

have risen to a level with the others, and the tusches will begin to appear. At five years the horse's mouth is almost perfect. The corner nippers are quite up, the long deep mark irregular in the inside and other nippers will bear evident tokens of increased wear. The tusches are nearly grown, the sixth molar is up and the third molar is wanting. This last circumstance will prevent the deception of attempting to pass a four-year-old as a five year old. At six the mark on the central nippers and fast wearing away in the corner teeth. The tusches are rounded at the points and edges, and beginning to get round on the inside. At eight years old the tusches are rounded in every way; the mark is gone from all the bottom nippers. There is nothing remaining in them that can afterward clearly show the age of the horse. After this the only guides are the nippers in the upper jaw. At nine years the mark will be worn from the middle nippers, from the next pair at ten years, and from all the upper nippers at eleven years. At nine years the centre nippers are round instead of oval. At ten years the others begin to become rounded, at eleven years the second pair are very much rounded, at thirteen years the corner ones have the same appearance; at fourteen years the face of the centre nippers become somewhat triangular; at seventeen years they are all so.

#### RAISING A COLT.

A colt is regarded as an incumbrance because he is useless until he arrives at a suitable age for work, but it really costs very little, compared with his value, to raise a colt. When the period arrives at which the colt can do service, the balance sheet will show in his favour, for young horses always command good prices if they are sound and well broken. One of the difficulties in the way is the incumbrance placed on the dam, which interferes with her usefulness on the farm, especially if the colt is foaled during the early part of spring. Some farmers have their colts foaled in the fall, but this is open to two objections. In the first place, spring is the natural time, for then the grass is beginning to grow and nature seems to have provided that most animals should bring forth their young in a season beyond the reach of severe cold, and with sufficient time to grow and be prepared for the following winter.

Again, when a colt is foaled in the fall he must pass through a period of several months' confinement in the stable without exercise, or else be more or less chilled with cold from time to time. Should this happen, the effect of any bad treatment will be afterward manifested, and no amount of attention can again elevate the colt to that degree of hardiness and soundness of body that naturally belong to a spring colt. Besides, a colt foaled in the spring will outgrow one foaled in the fall. An objection to spring colts may be partially overcome by ploughing in the fall, or keeping the brood mares for very light work, with the colts at liberty to accompany them always. A colt needs but very little feeding if the pasture be good and there is water running through it. He needs then only a small feed of oats at night—no corn—and if he is given hay it is not necessary to give him a full ration. What he will consume from the barn will not be one-third his value when he is three years old, and if he is well bred the gain is greater.

When a farmer raises his horses he knows their disposition, constitution and capacity. It is the proper way to get good, sound, serviceable horses on the farm. It should not be overlooked that a colt must be tenderly treated from birth, and must be fondled and handled as much as possible. He should never hear a harsh word, but should be taught to have confidence in everybody he sees or

knows. This is an easy matter if his training begins from the time he is a day old. He can be thus gradually broken without difficulty, and will never be troublesome. No such thing as a whip should be allowed in a stable that contains a colt. Colts should not be worked until three years old, and then lightly at first, as they do not fully mature until they are six years old, and with some breeds of horses even later. Mares with foals at their side should be fed on the richest and most nourishing food.—*Philadelphia Record.*

#### STARVING COLTS.

In early life (sixty years ago) we were taught that it was important that in order to have a strong and hardy horse that the colt must be allowed to shift for himself, live out doors through the winter and support himself by gleaning in the stalk fields. And this doctrine is believed, or at least practised, at the present day, not in solitary cases, but the instances can be found all over the State. There is no doctrine more fallacious, and no practice more detrimental to the future usefulness of the horse or injurious to the interests of the owner of the colt. The first year of a colt is all important to his future usefulness, and no item in his care and treatment is as essential as plenty of good nourishing food. He needs as much, if not more, than a fully matured horse. Just as a boy's appetite and the demands of his growing system require more food than the man of mature age, so the colt needs more at the period he is building up his flesh and bones than at any other period. So give the colts plenty of good food, not in proportion to their size in comparison to the horse, but feed in proportion to the appetite and the use they have in building up their system. Wallace, in his monthly, says colts need more food than an ordinary horse. Give the colts pure water, not too cold; good air, clean quarters, plenty of room, backed by an abundance of strong, nourishing food. Then he will add growth and strength, a solid constitution, and valuable powers. And during this solid winter let the men and the boys on the farm recollect the difference in the appetite of a boy and a man, and treat the noble little colt, whose appetite is keen as a boy's who has been all day fishing, and he will repay it in efficient work when he wears the collar.—*Iowa State Register.*

