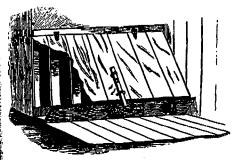
MASSEY'S ILLUSTRATED.

Live Stock.

A Good Hog Trough.

THE claims made for it are that it is a good trough a permanent pen. The cut fully explains how



this made. The upright pieces prevent the pigs from getting into the trough, and it is easily cleaned from the outside of the pen.

PROVIDE blankets for your horses both for the stable and when standing hitched outside. Take iong the blanket and spread it over the horse when it is pulled up and hitched, but keep a breast piece on constantly when driving in cold raw weather, to protect the chest and lungs.

A MODERATE allowance of oats or corn with good dover hay, makes the best feeding for sheep. A theep of 100 to 120 pounds live weight should have three pounds of hay and a pint of mixed corn and pats, or buckwheat added. Buckwheat, rye, and oats are excellent grain food for sheep.

A WRITER on horse topics says : I wish all horseen knew the value of sunflower seed. It is not only one of the best remedies for heaves, but a horse Which has recently foundered can be entirely cured by being given half a pint twice a day for awhile in this feed. Last autumn I took an other his feed. Last autumn I took an otherwise valu-ble young horse, which was so stiff that I could hardly get it out of its stall. In two weeks you wouldn't have known anything was the matter with it, and it has been all right ever since.

For the best growth of calves in the winter they should be fed and treated as the cows are. As they are as quarrelsome as other animals, they should be tied up each in its place, so that each can get its share of food. An excellent food for calves is made up of cut hay of the best kind, wetted and mixed with-for ten pounds of it-one pound of corn meal and three pounds of bran. This is enough for two calves per day, with as much clover hay as will be gaten clean. Salt should be added in the same proportion as for the cows.

TAKING the amount of food required to make a pound of gain on swine weighing thirty five pounds, .3 per cent more food is required by swine weighing seventy pounds, 14 per cent more by swine weigh-ing seventy pounds, 14 per cent more by swine weighing 125 pounds, 19 per cent more by swine weighing 220 pounds, 55 per cent more by swine weighing 270 pounds, and 84 per cent more by swine weighing 325 pounds. The cheapest growth is therefore made on young animals; after the matur-ing period the cost of gain increases rapidly. If we double the time needed to grow a hog, about three. double the time needed to grow a hog, about three-fourths of the food is used for maintenance, wheres but little more than one-half of the food need go for maintenance. By doubling the time of feeding we halve the profit of feeding.

A GOOD cow is flat-ribbed just back of the shoulers and has well sprung ribs further back. She as broad, flat ribs and so far apart that one can lay wo fingers between them. Her skin should be ose and flappy over the flank and her umbilical evelopment should be firm and strong, with the veins of the belly very prominent. She should be broad between the eyes, should have a medium height, straight face and bright and prominent eyes. Besides, the poll or forehead should belong between the horns and the eye; the neck should be clean and thin and backbone strong, the pelvic arch high, the hams thin to give ample room for a large udder, and the tail should be long, slim or flat. She should have a long udder, extending well back and frontone that will be soft and flabby when milked outand should have a three-fold, wedge-shaped form, the general tendency of weight being towards the udder, indicating power to produce milk.

Training of Colts.

HERE are some excellent suggestions about the training of colts, which we take from the London Live Stock Journal, as follows :

"In most sections of agricultural practice we have made a decided advance, and it is somewhat singular that in the rearing, training and breaking of animals-what we might style education of ani-mals, so conducive to the comfort and discomfort of man-we still pursue a course that is closely associated with the dark ages. "One common foundation cause forms the basis

of our non-success in education of animals, and it is the root and the resultant cause of the evils that follow. We assume that all animals at birth possess hereditary vice, and that that vice must be eradicated before the animal can become a useful servant to man. This is most certainly a mistake, and one that leads up to numerous evils. The same erroneous practice prevails in the training of horses, bulls, dogs, etc., but it is probably in the case of horses where the greatest mischief results. In the education of a colt or filly or a young bull, the same care is needed as in that of a child. The disposition should be studied, and defects eradicated by kind yet firm treatment. At present, if a foal is of a lively temperament, it is at once put down as vicious, and if either of its parents has shown what is mis-called vice, the result of mistaken brutality in their education, then the foal's liveliness is put down as hereditary vice, and a prolonged course of harsh conduct and beating is deemed necessary to effect a cure. If, on the other hand, the young animal is of a slow and heavy nature, it is erroneously supposed to be the result of vicious sullenness, and the same treatment as in the case of the lively foal is undertaken-harsh treatment and beating to bring them into so-called subjection. In each case this cruel discipline has just the opposite effect to that sought, and hence we have sadly too many kicking, biting, jibing and bolting horses. In place of having horses which entertain affection for man, we have them in constant fear of man, ever expectant of a blow, and their worst actions, often leading up to accident or death, are too often the result of this fear; possibly some movement of the driver being misconstructed into the intention to strike a blow. In the breaking and education of all young animals, firmness should blend with kindness, but never with harshness or brutality.

