

of young wood, or one or two buds of young wood somewhere on them, but they included a portion of the older wood, so that every branch of old cane that has an inch or two of young wood can be used for cuttings.

Plum Rot

(*Monilia fructigena*).

A sample of plums much affected with plum rot was brought to the FARMER'S ADVOCATE office. They were taken from a tree that had been faithfully sprayed three times this season, at the recognized correct dates, with Bordeaux mixture. By the 20th of June fully 25 per cent. of the plums on a heavily-laden tree were affected, and the disease was spreading. Two years ago the same tree was sprayed with Bordeaux in spring and with copper carbonate when the rot appeared, and the affected plums were picked off, thus checking the disease, so that a fair crop of fruit was harvested. We would very much like to hear from readers who have been able to check, ward off or cure this trouble so prevalent and destructive in many plum orchards.

POULTRY.

Seasonable Poultry Notes.

BY FARMER'S WIFE.

Growing chickens cannot be induced to eat too much. Push them along so that they will attain full growth before cold weather sets in. The pullets of early hatchings, if well fed and housed in a sheltered place, will begin laying in November. Separate the young roosters from the pullets, if it is possible, and feed them extra, so that they may be well grown and fleshed when the time comes to sell them. They should be kept hungry, yet have sufficient to eat. I find a good plan is to give them enough to only partially satisfy their appetite in the morning and never enough during the day, so that they will hunt around for food. The exercise will do them good. But for the evening meal they should have enough of good grain to fill their crops, so they can go to roost comfortably. Late-hatched chicks should receive the very best of care and be pushed along as rapidly as possible. It is easy to do this now when the weather is warm.

A fat hen is not a good layer. Do not feed corn more than once a day to laying hens. Bran, if well cooked or scalded, makes a good feed for poultry. Corn may be used as a part of the ration, but meat in the food will show its effects in the egg basket.

For gapes, dip a feather in turpentine and insert it in the windpipe.

Whenever possible, let the poultry have the run of freshly-plowed fields. Ground oyster shells and sharp grit are better than dosing for weak fowls.

A sick fowl rarely cares to eat, but will drink. Hence, the best way to give medicine is in the water.

Sour food is the worst thing a chicken can be given to eat. It makes a heavy draft on the strength of the little fowls to dispose of it.

Bear in mind, readers, that chicks are addicted to the natural habit of drinking when they have access to water. Keep them supplied with a dish full of water, into which drop a few old nails occasionally. This, I find, will furnish iron in about the correct quantity.

Preparing Poultry for Killing.

The time will soon arrive when the boys will be asked to go to the yard and knock down a young rooster or two for the table. This is the custom on many farms, and may be considered not a bad one after the household has grown tired of pork and other heavy meats. Even this toothsome bit of diet may be much improved on by housing the cockerels on good feed for a couple of weeks, and then fasting them a day or two before killing, and allowing them to hang in the cellar or other cool, clean place for a day or two after killing before being cooked. In preparation for killing, fowls should be fasted for at least 18 or 20 hours. This is more especially necessary where the birds are intended for market and are meant to be kept for some time before passing into the hands of those by whom they will be consumed. Fasting the birds in this manner clears their crops of all food; and thus improves their keeping qualities after being killed. If their crops are not thus emptied the fermentation set up in the undigested food very often leads to injurious results when the dead birds are kept for any length of time.

Ridding Poultry Houses of Vermin.

The bugbear (or *bete noire*, as the Frenchman puts it) of the poultry man or woman is vermin, to get rid of which bisulphide or carbon is said to be an excellent preventive. A continental investigator, who has recently been testing various remedies for lice and other parasites in fowls, finds that by placing a vessel containing a quantity of this bisulphide of carbon underneath the perches, all the lice or other parasites present in the house will be gradually killed off. Bisulphide of carbon, as is well known to chemists, is exceedingly volatile, and when used in poultry houses for this purpose it must be renewed at intervals of a few days. It is said, however, that even in very bad cases a week of fumigation with this material is sufficient to clear poultry houses of all the vermin present.

Bisulphide of carbon is too powerful in its effects to be used without care, and if a great amount is used, the poultry should be outside the house while the fumigation is going on.

Turkey Raising.

HATCHING, FEEDING AND CARING FOR THE YOUNG—TREATMENT FOR LICE.

BY "OLD MAID."

