

POULTRY.

Profit of One Hen for the Year 1897.

To the Editor FARMER'S ADVOCATE:

I am of the opinion that hens should be tested singly, the same as cows, to ascertain their individual capabilities. With this end in view I made a test of a pullet of 1896. She commenced laying in the first week of November, and having selected a nest for herself away from the other hens, I thought it would be a good opportunity to test her. I began on the 1st of January, 1897, to keep an account of her eggs. In January she laid 25 eggs, which sold at 19c. per doz.; February, 23, at 17c. per doz.; March, 26, at 13c. per doz.; April, 26, at 13c. per doz.; May, 24, at 13c. per doz.; June, 22, at 13c. per doz.; July, 21, at 13c. per doz.; August, 12, at 14c. per doz.; September, 14, at 20c. per doz.; October, 23, at 20c. per doz.; November, 21, at 22c. per doz.; December, 20, at 25c. per doz., amounting in all to 267 or 21½ doz. eggs per month during the year. She showed signs of clucking on August 17th, so I put her in the inclosure for clucking hens, fed her all she could eat, and gave her all the fresh water she could drink, and in four days she commenced to moult. On the 12th of September she commenced to lay again, and continued laying until the 12th of January, 1898. I set her next day, and, therefore, in a few days I shall know the result. During the year she laid 21½ doz. eggs, at the above prices, amounting to \$3.56½. The food she consumed during this period of time cost 67½c. The express charges on the eggs was 14½c., leaving \$2.74½ clear profit. I am of the opinion that it would pay people fully as well to test their hens separately as to test their cows separately. For, while I made this profit from this hen, I am satisfied I had other hens out of the same flock which did not do nearly so well. In the year 1897 I had chicks hatched in February, March, April and May. The February chicks I have found paid best. They moulted in August, and commenced to lay during the first week of September, and have laid regularly ever since. March chicks moulted in September, and did not commence to lay until the latter part of October. The weather being so much colder it was a greater shock on their systems, and they did not get over it as easily as the February chicks did. The April chicks did not moult at all, and are not laying so well as either of the previous months' chicks. As for May chicks, I cannot say anything about them, as I sold them all. Last year I fed 2½ lbs. clover, at \$8 per ton, 1c.; 5 lbs. shorts, at \$12 per ton, 2c.; 20 lbs. mangels, at 10c. per bush., 3½c.; 5 lbs. ensilage, at \$2 per ton, 1c.; meat scraps, 1c.; 5 lbs. oats, at 20c. per bush., 2½c., amounting to 10½c. per day. This year I am feeding 2½ lbs. clover, at \$8 per ton, 1c.; 2½ lbs. shorts, at \$12 per ton, 1½c.; 2½ lbs. bran, at \$10 per ton, 1½c.; 20 lbs. mangels, at 10c. per bush., 3½c.; 5 lbs. ensilage, at \$2 per ton, 1c.; meat scraps, 1c.; 2½ lbs. oats, at 23c. per bush., 1½c., amounting to 9½c. per day. I found that my hens got too fat last year, so by reducing their grain ration they are laying better, and are in a much healthier condition than last year. I have tried several different breeds of hens, but find that the Barred Plymouth Rocks pay best.

Lanark Co., Ont.

MRS. JOS. YUILL.

GARDEN AND ORCHARD.

The Spraying of Fruit Trees.

BY E. EDWARDS, F. R. S.

So much has already been written about, and the utility of spraying so many times demonstrated, that it is unnecessary for me to add anything to what has been so often proved. And my purpose in this article is to endeavor to inform the farmer and fruit-grower how to wisely select and intelligently make use of a good sprayer. For I believe that much damage is done to both the farmers and to the manufacturers of reliable sprayers by the almost worthless kinds sold, because of their cheapness, to many amateur fruit-growers. For if a man buys one of these worthless kinds, expecting it to do good work, he will, after trying it and finding that it injures instead of helps his trees, tell all his neighbors that spraying does more harm than good, and, consequently, they will not buy a sprayer of any sort. In endeavoring to answer the following questions I will state the findings of reliable men both in the United States and Canada, and which in my experience has stood the test. The first question is, What constitutes a good sprayer? All of the parts (excepting, of course, the hose) with which the liquid comes in contact should be made of brass, for if the pump be made of tin or iron it will rust or corrode after applying fungicides, and in a few years will be useless for spraying purposes. The valves should be of brass, because if they are rubber, leather or wood they will wear away and will need to be replaced, and the time they are most likely to give out is just when you wish to use the pump, thus causing much inconvenience. Secondly, a sprayer to be good should be double-acting, thereby insuring a strong, steady and continuous stream, which is very needful in obtaining good results. It should have enough power to throw a solid stream at least thirty feet. It should agitate the mixture so as to keep it stirred, and spray at the same time, otherwise you will have to stop spraying to stir the liquid or have the foliage injured by an uneven distribution of poison, since Paris green will settle to the bottom if not con-

