

deep, should be firmly pressed in the soil. The plants must of course be young, having never fruited; and if they are the product of other plants that have never fruited, by removing the blossoms, they will be all that could be desired. This, however, requires labor which will not always be bestowed upon them. But what should always be done is to transplant the young vines—it is not even too late yet—into well prepared ground, or in pots, where they should remain two or three weeks, watered twice a day, and then set out in the beds where they are to remain, say fifteen or eighteen inches apart; but before setting out surround the roots of each with a ball, not too compact, of moist earth, plant firmly, as we have already said, and water frequently during the warm weather; cover lightly with straw the last of November, which should be removed the middle or last of March; and then, if the bed is kept clean of grass, and weeds, and you are not rewarded with a full crop of fine berries, give up at the attempt to raise them ever again.—*Germantown Telegraph.*

POULTRY.

PRESERVING EGGS FOR WINTER.

For family use, in the cold months of the year, when most kinds of fowls lay but few eggs, and when the price at retail ranges from fifty to sixty cents per dozen, it is well to have a supply on hand, and we receive frequent enquiries as to how eggs may be preserved for this purpose.

A friend who has practised the following plan for many years, informs us that he has had no difficulty through his simple method in preserving eggs the year through.

In the summer, after hatching time is passed, collect from thirty to fifty dozen (or buy them FRESH, when eggs are from 15 to 25 cents a dozen), and prepare a liquid, thus: One pint of common salt, one pint of lime, dissolve in four gallons of boiling water; let it settle, and put the eggs into the liquor in STONE jars when cold. Cover the eggs entirely in the liquor, and use "stone," and not soft crockery-ware jars. On no account use casks, wooden firkins, tubs, or anything but stone vessels.—Thus embedded, eggs will keep for twelve months, and come out in good shape.—*Poultry World.*

SEASONABLE HINTS.

There is one thing that cannot be too strongly urged on the poultry keeper, especially at this season of the year, and that is cleanliness. Filth is productive of vermin and disease, and no matter how good your breeding stock may be, or how likely looking your chicks are now, when the warm weather comes, and lice and disease abound, they will not thrive, however well fed and otherwise cared for. Therefore, as a preventive, rake up and burn all the rubbish in and about the yards, and dig them over if not sod, whitewash the houses, coops, nest-boxes, and all the internal fixings, and give the chicks a fair chance to develop all there is in them. Don't wait until you are compelled to do this, in order to save a remnant of your flock, but do it now.

Where the chicks have a large range, little more need be supplied them than plenty of good wholesome food and shelter, but when confined in small yards, they require constant attention. An effort should be made to supply them, as far as possible, with what they could procure if at liberty. Fresh grass should be given

them every morning, fresh water twice a day, a small amount of animal food occasionally, and gravel to aid digestion.

Don't be tempted to hatch out more chickens than your yards and houses will accommodate when they are well grown in the fall, unless you intend to cull out largely when they are fit for broilers. It is a simple matter finding quarters for a lot of chicks when a hen can cover a dozen of them, but each of these, it must be remembered, will require as much house room when the cold, wet weather of the fall months come as an adult fowl. Crowding must be avoided.

Shade of some kind must be provided. Alternate rows of sunflower and hemp seed, sown in drills about four feet apart, will supply shade during the summer months, and nutritious food later on. The plants should be allowed to get considerable growth before the chicks are turned among them.

As the warm weather approaches, the setting hens will require more attention. The individual who would allow a hen to hatch three weeks on a foul and lousy nest, should be prosecuted for cruelty to animals. The larger parasites, which make their constant abiding place on the hen's body, are bad enough, but a couple of thorough applications of sulphur or insect powder, will generally dispose of these; the worst are the small spider-like pests that find hiding-places in every crack and cranny about the nests and houses, and are much more trying and difficult to get rid of. Look for these at night with a good light; they will be found then if about. Coal oil is the most certain remedy for these. When they are found about the nest, the hen should be removed and given a fresh one; the old nest should be burnt, the nest-box thoroughly cleaned, the joints saturated with coal oil, and well white-washed before being again used.

As a tonic, there is nothing better than Douglas' mixture in the drink. It tones up the system and fortifies against disease. Bone-meal will be found of great advantage to the growing chicks, especially as the larger varieties. It is an excellent preventative of leg-weakness, which is very prevalent when chickens are forced along rapidly with stimulating food.—*Canadian Poultry Review.*

CHEAP POULTRY HOUSES.

The following directions for building cheap poultry houses are clipped from W. H. Todd's descriptive catalogue for 1875:

We find the best and most successful plan to manage and make fowls pay is to scatter them over a large range in fields and orchards. For this purpose cheap, convenient and comfortable houses are best. My plan is to build 16 feet long and 8 feet wide, 7½ front, (facing south), and 4½ back, boarded upright and battened, with a shed roof, shingled. Sills are 2x4 inch plank, halved together. Plates, same size. Rafters, 2x2. Lay the sills on sleepers, and on these lay a tight floor, which cover with dry earth 4 to 6 inches deep, removing and renewing twice a year. This keeps fowls dry, warm and healthy. Place an entrance door near one end on the front, and at least two windows of six 8x10 lights. Partition across the middle, with a door. Fix ventilators at the highest point in each end, sheathed to exclude storm and wind. Erect roosts 20 inches high, for twenty fowls, with a movable nest or two, and a box, partly filled with dust and ashes, and you are ready for "business." Forty large

fowls can be accommodated and thrive well. Since the house is double, we are in shape for running two breeding yards.

