

one part of beef tallow, to be the best proportions. Melt them together in a skillet, (which is best,) or a tin cup, and mix well. It should remain in the vessel and used as needed. Twenty or thirty scions can be waxed with one heating-up. When much grafting is to be done, a little fire for heating the wax should be made on the spot, between the bricks or stones.

We have sent various preparations for making grafting-wax, and we believe we have tried nearly all, but prefer our own where there is only little grafting to do, though we should adopt that recommended by our friend Larkin, of Delaware county, where there is much to do. Applying it warm or hot does no injury. The object to attain in the mixture is that the wax will not crack in cool, dry weather, or run in warm weather. If however, upon trial, different proportions be required, the foregoing can be altered, though after using them in several ways we have come back to these.—*Germanstown Telegraph.*

POULTRY.

POULTRY ON THE FARM.

Written for the CANADIAN FARMER.

Small as it may appear when reckoned as part of the operations of the farm, the poultry interest is one of the great importance, whether considered in its aggregate value, or its influence upon individual property. The egg and poultry produce of the country exceeds that of the cotton, the corn, or the wheat crop. It exceeds the hay crop which falls little short of \$400,000,000; and the value of all the cattle, sheep, and swine slaughtered or sold to be slaughtered, falls below the aggregate annual value of the poultry and its products, in the shape of eggs and meat. Nor is it less important comparatively as contributing to the comfort and income of the small farm, where, from its limited numbers, the poultry seems hardly worth taking into account. Poultry-raising ought, therefore, to be studied and pursued as intelligently as any other farm operation. Use diligence, industry, integrity and proper improvement of time, to make poultry-keeping pay. Do not keep any more live poultry on your place than you can keep well, and take good care of. The more comfortable you can keep your poultry, the more they will thrive and pay for your extra care and trouble. Sell when you can get a good price. If you keep fancy poultry be sure and keep the best to behave. Never sell any but good stock.

H. E. SPENCER.

Centre Village, N. Y.

FOR BEGINNERS.

The first consideration in poultry-keeping is the necessary house accommodation. In selecting a house the requisites are perfect shelter from wind and weather, good ventilation and absolute dryness, with pure air. Cleanliness is imperative. Large and expensive houses are not desirable in Canada. Poultry can be kept profitably in a house, no matter what size it is, if the house has the requisites above mentioned. Five or six feet square will accommodate a cock and six hens of any breed; and if a choice can be had, a southern or south-eastern aspect is the most desirable, with plenty of glass to give ample sunlight, of which poultry are especially fond. The roosts should be low and placed so as to be perfectly free from drafts. The nests should be on the ground, and in such a position that the dirt from the fowls will not drop into

them. Cleanliness is very important, and the floor of the house should be liberally supplied with dry earth, road-dust, or coal-ashes. The droppings should be removed often, and a box of dust or coal-ashes placed so that the fowls can have access to it at all times for a dust-bath.

The feeding of poultry stock is a very important matter. If kept in a small run they ought to be given soft feed, made of soft corn, barley or oats, mixed with shorts and a little bran, thoroughly mixed with boiling water till dry and crumbly, for their morning meal; and a light feed at mid-day with oats, buckwheat, &c., and at night a full feed of barley, corn or oats. Corn is the best food for winter. They ought not to be fed more than they will eat up clean, and in the case of Asiatics must be fed more scantily, as they are apt to get too fat for business. In mixing soft food it is necessary to add salt, and pepper may be sparingly added. All poultry should have a regular supply of pure clean water, and if kept in confinement a diet of meat twice a week or so becomes indispensable, if eggs and good health are expected. If the flock is small the scraps from the kitchen will probably be sufficient, but if not, bullock's liver, chopped fine and slightly seasoned with pepper, will be found the cheapest and best. Fowls with a good range will need no animal food in summer, as they will get plenty of worms and insects, but in winter the best result cannot be obtained without regular feeding of meat twice or three times a week. In winter it is also necessary to give fowls a regular supply of green vegetable food, such as cabbage, &c.

In order to have a regular supply of eggs for winter it is necessary to constantly replenish your yards with early hatched pullets, gradually doing away with the older hens. Pullets hatched in April, of most breeds, will, if properly fed and cared for, lay in October and November following, except in the most severe weather, and will probably, if non-setters, continue until moulting in August and September following.

The nests for laying fowls must be kept absolutely clean, and be placed in a retired position in the poultry-house, and at the same time be readily got at to remove the eggs.

For a supply of poultry for the table it will be a great advantage to have plenty of early hatched birds, using the males for the table and reserving the best of the pullets for layers. The young chicks ought to be forced along, so that when wanted at 10 or 12 weeks old for broilers, they will be plump and the flesh tender and juicy. They ought to be fat enough when taken from the yard without having to go through any fattening process to finish them off, and they will taste all the better.

In selecting stock, pure breeds are always the best, although it may be out of the reach of the beginner to do this on a large scale, yet he ought to have a pair or trio of pure blood, and have the largest hens he can buy for the mother.