My experience in raising turkeys has been a very successful one, extending over quite a number of years. I think the time when I first became the proud possessor of a turkey all my own will never fade from my memory. A kind neighbor gave me a young turkey when I was quite a little girl, and from the time her hired man appeared with it under his arm I have been a turkey-raiser. Purchasing three more hens and a gobbler, I managed to raise quite a large flock the first year. I breed from only fine, healthy stock, saving my best for that purpose, and do not breed from the same stock long. I change my gobbler every year, and select hens from my own stock, as they are less inclined to wander away than strangers. The hen dearly loves a secluded spot for her nest. When she sits I put shelter over her, that can be closed at night and opened every morning, to keep the wild "varmints" from her and let her sit, providing she has chosen a reasonable place for the purpose. If moving is attempted, they are very "set," and will sometimes abandon a nest if moved, or so neglect the eggs if shut in that they fail to hatch. Sometimes there are one or two very early layers in the flock, too early to really care to set them, as early turkeys are not desirable, as the early rains and dampness are destructive. In this case I break these hens up and let them lay again, putting the surplus eggs under chicken hens. When I come to set them, I prefer not to make mothers of the latter, as their habit is so different the little ones will not thrive with them after they begin to need a wider range. The lice of hens accumulate quickly and prove more fatal than their own and harder to get rid of, so I put little ones hatched by hens with turkey mothers.

Sometimes the wings of little turkeys grow faster than their bodies, the quills stick out longer than the tail feathers: at the same time, many dwindle, get thin and die. Unless the one in charge understands these symptoms, the loss may be great without the cause being suspected. Catch the little ones and carefully turn back the feathers which cover the root of the quills on the wing, and in between the quills will usually be found lice, which are sapping the life away. The surest remedy for turkey lice is one part kerosene to three parts oil. Any oil which runs freely and will not get gummy on the feathers is good. Put it in a slender-necked machine-oil can, and let a little out along the roots of the feathers of each wing affected. The kerosene needs the oil, as alone it blisters the tender flesh and causes unnecessary suffering. Night is a good time to apply, just as they are put in the coop. Be careful not to get on too much, as that sticks the feathers down. Go over the flock a second time to make sure of a second crop; a large flock can be gone over very quickly.

After the patient mother has completed her time (from 28 to 30 days), I teach her to come to the house every day for food, and then comes the time for caring for the little creatures which are to be tended and kept growing into lordly young gobblers and meek plump hens to grace some festive board later on. I keep my eye on a hen which I know to be hatching, but never allow her to be disturbed to remove the little ones. If kept quiet she will seldom kill any, and will call them out of the nest herself.

The mother needs a refreshing dust bath often, as she has not left the nest while hatching. She is not confined, but the little ones are very unsteady on their legs. I make a triangle of boards nailed together, which need not be very high or very large, yet large enough for the mother to get in with her brood when she chooses. The little ones doze and enjoy the sun, while the hen dusts herself and picks grass and gravel at pleasure.

The cheapest and most healthful food for little turkeys is curd made like cottage cheese, unseasoned. They are very fond of it and thrive upon it, with the insects of all kinds which they get. Stale bread soaked in sweet skimmed milk is good for newly-hatched poults. Milk is good for turkeys of all ages, but for young ones do not let it stand and get warm and sour. It is unnecessary to make egg bread, custard cakes and expensive foods; they are too rich and produce diarrhea, and must be guarded against. Make the food sweet and wholesome, as variety is not necessary, but do not give grease or meat of any kind.

In wheat localities, whole wheat boiled makes the best food for young turkeys and for fattening. Don't fuss with a healthy flock, but if there is a tendency to diarrhea, pepper (black or red) mixed in the food is a good remedy. As a tonic, put a small lump of copperas in the drinking water occasionally. Many lose small turkeys by keeping them too closely confined. Turkeys must have range in order to become strong and thrive. I have large coops for each mother, but, unless necessary, they are not shut up after the dew is off the grass, excepting rainy days. They run in an orchard, and the little bodies grow broad and the legs get the stocky look of thrifty little turkeys; when a little older, they stay very contentedly in my meadow nearly all day.