stantly agitated. Lastly, it must have a nozzle that will make a spray as fine as a mist, for the object of spraying is not to drench part of the tree and allow the other part to get very little (which would be the result if a coarse nozzle were used), but rather to secure an even amount all over the tree, with the least possible drip, because when dropping occurs nearly all of the mixture runs off the leaf and is wasted, and besides the tip of the leaf is burned. The second question is, When should spraying be done to be the most advantageous, and what mixture should be used?

Apple, Pear, and Cherry Trees.—The first application, the purpose of which is to prevent the growth of fungi, such as the apple scab, etc., should be of Bordeaux mixture applied in the spring just as the buds are opening. The second application for the destruction of the apple worm and numerous other insects feeding on the leaves and blossoms should be made after the greater part of the blossoms have fallen, and should consist of Bordeaux mixture to which has been added 1 ounce of Paris green to every 12 gallons. The third application should be the same as second and applied about ten days later.

Plum and Peach Trees.—First application as soon as the leaves are started, before blossoming, to consist of Bordeaux mixture with 1 ounce of Paris green to every 15 gallons of solution, for the destruction of the old curculio which feeds on the young leaves before she has deposited her eggs, for these being placed beneath the skin, the larva when hatched cannot be reached by anything applied on the outside. Second application, same material applied immediately after blossoms have fallen leaving young fruit exposed. Third application, a week or ten days later, consisting of same mixture as before. The fungus disease, black knot, so common on plum and cherry trees, will be prevented by the Bordeaux mixture in above solutions; but if it is already contracted, simply spraying with Bordeaux mixture will not eradicate it. The knot must be cut off and burned and the wound thoroughly soaked with coal oil or turpentine, which kills the germs of disease. The Bordeaux mixture is made as follows: Dissolve bluestone in water in proportion of 1 pound to 5 gallons of water. In another vessel slake fresh lime and add enough water to it to make a solution of 1 pound of lime to every 5 gallons of water; when both are cool pour the lime milk slowly into the bluestone solution and give a good stirring. Do not keep long before using, for it deteriorates if allowed to stand for a length of time.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to be advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquiries must in all cases attach their name and address in full, though not necessarily for publication.]

Legal.

Contract.

"I rented a farm with the machinery on the place, and five cows, which were also on the place, for one year ending March 1st. No special bargain was made as to which party should bear the loss in case any of the animals should die. I was simply to pay a certain price, and was to keep the animals in a similar way as they had previously been kept. During February, 1896, one cow got ill, and I gave her the usual treatment, and afterwards got a veterinary who treated the animal. In the event of the cow dying should I bear the loss, or the party who rented to me?"

[The cow was at the landlord's risk, and you (the tenant) fulfilled all your legal obligations by giving the cow the usual proper care and attention. It would not appear that you could be held negligent, and you are not liable for the loss you could not with reasonable care avoid.]

Landlord and Tenant.

"A rents a farm from 'B' adjoining his own farm. Can he grow corn for ensilage on the rented place and remove it to his own farm? There is nothing in the lease as to this."

[Yes.]

Veterinary.

Caked Udder.

O. B., Renfrew Co., Ont.:—"Have great trouble with swollen or caked udder in my cows before and after calving. Am feeding dried cornstalks, straw of different kinds, green peas and oats, and millet or marsh hay, cut and mixed, with a liberal quantity of bran and one quart of hash, rye and buckwheat, twice a day. Please give cause, how to prevent it, and remedy if it occurs? Cows are watered inside, but let out on fine days from one to four hours, according to weather."

[Feed lightly for two weeks before calving. If trouble is likely to occur give doses of potash in feed, for which apply to your veterinary surgeon. Bathe the udder with warm water for an hour at a time three times a day, followed by bathing with warm vinegar, then rub with lard or goose-oil to soften the udder. Milk out three times a day, or let calf suck. In bad case give salts (one pound), sweet spirits of nitre (one ounce—four tablespoonfuls), nitrate of potash or saltpetre (one teaspoonful), blanket, and bathe udder as above.]

Bruised Knee—Cow Sweating.

A SUBSCRIBER, County of Wellington, Ont.:—"I have a cow that lately has swollen in one knee and is lame. Have cement floors in stable. (2) Also have another cow that appears to sweat in the night. Her hair will be wet, and she looks as if she had been out in a light rain. Please give cause and cure?"

