

Some of the farmers I had the pleasure to address last spring, adopted my advice as to the use of this fungicide, and, they report, with most satisfactory results. If a man neglects to use remedies which are proved beyond all doubt to be efficient, he is his own enemy. Then, the insect world furnishes another lot of foes to battle with, such as the potato-bug, flea and other beetles, caterpillars, and worms and for all these which eat or chew, we have an unfailing specific in arsenical poisons. Paris green, London purple, hellebore powder and tobacco; while for those which only suck the juice from our plants we have petroleum, but this has to be made into an emulsion as follows:

$\frac{1}{2}$ lb hard soap—1 qts Boiling water
4 qts coal oil, churn together for 5 to 10 minutes until like cream, then add 10 to 20 gallons of water, according to strength required; spray with this, and it will kill all the "suckers" it comes into contact with. The same mixture, with the addition of 2 oz. of carbolic acid, sprayed over the cattle is said to prevent the annoyance caused to them by the "horse-fly". With these facts before us, we shall be guilty of neglect if we do not adopt the means suggested and proved to be successful. It seems preposterous that a farmer should do all he can, up to a certain point, to secure a good crop, and at last to refuse to take precautions to protect it from its enemies; and yet there are such. I am told: "I have no time". It will not pay" It is a new fangled experiment. "I don't understand it." To such I would say: why plant the crop if you have not time to attend to it? Will it pay to lose the crop after all the trouble and expense it has already cost? It is not a new fangled experiment but a fact proved and demonstrated all over the world. If you don't understand it, learn; you have ample opportunities at this day of doing so through the press. Agricultural experiment stations etc. Where there is a will there is a way. The man who despises advice is a fool and he who neglects to fight against the common enemies of the farmer is unpatriotic, because he is not a good neighbor, and, is a worse enemy to himself than all the weeds, fungi or insects, that he has to encounter.

GEO. MOORE.

The Poultry-Yard.

The months of hot weather—Treatment of the older and younger chicks—Safeguards against the lodgement of lice—The laying stock and how to bring on an early moult.

(A. G. GILBERT)

The month of July is one of the hottest months of the year and at this time the farmer's hens are generally to be found running at large. It is well that they should have extended runs, for the fowl house, in most cases, is in a filthy condition and reeking with a pestilential odor. It is unnecessary to say, that in such cases his poultry do not pay the farmer. Dirt and success seldom go together. If the farmer cares so little for his poultry that he will not take the trouble to keep his fowl house clean, it is evident that he does not wish to make them revenue producers.

But, all farmers are not indifferent as to the money making value of the fowls, and for such there is work to be done in the present month. What is that work? It may be stated as the care of the young and the older stock. Where chickens have been hatched out late, and are yet tender, they require, in this hot month, to be given shade and to be kept free from lice. The May hatched chicks are by this time of goodly size and making rapid growth, or ought to be so doing. If they appear stunted in anyway, or seem to suffer from diarrhoea, look out for lice. If the little ones go peeping about, with wings inclined to droop, and are generally emaciated looking, ten to one their ailment is lice. On looking over a flock of chickens, the expert poultry man can at once tell; from their appearance, how they are fed and cared for. Lice infected, or infested, chickens present the appearance of suffering from all the ailments known in poultrydom. A good dusting of Carbolic acid disinfecting powder, well rubbed into the feathers and fluff of the older chicks, will soon give them relief. The little ones require to be more tenderly treated, for what kills the lice, in their case, very often kills the chick too. It must be remembered that it is easier to prevent the lodgement of vermin, than to rid the chicks of their presence. The work of prevention should commence with the sitting-hen, and every effort should be made to have her body free of insect life when her brood is hatched, and is entrusted to her motherly wings, under which they will brood for so many hours of their first few days of life. A good plan whereby to prevent the lodgement of lice on the chicks is to rub the body of the mother hen with a cloth or sponge dampened, not wet, with coal oil. Rub well under the wings and into the soft fluff feathers, and among the neck feathers of the fowl. Lice cannot stand coal oil, or the fumes of it. The little chicks nestle in the feathers of the mother hen, and their bodies are kept free from the pests. It must be remembered that care should be taken to only moisten the cloth or sponge, and not to wet the feathers of the hen with the oil, or it might affect the chicks. In the April and May numbers of the "Journal of Agriculture" full instructions are given as to the proper care, management and feeding of the young chicks and the sitting hen. The early chicks do not seem to be affected so much by lice, but June and July chicks require special care to guard against their insidious enemy. Hence, we have always urged farmers to get out their chicks early, not only for the reason given, but also that his cokedreds may make early market fowls, so bringing high prices, and his pullets make early layers.

CARE OF THE OLDER BIRDS

What care do the older stock require? Well, it should be the aim of the progressive farmer to look carefully over his laying stock. His object should be to have his hens over their moult as soon as possible, and go into winter quarters in such fine feather and condition, as to begin egg production at once.

