Apples in the Stock Yard.

Comparatively few analyses of apples have been made with reference to the several constituents that may take part in their nutrient effect, and there are no separate analyses of the seeds. We give in the following table the average of the results of the analyses of different varieties of apples, together with a statement of the average composition of some other articles of fodder for purposes of comparison:

	Water.	Albuminoids.	Carbohydrates.	Fat.
Apples.....	83.6	0.4	13.7	....
Mangolds.....	86.6	1.2	10.0	0.1
Potatoes.....	74.6	2.2	21.2	0.15
Good Hay.....	14.6	10.1	40.9	2.3

Poverty in the important albuminoids is shown by these analyses to be the special characteristic of apples as compared with potatoes; nor is the fruit especially rich in any other valuable constituent which may serve as a compensation for this deficiency; so far as anything is known about the proportion of fat, it differs to no important extent from that in potatoes or mangolds. Obviously one would not buy apples at usual prices, when mangolds, potatoes or hay can be had at usual prices; but it is quite another matter when the apples are rotting on the ground. There is abundant testimony to the effect that a more profitable use can be made of them than to manure the orchards that produce them. No one who has used thom properly will deny that they make very good fodder; but when we are advised by one friend to feed only two pecks a day to each cow, and we are told by another that we can feed two bushels with profit, between our desire to save apples on the one hand, and to save cows on the other, we are unwillingly forced to stop and consider the matter, or seek more definite counsel from our favorite agricultural newspaper; and while we consider, or wait for an answer, the apples go on rotting.

It is safely established that apples of good quality may be safely fed to some cows at the rate of a bushel a day, by a gradual increase of the allowance from a peck a day up to this limit. It may be carried still further up to two bushels a day with other cows; but one rule cannot be made for all cows. We have seen one cow begin to shrink in milk on a bushel per day, while another by her side on the same feed continued her yield undiminished. There is no question but that both yield and quality of the milk may be improved by feeding apples; it is possible to obtain an increase of 50 per cent. in the yield, with at least no loss in quality by judicious management. Many farmers, basing statements on their own experience, affirm that apples are worth more, in years when very abundant, for feeding to stock than for cider—even twice as much, one assures us who has fed many hundred bushels. Fed with corn they are said to be worth half as much as the corn. Others claim that they are as productive of growth or milk as mangolds or potatoes, but such an assertion is not justified by their chemical composition. The general opinion as to their value is more moderate and reasonable, though too vague to be put in plain figures. There is no well established difference between the feeding value of sweet and sour apples, although there is some prejudice in favor of the former. It is not based, so far as we are aware, on any careful comparative tests.

Our inquiring friends may safely feed surplus apples in large quantity to all stock if they but closely watch the effects, and lessen the allowance in any case so soon as bad results begin to appear, either in the yield of milk or the health and appetite of the animal; but other food of a more nourishing character, like oil-cake, bran or meal, with good hay or grass, should also be liberally provided. It is poor economy to allow any product of the farm that possesses feeding value to go to waste if there is any way of bringing it into use, even though some richer fodder may have to be purchased to mix with it. The free use of salt is advisable with large rations of apples. It would be worse than useless—for it might do positive harm—to lay down more precise rules than these; but with a reasonably careful observance of such general directions, our over bountiful apple crop of every alternate year may be well utilized, although not with such profit as if the fruit could be sold at the prices that rule in years when apples are comparatively scarce.—[Ex.

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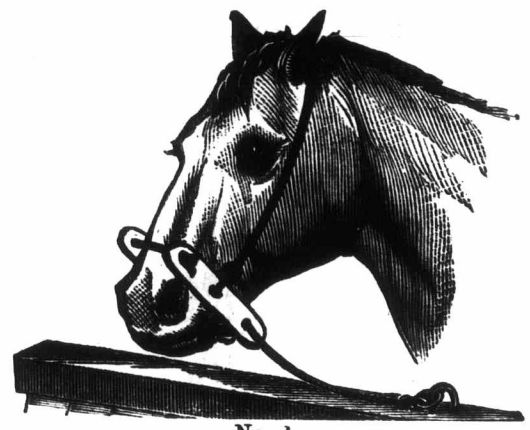
Postmasters are requested to act as our agents.

Halter for a Horse which is in the Habit of Breaking Loose.

This halter is plainly shown in our engraving, No. 1. It consists of rope and two pieces of strong hard wood of a suitable size and strength. For a horse of ordinary size the pieces of wood may be eleven inches in length. Three holes are bored in each piece, one at each end and one six inches from one end and five from the other. Through these holes ropes are passed making a halter, as shown in the engraving. The rope used should not be too large, but must be strong. In making the halter be careful to have the pieces of rope of such a length as to make it fit comfortably on the head. Measuring from the middle hole of the side pieces, the longer portion projects forward. A knot should be tied in the shank or tie rope on

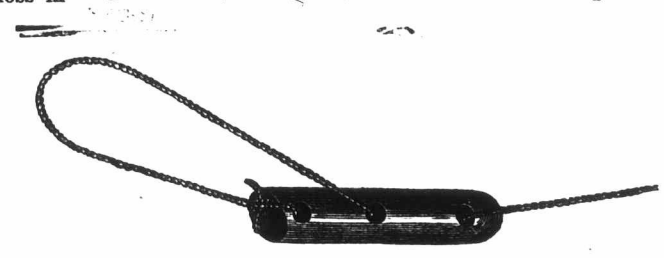


No. 1.

the outside of the pieces of wood, to prevent them from spreading apart too much, and allowing the horse to rub the halter off. This means of tieing horses which have been in the habit of breaking loose has been used to some extent by Canadian and American farmers, and has been found very serviceable.

