

## Livestock.

FARMERS who have had the foresight and good judgment to raise a supply of beets, pumpkins or turnips can now get a good price for them by feeding to hogs. Commence with a small feed and increase it a little every day, until they get accustomed to the change. Do not change all at once from corn to some other feed, but gradually replace about one-half the corn with something else. The best breeders agree that sows and breeding stock should not be fed entirely on corn for more than a few days at a time.

WALKING with many horses is a habit; in fact it is so with all horses to a certain extent. Break and work a colt by the side of a good, energetic horse, and its habit of walking will be adapted more or less to the gait of the older horse. And very often a pair of horses that might have made a fast walking team, are ruined in that respect, all because their driver is a laggard himself. When purchasing a team for general purposes, search for horses that are good, smart walkers, and after using them for one week, the owner will never want any other.

THE best cow for cheese is the one that gives the best balanced milk. It is better, however, to have an excess of butter fats in the milk than too little. Milk at this time of the year is viscid, and often becomes cold before being strained, so that the cream will not rise easily. To correct this, add about a pint of water at 110 to 120 degrees to a half pan of milk, bringing its temperature to 98 degrees. Then, when the milk is set in rooms where the temperature is about 60 degrees, the cream will rise easily and quickly. More cheese is produced from milk that is thoroughly aerated.

In rearing fall calves it should not be forgotten that they need salt as soon as their food is changed from milk. They also need water to drink, which is too often neglected. Milk is not sufficient to quench thirst, and many a calf lacks thrift simply because it does not have water. Calves should be fastened while eating, or else fed separately, otherwise the strongest will get more than their share. But it is best to allow them freedom in a roomy shelter when not eating, and to give them outdoor exercise when the weather is not severe. The more liberty consistent with sheltering, the better. Enough litter to keep the calves clean is none too much.

THE English and Scotch farmers have portable pens for their sheep. These are moved on to a piece of fresh grass each day, where the sheep are fed roots and grain, and where each day's droppings are scattered and left. This prevents the useless running over and tramping down of a large amount of feed. At each move the sheep are introduced to a fresh patch of grass, unbruised and unsoiled. In this way these farmers are able to keep a large number of sheep on a comparatively small amount of pasture. It is better than soiling, because there is no cutting and hauling of feed and no getting out of manure. The grass is fed where it grows, and the manure is left where it is wanted to replenish the fertility of the soil.

THE time to select breeding stock is when the pigs are from four to eight weeks old. The proper way is to leave the little things with the sow until they are eight weeks old, and so arrange matters that they can have a trough for themselves, with feed accessible at all times after they are three weeks old. Watch them closely and select those that improve most. In selecting stock, great care should be given the pedigrees, both on the sire and dam side. Although it is a great help in getting a strong pig, one cannot depend on the pedigree alone, for it is not the pedigree alone that makes the pig. Having obtained a proper conception of the best hog one must not expect to be able to procure it in every fence corner. Perfection has never been reached, but in all breeds of stock there are animals of such high merit, as to seem perfect, and though we cannot see much superiority in the individual animals of to-day over those of a few years ago, the number of the high classes is fast increasing, proving that our labor is producing good results.

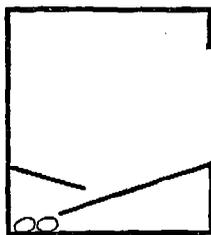
THERE is an art in feeding sheep so as to make the feed spin out evenly and uniformly and without waste, as the wool is paid out from the spindle into a fine and perfect thread. To cram the rack full even of the best of hay or to dash a certain quantity of grain recklessly into the troughs is not feeding. Grain should be given at noon or night, not in the morning, as then many sheep which require it most are lacking in appetite. Coarse provender, as fodder and straw, ought to be given in the forenoon, and that in small portions, which will be eaten up clean and with keen relish. Sheep are easily made into epicures by too liberal feeding; they will pick and mince the best of hay, eating off the heads, pulling out and wasting enough to feed one third of their number. It is not true kindness to animals to give them too much at once, but the reverse.

THE following hints on the care of horses in winter are worth noting: Have the stable properly ventilated. Don't forget that a horse requires more food, and of a more nutritious character, in cold than in warm weather. Horses clipped in mid-winter should never be allowed to stand unblanketed. Nails and a hammer properly applied will often convert a rickety barn into a warm one, and save hay and other food. Have all the horses properly shod and kept sharp all winter, as it is cruel to expose the animals to the chance of painful falls. Grooming should not be slighted in cold weather; grooming in the stall is bad for the horse, and the man who does it cannot get around the animal to do thorough work. In slushy weather, when the roads are bad with wet snow, give the legs of the horses a thorough rubbing, first with a wisp of straw and afterward rub dry with a piece of old carpet, or some such fabric; give the heels special attention.

