

Poultry.

Poultry in Winter Apartments.

BY R. A. BROWN, CHERRY GROVE, ONT.

This is a very critical time of the year in the farmers' poultry yard; not so much on account of approaching winter, which is no small consideration, but of the great hap-hazard slaughter that takes place on many farms at this time of year. The ones handiest by, or the easiest caught, and sometimes the fattest are taken, with no thought of enquiring which would be the most useful to select to mate for breeding-stock, for the ensuing year.

Many young cockerels, when half grown and half fledged, are ill specimens, yet when full grown make the best birds in the yard.

It is necessary now to have some understanding what will be best appropriated for next year's use, whether you want to breed for egg-producers or for table use. If the latter is desired, choose Brahmas or Cochins; if for eggs alone, try Leghorns, Spanish or Hamburgs; if for beauty or fancy, then try the Polands. If you want but one breed for general purposes, good for laying, sitting and table use, then try Plymouth Rocks, Javas, or Dorkings. Whatever you desire to produce next year you had better take a thought now and have your stock selected before winter sets in.

If you have a house for your poultry be sure they go into clean apartments for winter. Do not allow the accumulation of filth that has gathered in the poultry house during summer to remain there all winter also. Remove the roosts and sitting boxes, and clean the whole house, making it neat and trim. Sweep the walls clean of cobwebs and dust, fill the cracks and crevices with slaked lime, in order to destroy any vermin that may be concealed there; scrub the floor clean, and then sprinkle dry sand on it and the perches, and keep a good-sized box of wood ashes in a corner for the hens to wallow in, which will help to keep down vermin.

It is much better to breed from pure birds, as they pay better than grades; but if they cannot be got handy, try if you can get a pure blood male to mate with your hens. If the farmers do not care to raise pure bloods exclusively, it may pay just as well to breed from pure-bred cocks and your own cross-bred hens, always breeding each year from a pure-bred cock of that variety which is best suited to your wants, each year selecting your best pullets to breed from, and killing or selling the rest. Then, in a few years you will be gratified with the great improvement effected at such trifling expense. Anything that is worth doing at all is worth doing well. Get good stock and take care of them; pay attention to the selection of the best for breeders, and it will pay any farmer to breed and market poultry and eggs. People must not expect that to get good stock is all that is required, and that it will take care of itself and prove a horn of plenty. Poultry, like all other live stock, must be well cared for, and then will pay their keeper better, in proportion to the money invested, and the time spent in attendance, than any other farm stock.

Special care must be taken of all large-combed varieties, like the Spanish or Leghorns; a good warm place must be provided for them (it will be found profitable to treat all breeds similarly, but particularly this variety) to keep them from freezing. No water should be given on very cold days, or their wattles may become frozen too.

Fresh bones from the butcher shop pounded fine are superior to the commercial bone meal for fowls.

Fowls during molting require more warm and more generous diet during this time of drain upon the system.

At five or six months old the cockerels should be separated from the pullets, and rear each sex by themselves.

Farm Poultry.

As a rule, farmers pay little or no attention to these fowls, consequently the great majority of them know next to nothing about poultry. In all branches of husbandry the slipshod system must disappear, and a more thorough and economical system take its place; farmers must bestow more constant thought and watchful study to the various divisions of their business, proving by carefully attained personal knowledge, which branches of husbandry they can carry on with most profit on their respective farms. Neglected fowls are an expensive nuisance, but when a farmer uses judgment and proper care, they can be made very profitable. In selecting your breeding stock, never breed from crooked breasted birds; discard a bird at all hollow chested, short in breast bone, or high on the legs. Should you know exactly how all your chickens are bred, take special note of them when dressed for the poulterer, if it be possible, or let the man you supply tell you how the best birds were marked; thus, by a "rule of thumb," you soon arrive at a conclusion as to the best pen for the object you have in view. Careful selection, and the use of a little note book, will improve a stock, and, after a year or two's breeding, the economic qualities of the strain will be found vastly improved in the direction in which attention has been given. For the production of eggs we must try and know something of the ancestry of our birds (in fact, to attain excellence in any given quality this must be done), and more especially must we know what is the nature of the market. Thus, in some places, small eggs sell as well as large ones; and, of course, the production of the smaller eggs is more profitable, if, as is frequently the case, eggs are sold and bought at so much the dozen, irrespective of size. At the same time, any one wishing to establish a good steady market for his produce will do well to study the production of fine eggs, which are always an inducement to their being preferred and especially asked for by the housekeepers, in contradistinction to those "bantam things" that "were sent last time." Carefully note those of your pullets that distinguish themselves most in this line, and retain them for a second season for breeding purposes. Let her (or him) take special note of the eggs, and it will soon be possible to pick out the parent of each. A little vigilance, and it will soon be patent which hen or hens produce best. When kept for a second season's laying, the very prolific pullet will often be found a very bad layer; but this is of no importance. (The system I am unfolding in these pages depends solely upon prolific precocity; and, except in the case of the stock and breeding birds, every occupant will be relegated to the fattening pens after its pullet season.) The productive pullet has, in fact, laid herself out, and is now only relieved to reproduce in her progeny her grand qualities. The cock to mate with her must be of good productive lineage; in fact, a pen should be used for the production of cocks, and as a means of introducing the necessary fresh blood year by year. The plan is to select two or three large sized, deep bodied hens of great productiveness in the matter of eggs, and mate them with a completely unrelated cockerel, of some good breed, according to the requirements of the market. Some sittings from this pen should be hatched early in January and February, and specially marked. The birds being kept breeding for stock, as pointed out before, the finest and best cockerels should be selected. This interchange of blood should be carefully kept up, and two birds by the same pen should never be mated together. Birds related on one side only may occasionally be used; but cockerels are cheap, and a change of blood is worth a great deal, and from one or other of the breeding pens each season a stream of fresh blood should be introduced. For the production of large eggs the best pure breeds are Houdans. For small eggs, Brahams, Cochins and Hamburgs, crosses of Brahma and Dorking, and especially Brahma and Houdan, are especially serviceable.