CUT No. 2

Represents a very useful and simple implement, very like the slide used to tighten and hold tent ropes at the proper tightness. We have found No. 2 very useful when attached to plow lines. Every plowman knows the inconvenience caused by the lines shrinking in damp weather and again stretching when they become dry, or from the lines being



No. 2.

too short or too long when used with different teams or different implements. By using this simple contrivance these troubles are easily overcome. The slide may be made of any hard wood; about three inches is a suitable length. Bore three holes, one near each end and one in the middle; the holes should be of such a size that the plow line will just slip through (it will always be found an advantage to use small but stong lines). Our engraving shows the slide and a portion of the line arranged ready for use. When the line is too long draw it through the slide, making the loop to be held in the hand larger; but when too short, draw it through so as to lengthen the line and make the loop smaller. If neatly made, it will be found not cumbersome, but very handy.

Prevention Better than Cure.

Were more attention paid to the sanitary condition of our live stock at all times, there would be a great saving of veterinary bills. Better feeding, better grooming, and stricter attention to ventilation would make a great improvement in the condition of farm horses. They manage these matters better in England:

Both the health and comfort of horses have of late years been greatly improved by the better construction of stables. They are made more roomy and lofty and provided with means of thorough ventilation. In many new stables lofts are done away with or the floor of the lofts is kept well above the horses' heads and ample shafts are introduced to convey away foul air. By perforated bricks and gratings under the mangers and elsewhere round the walls, and also by windows and ventilators, abundance of pure air is secured for the horses; while, being introduced in moderate amount and from various directions, it comes in without draught. Too much draught is almost an unknown stable luxury. To secure a constant supply of pure air horses require more space than they generally enjoy. Even when animals are stabled only at night, a minimum of 1,200 cubic feet should be allowed. In England the new cavalry barracks give a minimum of 1,509 cubic feet, with a ground area of fully ninety square feet per horse, and the best hunting and carriage horses have more room.

Feeding Turnips.

From the first cultivation of the turnip for stock feeding it has been highly valued, not only as food for sheep and store cattle, but also for fattening. We have fed steers and heifers for the English market on turnips and hay, that were admitted by the purchasers to be prime beef—A. No. 1. It has, however, of late been not unusual to depreciate the feeding properties of roots, especially of turnips. These theorists say there is little or no nutriment in them, and add that the beef of cattle fed on turnips is of very inferior quality, with an unpalatable flavor. A Vermont correspondent of the American Cultivator fully disproves this erroneous idea.

To satisfy himself, he says, as to whether the food that a beef or other animal was fatted on would impart the flavour or taste to the meat, he decided to feed one cow on turnips. This cow was fed about two bushels of cut rutabagas a day, after she was fed on hay, and this ration was continued up to the day before she was slaughtered. Two quarters of this beef were sold to different parties, the others he kept for his own use. While the beef was being dressed and cut up, and while trying out the tallow, he was unable to detect any turnip taste or smell. On inquiring of those persons who bought and used the two quarters of beef, mentioned above, they pronounced the beef of a superior quality, and that they discovered no turnip flavor about the meat or tallow in any way that it was used.

The cow that he fatted the next year was fed and treated in the same way, and a part of the beef sold to other parties, and with the same results. Since that time he fatted beeves wholly and in part on rutabagas, and sold the meat to butchers and other persons; yet he has never heard of a single instance in which the taste of turnips was noticed in the meat. For several years past, when he has had a surplus of turnips to spare for that purpose, he has fatted beeves partly on turnips and partly on meal, giving one ration of turnips and one of meal in a day. In all respects, he thinks that the results have been more satisfactory than when he has fed either turnips or meal exclusively.

During the past winter he fatted three heifers. Two of them were two years old in March, 1880; the other, two years old in October following. After they came to the barn he commenced feeding them, in addition to what hay they wanted, one-half bushel of turnips in the morning, and two quarts of Indian meal and one quart of wheat bran mixed together, at night. January 11th he killed one of the oldest heifers; and the 5th of February the other two were killed. The dressed weight of the three was 2,084 pounds. The quality of the beef was pronounced by the butcher who had two of them, to be equal to any that he had ever bought.

The lot of lambs that he fed one year ago last winter were fatted on turnips and corn. In the spring they were sold to a butcher, who dressed and used them for his own trade. He said they were the fattest lot of lambs that he had ever bought. He never intimated to me that any turnip flavor had been noticed by him or others to whom he had sold the meat, although he knew that they had been fed turnips every day up to the time that he bought them.

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