

horses been stalled with a heavy load and whipped until the driver and horse were both certain he could not pull it, you would have a horse thoroughly broken not to pull.

Let me impress the truth of this by calling to mind another illustration of the result of similar treatment. Some men who have horses given to pulling upon the halter, put on them halters they were confident the horse could not break, and then whip them over the head in order to make them pull. Nearly always when a horse finds he cannot pull loose he will walk up to the hitching post. Some will argue that a horse can be so thoroughly broken in this way that a tow string would hold him. There is some truth in it, although all horses are not to be managed in the same way. A horse of nervous temperament should never be excited. They will always do their best in a perfectly calm state of mind.

The drivers of fast trotters have taught us this. They have also learned that to keep the horse calm all men in attendance must remain so. No passionate, profane man ever developed great speed in a horse or trained a powerful pulling team. With these general principles in view, and proper attention to details, any team may be trained so that it will be a delight to work them.

Have a definite and small vocabulary to use with your team, and always use the same word for one purpose. Keep the same two horses working together, and always on the same side. Use open bridles so that the team can see what is going on around them. Keep all attachments strong that your team will not be in fear of straining themselves through something breaking. Use close fitting collars and harness, and never allow a horse to become sore from any part of the harness. Teach your team to start together. Keep them strong and in good spirits by good and regular feeding and good care in every particular. Let them come to heavy pulling gradually, and not at all until their bones are well matured.

## Winter Production of Eggs.

**I**N producing eggs during the winter months it is necessary that the fowls have a warm comfortable house, facing the south or south east, and perfectly free from draughts. It should be situated on naturally well drained land, and should be sheltered as much as possible from the cold winter blasts. There is nothing so detrimental to the health of fowls as cold and dampness.

To attain success in the greatest degree the hen must be kept at work. When she has to work she should be supplied with plenty of room to exercise herself; generally from four to six square feet is considered sufficient. One of the best methods of keeping the hen at work is to cover the floor to a depth of four or more inches with cut straw or chaff. Some use leaves instead of chaff. It is just the same with a hen as a cattle beast, if you wish them to do well they must be kept warm and comfortable.

A mixture of equal parts of wheat middlings, ground oats, and bran, well scalded and fed warm early in the morning has given good results. The leaves of clover or finely cut hay should be mixed with the food as a substitute for grass. Fresh meat scraps from the butcher's shop, finely cut and soaked, added to the ration about twice a week are very essential where a large number of eggs are desired. Boiled potatoes, carrots, turnips or cabbage may be mixed with the grain and given as a change of food. By giving a change of food frequently better results will be obtained. From the results of experiments carried on at New York Experimental Station it would be advisable to add a little salt. One ounce per day to every hundred hens will do no harm, but it is not advisable to feed more than that amount as it may prove injurious. A little pepper and some linseed may be added occasionally.

The soft food should be fed in a trough which will not allow the fowls to scratch in the food or in any way spoil its wholesomeness. A very satisfactory plan is to make a V shaped trough, the one side about one and one-half inches higher than the other. The end pieces should be equal in height with the high side, and the cover is hinged to the high side. The fowls can then pick from the lower side. As soon as

they are done eating, if any food be left—which should be of rare occurrence—the trough should be cleaned and always removed from the pens or else put out of the way of the fowls so that they may have sufficient room for exercise. Always keep everything clean and sweet.

A little grain should now be scattered in the straw and the birds allowed to work. Some advise giving another feed at noon, but as a rule if you feed about 3 o'clock in the afternoon, this will be unnecessary and causes less disturbance. Wheat is probably one of the best foods, and in sections where buckwheat is grown it may be fed with good results. Corn may be fed rather freely to the lighter breeds of fowls, such as the Leghorn and Minorca, but it is always advisable to caution against feeding it very extensively to the heavier breeds, as the Brahma and Cochins, because they become too fat. Oats are very highly recommended by some. It is important to change the evening as well as the morning food.

The fowls should be watered early in the morning and should have a liberal supply all day. Warm water is preferable to cold. If skim milk can be obtained, it aids very materially toward filling the egg basket, but should not, however, be wholly substituted for water. A fountain is preferable to an open dish as it does not allow the water to become filthy, and also the fowls can not get their heads wet, which causes various diseases. A fountain which answers the purpose very well is constructed with a lip on the side large enough to admit a hen's beak. Fountains are advertised in the leading journals. They should be emptied every evening to clean and prevent from freezing.

Always keep the fowls well supplied with grit as gravel or sand. Some recommend feeding oyster shells. This has always been a debatable question, and can not be better solved than by giving the General Remarks from Bulletin No. 38, from New York Agriculture Experiment Station:

"The feeding of oyster shells during the laying season, where they can be cheaply obtained is recommended. One pound will contain lime enough for the shells of about seven dozen of eggs."

"Fine gravel containing limestone will probably as well supply the deficiency of lime existing in most foods, but the use of some sharper grit with it may be of advantage."

"Long or sharp splinters of glass or dry bone should be avoided. The size of the particles of grit had better be larger than that of a kernel of wheat and should be smaller than a kernel of corn."

Always keep your fowls well supplied with ground green bone. It may be either fed alone or mixed with morning feed. If a person has a bone mill they may grind them for their own use. They are sold ground, ready for use by some firms. Dried bones are not as good as green ones.

Avoid having large flocks, twenty five will give better results than fifty. You may have a greater number of the smaller breeds together than of the larger ones. Crowding is detrimental to good health.

Late chickens seldom lay during the winter, therefore, always try to have your chickens hatched early. Remember that the lighter breeds lay at a younger age than the heavier ones.

A hen after she is two years old, especially of the heavier breeds, seldom lays as well as younger ones. Hens that moult early in the fall are likely to lay during the winter, if they received proper care.

Never keep mongrels as it costs no more to feed a well bred fowl, and they respond far more readily to treatment, besides they are more pleasing to the eye.

W. R. GRAMM.

## His First Love-Letter.

No matter how much time and mental labor a young man may devote to his first love-letter, the sum of \$500 wouldn't be sufficient to induce him to listen to it being read by the counsel on the other side in a courtroom full of people—that is, if he could avoid the terrible ordeal.