

Troublesome Plum Pest.

THE pest here described by illustration has been found very troublesome. One fruit grower writes that his orchard of 400 trees is all affected. The galls are usually clustered about the bases of buds, and sometimes occur around the base of a short new shoot, as the figure shows. None occurs on the body of the larger branches or on the trunk. If one of the galls be carefully cut through with a sharp knife, an interior cavity is revealed which is now packed full of exceedingly small (invisible to the naked eye), whitish creatures, known as mites. The fleshy portion of the gall, between the cavity and the outer shell or skin, is of a dark magenta color. In the top of each gall, may usually be distinguished a small slit-like opening or depression, through which the mites pass in and out. A search through the literature, revealed the fact that a similar, if not the same, Plum-twig Gall-mite was first observed in Austria in 1888. It is now quite common in Germany and other parts of Europe. The mite was not definitely described until about four years ago, when a German named it *Phytoptus phlaeocoptes*, and gave a good figure of the minute creature; the object in the illustration beside the twigs, is a photographic reproduction of this figure of one of the mites found in these galls, and this figure is about 400 times as large as the mite itself.

New Spraying Agitator.

THE great difficulty which we all have in keeping spraying liquids in suspension, says Prof. S. T. Maynard, has led me to experiment on an automatic agitator, with the result that I think I have made one that will keep any liquid, fungicide or insecticide, thoroughly agitated. This contrivance, shown in the illustration, is made for use with the barrel lying on its side, which we consider the best way to carry it, and consists of an arm (a) of flat iron one-eighth inch thick and seven-eighths inch wide, attached to the handle of the pump and entering the barrel about six inches from its head. This arm is attached to an elbow (b), with arms six inches in length, which is fastened into a socket about four inches in length, that is bolted to the barrel at (c). At the lower end of the elbow is attached a short arm (d), which is joined to the long arm that carries the dashers or agitators (e.) This joint is necessary in order that the dashers may lie on the bottom of the barrel, and not be lifted up at every stroke of the pump. With the movement of the pump handle, the dashers move backward or forward over the entire bottom of the barrel, thus keeping the liquid in constant motion. In order that the liquid that may have settled on the bottom may be stirred thoroughly before starting the pump, the arm (a) is fitted to the pump handle by a slot (f), so that it may be quickly slipped off and worked upward and downward a few times before beginning to pump. All the parts are made of flat iron one-eighth inch thick by three-fourths inch wide, and can be made by one having facilities for cutting such iron and drilling holes to fasten it together. The parts are held together by short stove bolts. The dashers are fastened to the rod by a screw passing through it. In the adjustment of this apparatus to the barrel, the pump must be brought near enough to the end of the barrel to allow of full sweep of the pump handle, and the rod (a) fixed to the handle so as to give a full sweep to the elbow (b) that the dashers may be carried forward and back to their fullest extent. We have tested this agitator as far as it is possible at this season of the year, and feel that, if properly adjusted, it will be entirely satisfactory. No patent has been applied for on this appliance, though we think this special form originated with us, and wish the fruit growers of the country to have the benefit of it.

Pine Stock.

THE improved white Yorkshire hog is the best producer of lean meat.

FOR a horse with a scratched legs wash his legs with warm soap suds, and then with beef brine.

A CURE for worms in hogs is to put a common fire shovel full of ashes into a pail of swill once a day for two or three days.

OATS are the best food for working horses as they furnish more nourishment and flesh-making material than any other food.

THE time to serve a sow is from three to six days after weaning the pigs. By having them served at this time one can raise two litters a year.

MILCH cows with calves ought to have as much green food as possible, and a bucket of meal and water twice a day if they have not a good grass pasture, or green rye provided for them.

FOR a horse's feet that are brittle or bound, mix equal parts of tar and soft grease, having the foot clean and dry; apply hot, but not boiling, to all parts, letting it run under the shoe as much as possible.

