

since gathered in hope they may still do so. I have heard of several cases of crossing pure-breds that have turned out well, although none have been able to give me exact data. A lady poultry trader in England, now in Australia, says that after years of experience, she is convinced that the best results can be got by crossing any good barnyard fowl with Indian Game. A lady in Ancaster Township has tried crossing with Indian Game. She gets splendid results, and thinks she also gets good layers. A farmer in Saltfleet has crossed Rhode Island Red with Plymouth Rock, and another has crossed Wyandotte with Leghorn, and both are well pleased with the results. The breeders of Indian Game claim that they make a good cross with the Wyandotte or Leghorn. There is no doubt about their producing good roasters, but I would like to know more as to their laying qualities.

I have been very pleased to read the different experiences in fattening fowl. I have always crate-fed all my cockerels, hence had no trouble increasing the weight and probably improving the quality. I have tried different mixtures; sometimes I have milk enough and sometimes I have to do without it. The main thing, to my mind, is attention and care that they do not suffer from lice. I always dust them with lice powder when putting them in crate; also the night before killing them, and thoroughly clean the crates before filling them again. I have increased the weight one pound in less than ten days, and have no trouble selling all my own and all I can get to fatten.

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Winter Egg Producers.

Editor "The Farmer's Advocate":

The question of strain is a very important one in the rearing of poultry. Laying tests, such as are being completed this month at the Storrs Experimental Station, and the results of which are being eagerly looked forward to, are held chiefly to indicate strain rather than breed in egg-production. In addition to strain the pullet must be of a suitable age and the hen got well through her moult as early in the autumn as possible, if the supply of winter eggs is to be at all satisfactory. But do we consider sufficiently the influence of strain on winter egg-production? All other things, such as breeding, feeding and management being equal, there are undoubtedly some strains that will produce more eggs in winter than others, and it has been proved by experience that such strains may be cultivated in almost any good-laying breed. For years I have made a practice of breeding only from the best layers in the flock, and now have a flock that has produced during the past year fully fifty per cent. more eggs than did an equal number of their forbears when I first started in the poultry business. Among the sitting breeds it will be observed that certain hens or pullets in a pen lay well through the winter, whilst others are sterile, and again it will be noticed that some hens start laying after the moult, and after producing a few eggs become broody, whilst others continue laying for a much longer period, sometimes not evincing any desire to incubate all through the winter months. Now, as it is to the sitting breeds that we have chiefly to look for winter layers, we have here two points where winter-laying strains may, by careful selection, be followed up and improved, and if the influence of strain be carefully considered, it should prove of the greatest assistance in satisfactorily filling the winter-egg basket.

When feeding the fowls their morning feed I am always careful to notice whether they eat their food eagerly, and if there are any birds moping about, I catch them, to find out the cause of the indisposition. If the birds' nostrils are wet, it shows there is a discharge, owing to a cold in the head, but if the bird makes a rattling noise when it breathes, I know that the bronchial tubes are affected. Simple colds, if treated at once, are cured in a few days, whereas if they are neglected, the birds frequently develop diphtheritic roup, and the pus which accumulates in the birds' mouths and throats when they have this disease is difficult to get rid of. For a mere cold in the head give the bird a teaspoonful of glycerine, and add a good roup powder, in the proportion of a teaspoonful to every five birds, in the soft food. Cleanse the nostrils with a piece of soft cloth, and burn it. For a cold in the lungs I have found stewed linseed to be good. The linseed should be quite fresh, and should be rinsed before being put on to stew, so as to get rid of any dust. Cover the seeds with water (about two parts water to one linseed). Stew until quite thick. Give this to the fowls while warm—about five teaspoonfuls morning and night and a teaspoonful of glycerine also. When there are a large number of birds affected, the glycerine and the flaxseed may be mixed with the soft feed, but there is always a risk of those that are badly affected getting less than their

proper share when this is done, as they eat so little as compared with the rest.

A fault with many poultry houses is that they are made of lumber that is too thin. This is done, of course, for the sake of cheapness, but it is false economy. If the walls and roof of the building are made of too thin material the interior is very cold during the winter and hot during the summer. If one is making a new house this point can be kept in view, but many poultry keepers already possess houses which are at fault in this respect. If such is the case, they can improve their fowls' sleeping quarters at a small cost. The outside should be painted or tarred. Tar is just as good as paint, and much cheaper. While still wet lay on some sheets of heavy brown paper or unbleached cotton, and paint or tar over it again. The next day apply another coat of paint. This is a most valuable plan, and deserves to be adopted far more than it is. The paper or cotton becomes almost part of the wood, and lengthens the life of the house by several years.

When furnishing your poultry plant, be it large or small, it pays to buy the best appliances that you can. Never purchase a thing simply because it is cheap. It is better to put a little more into the cost of the roofing used and get a good quality. The cheaper quality will soon wear out, and you will find it necessary to do the work over again. The quality of all the material for the house should be the best for its purpose. If you do this you will have something that will stand the test of time. If later on you want to sell the building you will have something worth selling. If it looks dilapidated you will scarcely find a buyer; but a well-constructed house will find a ready purchaser. Do not make the hoppers in a ship-shod way, but build them in as tasty a way as possible. These things all tend to make a more attractive plant, and an occasional visitor will be pleased with what he sees.

In choosing your flock remember that it pays better to keep twenty fowls and give them close attention than to keep a large flock which has no regular care.

