

Varieties of Apples for the Ottawa Region.

Following is the latest revised list of varieties of apples recommended by Prof. Macoun, of Ottawa, for that portion of Province of Ontario between latitudes 45° and 46°, and along the north side of the St. Lawrence river in the Province of Quebec, to about Three Rivers:

Summer—Yellow Transparent and Duchess of Oldenburg.

Autumn—St. Lawrence, Wealthy and Alexander.

Early Winter—McIntosh Red and Fameuse (snow).

Winter—Scott's Winter, Milwaukee, Northwestern, Greening and Canada Baldwin; and Golden Russett in the more favored localities.

Additional varieties suggested for home use are:

Summer—Lowland Raspberry, Early Joe, Russell and Dyer.

Winter—Swazie, Pomme Grise and Grimes' Golden.

POULTRY.

How to Improve the Laying Capabilities of a Flock.

Owing to the results achieved in the various egg-laying competitions, both at home and abroad, in the United States and in New South Wales, poultry-keepers who breed hens for economical purposes are realizing that it is possible under certain conditions to obtain 200 or more eggs from a single hen in the course of a year. The correspondent in question having learned that this is the case, asks where he can obtain such hens, and expresses his willingness to purchase at a fair price a number of birds of a remarkable laying type, even though the number of eggs they produce is smaller than the figures which have been suggested. It is remarkable how little practical knowledge many poultry-keepers possess. A man who owned hens which had laid an average of 150 eggs per annum or more, as the case may be, could not possibly sell them with any guarantee that they would produce the same number in a succeeding year. As a matter of fact when a hen lays a large number of eggs it is within her first year—i. e., from the time she commences laying as a pullet to the expiration of twelve months—after this she commences to moult, and when laying again, as a rule, produces a much smaller number of eggs than before. A buyer, therefore, would be disappointed, for a hen is not like a cow which increases her milk supply year by year until she has attained her zenith, for the older she grows, the smaller do her producing powers become. On the other hand, it does follow that a hen having laid a large number of eggs in her first year may to a large extent be relied upon to produce pullets, if she is properly mated, which will do as good work as she herself has performed. As a matter of fact, it is impossible in practice to buy remarkable layers which will continue to lay as before, but we can utilize their services in the breeding pen, and thus secure in future what is actually needed.

Those who have exhibited hens which have laid large numbers of eggs, or who compete for prizes with considerable success in the same direction, have in most instances produced these birds in the process of selection. If the owner of race horses desires to obtain the highest speed in his foals he employs sires and dams which are themselves the swiftest within his reach. If the dairy farmer desires to increase the quantity of butter or milk produced in his herd, he selects the deepest milkers or the best buttermaking cows for the purpose, mates them with a sire whose blood is that of a milking or buttermaking family, and, in consequence, naturally expects to obtain heifers which in their turn will produce large quantities of milk. And so it is with the poultry-keeper; if he will obtain a large number of eggs from the hens he owns he must discard every bad layer, and by the aid of a recording nest ascertain which of the remaining hens in his possession lay the largest number of eggs, and these he must retain as his breeding stock for the forthcoming year, taking care to mate them with a male bird which has been produced from an egg laid by the best laying hen within his knowledge. The poultry fancier has produced his most perfect specimens from the point of view of color, feather, form, symmetry, and the like, by adopting this same method of procedure. Like produces like, and whatever quality we require we must look for in the parents, and if we are patient, and strive to reach a particular standard, we are certain to do so in the long run.—[Farmers' Gazette.

Farmers, I find, prize your valuable paper. It is full of good information. H. C. HOAR.
Sec. Farmers' Institute, Hampton, Ont.

"Better late than never." Send in your renewal now, so that we may change your label.

Strain Necessary to Improve Egg Yield.

