You have a faculty of charming steers." I replied that this was a mistake. I simply study their nature and adapt myself to that nature. In approaching them, (whether they are under the yoke or not,) though I may "come with a rod," yet I always come "in love." If I am in a hurry, and a steer is in my path, I never give him a kick, or a thrust, with a yell, "get out of my way," but instead I allow him the path while I pass quietly by, gently rubbing him with the hand as I pass.

The pressure of the hand on the animal has a powerful influence in training him, and I had rather engage to bring two yoke of steers to a state of good working discipline, than tame one pair that had been taught to fear the presence of man. I could tell several illustrations, but will mention one that others may "go and do likewise." Yesterday I was carting with a pair of steers that were impatient about starting. Whenever they started too soon, I would back them to the very spot from which they started, and rub their heads, or pick off loose hair from their bodies, and in one-half hour the change in their general appearance was surprising. In handling them, I always endeavor to persuade them that even the goad cannot harm them. When I yoke them, which I do at all ages after the first 10 months, (though I consider from 1½ to 2½ years the best age for their discipline). I usually place them in front of a yoke of well trained oxen or steers large enough to anchor them safely. At first I attach a line to the horns of the off steer, making it fast to the bow of the near one, thereby preventing him from turning his head too far to the right. This is not usually necessary after once yoking. I also hold another line in my hand attached to the horns of the near one, or if he is too hard to manage, I put a snap in his nose. Of course they are frightened at first, but after a few minutes they will walk off quietly. I travel beside my rear cattle, using appropriate language, speaking just what I mean, and no more, at the same time showing by means of my goad and line the meaning of my words. In ordinary cases I can remove my line from the near one after one hour, calling them to without it. After handling them on the lead one day I can use them on a drag or a light log, and next, a cart.

Human nature and bovine nature are synonymous in a great degree, and as we encourage trustworthiness in our children by trusting them, so far as it is safe, but no farther – in like manner I will trust my steers so far, and only so far as I can confidently do so. As soon as they can be termed handy I give the near one an occasional lesson in the yard without the yoke, teaching him the elementary tactics in "single file." I then change their places under the yoke, putting the off one on the near side, and after he becomes handy there I teach him the tactic singly also; after which, as both are disciplined to work on either side, I can place them together without any yoke or other attachment, and move them to and from the pasture and where else I please. I never whip them except in rare cases of stubbornness (which are nearly as scarce as hen's teeth), and then not severely, but calmly and candidly, without exciting fear in the animal; and the moment he yields, treat him with the greatest possible kindness.

I always give each steer a distinct name, naming them after the yankee custom, allowing the color, spots, lines, horns, etc., to guide me in this matter, and I always call him by that name, on which ever side he may chance to work, naming the steer and not the place where he works. This may seem boyish to some, but my reason is, that in changing owners, they will be less liable to have their names changed. Here let me advise farmers not to allow themselves to become slaves to any one pair of names because their last oxen bore those names, neither does it follow that because an ox is called "Star" for the spot in the forehead, he must always work on the near side; but in buying, be sure to ascertain the name of each ox, and in selling do not fail to impart the same knowledge to the buyer, for the changing of names is very injurious to the discipline of well trained oxen. I frequently accustom steers to be handled with myself on the off side with the rod in the left hand, which I find very convenient in loading hay, back-furrowing beside fences, banks, ditches, &c.—*Maine Farmer.*

Economic Horse Management.

(Continued from last month.)

Oats, on an average, contain 4½ lbs. of husk in every 14 lbs.; maize, only 5 oz.; and peas, 7 oz. The percentage of husk, then, is very heavy in oats, and very light in peas and maize, so that we conclude, if the digestible portions of these substances are equally nutritive, there is a heavy loss in the use of oats. I am second to no man in my appreciation of the value of good oats as a feeding material, either for man or horse. If our choice of grain is limited to one variety only, unless the best, and if cost is no object, oats and bean form a feed simply unobjectionable. But oats vary considerably in value. They should be sound, sweet, a year old, and their normal weight should be at least 40 lb. per bushel.