The Poultry Pard.

DURING winter let the fowls run out on dry days. In a place that is dry and sheltered against the winds they will not care for the cold.

GIVE your fowls charcoal in some shape as it assists in keeping the stomach sweet and also aids in the digestion of food. Coal ashes thrown in their yard is a good way to feed it.

DIRECTLY after snow storms always clear away some portions of the ground around the hen-houses for the comfort and health of the stock. Standing on the snow is not as good as on the ground. If the fowls cannot get on ground they crowd too much in the houses.

To get fertile eggs for hatching, the fowls should have plenty of green food, all the exercise possible, and the male should have run with the flock at least

a week before the eggs are used. Eggs for hatching should be of a uniform size-such as contain double yolks are of no value, and eggs from immature pullets produce immature chicks. Select eggs from vigorous parents and more chicks with less difficulty will be raised.

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 inclosed 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.

Fix the nests for the sitters where they will not be disturbed by the other hens and line them well with fine hay or chaff. Give the hens no more eggs than they can cover well. In cold weather eleven eggs are enough for a good-sized hen, nine for a eggs are enough for a good-sized hen, hile for a small one. When feeding the sitters, and there should be a regular time for feeding them every forenoon, do not let them remain off the nests until the eggs chill. The last week of incubation sprinkle the eggs two or three times very lightly with warm water just before the hen returns to the nest.

FARMERS who keep but a few common fowls for eggs and poultry would find it to their advantage to breed from a pure bred male. The best kind for this purpose to suit those who wish to combine plenty of eggs with good plump carcass, is the Dorking or the Langshan; the Plymouth and Wyandotte also answer where yellow legs and skin are desired. Where eggs are the principal object, the Minorca will produce the desired effect. The Leghorn or Hamburg varieties would also answer, but the Minorca is to be preferred, having the advantage of the other breeds in size and laying qual-The Houdan male mated to common pullets, produces chicks that at maturity average larger than either parent, with good plump bodies and good vigor. Nearly all, however, will be black.

GAME fowls are probably the oldest of the pure English breeds and have been bred for generations with great care and skill. In addition to their pugnacious dispositions and great courage and endurance they are extremely handsome birds. Their beautiful plumage and delicious flesh make them popular with many who consider their fighting proensities objectionable. For crossing with other breeds they are often used with good results. They are rather good layers, good sitters, and attentive to their young chicks. The kinds quite widely known are brown-breasted reds, black-breasted reds, duck wings, and pyles, although there are a great many other varieties. A game hen will defend her young to the last extremity against cats or other enemies, but the varieties of game birds can hardly be recommended for domestic purposes as profitable farm fowls.

Pithily Put Pickings.

You need not fear the wrath of God if you do nothing to de-serve it. . . . Certainly, my son, love your enemies, but don't chew them up, burn them or drink them; lettobacco and whiskey alone.—Western Plowman.

CULTIVATING the mind often enables us to get more out of the muscle. . . . Labor and thought should never be di-vorced; the thoughtful laborer is the effective laborer. . . So far as his employment is concerned the farmer's highest am-bition should be to make his acres more productive.—Farm,

Stock, and Home.

Ir there were more drains on the farm there would be fewer druggists in the village. -- Maryland Farmer.

THERE is no calling under the sun in which kindness is of more avail than on the farm; the farmer is brought in constant contact with his stock and it is of the utmost importance that he practices gentleness towards them.—Rocky Mountain Hus-bondows bandman.

THERE are too many middlemen—one-half of them would easily do all the legitimate business—the others should go to work at some productive labor.—Orange County Farmer.

FARMERS are too much like isolated points. They must touch each other oftener and closer if they would improve as they should, industrially, socially and politically. Let us draw in our elbows, and push out our shoulders.—American Agricult-urist.