

but all that is given him is not lost. He should have good pasture and change of pasture during the summer, a run in a clover or old-land fog in the autumn, and sound hay, chaff, chopped straw and turnips during winter. The water supply should be pure and plentiful, and in cold weather he should have the shelter of a shed or foldyard. It is good for foals and yearlings to run together; they exercise themselves better than when alone, and for blood and hunter foals, that will have to gallop if they are to sell well, it is important that they should run out with another of their kind. It is well worth while looking over the feet and mouths of young horses from time to time, and having the hoofs that require it trimmed, and "wolf teeth" extracted—which latter are often the sole cause of a young horse doing badly and losing flesh.

A two-year-old agricultural colt or filly may begin to do a little work on the farm and help towards its keep, but if a filly two years old and rising three is put into light work she should on no account be put to the horse at that age. I have observed no harm done by breeding off two-year-old mares that are left unbroken and well kept till they are rising four; in fact, it is better for a two-year-old mare to go to the horse, say in June, foal in May, when she is three years old, and not go to work till the following "back end" when she is rising four, than to go into hard work on the farm straight away. A hunter mare is not any the worse for having a foal in May at three years old and remaining unmade till the following December, when she may be backed and ridden, and not only see but go to hounds before the end of the hunting season.

A young Hackney should be run in hand frequently—the more the better after he is two years old, to teach him to trot and move fast and freely; his action thus early cultivated will rapidly improve when he gets into work and on to hard meat, and gets his nose pulled in by his rider.

As to the manner of accustoming young agricultural horses to the harrow, the plough, and the shafts, it would be more appropriate for the farmer to teach me than that I should attempt to advise him; but all young horses that have learned to run well in hand show themselves off to much greater advantage when the day of sale comes than those which have to be hauled about at the end of a halter, and whose only attempt to go is to flounder and buck forward in response to the application of the whip behind. Those farmers who have the old-fashioned horse-wheel threshing machines often find that for young horses there is no better method to teach them their first lessons in farm labor than to put them in with the older horses, where they soon learn that it is easier to cheerfully perform a task they cannot escape from than to refuse it. There are many useful lessons that may be taught a young horse and he should always be corrected from his earliest days for any vicious tendency; he should never be allowed to strike, bite or rear, without a severe reprimand. A horse should be taught to stand when left by his master. The Arabs teach this to perfection. My Arab horses here, like all Arab horses, are taught to stand anywhere at any time immediately the reins are thrown over their heads on to the ground. You can thus leave them in the desert for hours together with perfect confidence that they will not move a yard from where you have left them. This very day I was going at a hand gallop

on one of my Arab mares when the buckle of my snaffle rein came unfastened and the two ends fell through my fingers to the ground, when she stopped as if shot, throwing me forward on to her neck. It takes about three days to teach a young horse this, by leaving a lad with the horse to put his foot on the rein every time the horse attempts to move, thus giving him a sharp check that unpleasantly remind him that he must remain where he is.

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(Cultivator.)

THE FOAL.

Mr. W. Brownlea, of Hemingford, Que., gives his treatment of young foals as follows: We usually raise from two to six colts each year. If the young foal has no movement of its bowels, we give an injection of strong suds made with Castile soap and soft water at blood heat, to which it is well to add a little castor oil. It is much easier to give an injection with a large syringe than a small one. Give one injection after another until successful. Do not be discouraged if you have to spend the whole day doctoring. We have never lost a colt since we began using the above treatment, with the exception of the first one, which was allowed to go too long before anything was done. We never give castor oil inwardly, because we find that it makes the colt sick, and it will not suck and soon dies. For diarrhoea (1) we give Dr. Fowler's Extract of Wild Strawberry with good results, having saved a number in this way, giving a quarter or a third of a bottle at a dose, one to three doses generally effecting a cure, and never leaving any injurious after effects.

Poultry.

HOW TO CARE FOR, FEED, MANAGE AND MATE THEM—THE PROPER TREATMENT OF THE LAYING STOCK IN WINTER—ESSENTIALS TO EGG PRODUCTION—FOOD AND EXERCISE—MEAL AND VEGETABLES—THE MORNING AND EVENING MEALS—THE BENEFITS OF CUT GREEN BONES.

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It is desirable to obtain eggs in winter, because at that time the highest price is obtained for them. To secure a steady supply of eggs, it is necessary to know how to properly feed and treat the laying stock. It is of this we will attempt to briefly treat in this chapter. In the first place the layers should be under two years, and under no circumstances should they be allowed to exceed that age, for the reason given in the article preceeding this one that an old hen moults so late, that before beginning to lay she will eat up any future profit she may make. Again, old hens will not stand the stimulating diet that a pullet will, for what will go into eggs in the latter will make the former so fat that she will not lay at all. It will be found that pullets and yearling hens will give the best results.

(1) We have always found "Dwight's Mixture" the best cure for diarrhoea, and Mr. Tuck, at Messrs. Dawes' farm, swears by it.—Ed.

THE BASIS OF WINTER LAYING.