Fence can be built cheaply with lath nailed upright to two 1 inch thick pieces, the lower one 8 or 10 inches wide, and the upper about 2, 30 inches apart; the lath may be 3 inches apart, and a short piece, 16 inches long, tacked to the bottom board, and to a light strip running lengthwise the panel. It is best to make this fence in panels about 12 feet long. Set a post where they come together, and pass a wire around panels and post, fasten, and you have light, cheap, strong fences. The house can be made warmer if necessary, by lining with tar board sheathing.

DAIRY.

SHAM AND REAL.

Can any one tell what dairying is drifting to? We hear of all sorts of queer monstrosities, from lard-cheese to cotton-oil butter. No man knows what he eats, if he buys it. Simulation is the spirit of the age, and no end of science and skill is employed to deceive. A clever imitation is what men prefer to produce, and the public are led to devour. The simplicity of genuineness is out of the running, as things go in the world. The public must eat what is given them, asking no questions. The oleomargarine men have done a terrible lot of mischief, and offal is the god whom they delight to honor and exalt. At all points they aim to circumvent the dairymen and to swindle the public. The taste of the people is degraded by sham butter and cheese, which seems to be real. Men's stomachs, now a days, are sepulchres for strange abominations, which they ignorantly, rather innocently, swallow. This sort of thing is leading them they know not whither, and posterity will pay the piper. It is no longer that which cometh out of, but that which goeth into, the mouth that defiles. Meats and drinks of many kinds are not what they pretend to be, and there is a good deal of "tricks that are dark" in what passes for dairy goods.

Whose fault is this? Well, in a great part the dairymen's, for they have spoiled good milk, so long that anything serves for milk. They have given an opening for the shoddy men of the dairy, who are growing rich out of offal. The law complacently lets men sell what they like, and the sham article is often enough better than the real one. Shoddy sells well enough if it be carefully made, and so the makers of counterfeit cheese and butter do flourish. Dairymen who make inferior butter and cheese, no matter how real the goods may be, are out of the running entirely. If only the palate of the public be suited, it matters not if the article be real or pretended, so that careless dairymen can hardly "make ends meet and tie." But one thing is clear: the makers of really first-class cheese and butter can hold their own, and will hold their own against all the nefarious stuff that is made in any and every country. A weeding process is going on, and goods which are mere simulations will take the place so long occupied by the products of milk that was spoiled. If, then, the oleomargarine business, the melted tallow and lard and other less creditable things, shall result in bringing about a thorough reform in dairy methods, we shall have reason, after all, to be grateful to men for whom few of us entertain feelings that approach to respect or affection. But let the public have fair protection, let

them know what they buy; then the dairymen will win—if they want to, and if they don't, the fault is their own.—*Prof. J. P. Sheldon.*

GRADE COWS FOR THE DAIRY.

For practical and economic purposes, grade cows are the best for the dairy, and especially so for farmers who are blest with only moderate means. It is very nice, however, to have an entire dairy of thoroughbred animals; yet to secure such a herd and of more than average dairy value, is a work of time, and calls for an outlay of cash far beyond what farmers or others of moderate means can afford to have invested in a herd of cattle. Grade animals, half and three-quarter bloods, almost invariably make profitable dairy animals, and especially so if the pure bred male used is from a long line of superior milk or butter stock, and the dam is a strong, vigorous and good dairy cow. We have had grade—half-blood in this case—cows by a pure-bred Guernsey bull, and out of good common cows, produced after they had their second calves. 13½ to 16, and in one case as high as 17 lbs. of butter per week. While this cannot always be reached, nor should breeders expect it at first, it shows the possibilities. A ½ blood Guernsey cow, which dropped her first calf in February, made, during July, and on grass which was not all fine, 7½ lb. of splendid butter per week, and this, too, besides supplying a small family of five persons with milk and cream, native strength of the common datus, giving us in the grade animals the good quality of the thorough-bred, in an intensified form. Half-bloods, as a rule, are better than those of three-quarter or seven-eighth blood. This does not always hold good, certain controlling influences governing them materially.—*D. Z. E., in Agr. Journal Epitomist.*

OBSTRUCTED TEATS.

The more the udder is stimulated to extra secretion of milk, so much the more is it liable to congestion and inflammation. The pressure, too, of a great quantity of milk in the udder upon the circular muscle (sphincter) which closes the end of the teat, tends to set up more or less irritation there, and this will sometimes result in excessive thickening of the walls and hard milking, or even complete closure of the orifice. The simplest and best treatment is to slightly dilate the opening of the teat once or twice a day, with a perfectly smooth probe. A silver milking tube, about the twelfth of an inch in diameter, will answer; or when this is not available, a probe of the same size made of gutta percha. A small size will be necessary at first, and, after a day or two, until finally the orifice is easily dilatable and the milking sufficiently free. In every case the probe should be well oiled, and introduced with caution, so as to avoid injury to the internal parts. A silver tube should be warmed before it is introduced.

THE CARE OF COWS.

The dairy requires, in fact, scrupulous care in every department. It is a delicate industry. And the care must begin with the cow. It is not enough to have a good cow and to feed and water her properly. She must in fact be made a pet of. That description of her treatment is the very best that can be made. In handling her, it should be done as if she were a frail, delicate thing, liable to injury from the slightest touch or unkind word. Remembering her excessive nervousness, she ought never to be frightened, indeed not any more than a considerate person would frighten a child, which a considerate person would never do.