

any source whatever, will serve as a starter, from which the ropiness will soon develop. There are scores of ways in which the milk can become laden with these bacteria from a water supply containing them, or from dust. These bacteria will develop at low temperatures, but, as it takes from twelve to thirty-six hours for the ropiness to appear, the milk has usually left the milkman's or farmer's hands before this condition is noticed, and these men know nothing of it until they hear their customers' complaints next day.

The remedy for the trouble, then, is to prevent the germs from getting into the milk. Souring of milk, caused by the development of the lactic-acid germ, will prevent the development of the germ which causes the ropiness, and farmers have been known to leave their milk without cooling, preferring that it sour, rather than become ropy. To prevent the germs getting into the milk, it is necessary that the origin and mode of entrance be known. A good method is to take a number of thoroughly-scalded small vessels and place a little milk in each, and put in one a little water from the well or cistern, in another a little from the cooling vat, in another a little dust from the stable or milkhouse floor, and so on, until every possible suspected material has been tried. Cover the vessels and set them away for twenty-four hours. Then, using a spoon or fork, test each sample for ropiness, using a different spoon or fork for each. This will likely prove where the source of the germ is. All cans and utensils should be thoroughly scalded previous to use each time. If the source is found to be the water used, no more such water should be allowed to touch the dairy utensils, or, if no other water is available for filling the cooling vats, a little potassium bichromate, one part to one thousand of water, may be used. This is, however, a poison, and care must be taken to prevent its access to the milk. The floor and walls of the milk-house should be disinfected with a five-per-cent. solution of sulphuric acid (oil of vitriol), which may be sprinkled around with an old broom. The only remedy necessary is to ascertain the source of the trouble and prevent the entrance of the organism-bearing material into the milk.

POULTRY.

Some Poultry "Don'ts."

Editor "The Farmer's Advocate":

Don't neglect the late-hatched chicks. They need more care and feed than the early ones. Bugs and worms are scarce these hot days, so you will have to supply animal food in some form. Fresh ground bone, given once or twice a week, will be found to give excellent results. Green food is also needed, as the grass is quite dry and tough during the hot weather. Lettuce chopped up fine is relished by the chicks. They will also eat mangels, etc., if chopped up fine. Keep a good supply of fresh water on hand. Don't neglect to give the ducklings plenty of shade. In fact, if their pen can be put under the shade of trees, so much the better. The recent hot spell clearly showed the necessity of plenty of shade to many an amateur duck-grower.

Don't forget that lice and mites thrive best these hot days. Keep the hens with chicks well dusted with a good insect powder, and keep the

chicks well greased. Keep watch over the hen-house; look on the underside of the roosts every few days. You may find them covered with little red mites some morning. Coal oil or hot whitewash with carbolic acid in it will kill them. Even a kettle of boiling water poured over the roost will put the present crop out of the way, but you will have to keep on the lookout for another batch in a few days.

Don't forget to sell off all those old hens. They aren't laying very well now, and it won't pay to keep them over winter, and, besides, they will bring a good price now. C. H. R.
York County, Ont.

Profit in Poultry for Farmer and Horticulturist.

Editor "The Farmer's Advocate":

It is chiefly the object of the writer to impart information acquired during a hard, matter-of-fact experience, that may be useful to all classes of poultry-keepers, but more particularly to give encouragement to the industry among farmers and horticulturists, in the hope that the numbers of such poultry-keepers may be rapidly augmented throughout the country.

There is not the slightest doubt that poultry should be kept far more generally and in greater numbers by the farmers, market gardeners and horticulturists. The birds will live almost entirely on the waste, and repay the trifling amount of trouble involved in attending to their wants, by supplying the owner with an abundance of fresh eggs and juicy meat, to say nothing of the tremendous benefits that the soil will derive from the cultivating, fertilizing and scavenging propensities of the feathered Solomon and his numerous harem.

Farmers and horticulturists are exceptionally well situated for keeping poultry on a more or less extensive scale, as they are in a position to give the birds ample range, on which they will provide themselves with a very large proportion of the necessary food for a "laying diet." They are also able to keep the birds in small colonies, scattered through pastures, meadows and orchards, so reducing to a minimum the risk of disease.