HERE is an excellent method for relieving choked cattle: Put down her throat a ball of lard which will cause a cow to throw out the obstruction—if not add gunpowder, which will make her cough and so relieve her.

IN Switzerland a milkmaid or man gets better wages if gifted with a good voice, because it has been discovered that a cow will yield one-fifth more milk if soothed during the process of milking by a pleasing melody.

COUNT the cost. Where there is no profit there is usually loss. Do not attempt the wintering over of any animal which does not show good promise of returning a profit for food consumed. Possibly you have some which you would better give away than feed.

A SMALL flock of sheep is sometimes good to keep if not to sell. It is one of the most effective scavengers to be placed upon the farm; and because there is no profit in the wool, feed up the mutton breeds, and do not be knocked out by the present adverse circumstances.

FOR inflammation of the udder or milk ducts, milk carefully, and after each milking wet the udder with camphorated ointment. If this fail try iodine ointment and give once daily on the feed two teaspoonfuls powdered nitrate of potash and one teaspoonful nitrate of potash.

WHILE only the milch cow seems to hold her own in the market, and a good horse will sell but for a song just now, we venture to say that the tune in regard to the latter will change by the coming spring. It is only the poor sheep that must hang its head in utter hopelessness.

The Poultry Yard.

House for 1,000 Fowls.

A HOUSE to contain 1,000 fowls is thus designed. The house should be 300 ft. long by 24

feet wide, six feet high at the eaves, and 12 feet at the top with the roof pitching both ways. It is well lighted with one window in front of each pen and one in the top for each pen. The house sets north and south, so that fowls in the east pen get the sunshine in the morning through their window in front and those in the west side through the windows in the top of the house, and the afternoon sun in like manner. The house should be made as tight as possible and perfectly dry. The windows at the top are hinged at the bottom of the sash so as to open inside for ventilation on warm days. There are 25 pens on each side of the walk, 12 feet square on the floor, which is raised two feet from the ground with partitions underneath the house the same as the pens above; this gives a dry place for the hens to wallow, insures freedom from rats working under the floor, and doubles the floor room for the fowls. The yards are 12 feet wide, and 150 feet long, and are well provided with fruit trees for shade. The fences are boarded two feet high, with four-foot wire-netting above. In the illustration, A A are posts two feet high, on which the house is set; B the water trough; C C feed troughs; D D a board five or six inches from the level of the walk on which the fowls stand to eat from the troughs through slatted partitions; E E platforms under roosts three feet wide and perfectly tight, so that no dirt can drop through; F F roosts; G G nest. The roosts, nests, etc., extend 10 feet, allowing a two-foot gate to enter the pens if necessary; H is a door let down for cleaning platforms; I, door for gathering eggs.

FEED young ducks on meal or curds and keep in a warm place at night.

Do not wait too long before mating your fowls for spring breeding.

BE sure that your birds have plenty of fresh water before them at all times

It is a question, which is the worst poorly fed or over fat hens. Neither of them will produce many eggs.

THE show season is now upon us, and this is also about the season of the year for a new crop of poultry papers to hatch out.

WHICH will you have, eggs or lice? Make your selection, and remember that you cannot have both in the same poultry yard.

EXERCISE is necessary to keep the birds hardy and healthy, and is certainly essential to egg production. Provide plenty of good clean litter.

Do not believe all you hear until you have tested it for yourself. Knowledge gained from experience is expensive sometimes, but it is valuable just the same.

Ducks should never be allowed to swim till they are more than a month old and do not let them out in the early morning to eat slugs or worms, as too many will kill them.

SKIM milk, buttermilk or curds given to poultry will prove as profitable as when fed to pigs. Give the milk to chickens in clean vessels only, as disease will result if any filth accumulates.

AN excellent cure for roup is to pour kerosene down the throat and rub on the outside on the affected parts, and continue with the following remedy: Sulphur-magnesia and alum blown or sprinkled on the cankered or swollen parts. Keep the fowls warm and out of draughts.