In breeding poultry, an effort should be made to breed with a definite object in view. Among the different objects sought for, viz., size, color, shape and eggs, the last mentioned stands pre-eminent as a financial proposition. Notwithstanding that eggs of the desired color and shape are the most coveted prize in poultrydom, yet breeding to improve the flock in egg production is more difficult than for the improvement of any other point. If we want well-shaped birds, we breed from well-shaped ones, and if we want eggs we must breed from producers and the descendants of such. When breeding for all the other qualities, the points considered are prominently before the breeder's eye, and all he has to do is to use good judgment in selecting his matings; but not so in mating for heavy laying strain. No man can select the best laying hens from merely looking them over. Frequently a favorite in appearance is seldom found at the nest if watched. Non-production, to a great degree, accounts for her fine appearance. There are some claiming to know the points which go to make a layer, yet they can only talk and speculate. The only way of knowing is to make an actual record of the produce of each hen, and in that way the profitable ones will be found.

There are hens which lay as many as 200 eggs in a year, and a very few do better, while some don't exceed two dozen. In fact, some specimens have been found never to lay an egg.

If one could secure a male from a 200-egg hen (or better), he would be worth from five to ten times more to put with a flock than one from the two-dozen-egg hen. Often the low-producing hen will only lay a few eggs during the most favorable season—in the spring, when any old scrub strikes up for a few days. This, also, is the time for hatching, and if the hen has been resting for six or eight months, she will likely lay a few very fine eggs, and so these find their way to incubation. A cockerel from a chance of this kind will outdo the rest in the flock, and, of course, be kept for breeding purposes. Well, what can be expected from his pullets? The traits their ancestors possessed, and nothing better. Is it any wonder, then, that, where there is no system whereby we can breed from the best, we are not making the progress we would wish for. This accounts for so many flocks degenerating so rapidly.

Trap-nests, records and pedigrees may not be practicable with busy persons, but these should take advantage of every opportunity to secure breeders or eggs from those who have used time, patience and money, and have produced a first-class strain of layers.

Wentworth Co., Ont.

Poultry Feeding.

Fowls should be given a breakfast, consisting of ground grain and any available vegetables, as soon as they are awake and active in the morning. It is best that the food be mixed and mashed together, with a little salt added, and fed warm. One should be careful to see that the feeding troughs are kept clean.

During cold and stormy weather, a little ginger or red pepper mixed with the food will aid digestion. But condiments should, of course, be used sparingly. A suitable variety of wholesome food is the best tonic. A regular system in feeding, with frequent changes of diet, will keep fowls in a healthy condition—always provided their apartments are warm, well lighted and ventilated, and kept clean.

In feeding, the object to be obtained should be considered, whether it be for eggs or for the market. An excess of fattening food will injure the laying qualities. Give no more food at a time than the fowls will eat up clean. Better let them go a little hungry and make them scratch—especially when feeding for eggs—than have them mope around and become lazy and inactive. The larger breeds, such as the Partridge Cochins, being rather quiet, are more apt to become too fat; while smaller and more active breeds, as the Leghorns, are less liable to excessive fat. With a little care and judicious observation, it is not difficult to regulate the food supply. In cold weather a greater amount of food is required to sustain the vital force. Plenty of pure water must always be supplied to the fowls. On account of the high percentage of water in eggs (64 to 65 per cent.), laying hens particularly need an ample allowance.

Galvanized iron drinking vessels, placed a little above the feeding floor, so that they will not become filled with litter, are a satisfactory watering arrangement.

For the noon-day meal, allow the fowls what they will eat quickly of a mixture of ground grain and sour or skim milk. The evening feed should consist of whole grain, preferably corn, oats or barley, scattered on the floor of the scratching shed.

Poultry should have access to some form of vegetable food at all times. Cabbages, turnips, beets, etc., are all relished by them, and all contribute to keep them in healthy condition. To give the birds exercise, we feed these vegetables whole. For egg production, some animal food is needed every day, as meat scraps, beef heads or livers, either raw or boiled. This can be cut up and fed to the hens, or hung in their feeding place. A cheap and nutritious food can be made from a piece

of liver or meat scraps boiled in water. Add to a gallon of water a pint of soaked beans and the same of linseed meal. When cooked, thicken with bran, middlings or corn meal to make the mixture a stiff dough. Crumble and feed.

