

Enclose open tiers or piles of slat crates filled with dry onions, potatoes, etc., in tight room or oiled tent of canvas buried in earth about the base. Generate the formaldehyde gas in a flat-bottomed dish or pan of adequate capacity by placing one of the materials, as the liquid formaldehyde, in the pan, and adding the other the last thing before retiring. Applicable to fumigation of seed potatoes for scab, sweet potatoes for rot troubles, and to newly-gathered, dry onions before storing for winter.

The object of immediate disinfection is to prevent the entrance of these organisms, particularly the sclerotium rot, through the green neck of the newly-topped onions. The exuding juices offer favorable culture conditions for the fungus to develop.

When no fumigation is practiced following harvest the onions which are found to be sound and delivered for storage at the close of the season may very profitably be treated in this way before winter storage. Both these rots are essentially dry-rots of onions. In addition, we have wet-rot of white onions, which may be either due to bacteria or to the same fungus as the wet-rot of Globe or other onions mentioned below.

The rots of yellow and red onions are of both the wet-rot and dry-rot types, but the wet-rots are much more serious with these varieties. Doubtless as in all vegetables held for a long time in storage, we have many cases of wet-rot in onions where some of the common decay bacteria are the chief cause. These find entrance through wounds as in topping, and, under conditions favorable for their development, invade the tissues of the onion and cause decay.

In addition, however, to the wet-rots, due to bacteria of undetermined species, we have a specific wet-rot of onions due to *Fusarium* species. This wet-rot fungus belongs to the same group as the potato dry-rot, and is liable to infect soils in which onions are grown year after year. Rotted onions will show external developments of the pink fungus, and may be detected in that way as well as by the use of the microscope. The chief factors of control with onions of this kind are in the methods of culture followed to produce the crop. The best temperatures for onion storage are about 38 to 42 degrees F.

This season has been one which has served to bring before many apple growers the need of a Fruit Grower's Association in their district. Where well managed associations are in operation, good prices and ready sales have been obtained, but where the grower was forced to rely upon the apple buyer the price offered has been very small, and he has experienced difficulty in getting the apples picked and packed. If the need has been felt in your locality, now is the time to organize. Strike while the iron is hot. Call a meeting and talk the matter over, then if sufficient interest is taken, organize at once, and be ready to handle next year's crop. Better fruit and better marketing facilities will result.

One of the best ways to increase the demand for apples or fruits of any kind is to encourage the people to use more of them, and the best means of increasing consumption is to put up nothing but the best quality in the different grades.

A single apple tree will not infrequently yield more cash profit than an acre of land devoted to general farm crops.

POULTRY

To prevent drafts, a solid partition should be placed in long poultry houses every fifty feet.

A two-year-old or three-year-old hen is safer to breed from than a pullet.

For curtain-front poultry houses, a good rule is one-third glass, one-third cloth and one-third boards.

The chief objection to curtain-fronts is dirt, which clogs the curtain and prevents the circulation of air.

Two hundred birds to the acre is just about the limit where they are to remain year after year.

Where mixed farming is carried on, a flock of 100 laying hens is about enough per 100 acres of land.

Kill or dispose of all the cockerels not needed for breeding purposes. It costs about \$1.50 per annum to feed each male bird.

In some large poultry plants the labor required to care for the poultry is figured at one-quarter of the cost of feed.

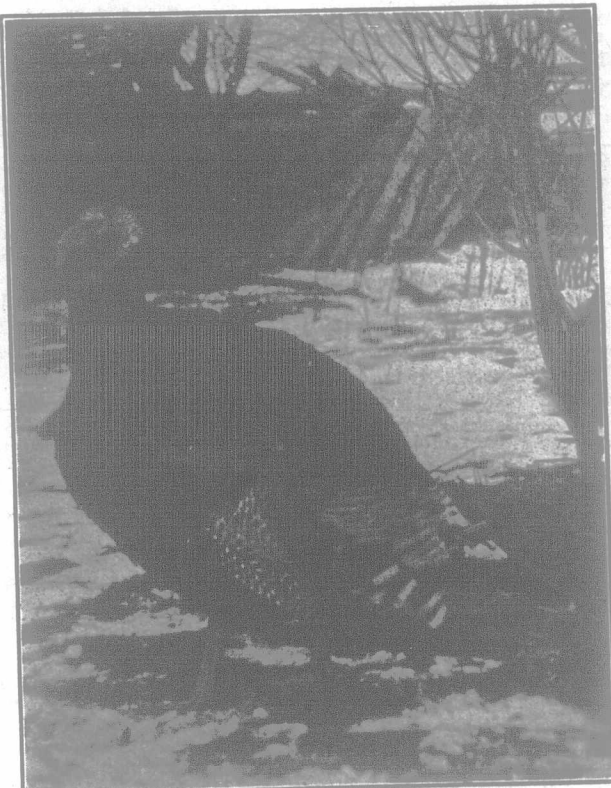
Poultry Notes.

Editor "The Farmer's Advocate":

In the scratching shed for your fowl there is nothing better than straw chaff or clover tops, and this should be at least eight inches deep. All the whole grain should be fed in this litter to induce exercise. Dried leaves are also suitable and have the advantage of being exceedingly cheap. Some poultry-keepers make a point of gathering sufficient leaves in the autumn to last the whole winter and store them away in sacks or barrels.