#### WHY DO ANIMALS NEED SALT?

Professor James E. Johnston, of Scotland, says: "Upwards of half the saline matter of blood (fifty-seven per cent.) consists of common salt, and this is partly discharged every day through the skin and kidneys. The necessity of continued supplies of it to the healthy body becomes sufficiently obvious. The bile also contains soda (one of the ingredients of salt) as a special and indispensable constituent, and so do all the cartilages of the body. Stint the supply of salt, therefore, and neither will the bile be able properly to assist digestion, nor the cartilages to be built up again as fast as they naturally waste. It is better to place salt where stock can have free access to it, than to give it occasionally in large quantities. They will help themselves to what they need if allowed to do so at pleasure; otherwise, when they become 'salt hungry,' they may take more than is wholesome."

#### THE GALLOWAY.

The secretary of the Galloway Society, of Scotland, says: "There are strong indications that a great demand for them will rise in Canada and the United States, as more Galloways have been sent out during the last few months than for

many years previously, and the American people are beginning to appreciate the merits of the breed. The Polled Angus is a magnificent breed for particular circumstances; but not a breed possessing so many recommendations to American breeders as the Galloways. There is no breed of polled cattle in Britain so impressive and influential as the Galloways in crossing with horned cattle, with the view of getting quit of the horns. Where a pure, well-bred Galloway bull was put to cows of any horned breed, the produce in 99 cases out of every 100 would be polled; and he would leave those in a position to judge to say whether there were any other polled breeds of which the same could be said. Then there is their hardy character, which is a great point in their favour. There is no breed, except, perhaps, the West Highland, so peculiarly fitted for exposure to the extremes of heat and cold experienced in many parts of the Western States, where a large number of cattle have to lie out at all seasons."

The practical man can tell at a glance the exact condition of his stock, if he is fit for this business.

Every care and attention shown to horses, no matter what their condition is, will bring its reward. The kind of influence thrown around a young horse will have its effect on its character in after years.

There is a general movement in Providence, R. I., to dispense with blinders on horses—a reformation begun years ago in England and on this continent, and now fast spreading throughout the civilized world.

The use of sulphur with live stock of all kinds has a value in preventing many forms of disease, and especially skin diseases. It must be used cautiously, as it is an active poison. The average hired hand must not be trusted in using it. Mix thoroughly and there is no danger in giving it.

A Western cattle breeder reports that the greatest profit is made in the first year of an animal's growth. This is increased, but in less proportion the second year. If kept a year longer not only is there no profit, but all the clear gain of the second year is wasted. This is a striking commentary on the advantage of early maturity.

A VETERINARY professor says that "a great majority of ring-bones in young horses come from the failure to shorten the toes." To this may be added that ring-bone is apt to be formed if colts are allowed to stand on a plank floor, or anywhere else where the footing is hard, during the first eighteen months of their age. Whether in stable or yard during this period, let them have earth for standing or walking, free from stone or gravel.

The practice of dosing horses with heavy quantities of medicine every time they are ailing is not only an expensive and ludicrous habit but one that is cruel in the extreme. In nine cases out of ten, those administering know but little of the medicinal qualities of the stuff they give them. There is no question that medicines and timely aid are often necessary, but should always be given under the advice of some one who knows something about them.

LINSEED meal is an excellent food for stock, when fed in connection with grain. It should be fed sparingly at first, mixed with grain ration, and can be increased to a quart for each grown fattening animal. For store stock, half that quantity is sufficient for a full ration. Calves and colts should have a handful per day each. It keeps them in a thrifty growing condition, and the coat is very glossy. For sheep it is specially valuable, and fattening sheep can be given all they will eat after they become used to it.