A very good plan, if one has not carbolic acid on hand, is to mix with the whitewash a cup full of kerosene before using it in the fowl-house.

Poultry breeders should pay more attention to caaponizing than what they do. Cockerels for market or family use are made fully one-third more valuable by the process.

The Apiary.

Wintering Bees.

BY CHAS. F. DODD, NILE, ONT.

There is no question that so deeply concerns bee-keepers as how to winter bees successfully. If a man does not get much honey, or does not get a good price for it, but has his bees left, he can try again, with the hope of doing better next time; but if his bees die in wintering, he would naturally feel a little discouraged. We have reason to believe there are more bees lost every year in wintering than from all other causes combined.

Experience proves very clearly that very severe cold, even for two or three weeks, is dangerous to bees. This may work evil in two ways: They feel the chill, essay to move, and drop from the cluster and perish; with more activity, they eat more, and thus may use up the honey where the bees are clustered, and the surrounding honey being chilled and inaccessible, the bees actually starve. Extremes of heat and cold are also detrimental, especially if the bees are prevented from flying. With either heat or cold the bees become uneasy, eat more, and unless they can fly, become diseased and die. Excessive moisture in and about the hive is also a source of danger to the bees, as dampness and warmth always promote the development of fungus growths, which may not only affect the bee through the air which it consumes, but also by contaminating its food.

Now, to secure the best results from our bees, they must be properly wintered; and to do this, they must be kept free from dampness, and at a uniform temperature, and we can best do this by having the hives so constructed that they may be packed on every side with dry sawdust or chaff; the bottom should also be double and packed, and we also want something over the bees to absorb the moisture and for ventilation; we can do this by laying a sheet of duck over the frames, and covering it with a thick chaff cushion, or 6 or 8 inches of chaff or dry sawdust, which should be kept dry by a tight cover, and left on their summer stands, with the entrance to the hive left open, so the bees may go out and in at their leisure; and if the hive contains a good strong stock of bees and plenty of honey, they should stand our very severest winters and come through in good condition. The packing should be left on till the 1st of June next year. After your bees are put into winter quarters do not disturb them; the quieter they are kept the better.

From the 1st of September there were 3,984,135 pounds of oleomargarine shipped from New York to European ports.

In Detroit market barley is selling altogether by sample, and the latest sales range from \$1.40 to \$1.50 per cental. The maltsters are giving \$1.70 to \$1.75 for prime Canadian. In New York the prices are 80c. to 85c. per bushel for four-rowed State, and No. 1 Canada is quoted at 92c. to 93c.

GRANTS IN PROMOTION OF IMPROVEMENT OF AGRICULTURE.—No part of the Dominion was favored with a more fertile soil than a large proportion of the Province of Quebec. The Valley of the St. Lawrence was proverbial for its productiveness. But that fertility is a thing of the past. Bad farming, over-cropping, and neglect of restoring to the soil the elements of plant food taken away by crops, have reduced the once fertile plains to a state of sterility. The Provincial authorities are endeavoring to effect some improvement in this respect. They have resolved to distribute a part of the yearly grant in promotion of agriculture in the form of superphosphate of lime to the County Societies, to be expended in the way likely to secure the best results. This fertilizer is much wanted by the worn-out lands. It is hoped that by this means farmers will be taught the secret of restoring to exhausted soils their former fertility, by the most expeditious and effectual method. There are in the Ottawa Valley, and other sections of this Province, vast deposits of phosphate. It is well that this should be made use of, in part at least, in our own country where needed.—[Ex.