A point often overlooked is that mongrels cost as much to keep as pure-bred fowl, and the present month is an excellent time to arrange a purchase of next year's stock, if you have not already good stock. Young stock if purchased now will have matured and settled down in their new quarters before winter sets in. Ordinary utility stock, even from a trap-nested, pedigreed strain is not very expensive, but it is wise to pay a reasonable price for well-bred birds rather than to attempt to secure a bargain at cheap rates. Many poultry-keepers make a practice each year of killing off or disposing of all unnecessary stock during this month to provide room for growing stock, and splendid bargains may often be secured from them. The greatest mistake is for the beginner to commence operations with mediocre stock—a policy which usually ends in failure and disgust. A first purchase often makes or mars a poultry-keeper whether he starts in on a large or a small scale.

When the first season is crowned with success he is enthusiastic and stimulated for further effort, whereas a failure the first year very often leads to more failures the next year and the ultimate "dropping out" of what might have proved a first-class poultryman.



Sensation.

Bronze turkey, winner of first prize in turkey classes, and grand champion over all varieties of poultry at the Ontario Winter Fair, Guelph, 1911. Bred and owned by W. J. Bell, Angus, Ontario.

The culture of pure-breeds will add to anyone's storehouse of knowledge and with comparatively little trouble or outlay gives one pleasure and profit.

I might also add that when a business man retiring from active life, when old age comes upon him, has a poultry-yard, be it large or small, on which to devote his time and advance it towards a standard of excellence, he will find an enjoyable occupation closely associated with ample remuneration for his labors.

If the young pullets' combs grow well and they redden up before the bird is matured enough for laying, it is a good plan to remove them from one run to another about once a fortnight to prevent them laying too early, as they will lay better later if not allowed to lay till well matured.

A little aperient is most helpful to fowls which frequently suffer from partial indigestion; much illness would be avoided if more care were taken in this respect.

It is most essential that young stock should have a liberal supply of sharp flint grit, as nothing causes sluggish liver so quickly as lack of this; fowls of any kind cannot do well if their digestive organs are not acting freely, as the gall

becomes overcharged and disease frequently follows.

House scraps should always be utilized for the fowls, and these boiled up with water or milk, and mixed into a crumbly mash with shorts or provender, make an economical as well as an excellent breakfast for the fowl. NONA.

Carleton Co., Ont.

Ducks.

Readers of The Farmer's Advocate have recently had their attention called to the habits of ducks by articles written by Peter McArthur, also by "A Poem to Order on Ducks." Now ducks are a part of the poultry crop on many farms, and they are usually found profitable. A writer in one of our American contemporaries thus describes ducks: "It takes four weeks of profound uncertainty to hatch ducks, after which they proceed to grow up, sectionally, in the following order—(1) their bills, (2) their feet, (3) the duck proper."

"If anything had been created in vain, ducks would prove that it wasn't by eating it."

"Each shining hour seems to be plenty good enough just as it stands for ducks. For as often as they catch the busy little bee improving it, they swallow him on the spot."

"The duck never lays a golden egg, being no such goose."

THE FARM BULLETIN.

Likes the Distributor.

Editor "The Farmer's Advocate":

The corn-harvester, as compared with the back-breaking sickle, is, in my experience, almost equalled by the corn-distributor in the silo as an efficient labor-saving contrivance. When I went to a tin-smithing establishment in our town to enquire for such an outfit, I found that the foreman had a sheet from a back number of The Farmer's Advocate pinned up over his desk in the make-room, showing plan and description of the distributor used last year in the Weldwood silo. The curve, or elbow, given the hood at the top, which receives the stream of cut-corn from the blower pipe, had, he said, proved to be a decided advantage in lessening the wear on the back from the steady impact. He said they had turned out a lot of them from the pattern, with the best of satisfaction. I finally ordered one of 24-gauge galvanized 8-inch iron pipe, six sections, each five feet in length, joined with rings and snaps, and the elbow complete, for \$14, rather steep, I thought, but since filling the silo I don't begrudge the outlay, for one man with a distributor can make a better job more easily than two men with forks. One man should handle the distributor pipe and another do the tramping, and the silo will be well filled. The grain and stalks will be evenly mixed, which is hardly possible with forks. The sections are removed as the mass of corn rises in the silo, and care need be taken that when hanging suspended, the corn should not be allowed to rise above the opening of the discharge pipe, choking it up and liable to occasion a burst in the blower. I am greatly indebted to Weldwood and The Farmer's Advocate for calling my attention to such a simple and sensible plan in silo-filling. To be relieved of the constant pelting from the falling cobs and stalks by the old process is enough to commend the new, even if it had no other advantage. It's a good scheme. Thanks! ALPHA.

Ohio's Largest Consolidated School.

Jackson Township, Pickaway County, boasts of being the largest centralized school district in the State, comprising as it does an area of over sixty square miles. A new school building, costing over \$30,000, was recently dedicated by the people of the township. It has eight rooms, an auditorium, a chemical and physical library, and an office for the superintendent. Scientific apparatus and books for the library have been purchased to the amount of \$500. The building is equipped with running water and all other modern conveniences, including sanitary drinking fountains. A gasoline engine is used to pump the water supply. Eleven schools in the township have been closed by centralization. The buildings have already been sold at auction, as the people have no idea of ever returning to the old system. Two hundred and twenty-five pupils are enrolled in the school, thirty of which are in the high school. Ten wagons are used to haul the pupils to and from school. Excluding the cost of the high school, the expenses are less than under the old plan. J. H. Cook, Jr., is the superintendent.