How Often Should the Henhouse Be Cleaned?

Quite frequently questions come to this office asking : "How often should a henhouse be cleaned out ?" Strange that this should be so, for it is not very frequently that we are asked how often a horse stable or cattle stable should be cleaned. And yet we do not wonder that this question bothers many poultry owners. Little is to be found in most of the poultry works on the subject, and we distinctly remember hearing a poultry professor ask a large class of young men, the majority of whom had spent the greater part of their lives on farms, this question, and not one felt sure enough to answer. It looks easy and still it cannot be answered with a few words to suit all conditions. This much is true, however, that most poultry houses are sadly neglected in this respect. Horse stables and cattle stables are cleaned once, twice or three times daily when the house in which the hens are kept is not thoroughly cleaned out as many times a year. While most people realize the importance of cleanliness in the dairy barn and the horse harn, they seem to overlook this matter as it applies to poultry houses. While this is true, there are those who believe that a poultry house should be cleaned out daily. There are types of houses in which this is imperative, viz., those in which dropping boards are used. If a man does not feel that he can take the time to clean these boards each day they would be far better left out of the pen. In fact, their worth is questionable in most farm poultry houses. But with the house without dropping boards many leave the droppings altogether too long. It is no easy matter to keep litter fresh and clean. In a short time, if not changed, it will become solid and matted together. This means that not only droppings but all litter should be cleaned out. regularly. No doubt the best house is the one cleaned out daily, but this house is not found on regularly. We wonder if the poultry house most farms. were cleaned twice per week, as a good many people clean their hog pens, it would not suffice. This would, in most cases, be an improvement on present conditions. Even if the house were cleaned out once per week and new litter put in it would be an improvement. Some manage to get it done two or three times during the winter and get fair results, but others do not clean at all and wonder what is wrong if disease de-Where possible clean daily and in all velops. cases keep the litter fresh, dry and clean.

The Hen in Her Place.

Here we are again at the beginning of winter. Last fall many planned that the cold weather would not catch them again without the poultry house prepared and ready for the flock, but often the rush of other work has side-tracked this apparently small matter, and as the need did not seem imperative during the summer season, cold weather is again forcing the hens to seek shelter in the straw stack, cow stables, horse stables, or pig pens. Everyone knows that none of these places are suitable quarters for hens, either from the viewpoint of the poultry business or from that of horse, cattle or pig raising. Nothing disgusts a horseman more than to find a lot of scratching hens stirring up bedding and roosting above horse stalls or over harness and appliances. No clean dairyman cares to have a flock of busy birds raising a There is no place for the hen dust in his barn. but in her own pen where all her cackling and all her scratching does no harm whatsoever, but stimulates the rest of the flock to do likewise and thus get the exercise so essential to health and production. A separate pen for poultry is essential of all farms on which hens are one kept. It need not necessarily be expensive. As long as it is well ventilated, dry and light and kept clean it will give satisfaction.

THE FARMER'S ADVOCATE.

Experiences with Frost.

What the nature of the coming winter will be no one knows, but it is better to be safe than sorry and any little operation performed on the fruit trees to make them snugger, as it were, to endure the cold, will bring results in the years to come.

We cannot estimate, 'even yet, the loss occasioned by the severe weather during the winter of 1911-12. Many apple trees showed their oldtime strength and vigor in the spring only to suddenly wilt and die with the small, immature apples hanging on their limbs. Trees that showed no injury during the summer of 1912 have succumbed during the season just passed and we cannot foretell what another season will bring Some orchards continue to show effects forth. of the frost on the trunks and branches. It resembles pear blight in color of the affected part and in the sunken condition of the area° which suffered most. In not a few instances the bark has separated itself from the limb altogether, leaving a dry, dark wood, often checked and split. Then again, at the base of the trunk or surface of the ground the tree may be partially or almost completely girdled, due to the frosted or injured condition of the tree developing what is known as collar rot. Baldwins and Greenings have suffered most severely, but no variety can boast of immunity in this regard. More depended on the vigor and health of the tree and its location relative to soil and air.

The same thing may be said of the peach trees. Crosbys and other hardy varieties showed no pre-eminence over other kinds when the cold blasts came. Most pronqunced, however, Where the was the effect on weakened trees. borer had been at work and not checked in its depredations the whole system was so impaired that it could not withstand the test and again where the trunk was slightly split, owing to poorly-formed crotches, the result was often These are conditions in the tree that fatal. should be watched from time of setting and cannot be remedied when the tree is four or five years old. Further than this, field conditions have much to do with the survival or destruction of the peach tree. A cover crop proved itself a savior in numberless cases and in one instance where one-half the orchard was under rape and the remainder without, only those trees remain that were protected by the growth of the As one would expect, any trees uncover crop. fortunate enough to be placed in pockets that would receive the cold air from higher land and not allow it to drain away were pretty sure to perish and similarly on high knolls subjected to, severe winds and not able to retain the snow were equally in danger.