[The swelling in the knee is evidently due to lying on the cement floor. The remedy is to see that she has more bedding under her; or, better still, for such a case give her a well-bedded box stall. For the swelling apply the following lotion twice daily until reduced: Sulphate of iron, sugar of lead, and nitrate of potash, of each half an ounce; water, one quart. Shake well and apply. (2) The cow that sweats probably has too heavy a coat of hair for the temperature of the stable. Such cases, however, do occur from derangement of the glandular system (liver, kidneys, etc.), and may be relieved by giving a dose of physic (in case she is not far advanced in pregnancy) of one and one-half pounds Epsom salts, half ounce ginger, dissolved in a quart boiling water and drench when cool, after which give a teaspoonful of the following in her feed three times daily: Bicarbonate of soda, ginger, saltpetre, of each two ounces; powdered capsicum and nux vomica, of each one ounce. All well mixed.]

Dropsy of the Uterus.

W. H., Durham Co., Ont.:—"Could you inform me what ails my cow? Last winter she got so heavy I thought she was going to have two or three calves, but when she did calve she had only a little, small one. She is as heavy that one would think that she could not get around, or was heavy in calf now. I have been trying to get her fat, but she feeds fairly well and makes no progress."

[This disease is not uncommon in the cow, and is due to accumulation of water in the uterus. The symptoms are just as W. H. has described, and by manual examination one can feel the womb distended with fluid which may be felt to fluctuate upon pressure. The treatment will consist in evacuating the fluid from the uterus by means of a trocar, but there is always a tendency for the fluid to re-form. Unless the cow is a valuable animal we advise you not to spend money on medical treatment.]

Sprain of Tendons.

C. W. NEFF, Hamilton, Ont.:—"I have a horse which is very lame; it seems to be in the cords of front leg between knee and fetlock joint."

[If the damage is so severe as to incapacitate him from work we would advise taking him to a veterinary surgeon, who would most probably advise firing and blistering, with a run at pasture for the next summer. This would be the only means of cure.]

Dr. W. MOLE, M.R.C.V.S.]

Bowel Derangement in Colt.

SUBSCRIBER, Lanark Co., Ont.:—"I have a colt rising two years old. Took complaint like scour last November; tried all kinds of remedies to check it, but failed. I employed a veterinary about New Year's. He claimed there was gravel lodged in the bowel; gave her quart linseed oil and some powders to check it. All to no use, she is no better. She is quite lively, never appeared sick at any time; eye looks well; greatly failed, hide-bound, and nostrils dry. I feed hay and oats. She always had good appetite. She had great thirst for a few days some time ago, but got over that. Sometimes she will dry up a little for a few days and get worse again. Would you think it diabetes? One veterinary claims she ate some poisonous herb."

[In all probability the veterinarian employed was right in his diagnosis when he said that some foreign substance had lodged in the bowel, such as sand, etc., which can only be removed by repeated pint doses of raw linseed oil, say one every ten days. A tablespoonful of finely powdered charcoal in easily digested feed (ground oats and bran), twice daily, may assist in allaying the irritation.]

Probably Tuberculosis.

C. H. F., Middlesex Co., Ont.:—"Please answer the following question in the next number of your valuable paper. What do you think is the matter with a steer which we have and whose symptoms are as follows: He has a slight cough at times and continual trouble with his breathing; sometimes worse than at other times. He seems very much like a horse with heaves. What treatment would you recommend?"

[The symptoms given indicate tuberculosis, yet it is simply impossible for any one to judge from such a slight description of the case. State particulars more fully. Is he thin, and failing? Is his throat swollen? Have you had him examined by a veterinary surgeon? If so, with what result?]

Piles in Pigs.

T. W. EVANS, Middlesex Co., Ont.:—"Can you give me the cause and cure for piles in pigs? I have lost several small pigs and have just lost a fine sow. She was suckling second litter of pigs. Pigs were three weeks old when the piles appeared. We put them back three or four times after washing clean with warm water and soap, oiling well before putting back; but they would come out as soon as we would let her on her feet, so at the end of one week we killed her, as she seemed to be getting worse. We feed chopped oats, corn meal, bran and shorts, about equal parts, scalded in large kettle. We feed young pigs one part bran,

one part corn meal. Now, if you can you will greatly

[References to piles in pigs in Christmas number, page 13. The inner and outer connective tissues are generally covered by an aggravated presence of irritation by giving by soda and corn meal moderately of twenty grains of tepid solution of lead and alum water. It is so the ligature of

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