

some other grain at night. Green food, too, should be supplied at least once a day. Plenty of fine gravel, crushed shells and coal ashes should also stand before them all the while, and a suitable dust bath ought to be provided. A very good way to make the latter is to keep a small portion of the yard often freshly spaded and pulverized.

Keeping the house and yards, as well as the fowls, free from vermin is a matter which should receive very careful attention. If vermin is permitted to get into a henery it is often very difficult to dislodge. The henery should, consequently, be thoroughly white washed twice a year, the nests and roosts smeared with kerosene oil, and the yards treated in the same manner. It is well to remember that lice and other insects prefer dirty fowls, and if the birds are kept clean and healthy, they are not apt to be troubled with them. Sulphur—a table-spoonful to each dozen hens—mixed with meal, has a beneficial effect in preventing the multiplication of insects, and also improves the general health of the fowls.

### Diseases and their Remedies

A writer in the Chicago Poultry Keeper discusses certain complaints and the difficulties as follows.

#### ROUP.

Whenever you have a northeast storm, with damp, chilly, disagreeable weather, look out for the roup. Roup is to the fowls what heavy colds are to human individuals, and as we may have cold in the head, cold on the bowels, sore throat, and other disturbances from cold, the term "roup" covers them all. Roup in some forms is contagious, while in other shapes it may exist in a flock without affecting any but those of weak constitutions. The first thing to do with the affected fowl is to clean out the nostrils, and every breeder should have on hand a small syringe, which should be put to use early. Roup, when malignant, makes known its presence by a peculiar, disagreeable odor. The sick fowl looks droopy, and a slight pressure on the nostrils causes a discharge, which is very offensive in smell. Make a solution of copperas water, and with the syringe inject some of it into the nostrils, and also down the throat. If the bird is no better in a few hours, try a severer remedy, which is the injection of a mixture of coal oil and carbolic acid. Add ten drops of carbolic acid to a table-spoonful of coal oil and force a small quantity into each nostril. This will cure when all other remedies fail. Night and morning give roup pills (or powder) either in the food or by forcing it down the throat. Add some, also, to the food of those that are well.

How to make roup pills is what most persons desire to know. The basis of all roup pills or powders is asafetida. This is combined with tonics and cathartics. Here is the method, and by which a large quantity may be made at a small cost. Take one teaspoonful each of tincture of iron, red pepper, ginger, saffron, chlorate of potash, salt and powdered rhubarb; mix them intimately. After thoroughly mixing add three table-spoonfuls of hyposulphite of soda, and mix together well. Incorporate this with one ounce of asafetida, working it together until the whole is completely mingled, occasionally softening it, whenever necessary, with castor oil. This can be made into pills, or when dry, into a powder. It is of the same composition as many of the roup pills which are sold at 50 cents a box.

#### CONDITION POWDERS.

There are many suggestions for making hens lay, but their

virtues depend upon stimulating the fowls and supplying them with materials for producing eggs. Here is a recipe, which is a good one (much better than the majority), the cost of the ingredients of which is but very little. Take of bone meal, ground meat and parched wheat (ground), two pound each, linseed meal, common salt, ground oyster shells and charcoal, one pound each; sulphur, copperas, common bread soda and fenugreek, half pound each; saffron, red pepper, ginger and hyposulphite of soda, one-quarter pound each. Have all the ingredients in a fine condition, mix them together thoroughly, and you will have about thirteen pounds of condition powder, at a cost of less than five cents per pound, and which is not only egg food, but a preventive and cure for many diseases. Give a heaping table-spoonful once a day to every ten fowls, in the soft food.

#### LICE

This is not a disease, but is not out of place here. To be rid of them provide a dust bath, dust the fowls with Persian insect powder, clean out the poultry houses and coops, rub the roosts with coal oil, and whitewash the buildings inside and out with hot whitewash to which carbolic acid has been added.

#### SCURVY LEGS

Rub the legs two or three times (once a week) with lard and sulphur, to which a few drops of carbolic acid have been added, or with a mixture of lard and coal oil; but do not grease sitting hens in any manner, as it injures the eggs.

#### TONIC FOR FOWLS.

Iron in any shape is beneficial to fowls. Copperas is sulphate of iron, and if a little copperas is added to the drinking water, or ground fine and mixed with their food, the benefit will soon be seen in the reddened combs and healthy look. If an old iron pot is used in which to keep the drinking water, the gradual oxidation of the iron by the water will cause particles of oxide of iron to be given off, which will be taken up by the fowls when drinking. A handful of nails, or old pieces of refuse iron, iron filings, or even iron cinders, if placed in the vessel containing the water, will more or less afford iron to the poultry. Iron is invigorating, stimulating, and assists in guarding the system from disease. Iron is in the blood of every living creature, and any deficiency thereof causes weakness or debility. The use of copperas is beneficial in another respect. It is a remedy for a great many diseases, is a good disinfectant, and a sure remedy against contagions of a certain character. Do not be afraid to use it. A table-spoonful of a solution of copperas in the drinking water for a dozen fowls is sufficient, and as it is cheap in price, the expense of its use is but a trifle.

#### MOULTING.

Moulting is simply shedding old feathers. Feed liberally, giving both the egg food and tonic. Warmth is one of the best remedies for all diseases, especially roup. Pip, or a thickening of the membrane of the tongue near the tip impedes breathing and sometimes suffocates, especially chicks. Clip off the end with a pair of scissors, if an extreme case, and give the bird a good mouthful of butter or lard, to which a few drops of coal oil are added. Bowel diseases other than cholera may be treated in this manner. Use castor oil for constipation, and castor oil with a drop or two of laudanum for diarrhoea. Always give clean water, free from filth.