A turkey hates to go in her coop at night unless it has been moved during the day. If it is changed every day, she soon regards it as a safe place to keep her little family over night, and should it rain in the night, change it so it will be clean for the day. Filth is a deadly foe to a young turkey in confinement. I have always kept my coops on the ground. An experienced raiser, who has tried floors, prefers

the ground, as it is more natural and healthful. I think it is a good plan to keep a box skunk-trap set at night near the coops.

When the turkeys get large enough to fly over a stone wall they will wander farther away and there is danger from hawks. I keep track of their whereabouts as well as I can, which takes me outdoors no more than is necessary for good health. I have had them so wild that they caused me considerable trouble, but it was caused by introducing strange hens.

The curd diet is excellent while it lasts, but much is required as they grow larger. While they are small, a little goes a great way, even feeding five times a day. I prefer whole buckwheat to any food when my supply of curd runs short. It is healthy, and prevents diarrhea. The finest turkeys I ever raised were fed almost exclusively on fresh curd and buckwheat. Cracked corn, wheat and buckwheat is good food when they have grown larger.

As soon as they show a desire to roost, I encourage them, providing it gives promise of fair weather in which to make the new departure. I accordingly introduce them to the turkey tree—a large maple—in which generations of turkeys have roosted before them, providing a narrow board with cleats to climb up. They are up and off in the morning before I am around. They do not care to wait for their breakfast, preferring grasshoppers and crickets to anything I might offer. They generally return at 10 or 11 a. m. to rest and refresh themselves with cool buttermilk, sweet skim milk or whatever I have for them. I make it a point to offer them something to encourage them to come home.

It is well always to feed when shutting them up at night, which should be at 5 p. m. when small, as after that time they get so sleepy it is slow work. This teaches them to expect supper, and they will soon come of their own accord. When large, the supper need not be a very hearty one, as they don't need it if there are plenty of bugs, but, just for the principle of the thing, to get them home, it is best to offer a reward. When feeding buckwheat for the first time, they rush around expecting the familiar food of curd, and receiving only buckwheat, a universal cry of "quit" will be set up all along the line, and it is only after careful examination and thoughtful observation of the fact that the mother is eating that they can be induced to touch the stuff of which they are afterwards always so fond. After the flock goes to roost they are usually very little trouble until marketing.

ENTOMOLOGY

The Hessian Fly Again.

Reports are coming in from many parts of the Province that this serious pest of the wheat field has done very extensive injury, to the extent of destroying many hundreds of acres of fall wheat, which until a few weeks ago gave every promise of a very abundant harvest. Much has been said and written on the best methods of dealing with this pest, and perhaps what I have to say will contain nothing new on the subject, but as many farmers who have lost heavily this season may not be disposed to sow as large an acreage as usual, a knowledge of the best methods to adopt in the preparation of their fields may tempt them next with the hope that they will have better luck again time.

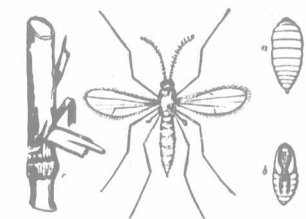
The winged fly which lays the eggs from which the maggots emerge is a minute creature, not more than a quarter of an inch across the wings. In

ordinary years, it appears in August, and remains until near the middle of September. During this period the females lay their small, scarlet-colored eggs on the upper sides of the leaves of the young wheat plant, if any can be found; otherwise, on the leaves of certain grasses. The young maggots, on escaping

from the eggs, make their way down the shoot between the shoot and the sheath of the leaf to the base of the plant. There they imbed themselves in the shoot, with the result that a small gall or enlargement is produced, just above the roots and a short distance below the surface of the ground. There the maggot grows and feeds, thus sapping the vitality of the young plant.

By the time winter comes on the maggot has reached full size, and assumes the well-known "flax-seed" condition. The effect on the plant is to weaken and dwarf the shoot so much that the frosts of winter kill it outright. As the main stem has been badly weakened, it is not in a condition to send out lateral tillers which will survive the winter and bear heads the next season.

In the spring the next stage of the insect is entered upon, viz., the pupa, which, however, it soon leaves to become the adult two-winged fly again. The flies of this spring brood appear in May and June, and lay their eggs on the upper surface of the leaves. Maggots again emerge from the eggs, and as in the case of the fall brood, make their way down the stalk between it and the sheath of the leaf, but usually not so far down. They come to rest at one of the lower joints, where they pierce the stalk



HESSIAN FLY—(a) larva; (b) pupa; (c) injured stem.