Everybody knows, or thinks he knows, just how to set a hen. The plan I have found most successful has been to have the nest prepared by putting two or three inches of soil in the bottom of the nest-box, and on this sufficient short hay or straw to make a hollow for putting in the eggs, and into which I put a few crockery eggs. I next procure the hen, making the removal during the night, and closely covering her up for eighteen or twenty-four hours. I then quietly

remove the screen or cover, allowing her to come off of her own accord for food and water, always taking care to see that she returns to her nest, and if she does not do so it will be necessary to put her on, but it must be very carefully done, as she must not be frightened. After putting her on the nest, drop the cover, leaving her covered until the following day, when it ought to be removed at the same hour, and the hen allowed to feed. If she goes back to the nest herself and covers the crockery eggs, you may then put the good eggs under her, marking on the box the date and variety of eggs set. A little dusting of sulphur in the nest three or four times during the first two weeks will keep away all vermin. If setting hens are scarce and hard to procure, an artificial mother will be found of the very greatest assistance, as the chicks as soon as free from the shell can be removed to the artificial mother, and so soon as all are hatched, the nest can be cleaned and renewed, and a fresh supply of eggs put under the hen. I have kept my hens setting for nine weeks, bringing off three broods of chicks, and then being in good health. This can only be done by regular and systematic feeding and attention. I have had the best success with small hens as sitters; they are more careful than larger breeds.

In mating breeding stock it is very essential that the birds be in robust health. The cock bird, prior to mating, should have been kept separate during early winter months, and only introduced to the hens when his services were wanted. It has been found that in mating fowls for breeding, the ages of the cock and hens should differ, say cock a year old, mated with two-year-old hens, or a two-year-old cock with pullets. This difference of ages gives the best results, and is now universally followed by our most successful breeders. It should be understood that very young pullets are not desirable, and ought to be avoided if possible in the breeding pen. When making up breeding pens discretion should be used in not putting too many hens with the male bird, especially when they will be closely kept in. Of Asiatic, four to six hens to one cock, and of the smaller breeds a few more hens may be allowed if the cock is in good order and high health, but it is safest to err on the small side. The hens ought to be out daily, and kept as healthy as possible, as upon the hens depends greatly the vitality of the chicks. Eggs from hens in good health will often hatch in nineteen days, whereas if the hen is at all feeble the chicks will not hatch until late on the 21st day, and perhaps not at all, not being strong enough to chip the shell.—*From advance sheets of G. H. Pugsley's Illustrated Catalogue.*

DAIRY.

A SHORT CHAPTER ON MILCH COWS.

I take great interest in reading your valuable selection of agricultural news that appear from time to time in your paper.

And, sir, if I have a choice it is reading about the different breeds of cattle, whether of the lordly Short Horn, with their unsurpassed beef producing record, and what appears strange, their great milking qualities given, if the selections are from English papers, for in England it is said nearly all the large dairies are composed of Short Horn cows. Here, in Nova Scotia, if you want a poor milker hunt up a Short Horn and you have found what you were in search of. Not long ago

I read in an English paper a description of a lot of cows, thoroughbred Short Horns, owned by a gentleman in the vicinity of London, England, who sold all his milk to the city. Speaking of the milk yield of some of his cows it said that it was by no means uncommon for them, in the beginning of summer, to yield 30 quarts a day, and that one of his best cows gave 36 quarts a day, or 72 pounds of milk in one day. Now then, those who buy for us Nova Scotians in England either buy from the wrong family of Short Horns, or our country is not adapted for bringing out their milking qualities, for they are proverbially the poorest milk producers of any of the known breeds in our Province.

Sometimes you treat us to accounts of the handsome Ayrshires, with their well-established milking properties. I have the record of one cow, an Ayrshire, now before me, (Old Creamer), owned by General S. D. Hungrford, of New York State. This cow when 9 years old weighed 1080 lbs., and in 1873 gave, during the month of June, 2x20 lbs. of milk, in July, 2483½ lbs., and in Sept. same year, 2200 lbs. Her average for June was 94 lbs. or 48 quarts per day.

In our own county of Pictou are two registered Ayrshire cows, "Cuthbert Lass" and "Little Dorrit." Although they cannot show "Old Creamer's" record they are representative Ayrshires all the same, and if you think the account sufficiently interesting I will give you their milk record during the months of January, February, March, April, May, and to June 21st, 1881. Their milk produce was weighed each day and sold at 2 cents per pound. An account was kept against them for feed, attendance, &c.

January, Milk Yield 184½ lbs at 2 cts.	\$3.69
February, " " 1876 " "	\$3.73
March, " " 1923 " "	\$3.84
April, " " 1950 " "	\$3.90
May, " " 2015 " "	\$4.02
21 days in June " 1428 " "	13 cts. 20.99
Total	\$220.55

Average yield per cow per day 33 lbs., and for each 27 days during the time stated each cow gave her own weight in milk, "Little Dorrit" being only 3½ years old at the time and milking after first calf, having calved Oct. 25th, 1880.

I will now give you the opposite account for feed, attendance, &c.

Jan. to June, 16 lbs. of hay each for 172 days—650 lbs at 1 ct. per lb.	\$6.50
Jan., 62 bus. of turnips at 15 cents—	\$9.30
Feb., 250 lbs. of bran \$2.50	11.60
Feb., 7 bus. of barley at 70 cts.—\$4.90	
42 bus. potatoes at 21 cts.—\$8.82	15.40
Feb., 32 quarts of oil cake	2.00
March, same as February	17.40
April & May do	\$7.83
June, meal to the 21st	\$7.00
Pasture	9.00
Attendance	30.00
Interest on first cost of cows for six months	9.00
Total	\$153.94

So you see the account will stand thus:

Milk Yield, 11,304 lbs. at 2 cts.	\$22.61
Charges, keep, interest & attendance	158.94
Total	\$181.55

In addition I must add:
2 thoroughbred calves at \$15 each... \$30.00
6 loads of manure... 6.00

Leaving to the credit of the two cows \$111.14

It is not a very bad argument in favor of Ayrshires do you think.

Now and again you give us accounts of "Jerseys" and their butter yields.

It is said that the Leicester sheep are the Short Horns of sheep, and by using the same figure I think the handsome and aristocratic South Down has a something about them that always makes me think of the Jersey cow, and think they should be together.