

the winter is better with two feeds of grain, than the feeding exclusively of grain rations, morning, noon and night, without the roots. In a limited extent as an auxiliary feed carrots are worth as much for horses as oats, and more than corn. This latter grain, so well adapted for nearly every other purpose, is not well adapted for horse feeding. Some horses can consume corn without bad results, and it is a good sign for a horse that can, since it shows his digestive apparatus is in excellent order. But, as a rule, a horse corn fed will not be able to do as much work as if given oats. When the corn does not cause colic, it may be given before hard work begins, but after that the oats are worth as much per bushel as the corn, though it takes only thirty-two pounds of oats to make a bushel and fifty-eight or sixty of corn. In hot weather the oil and starch in the corn are worse than wasted. The poor animal is hot enough already, and he needs strengthening not heating food. We are aware that many heavy, slow-moving city dray and truck horses are fed on a large proportion of meal, yet this does not change our opinion of its comparative value.—*American Cultivator.*

JERSEYS IN ENGLAND AND AMERICA.

The *London Agricultural Gazette* has the following remarks:—As present returns go, the breeders of fashionable Jerseys are (both in the United States and Great Britain) taking the lead from other breeds. It is not necessary to reprint the extraordinary rates made in America for special animals. So long as an American "boom" is on, nothing can rival the object of it. But recent rates in England are not controlled by American buyers, who, for most varieties, have plenty on sale at home. Yet Lord Braybrooke's Jerseys average more than Mr. Tracey's Shorthorns, and it is pretty certain that it costs more to bring the latter into the ring than it did the former. The real inference seems to us to be that any class has rallied from the depression quicker than the farmers have—i.e., that dwellers in villas (who are Jersey buyers) are in better condition to pay for their fancies than are farmers who would be the proper competitors for middle-class Shorthorns. It really seems, however, as if English breeders who wish to obtain "improved Jerseys"—i.e., those which give increased quantities of butter, not those which conform more closely to an arbitrary standard of colour—will have to go, not to the island, but to America, for new blood. By common consent, the island is well-nigh stripped of fine specimens. New Jersey seems to have more of the Channel Island cattle than the Jersey, which may in distinction be called "old."

FARM HORSES.

The breeding of farm horses, or "horses-of-all-work," as they have for a long time been called in this country, constituted a large part of the business of those who in the earlier years of agricultural operations, devoted themselves to the rearing and development of this animal. In the colonial days many well-bred and valuable horses were imported both from England and from the continent of Europe. The English horses were valued as much for their power and vigour as for their blood.

The early French settlers brought into Canada a great number of hardy, medium-sized animals capable of performing a great amount of labour and of enduring the hard fare and cold climate of that country.

These strains of blood soon commingled and created the foundation of that great mass of horses now counted by millions and which, while

varying in size, according to the locality in which they are bred and fed, constitute that equine family known as the American horse. The addition to these strains of blood of the heavier horses of Scotland and Normandy has added to the size of these animals. And, while we have poured into this channel the warm, courageous, enduring blood of the Thoroughbred and the coolness and patience of the Norman, and the solid resoluteness of the Clydesdale and the style of the Cleveland Bay, we have created a horse which in his perfection combines all these qualities and is one of the most useful animals in the world.

Good breeding and good care are both necessary. A neglected colt matures slowly and seldom forms that attachment to man which develops his good qualities as he comes to his work. While we breed, therefore, with care, we should feed and treat with care and kindness also, if we would secure those characteristics which make the American farm horse valuable.—*Hon. Geo. B. Loring, U. S. Com. of Agriculture.*

SHORTHORNS AND THEIR GRADES.

