

milk cows. Whenever a man is harsh with a cow, and whenever a man is employed who is never in a hurry, except when he is driving the cows, he is taking money right out of the pocket of the man that employs him; and whenever the owner of the cows is guilty of such things, he is taking money out of his own pocket and throwing it away. The first thing that a stock owner needs to insure is good treatment of his stock, and then he should see to it that a judicious system of feeding supplies what may be necessary to keep his stock in condition at any time of year. Thus winter feeding will prove profitable.

It is useless to expect good results from stock-raising unless we can keep it in good condition from the start to the end. Young stock is frequently ruinously neglected in this respect. From one cause or another the mother has not always a sufficient supply of milk for her young. In such case the utmost care must be taken to supply it from other sources. The young animal that is half starved will never make the animal that it would if kept growing from its birth, even if it should live at all. It is often expensive to raise a young animal by artificial feeding, but that has nothing to do with the question of raising it right. If the expense is too much, don't raise it. When the milk of the mother is insufficient for the young—and that is quite frequently the trouble with young ewes—it will be found best and much the cheaper to feed the mother liberally on such things as roots, ground oats, etc., which will produce milk.—*Western Rural*.

BREED OF CATTLE.

The Jerseys and Guernseys excel in richness of milk and fine butter qualities. The latter are larger than the former. Herefords are not large milkers, but the milk is rich. The bulls make good crosses on native cows, and the steers fatten rapidly. The Ayrshires are good milkers and will do well on short pastures. Their milk is better for cheese than for butter. Shorthorns are eminently the beef breed, being of large size and early maturity. Besides being profitable for either butter or cheese making, the cows, when dried off, fatten remarkably easy, and make beef of prime quality. The bulls are handsome, and excellent to grade up native stock. The Devons are quite similar to the Herefords in respect to milking qualities, but smaller in size, and of a deep red colour. As working oxen, they are celebrated, being muscular and active. They are thrifty growers and mature early; their beef is of prime quality. The polled cattle are profitable for beef, especially in the prairies of the West, and their meat is superior in quality. The cow's milk is rich, but is not produced in very great quantities. The Holsteins, or Dutch cattle are noted for excellent milking qualities, coupled with the capabilities of making good beef. Their peculiar markings make them attractive to the eye.

DECENCY TO HORSES.

A horse cannot be screamed at and cursed without becoming less valuable in every particular. To reach the highest degree of value the animal should be perfectly gentle and always reliable: but if it expects every moment it is in harness to be "jawed" at and struck, it will be in a constant state of nervousness, and in its excitement is as liable, through fear, to do something that is not expected, as to go along doing what you started it to do. It is possible to train a horse to be governed by a word of mouth almost as easily as it is to train a child, and in such training a horse reaches its highest value. When a horse is southered by the words of its driver—and we have seen him calmed down from

great excitement by no other means—it may be fairly concluded that he is a valuable horse for practical purposes, and it may be certainly concluded that the man who has such power over him is a humane man and a sensible one.

All this simply means that the man must secure the confidence of the animal. Only in exceptional instances is a horse stubborn and vicious. If he understands his surroundings and what is expected of him he will give no trouble. As almost every reader must know, if the animal, when frightened, can be brought to the object he will become calm. The reason is that he understands there is nothing to fear. So he must be taught to have confidence in the man who handles him, and then this powerful animal, which usually a man could not handle if it were disposed to be vicious, will cause no trouble. The very best rule, therefore, which we would lay down for the management of a horse is gentleness and good sense on the part of the driver. "Bad drivers make bad horses."

THE ROAD HORSE.