The whole basis of winter laying may be summed up as follows—Supply the hens in winter with what they can pick up during the summer months. A hen at large supplies herself with grit, in the shape of sharp, flinty substances. It must be remembered that grit is the hen's teeth, and is used in the gizzard for grinding up the food. She picks up insect life in every shape, and eats a very large quantity of green stuff. She keeps herself free from vermin by dusting in the dry earth. She eats the grain that may be thrown to her and is off again in busy search. She is in a state of constant activity, supplying herself with all the essentials necessary to make the eggs, which she deposits in greater number than when leading a state of artificial existence, as she has to do for many months of our year.

THE LESSONS TO BE LEARNED.

What are the lessons to be derived from this? Simply that the nearer we approach, in our treatment of the layer, the natural condition, the more eggs shall we get. The laying stock then should have as much room and range as possible. If the layers could have a small apartment to roost and lay in, and a larger one with a floor of 2½ feet of dry earth or sand with coal ashes and siftings, bits of mortar, broken crockery glass, lime &c., &c., mixed, to range in, they would have a splendid opportunity to roll and dust and to keep themselves busy scratching. An incentive to renewed exertion might be given, by occasionally throwing a handful of grain and covering it up with the sand mixture, so as to make the hens search for it. Care must be taken to have the earth and sand perfectly dry or more harm than good will follow. Many farmers have an old barn or shed to which they could allow their fowls access to. Occasionally, a mild day will present itself, when the doors of the fowl house might be thrown open and the interior aired. But care must be taken that the fowls are not so exposed as to suffer from cold or damp. Where the fowls have such treatment as the above, there will not only be more eggs, but there will be freedom from vermin and the vices of egg eating, feather pulling &c., &c.

SMALLER QUARTERS AND EXERCISE.

When it is not possible to afford any more than limited quarters, the fowls should be kept in small colonies. More eggs will be got from 30 hens with plenty of room than from double that number crowded. Each fowl should be allowed at least 5 to 6 ft square of room. The floor should be covered—when dry earth or sand cannot be had—with cut straw or chaff, the grain food thrown in this and the fowls made to scratch vigorously to find it. A cabbage suspended from the ceiling high enough from the ground to cause the hens to jump to reach it is a very good plan. A piece of tough meat might be placed in lieu of the cabbage occasionally.

GRIT.

This essential may be supplied in the shape of broken or ground oyster shells, fine sharp gravel, broken delf glass, &c., &c. Grit must be supplied in some shape, or the hens will become crop bound from inability to digest their food.

LIME.

Another necessary is lime to make the egg shell. Some writers contend that lime is supplied with the ordinary green and grain foods. But it is best to be on the safe side and supply lime in the shape of broken oyster shells, old mortar, &c., &c. Observation of a hen roaming about will show that she helps herself liberally to substances containing a large percentage of lime.

GREEN OR VEGETABLE FOOD.

Did you ever notice the quantity of grass a hen eats when at large? If you have not, then do so, and you will be astonished at the quantity. A substitute for grass in winter is found in cabbage, turnips, carrots, beets or any vegetable that a farmer usually has in abundance. Clover-hay cut into small lengths, steamed in boiling water until comparatively soft, and fed alone or mixed in the morning with warm mash, is excellent. Boiled oats is said to be a very good substitute. A substitute for green food,—where green food proper, cannot be given,—is necessary.

THE DUST BATH.

Where it is not possible to have the flooring of dry earth and sand, it will be necessary to have a large box, or a portion of the floor set apart for a dust bath, the means by which the fowls keep themselves free from lice. When lice take possession of a hen-house, or a flock of fowls, no eggs can be expected. Hence, the importance of the dust bath. Many a farmer treats his fowls fairly well and wonders why he does not get any eggs? Upon investigation he will discover that lice are the cause. Some of these pests are not seen in day light, seeking refuge in cracks and crevices, but swarm out at night and feast upon the life blood of the fowls.

THE MORNING FEED.

There is a variety of opinion as to whether the morning feed should be hot or cold, soft or hard. It is a good plan for the farmer's wife to have a pot or pail standing by into which she can have thrown the waste of the table, kitchen scraps, bits of vegetables, peelings &c., &c. Boil all together and in the evening, or early morning, mix with any meal stuff that is in most abundance and feed enough to satisfy, not to gorge.

Feed in the narrow trough described in article in April number under sub-head "Other little Necessaries." It is a matter of very great importance that just the right quantity should be fed of any sort of food, grain or soft. The mash should be mixed until it is "crumbly" and should not be given "sloppy." The hens should not be fed enough to make them disinclined to scratch for any grain that may be thrown to them to keep them busy. When a hen has so much food that she will stand about idle, she has been gorged. The laying hens will be found to be the active ones. For noon, a handful or two of oats may be thrown among the straw. At night, send the layers to roost with a crop full to do them over the long night fast.

OTHER NECESSARIES.

Meat of some kind must be fed the laying stock in order to get eggs. No better incentive to egg production can be had than cut green bones.