Charcoal should be placed where the fowls can get at it, as perhaps no one thing is more conducive to their health. Also, lime or old plastering, and broken oyster-shells, for egg-shell material.

As poultry masticate their food by a grinding process in the gizzard, the grit box must not be neglected. Let it be supplied with small broken stones or coarse coal ashes. Broken crockery or granite and gravel are also used.

When breeding fowls have free range, much less food need be given. Scatter the small grains through the litter in the morning.

For fattening, give a ration that will produce white-colored flesh; such as equal parts ground oats, ground barley and ground buckwheat. Corn-fed fowls have yellow-colored flesh of inferior quality.

Whitewashing, with the addition of a little carbolic acid, and the sifting of air-slaked lime about the poultry-house occasionally, will destroy parasites and keep down unhealthy odors.

The better the care, the more varied the food, the greater the profits.
W. J. WAY.
Co. Kent, Ont.

Good Results from Our Ads.

Our thanks are due to Mrs. M. Howard, Sutton West, Ont., for an interesting photo of three enthusiastic readers of "The Farmer's Advocate." We shall certainly make these a feature of our columns. Re our advertisements, Mrs. Howard writes: "Am happy to tell you I have had excellent results from an 'ad.' in the poultry columns of your valuable paper." Will others who have anything to advertise kindly take note of this.

APIARY.

Running a Wax Press.

There are some things about the operation of a wax press that do not appear very often in print, and a few words on the subject may help some readers of "The Farmer's Advocate" who are operating one of these machines for the first time, or who have just been trying to, and have not obtained as good results as they should have. The writer had considerable trouble the first time or two, caused by the wax "freezing" before it ran out of the press, and clogging up everything, so that it had to be cleaned up with boiling water before the work could be continued; and this is the trouble which causes many people to condemn this method of rendering wax. Now, the fault is not in the machine at all, but in the conditions under which it is worked.

In the first place, it must be borne in mind that wax will stick to wood, or anything else that is dry, and that it will not stick to a wet or damp surface. In the second place, get acquainted with the fact that wax will "freeze" when it strikes a cold object, or when a cold current of air strikes it, and that it will not freeze so long as it is hot. These two facts are known by nearly everyone who has anything to do with beeswax, and yet it is because conditions are not as they should be that the wax press gets bunged up and makes trouble.

To have everything run fast and smoothly, it is necessary to have the room where the work is being done very warm. A temperature of 85 or 90 degrees will do away with most of the trouble from freezing. The press should be in a warm room for a couple of hours before commencing operations, so that every part of it may become thoroughly warmed up. Take out the follower and the slatted bottom, and stand everything up so the warm air of the room can get all around it, and it will warm up much more quickly. Just before putting in the first "go" of melted wax, have ready a kettle of boiling water, put the press all together, with the bottom and follower in place, and the burlap to hold the melted combs between them, plug up the spout of the pan, and then pour your boiling water slowly into the press. Don't forget to give the corners their share, and let it stand long enough for everything to get thoroughly hot and wet. Now let out the water, remove the follower, open up the burlap, dip in the melted combs (you will soon learn how much you can handle at a time), fold the burlap over the wax, put in the follower, and screw it down slowly. Be sure the screw presses fairly in the middle of the follower, or it will not press evenly. When it is down nearly as far as you can turn it, and you think all the wax is out, ease it up a little, and then turn it down as far as it will go. Give it time to run out; then turn it down some more, and give it more time to run out. You will be surprised how much wax will come out after you think it must be all out. Don't be afraid of breaking the machine, but squeeze it down for all you are worth. If it bursts, gets a new one—stronger. When you cannot persuade any more wax to come out, release the screw, take out the follower, remove the