Nothing more directly contributes to the nerve and courage, to the cheerful willingness, to the muscular condition and general healthfulness of the road horse, than careful, patient, thorough grooming, as conscientiously executed as he is fed bedded and exercised. The ordinary driver, whose horse reflects his indifference, contends that all these preliminary attentions belong to the groom and attendants, that they in no wise form an essential part of the education of the model roadite. But if the road driver is ignorant or indifferent of these things, the chances are they will often be neglected, and the horse will be more frequently led to the hospital, and more often fail to respond gallantly to the call for rushes of speed, than if his owner carefully watched the performance of these needed attentions. The road horse is a delicate piece of animated mechanism. He is very easily fed, or watered, or groomed, or driven, out of condition; and he approaches nearer to the standard of a model road driver, who personally superintends all these important requirements. The road driver is now ready to have his horse harnessed for the pleasure ride. He must see that the bridled is furnished with blinders, or not, as the temperament of the horse requires. If he is high strung, full of nervous excitement, inclined to be flighty, indulging in shying, or timid starts, he should be trained to drive in an open bridle. Nothing inspires confidence, nothing overcomes fear in the horse like a knowledge that the senses of sight and of smelling bring to him that there is no real danger. If the horse can see and smell the object of his fright, his timidity rapidly disappears. Many flighty, nervous horses have been reassured by the use of the open bridles.

BETTER HORSES AND BETTER PRICES.

Never in the history of fine stock interests has such rapid improvement in any branch of stock raising been made as has characterized the American draft horse. Americans have crossed the Atlantic and obtained the very best specimens of French and English draft horses, the progeny of which are scattered throughout the country; yet farmers are slow to improve the opportunity of using them, but will continue to use mongrels because they are cheaper. There is not a more profitable business connected with the farm than raising half and three-quarter blood draft horses. We will suppose the reader is a farmer and possesses four or five work horses; we will also suppose that three out of the five are mares, or can be exchanged for mares. You breed these three mares to one of the many little stallions of the

country and you produce a colt useless until it is three years old, and his cash value is then from \$60 to \$100. Take the same three mares and breed them to a thoroughbred draft horse of any kind of the popular breeds, Norman, Clydesdale, English Draft, Suffolk Punch or Cleveland Bay, and the offspring will be colts that can be put to work at two years old. We have known yearlings to be used for light work, but do not recommend that. After working the colts two summers, thereby receiving satisfactory returns for feed and trouble, at four years old you will find a ready sale for them at \$125 to \$250 per head. We know of a farmer who pursues this course turning off a team of four-year-olds each year at prices that were never lower than \$400 per team.—*Iowa Homestead*.

CORN OR OATS FOR HORSES.

The comparative value of corn and oats for horses may be briefly stated as follows: The former is deficient in many of the elements of nutrition so necessary for recuperating the constant wear and tear which necessarily takes place in the body of a living animal. On this account, horses which are exclusively fed on corn and hay do not receive that kind of nourishment which appears necessary for the due support and maintenance of the animal fabric. Hence, we must not be surprised that corn-fed horses show evidence of being languid, by sweating profusely while being worked, lack of vitality, etc.

Oats, on the contrary, contain more of the essential elements of nutrition than any other article of food which can be fed with impunity to horses. Oats are not only the most natural food for horses, but are decidedly the most nutritious. They are the cheapest, because there is less risk in feeding them, and experience has proved that horses properly fed with oats and timothy hay can, with regular exercise, good grooming, and proper sanitary regulations, be brought to the highest state of physical culture, and can perform more work with less evidence of fatigue than when fed on any other article of food.—*National Live Stock Journal, Chicago*.

OIL-CAKE MEAL FOR HORSES.

The *Live Stock Journal* says: But very few know anything of the value of oil-cake meal for horses. Its use in fitting fine bred cattle has long been common and its value fully appreciated. The same can be said of swine, for no food will cause a pig to gain and put him in show condition so speedily as oil-cake meal, giving him a glossiness of coat not obtainable so well in any other way. What oil cake will do for cattle and pigs, it will do equally well for horses. A horse appearing to be bound up, as this term is understood in the stable, can, by the use of this feed, be relieved of this condition as promptly as by turning out to grass, involving none of the contingencies which attend the latter, the full strength and vigour being maintained in the meantime. Nothing so quickly improves the coat of a horse, as the use of a little oil-cake incorporated with his feed; while turning out to grass in sun and rain fades and roughens the hair in a week's time. In addition to this, oil-cake loosens the bowels, the degree to which this is done being entirely under control while the effect from a run on grass is entirely a matter of chance.—*Indiana Farmer*.

FARMERS in the county of Durham have found that the soaking of seed peas in coal oil is death to the bug. The same experiment is being tried this year in other parts of the Province, and the result will be watched with interest. If it is a satisfactory one, the pea-bug pest ought to be speedily exterminated.