In my paper of 1860, I stated that two bushels of good oats, with a natural weight of 42 lbs. per bushel, would keep horses in condition better than three bushels of oats at 35 lbs. natural weight. Further experience has convinced me of the truth of this statement; and I believe that the heavy oats are really worth seven or eight shillings per quarter more than the lighter. When I first noticed this difference in feeding value between light and heavy oats, I considered it was due to the lighter grain carrying the greater percentage of husk, but my table shows that Russian oats have a smaller percentage of husk than the best short oats. Although I am unable to explain why, I think, being kiln-dried, they leave the husk cleaner; yet it is certain that, weight for weight, foreign oats are unable to sustain hard working animals like the short potato oat. There is something more or less in many samples most injurious to horses. I have frequently been called to examine and report upon pit horses which were unable to stand their work, although allowed an *ad-libitum* supply of oats. The history is always the same: "Our horses were all right till the last two or three weeks; since then the flesh has rolled off them. They are always sweating, as weak as rats, and knocked up before the shift is half over." I nearly always find foreign oats in use, and that the change in the horses followed close upon a change in the sample of oats. The symptoms shown are, a tight, dry skin, loss of appetite, debility, and excessive staling; much the same set of symptoms as we get from feeding upon musty English or Scotch oats.

These foreign oats are, however, nearly free from smell, and therefore, I take it, their objectionable properties are due to some artificial preparation, or to the changes caused by mustiness, the smell of which has in some way been removed. I have noticed, too, that we have many more cases of colic when using foreign oats than when using good home-grown grain. Only last year, a lot of Tartar oats—34 lbs to the bushel—were sent to a colliery. We refused to use them, but were compelled to by one of the owners, who looked into the matter and pronounced them very good, saying he did not believe that a light natural weight was of any consequence, so long as we got 336 lbs per qr. The result was, that we had ten times our usual number of colic cases, and the animals out of condition. It has long been known that musty or kiln-dried oats are injurious to horses, but the really dangerous nature of some foreign oats is not appreciated.

In the *Veterinarian* for 1862 Professor Varnell reports a case in which a number of horses died as the result of such provender. A Mr. Mitchell, of Leeds, bought twelve quarters of oats, and when about half of them were used, four horses died within a few days of each other. Poison being suspected, the contents of the mangers and stomachs were analysed, and not found to contain any vegetable or animal poison. Suspicion next fell upon the oats, and an aged, but healthy, mare was bought for the purpose of testing them. She had three feeds a day; on the third day paralysis appeared, and was followed by death. The experiment was repeated on other horses, and a few days' feeding on these oats produced death in each instance. The oats were foreign, and had a musty smell. Placed in water they quickly became matted together by a filamentous structure, the fibres of which crossed and interlaced each other. Some floated at the surface, and some remained at the bottom of the vessel.

In the same volume of the *Veterinarian* is another report of the death of thirty-nine horses from feeding upon musty oats, the cause of mischief never being suspected till the injury was done. We can all "lock the stable-door when the horse is gone;" but it behoves us, as prudent and careful managers, not to cure but to prevent evil. In few cases have I directly traced death to foreign oats, but I have frequently met with serious illness as the result of such food, and I have frequently noticed the filamentous arrangement just mentioned, in the cisterns attached to underground stables. Bad oats of all kinds should be utterly avoided. Even small quantities mixed with a bulk of good grain produce ill effects, and soon spoil by contact that which was previously good. Referring to the table showing the proportions of husk on grain, you will see that oats show a very heavy amount, in fact, from 30 to 40 per cent. Now this husk has a value of less than 20s. per ton, whilst oats at 28s. per quarter are worth £9 6s. I have calculated that if the five thousand and odd horses, whose feeding I superintended, were fed as they used to be on hay and oats only, there would be a consumption of 134 tons of husk per annum. That is, we should be using a material costing £8 per ton more than it was worth, or more than it could be purchased for from the oatmeal dealers.