From a profit-making point of view, fowls are kept to the best advantage when they are able to pick up for themselves the greater portion of their food. But this must not be understood to mean that they can be left to shift for themselves. The latter form of poultry-keeping, which, alas, is too prevalent in this country, invariably means disaster to the farmer, and frequently to the flock. It always results in dirty implements, sheds and outhouses, where the birds have taken refuge for the night, wrecked gardens, and persistent invasions of the barn floor and oat bins by day, and finally leads to the axe for the offenders, and an end to the industry, as far as this flock is concerned.

Fence your garden, if it is absolutely necessary to keep your birds near to it. The wire will last for years, and, properly handled, you will soon find out how well the "biddies" are paying the interest on the small amount of capital invested in the improvement. Secondly, feed your hens regularly what grain is necessary, and so do away with more than half the cause of the depredations in the garden and oat bin. Biddy would far sooner have a good fat "bug" as a

side-dish with the grain you should feed her in return for the fresh egg she gives you on your breakfast table, than a mouthful of your green tomatoes. But if you don't give her any "board" for providing you with a good meal, she is certainly going to be just where you don't want her, in her endeavors to provide for herself. Small blame to her.

Properly managed, nothing will pay the farmer better than his flock of hens, for I could, if necessary, give a chartered accountant's certificate verifying the fact that a flock of ordinary, thoroughbred, utility Barred Plymouth Rocks, kept on the outskirts of this city, have, since the first of January, 1911, made for their owner a clear profit of nearly \$3.00 per head, after paying all feed accounts and out-of-pocket expenses. These pullets, or similar ones, could have been purchased in the previous fall for 75 cents a head, or raised for less. Now, have you any other live stock on your farm that has earned for you in five or six months a clear profit of over three times its value on first cost, after deducting feed, labor, etc.? I think not.

We must not forget that on the farm a good deal of grain, etc., is unavoidably wasted, and not only this, but an abundance of insect life is found, which would feed fowls, keep them in better health, and more profitably than anything else. These advantages farmers get for nothing, and must consider whether it would not be better worth their while to feed poultry upon the waste and insect life than the scores of sparrows, crows, etc., that come for the waste, and carry away other, besides.

Where the soil is infested with angle-worms, it is a capital thing to coop chickens where they can run over the ground, especially early in the morning, when so many insects are abroad and can readily be picked up. And I venture to say that few caterpillars that dropped from the trees in the orchard would ever escape the watchful eye of the young stock foraging underneath, and regain the leaves they are destroying. Too many poultry-keepers cut down their profits by increasing their feed bills. They pen up their birds in a limited run, where there is not enough insect life to go round, and then have to supply the extra quantity of grain and beef scraps to get results which are not half so satisfactory. If you watch a flock of chickens when first released from the colony house, brooder or coop, in the early morning, you will at once see that, after a few grains of the wheat or corn you have thrown down for them, they will turn their backs upon it and scatter in all directions for the succulent, early worm. If these are plentiful in the neighborhood, you will even have a difficulty in enticing them back to feed before nightfall.

I have had a flock of chickens that made straight off in this manner every morning, and were not seen again till the evening meal, and they made 1½ to 1½ pounds in six weeks—a good margin for profit at the price broilers fetch the first week in June.

Fruit-growers should especially give this subject careful attention. A good deal of spraying might be avoided if fowls or ducks were used for the purpose Nature intended them, viz., to clear the land of vermin and many of the pests that cause such ravages in the orchard, and which are a source of expense and vexation to the owner; it is hard for him to contend with.