With many farmers the desire is to possess larger cattle than are the Jerseys and Guernseys, so that when the cows have outgrown their usefulness as dairy animals, or have proved themselves unprofitable for the same purposes, they can be turned into the best account as beef, making heavy weights and correspondingly heavy gross receipts from the butcher. It must be remembered, however, that it is impossible to find all the excellencies of all breeds incorporated in any one breed, and that large size and extra dairy qualities are seldom found in cattle. It is true that we occasionally find in the shorthorn superior dairy excellence; yet such is the noteworthy exception and by no means the rule, and those who wish to secure large size and extra weights in cattle must be willing to sacrifice the extremes of good dairy qualities to secure what they are most desirous of securing. A sort of a compromise can be had, however, by breeding a first-class shorthorn bull to the best dairy cows in the herd of common ones, the result being, almost invariably, extra fine half-blood or grade heifers, which possess valuable dairy qualities and have good size. Of course, only the heifer calves from such materials should be kept and reared, the bull calves being sold to the butchers, or to some of the neighbours who either cannot afford or do not care to invest in the purchase or use of a thoroughbred bull. Where the farms are large and good, and where there is plenty of grass and other food, the shorthorns will please many, their size, where size is one of the principal objects desired, being decidedly in their favour. For nearly all purposes, unless, perhaps, speculative ones, the grades will give better satisfaction to the average farmer than will the thoroughbred ones, while having the additional virtue, where cash is not over-plentiful, of costing comparatively little cash outlay. Thoroughbred bull calves, of almost all breeds, can now be had at very low prices, considering the quality, and there should be a greater demand among farmers than there is now. No enterprising, progressive farmer should be without one, and he should not be satisfied to breed to a common half-blood bull, "because it don't cost anything, you know."

RAISE MORE COLTS.

Colts are not expensive to raise if good pastures are convenient, nor are they troublesome. Every farmer should make a point of breeding his mares to the best stallions that can be procured, and it

matters not whether the colt comes in the spring or in the fall, the balance sheet will be in his favour when his usefulness begins. But little grain is required during the time the colt is useless, and is only a portion of the usual care necessary for horses is bestowed on it, he will thrive and do well. One of the great obstacles to overcome with colts is the inducement to put them to early service. This custom has done much to destroy the lasting qualities of the colt after maturity, for the early training to work is detrimental to growth and proper formation. The colt should be trained (not worked, but handled) early, however, even from birth, for he may thus be taught a great many habits gradually and easily without difficulty, and in so doing the colts learn confidence and reliance. The mere breaking of the colt to work is not all that pertains to his education, for this value rests as much on his temper and disposition as upon his size, shape and power. It is the farmer's duty in the matter to breed from the best sires, push the growth of the colt, educate him by kindness, and the result will be a handsome profit.

BREAKING YOUNG HEIFERS.

The way to break in young heifers to milk which are wild and given to kicking is being discussed in some of our exchanges and different methods recommended. One writer recommends a rope or strap tightly sirched about the belly in front of the udder. Another objects to this as a barbarous and painful practice at variance with kind handling; that it retards the flow of milk and does not hinder kicking. He recommends putting a rope round the ankle of the hind foot next the milker and fastening the free end to a post or ring in the floor, and the rope drawn back so that the toe only just touches the floor, when, if the head is securely fastened, she can be milked without danger from kicking. We have seldom had any trouble about milking a young heifer if we had the opportunity of handling her freely before calving. She can usually become so accustomed to have her udder handled that she will permit herself to be milked, if treated gently and given a good to take up her attention. But some are so nervous that they become frightened if one attempts to milk them, and will kick through fear and not malice. In such cases our method is to lift the fore foot on the milking side, bend the forearm back upon the arm and slip over it a loop of rope or strap that will just slip over both and hold them in place. If slipped forward next to the hoof it cannot slip off, and standing on three legs she cannot kick. Two or three milkings with gentle treatment have, with us, always been effectual. If she has a relapse of kicking one or two more applications of the strap effect a cure. This method cannot inflict pain or suffering, and we have never known a subject of it to receive any injury.—*Farmers' Review.*

A NEW USE FOR ELECTRICITY.

A new cure has been discovered for balking and cribbing horses by the application of electricity. A gentleman of Baltimore county, Maryland, who has a horse subject to balking, placed an electric battery, with an induction coil, in his buggy and ran the wires to the horse's bit and crupper and as soon as the horse came to a standstill the current was turned on, and after the horse was relieved of his shock he proceeded without showing any disposition whatever to balk. The same application was successfully made to a horse which indulged in cribbing, whereof he was soon cured through the unpleasantness of the electric shock. *Towsontown Herald.*