Another point to remember, in putting away chicken coops and houses for the winter, is that they should be thoroughly cleaned and disinfected, so that they will be ready for use in the spring. If lime-washing fails to kill all the vermin, try burning sulphur in them.

Fanciers who keep large-combed varieties of poultry should always, during winter, be prepared for frost bites. In such cases camphorated oil should be applied to the comb and a roup powder given in their drinking water. In cases of fighting wipe the comb dry and apply carbolyzed vaseline.

A frequent change of food is indispensable and will not increase the cost of feeding. I change the food twice a week, the different varieties being given in turn. A most useful morning feed for laying hens and pullets, given warm, during the winter, will be found in the following: Scalded bran and low-grade flour, one part each, dried off, with two parts middlings, and a little green-cut bone or meat-meal, about three-quarters of an ounce to each fowl, when insect life is unobtainable.

MONA.

"Lay of the Last Chick."

The chicken-pie social is over and gone,
With its tragic heart rending foul play;
Alas! my kind mother was slain in cold blood;
Oh! give ear to my pitiful lay.

Yester eve, as we perched on the apple-tree bough,
Said the housewife to Johnny, "My dear,
Go catch me yon hen that sets in the loft,
For she hasn't laid an egg in this year."

"Corner up, if yer cen, the broken-legged rooster,
With his mopy old grandfather, too;
I'll bet yer a penny," she said to her boy,
"They'll be most interestin' to chew."

As Johnny climbed up in the apple-tree top,
And wrung my great-grandfather's neck,
I arose from my perch in bitter revenge,
And indignantly gave him a peck.

He snatched at my bonnet, gave my head such a twist,
Threw me down for his mother to pluck,
But I soon stole away with a staggering gait;
Now and then gave a husky p-tuck.

Next morn I awoke with my heart in my mouth,
And head facing wrong way about;
Thinks I to myself, "I'll put this in print;
'Tis fiendish without any doubt."

Now where shall I go without my kind dad,
No mother to lead me to perch;
Oh! I'll just wine my eyes when I feel that it is
For the good of the Methodist Church.

—"COCK-A-DOODLE."

GARDEN & ORCHARD.

Apples have to be pretty cheap when it doesn't pay a farmer to pick and pack the crop in his own orchard.

Dribs count up when there are enough of them. The many small incomes from orchard and garden go quite a way towards rounding out the yearly revenue of the farm.

So persistent and continued are the ravages of the Gypsy and Brown-Tail Moths that the United States Department of Agriculture propose to quarantine a large extent of territory in Eastern New England, Maine and New Hampshire. Shipments of plants would have to pass inspection before going out of the areas in question.

The Ontario Horticultural Exhibition is to be held this year at Exhibition Park, Toronto, Ont., on Nov. 12th to 18th. The prize list is larger than ever. The exhibits for both flowers and fruit are already very much greater than ever before, and the entries are not nearly all in. Single fare railway rates will be in force from all points in Ontario. There will be music every afternoon and evening.

If the weather will permit it, a little time may yet be well spent in cleaning up the refuse vegetation of the garden: and burning surviving weeds and other rubbish, so that all will be clear for early work next spring. When that is done, a liberal dressing of manure, preferably well-decomposed, in order to be as free from vital weed seeds as possible, should be applied and plowed under. Such soil, if properly drained, should be in good order for planting very early potato and other crops, which are most appreciated for the home and profitable for market. A little extra preparation in the late autumn will greatly hasten operations and make the spring work more pleasurable.

Preventing Sunscald.

Some timely hints offered with a view to preventing injury by sunscald are contained in a circular letter issued by I. F. Metcalf, from the District Office of the Ontario Department of Agriculture at Collingwood. While trees in southern sections are not so liable to the affection, it is liable to occur almost anywhere in the territory covered by this publication, so that we deem it well to quote the letter substantially in full:

"You may have had trouble with some of your younger trees dying this season and did not know what was the matter with them. Perhaps you thought it was blight, when it was something else. If you find at the crotches of the limbs—and in some cases along the limbs—spots where the bark is dead and shrunken, it is probably sunscald that did the damage. In many cases you will find the limbs almost girdled from the effects of the sunscald.

"Sunscald is caused by getting a few very warm days early in the spring. The sap is started by the heat of the sun, and then cold weather sets in and it freezes. Most of the trees will stand plenty of cold, but will not stand the combination of heat and cold.

"The injury usually happens on the south or southwestern side of the tree. The only remedy is to cut out all dead bark and put on a poultice. In many cases the injury is so bad that the only remedy is to cut off the whole top of the tree. This will force new shoots to grow out along the sides of the old trunk, and in a very short time you should have a new top on the tree since all the energy of the old trunk and roots will be devoted to produce this growth.

"Prevention is, however, much better than cure. This consists in protecting the tender wood from the rays of the sun. This may be done by enclosing the trunk and crotches with cornstalks, building paper or shading by nailing two boards together in a V shape and placing upright on the south side of each tree.

"By far the easiest and simplest method is to give the trees a coating of whitewash the last thing in the fall, so that rain will not wash it off. This white color will throw off the sun's rays, instead of absorbing them, and thus acts as a protection. It will also protect the buds from getting started too soon in the spring. Every person having an orchard of young or tender trees in this northern district would do well to make a practice of applying whitewash to his trees the last thing every fall.

"Of course there is only one way of applying the whitewash satisfactorily, and that is by means of a spray pump. This does not need to be a large outfit, but should have plenty of power (or pressure, as it is called), for its size. A spray pump will be of use in spraying lime and