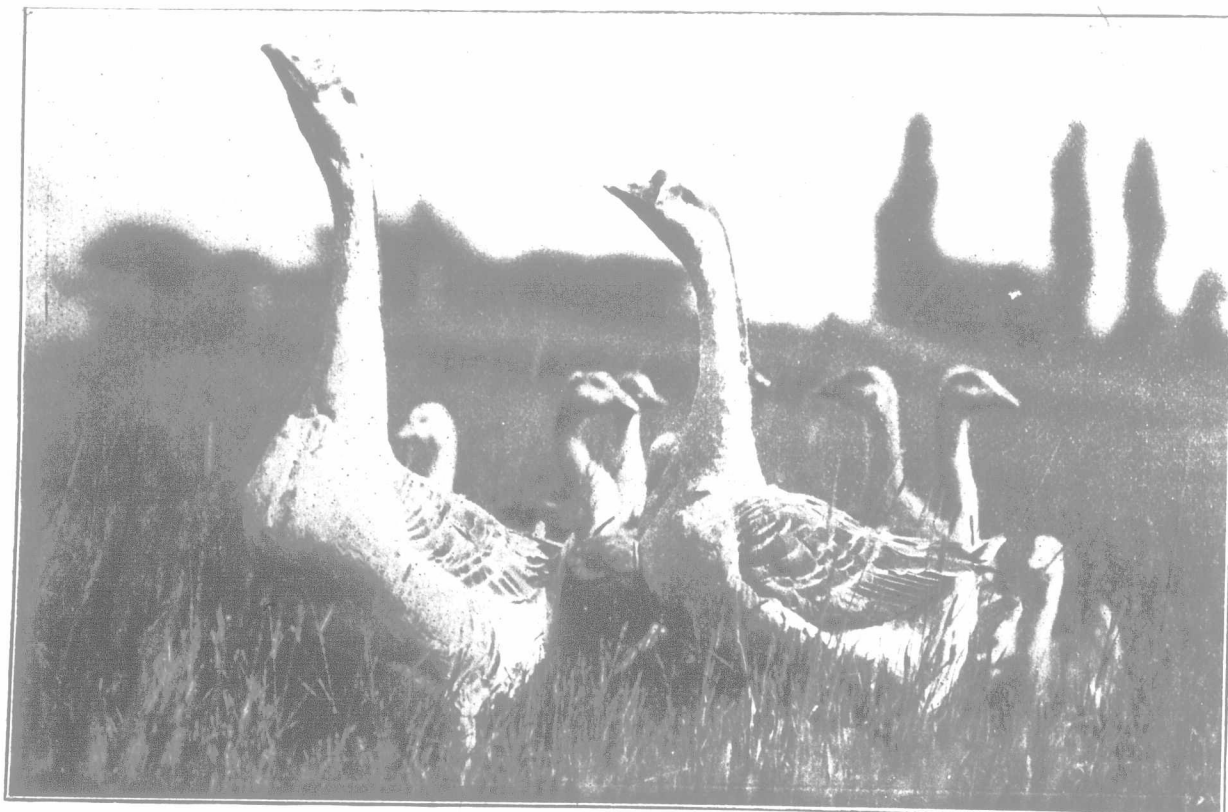
Central Exp. Farm.

WALTER SCOTT.

GARDEN & ORCHARD.

Standards for Judging Fruits.

The Ontario Fruit-growers' Association have approved for trial in the year of 1911 standards for the judging of apples, pears, peaches, plums, cherries, seedlings (any other variety), grapes on single plates. They have also formulated a standard for collections of the foregoing fruits on plates, as well as for boxes of apples, pears and peaches. Barrel packs of apples are also dealt with, and the package and packing of each scored. The qualities considered and given a certain number of points each are for the commoner fruits, form, size, color, uniformity, freedom from blemish, and the total score is 100. To give an idea of how the points are divided, this is the way apples or pears on plates will be scored: Form, 15; size, 15; color, 25; uniformity, 25; freedom from blemish, 20. In box and barrel pack, 25 per cent. of the points are allowed for package and packing. The different terms used at exhibitions and in connection with the preparation and packing of the fruit are explained fully, and anyone contemplating exhibiting fruit this autumn should procure and study a copy of this pamphlet. The committee which formulated the different score-cards consisted of W. T. Macoun (chairman), W. H. Dempsey, A. E. Sherrington, Prof. J. W. Crow, H. S. Peart (deceased), and W. H. Bunting. Copies of this leaflet should be procurable from P. W. Hodgetts, secretary of the association, Parliament Buildings, Toronto.



A Good Type of Geese.