## The Poultry Yard.

### A Safety Hen's Nest.

OUR illustration is a sectional view of a device which, though not new, is quite effective in preventing the unprofitably prompt conversion of agricultural products which is involved in the habit which some hens have of eating their own eggs. A false bottom is fastened in the nest-box, consisting



SAFETY NEST.

of two boards, sloping to the center, with a space between just wide enough to admit an egg. When the hen turns to cackle over the new-laid egg and then to devour it, she is naturally astonished to find an apparently empty nest. It is not expected that this will work upon her feelings so much that she will resume her place and lay another egg, but it will at least place the one already laid beyond the reach of her beak.

To insure fertile eggs for hatching, fowls should have plenty of exercise and green food or clover. The males should have a run with the flock at least a week before the eggs are used.

A MODERATE dose of sulphur given twice a week serves as a laxative and blood purifier. The sulphur permeates the whole system, even coming through the skin; and being death to insect life, causes parasites to drop off.

THE first meal should be given as early in the morning as possible. The hens are usually awake long before the people of the house are up, and they will be impatient for their breakfast. The earlier

they receive it the sooner they will feel like scratching and working, as they often feel the effects of a cold night.

THERE is no economy in wintering more cockerels than are wanted for breeding. The sooner the rest are marketed the better, as after they are matured they add to the expense of keeping the poultry without a fair return of profit.

SEASON all soft food with a pinch of salt. A small quantity of flaxseed meal mixed with their morning meal is also strongly advised. It makes their plumage bright and glossy, and deepens the color of their combs and earlobes.

FOWLS will readily eat snow if the water supply is shortened, or ice forms in the fountains. Snow does not allay thirst, but causes roup or throat ailments. Hence do not cut off the water supply, under the supposition that the hens can get it from snow.

WHILE fine hay or fine, well-broken straw makes good nests, a very good nest can be made with shavings from wood. Select only the thinnest and softest, and make the nests well with them. They can be lightly sprinkled with diluted carbolic acid to keep away lice, and, being very porous, will retain the smell and effect of the acid much longer than any other materials.

To decide whether eggs are fertile or not, hold them between the thumb and forefinger with an end towards the thumb and finger in a horizontal position, with a strong light in front of you. The unfertilized egg will have a clear appearance, both upper and lower side being the same. The fertilized egg will have a clear appearance at the lower side, while the upper side will exhibit a dark or cloudy appearance.

In the matter of dust or earth baths, fowls much prefer burrowing in the earth to wallowing in a shallow dust-box. One corner of the poultry house should be enclosed and then filled with soft pulverized, dry earth to about twenty inches above the level of the floor. Have a small door connecting this with the poultry house, and when it is left open the fowls will walk in and take a good wallow. All kinds of poultry especially love to dust themselves when there are indications of stormy weather.

DURING winter the fowls must be kept comfortably warm, and it is seldom necessary to resort to artificial heat to secure the necessary degree of temperature, even in severe weather, if the house be well built, and be closed during the night. For very young chicks, and where incubating is carried on, the building must be heated by a stove, or in some other way, to raise the temperature above the freezing point. Some use an oil stove, instead of one burning coal, but in any case the stove must be protected or placed where the poultry cannot have immediate access to it, else they may seriously injure themselves, or else endanger the buildings from fire.

DURING the moulting season, fowls are not only more exposed and liable to atmospheric influences and changes, but also more susceptible to them, consequently it is very important that they should be protected from wet or damp and currents of chilled air, for these would prolong the process and lower the tone and vigor of the fowl. On the other hand, warmth assists fowls while moulting, and they are sometimes kept in very warm places in order to precipitate a moult. Hens are set at moulting time for the same purpose by some poultry keepers. The increased temperature present during incubation appears to have the effect of hastening a moult, and shortening the period of its duration. The material for a new coat of feathers must be, to a very great extent, previously stored up in the fowl's system, and in order that this shall be accomplished a judicious system of grain-feeding ought to be adopted previous to moulting time. In addition to wheat, barley, and oats, which are the best food stuffs for stock birds, and should be given alternately say, week and week about, a little hempseed should be added thrice.