In looking over his laying stock, care should be taken to weed out all hens over two years of age. The old hens moult late and do not begin to lay until late in the season. If possible, let the future winter layer have a run of the fields where they can have free access to the different clovers and grasses. If they cannot have such

freedom, supply them with such food three times a week, at least. At the close of the breeding season, separate the male birds from the hens. About the beginning of the moulting period egg production will slacken off. At the beginning of August, give the hens a soft morning ration mixed to a crumbly condition, three times a week. Give a night feed of cut bone, at noon, three days in the week, and, on other days, at that time, a light feed of outs. For last ration, give grain of any sort, but avoid the feeding of Indian Corn to Plymouth Rocks, Brahmas, Dorkings, and Javas. With such treatment, the yearling and other hens will shed the old and get their new feathers at an early period. The aim should be to get the laying stock into winter quarters in proper condition. While the feeding is generous, care should be taken not to get the layers overfat. At this season, the mistake is often made, even by those who ought to know better, of getting their prospective layers out of condition by overfeeding. It is better that the laying stock should go into winter quarters on the thin, rather than on the fat side. With a good strain of the ordinary farm-yard fowls, that is, a strain with a dash of thoroughbred in them and of the proper age, the farmer should have no trouble in getting them into winter quarters in proper condition, and laying when eggs are worth from 35 to 45 cents per dozen in Montreal.

Again, I hear the plaint "Oh! all that requires experience and expenditure of time and money". Again, I reply, that the different departments of modern, progressive farming can only be successfully prosecuted by a thorough knowledge of details. Experience must be gained, sooner or later, and it can only be had in time, and time, we are told, is money. Brains, energy and skill, experience are all required to make mixed farming a success.

PRACTICAL AGRICULTURE.

(By James Dickson)

Hay making—Saving grass seed—"Dont's" in brief.

(In last issue please read ten dollar-note in place of two dollar-note.)

HAY-MAKING

It is generally conceded that the nearer the consistency of Hay to that of grass, the more perfect the quality of the Hay; that a great proportion of ripe hay cannot be digested by an animal, and consequently cannot be assimilated by the system; and that hay that has been wetted to the loss of its beautiful green, has lost much of its nutritive and digestive qualities.

Those who can look back 40 or 50 years can remember that the quality of hay as generally made, was much inferior to that of the present day. They can also remember that the hand labour necessary made it a tedious and wearying time of excessive labour. Nearly 50 years ago, I went to the U. S. One of the purposes being to learn something of more advanced Agriculture. In the one haying season I changed places three times, as I could not believe they were all alike in their system of work. The regular time to commence mowing was just before the largest stars had disappeared, stopping as few minutes as possible at 6 for breakfast,

at 11.30 for dinner and again at 5 for tea, every man being at the utmost tension of his system throughout the whole course of the day, and even at the eating table.

The farmers of the present day cannot estimate the difference in the severe labour of hay making by hand, and that of the present day. Over 30 years ago I bought one of the first three mowing machines sold in the Township that season, (1) and since that time, although machines are a great deal better now, and for half the price, hay-making has had all the pleasure, with less hard labour. I am certain that if some of our spruce young farmers had a few days in a gang of mowers; if they would industriously work at the stumps and stones of the buck field, getting it ready for the machine; they would have more sympathy with the humilities of the "old folks," and respect for the memory of those who did pioneer work from the first click of the

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"Make hay while the sun shines" is often quoted. But this is not a surprisingly wise injunction, the great difficulty being to make it when it does not shine. (1) In old times of hand mowing there was little stop to the work of cutting, even in dull weather. But in modern haying, the closer the rake can be kept to the mower, and the waggon to the rake, the better for the hay, and the more economy in labour and time. Another great difference between the old and the new systems of haying is, that now it is cut in better time, and it is not handled so much, and then does not appear to be so much necessary for, nor benefit from, cocking hay, and although hay in hand-mowing seemed drier, even to crackle, it did not keep so well as it does at the present day. The reason is obvious, and applies to handmowing of swales etc., at the present time. In cutting with the machine, it is spread evenly on the ground, and is at once drying, the sun and wind surrounding and extracting the moisture from each separated stem. And, contrasting that with the fact that the swaths were rarely begun to be shaken out before 10 o'clock, and then were not spread in the even manner the machine leaves it, it was thus imperfectly and unevenly dried, the top being sometimes too dry, before that underneath was even wilted. This made cocking hay a necessity, to allow the dry hay to absorb a part of the moisture from the damp portion, making further curing an easier matter, and an even quality of hay.

The time for cutting each farmer must decide for himself, the object before us being, to finish before the last is too ripe. In this he has to consider the amount of help and hay, and, what is more difficult, to allow something for dull weather. Clovers, coarse grasses, and swales come in for first attention, after that old meadows, and then timothy for the horses, which can generally stand until about the first of August, sometimes longer. I well remember the old Irishman's rule, at the time of the St-Lawrence and Atlantic R. R. building. He was uneducated; knew nothing of science; but my experience has satisfied me that he was right. He wanted what he called "strong hay", hay that was raised on well fed clay

(1) In 1851, the Editor bought the first "McCormick" mower brought to England.

(2) Little sun and a fair breeze makes better hay than too much sun and still weather.—Ed.