References have been made to conditions that cannot be remedied in the fall of the year with the exception of the high hills or knolls which, if small in area, might be mulched with a heavy straw or brush to retain the snow. There are conditions, however, where a little work in the fall will ward off some danger. Two years ago one could see where trees had been banked up through the summer to ward off the borer. The cone, thus formed, caused a little whirlwind to organize there and result in leaving the embankment of earth and for some distance around the tree uncovered with snow. Root injury was the result. Another circumstance, just the reverse of the one last mentioned, likewise was not uncommon. During the fall winds the trees had rocked to and fro making a hollow space around the trunk. In some cases the cavity filled with water, in others it was empty, and in either case the result was not good. The tree should be tramped solidly in the ground and well surrounded with soil, but not banked up high enough to form a cone or pinnacle. What temperature the trees and fruit buds will endure it is hard to say, for so much depends on the individual condition of the tree and its environments. Two winters ago the trees were subjected to a temperature of 26 and 28 below zero and lived. They showed the cambium layer or first layer of wood under the bark very brown and blackened, but in a couple of weeks after growth started a layer of new wood, from one-eighth to one-quarter of an inch thick, covered the old blackened area. What condition will eventually develop from this injured wood cannot be foretold, but many have borne immense crops this past season and show customary health and strength. Twelve to fifteen below zero did not destroy the fruit buds in all cases, but where anything more severe than this occurred the crop was very light. A cover crop left standing this winter will help to retain the leaves and snow and where this does not exist even mulching may prove profitable. Local conditions and surroundings will suggest new departures to the orchardist and a tree just coming into bearing is worth considerable attention, even if it is "only one."

FOUNDED 1866

Fillers and Specials.

A recent issue advocated a list of standard varieties of apples for the new plantation, but there are numbers yet unmentioned. Many of them would be strongly opposed by some and as strongly recommended by others. A circumstance in the Maritime Provinces exists where an agent advised a large orchard to be planted exclusively to Salome. At that time that variety was not well known and even now few would recommend the venture. As it happened they were a variety that was self fertile, bearing young and quite productive. The young orchard has been profitable, and we cite it only to illustrate the idea that a variety not famous for quality may often be used, and through its tendencies to bear young and abundantly it will often yield remunerative returns. The Ben Davis has had more anathemas showered upon its name than any other variety, yet under such a ban it still has its advocates.

Where land is high in value, the space between the standard trees may as well be utilized with younger-bearing stock. For this purpose the Wagener, Duchess, Wealthy and Hubbardston receive the greatest number of votes. When near a good local market, the Astrachan and Yellow Transparent will be profitable. They are earliest of all, and this year sold well in elevenquart baskets from 40 cents down. Where the box practice is not in vogue and the trade in baskets small, it would be unwise to set either the Astrachan or Transparent. The Wagener is a very young-bearing tree and the quality of the fruit good. You are not obliged to hasten in gathering them in the fall for they will keep a reasonable time. The tree, however, is not a healthy type, and it may be said that unless particular care is exercised to maintain the health of the tree, the owner of the orchard will cut it out without any compunction of conscience when the space becomes crowded. The Duchess and Wealthy are good, healthy, productive trees, and even to such an extent that the Wealthy, at least, should be thinned in order to get size and Where shipments do not have to carry color. too far, these two varieties will net good re-turns. The Hubbardston is a somewhat larger tree than either the Duchess or Wealthy and the fruit is longer lived.

The Gravenstein and Blenheim are two good fall varieties that have not been given a place, and the Stark and Cranberry Pippin in the winter kinds have been omitted, not because they are unworthy of a place in a commercial orchard, but in order that we might confine our list to a reasonable number and not confuse the reader by a multiplicity of varieties.

Pruning Out Fire Blight.

This disease that has been known for a century past still exists and in some districts goes on unknown and unnoticed. Many theories have been advanced as to the causes, but later investigations have proved satisfactorily that bacteria operate beneath the epidermis or outer layers of the bark and cause the destruction of branch or tree. Not only does it attack the pear tree with great vengeance, but apple trees are caused to suffer as well, and quince, plum and cherry are not immune. The Clapp's Favorite seems to offer least resistance to this disease of any of the pears and they will soon be a minus quantity in localities where attention is not given to the preservation of the orchard. Few will mistake this disease in the pear orchard, for it does its work so quickly and effectively that a whole branch will show the effect in a few days. The leaves appear very dark and wilted, as though the intense heat of the sun had blighted and destroyed them. A gummy exudate also comes from beneath the bark, but to the casual observer it is not noticeable. After the disease has done its work the affected part is dark in color and sunken in appearance, nor is it hard to define the wasted area, for it is so clearly mapped out that mistakes are seldom made. However, the germs may at that time be operating beneath the healthy bark farther down the branch and the external appearance will not indicate their presence. The only remedy known to man at the present time is to prune and prune constantly during the summer months. Little abrasions in the bark allow entrance and the blossom admits the germs, so through the entire growing season it will appear in the branches and limbs. In many instances the trees are near the house and five or ten minutes during the noon hour would clear the tree of the disease and save it for many years of usefulness. Instead of that the owner often says, "That pear tree has got blight and I believe it's going to die." If he is true in the first sense he is truer still in the second and too often he allows the tree to go to prove himself correct. If pruning is thoroughly done this winter much trouble and expense may be forestalled for the coming season. Cut twelve or eighteen inches back of where the disease shows itself and

HORTICULTURE.

Have you saved some good specimens to exhibit at the Horticultural Show at Toronto?

One good box of apples on exhibition will get you in touch with the fruitmen and add an interest to the show.

Number three apples selling locally for one dollar per box, with box returned, is a pleasing circumstance for the producer and an amazing condition for the consumer, which exists in some Ontario towns.