From these facts we conclude that the best oats are the cheapest; that though the market value of the heaviest oats is seldom three or four shillings higher than that of the lighter sorts, they are really worth seven or eight shillings more as food, and, therefore, are absolutely four shillings a quarter cheaper. We also conclude that musty or kiln-dried oats are positively dangerous, and should be utterly avoided. Foreign oats we seldom use; they are generally light, and not unfrequently injurious. There is, however, an objection to even the best oats as an economical food for hard-working horses. They contain such a large proportion of husk—indigestible matter—that their market value is out of proportion to their feeding value. I have related one case where oats alone failed to keep in condition the horses on a colliery, and how a mixture of grain containing a larger proportion of nitrogenous matter succeeded in replacing and preserving the condition. Under the head of beans we may include peas and tares, for all three contain about the same proportion of nitrogenous or flesh-forming matter. Tares, however, contain a bitter principle which renders them somewhat objectionable. Between peas and beans there is no choice, providing both are in equally good condition. Sound, sweet, hard beans, tares, or peas, are of all seeds the richest in flesh-forming material, containing, as our table shows, 26 to 28 per cent. They are, then, especially indicated for use when the animal body undergoes great loss of flesh or muscle, as it does with all hard-worked horses. But these leguminous seeds cannot be used alone in very large quantities; they have a heating and binding effect upon the system. They must then be used either in small quantities or be combined with some other article of food having an opposite or counteracting effect. Such articles are supplied in bran and maize, either of which may be used advantageously in combination with beans and peas.

In Boiling Potatoes for Pigs, says the *Gardener's Chronicle*, they should be steamed, as the water from them is injurious to a less or greater degree, as it contains the poisonous alkaloid called solanine, which, it should be noted, is more abundant when the tubers begin to bud out.

How to tell when a Mare is with Foal.—Take a rope, strap or string, and measure around the girt where the harness goes on the back and the belly-band buckles up; then measure again, just forward of the hind legs around the body; if larger around in the latter place than in the former, you may safely conclude she is with foal.—*Rural New Yorker*

Growth of Merino Wool.—The merino sheep offers a singular proof how easily the annual change of the fleece, or annual change there is, may be suspended in the domesticated state of that animal. Lord Western has retained the wool of the merino without the slightest disposition to separate, during three years. The experiment was also tried at Rambouillet, and the fleece remained on firm and healthy during two years. It had attained its utmost growth at the fourth year, when it was thirteen inches long. But it had no disposition to separate from the skin, and probably it would not have fallen off during the life of the sheep. There were not merely a few cases of this, but the experiment succeeded in every sheep on which it was tried.

Flies in Stables.—Mr Meehan call attention to the system of darkening cow-stables by hanging cloth canvas over the openings, adopted by the late Mr. Hudson of Castle Acre, to keep out the flies. He says that on a visit there, he was "amused and instructed by seeing the well fattened cattle get rid of their tormentors by passing between pendent canvas curtains, which admitted them and closed after them, rendering the shed dark and flyless. Another friend who had many cows in a long shed, having its ridge louvre-boarded throughout its whole length, and divided by a pendent board on Watson's principle, excluded light except from these openings in the roof, not a single cow's tail was in motion, for the flies would not descend into the darkness."

Kerosene for Lice.—I wish, says a *Country Gentleman* correspondent, to give my experience with lice on cattle, though not a farmer, but a farmer's wife. Last winter we had some yearlings got lousy some time in February; the next day after John discovered them he was taken sick, and a few days later told me something ought to be done before he could get out to attend to them. Having read that a subscriber thought wood ashes an excellent remedy, I accordingly went to work. For mine head I used as many quarts (for I was anxious to do a good job) and waited for the result. After some days I noticed that the hair in places was all gone; in a few more days the skin began to curl up around the edges of the bare spots, and left them raw and bleeding. It continued to curl and come off until it was left in large sores, some as large as the palm of one's hand. Some were so deep that they have not healed yet; but as for the lice, they kept out of the way so they were not all killed, although not so numerous as before. One heifer was so lousy that we felt obliged to try something else, and decided that it should be kerosene. We gave her a good dressing of oil and a thorough carding. The next day John called me to see lice that (being disgusted with such treatment) had gone down on the under side of the animal, and there they were in large numbers, but did not seem to care "whether school kept or not," so he got the oil and gave them a finishing stroke. The heifer is now thriving and shedding her old coat; she has gained in her milk, and now I would recommend kerosene for lice on cattle.