

five kinds can be out at large at a time in these large runs, and into which they are all let out by turns.

The house is surrounded with a drain which carries off all the water and moisture, and prevents dampness. Inside, the house is cemented all through; and these cemented floors are covered with gravel about two inches deep. The house is heated in the cold weather just enough to keep water from freezing, as Mr. Van-Winkle is opposed to much artificial heat, and to forcing fowls to lay. At the north end is a small house or shed to protect the hens from the north winds, and the entrance is by the south, through the shed which is used to keep his feed close at hand.

The plan of this henery is remarkable for its simplicity and hygienic arrangement. The cost of the labour and material was under five hundred dollars. The house is cleaned out every day. When there in the hottest of last summer was no smell, and it smelled just as sweet as outside: we could not discover the slightest taint to the air inside.

#### Sulphur for Hens' Nests.

A writer in the *Country Gentleman* says: "My experience is against the use of sulphur in nests. I have found thousands of small hen mites in immediate contact with it especially when eggshells have been broken. For hen houses and roosts nothing is so good as boiling water, fresh white-wash, hot, or kerosene. Smoke from sulphur will not do any good. A little kerosene is the best to use in nests."

Now, Mr. Editor, let me tell you my experience. I set two hens at the nest, each in a box which had previously been used as a hen roost. As I removed the boxes and hens to an apartment where no layers could get at them, and placed plenty of food and water within reach of the sitters, I did not pay any attention to them for ten or twelve days, when, one morning, I found one hen dead upon her nest, and literally covered with the small "mites." The other hen had left her nest, and was evidently getting ready to die, for she trembled all over; and stood with eyes closed. On examination she was covered with a horrible swarm of vermin, every part of her feathers being alive with the disgusting creatures, and the nest and eggs she had left were covered also. Now, I said to myself: If, here is a chance to learn something. I will find out whether sulphur will kill lice, anyhow, whether I lose the hen or not. So I sifted the finely powdered sulphur all over her, and "rubbed it in" into the bargain. Eight hours after I paid her a visit. She appeared just as well and lively as ever. I caught her, and the most careful examination could not detect the slightest trace of a single creeping "critter," little or big. Before the application of the sulphur, she was as near dead as to not make any effort to roll

or shake her feathers. She was kept during the whole time, both before and after the application of the sulphur, in a room where there was no chance of dusting, so that the riddance of the vermin could be ascribed to nothing but the sulphur.

The correspondent alluded to does not state how long the "mites" lived in contact with sulphur. It is well known that this substance is deadly to other vermin. For instance, the ailment called the itch in the human species is caused by a microscopic parasite that sulphur kills. Mr. Geyelin, in his celebrated treatise on poultry breeding, recommends sulphur as a specific for poultry parasites. We wish others would give their experience on this point through these columns. —*Poultry World*.

A writer in the *Poultry World* says his plan for curing hens of a desire to sit, is to put them in an open yard, where there are no roosting places, and differing as much as possible in appearance from their regular quarters and feed them liberally with soft feed made rather hot with cayenne; give them plenty of cooked meat and all the milk they will drink.

Few people know to what perfection the art of sending dispatches by carrier-pigeon was brought during the siege of Paris. At first the dispatches were written on the thinnest of tissue paper in the smallest possible hand. Then microscopic photography succeeded in greatly reducing the bulk, and finally, by first printing and then photographing the dispatches, not on ordinary photographic paper, but on films of collodion, only one tenth the thickness of tissue paper, the besieged were able to inclose in a single quantity of paper which, when printed, covered fifteen thousand book pages.

## Entomology.

### Prizes for Injurious Insects.

We note that the Royal Horticultural Society, England, offers a prize of fifty dollars for a collection of British insects injurious to some one order of plant used for food, such as cruciferae (cabbage tribe), or the leguminosae, (bean tribe), &c.—the collector to be at liberty to select such tribe of plants as he chooses. The insects to be exhibited in their various stages of development, accompanied by specimens, models, or drawings of the injuries caused by them.

This plan should be adopted, with some modifications, by our Agricultural and Arts Association. Instead of offering a prize for a collection of Canadian insects injurious to some order of our food plants, they should offer a liberal prize for the best essay on all the insects found in Canada preying upon or

injuring any class of plants used for food, including our several kinds of fruit trees—such essay to be illustrated by accurate drawings of the several insects in all their various stages of development, with illustrations of the injuries caused by them—the essay not only to give the history of the life of these insects, including their mode of injuring the plants or fruit, but also the best known methods of combating or destroying them, and so lessening their ravages.

The prize offered should be large enough to enlist the best entomological talent in the Province. After the prize has been awarded, the Association should cause accurate colored engravings to be made of all these insects in their several stages, and cause the same to be printed and scattered among the farmers of Ontario.

Such an essay would be exceedingly valuable, and the means of saving many times its cost to the Province; much more valuable than the destruction of insects which can be seen only by a few.

### The Enemies of our Insect Pests.

The rarity in Europe of those insect pests which destroy our fruit and defoliate our trees is due principally to the Geometric Spider, which in that country is very abundant, covering every tree, shrub, and fence with his ingeniously constructed net, giving to the landscape on a dewy morning the rather unpoetic appearance as if a gigantic washing of dirty linen was spread out to dry.

Of course birds aid greatly in the suppression of diurnal insects, but our greatest enemies are the nocturnal varieties which include the vast family of moths; it is these that the spider alone can manage, as may be perceived by the vast quantity of their remains found in his net.

A variety of this little animal is sometimes to be met with in this country, but it is very rare and appears to be smaller in size; therefore, we cannot expect much aid from it, and for the present we must content ourselves by using artificial means to keep our insect enemies in check.

I may suggest, for the consideration of the entomologists of Canada and the United States, that as the Codlin Moth, which is a native of Europe, has been thoroughly acclimatized here at a national expense, I do not see why its natural enemy should not be introduced as well.

SIMON ROY.

The Committee of the National Labourers' Union have resolved to promote emigration among the men in Dorsetshire in consequence of a report that several farmers in that county are endeavouring to "compel" their labourers to enter into annual engagements at from 5s. to 1s. per week.