In the early part of the fall I foolishly put the floor down again, and about a month after the rats came back and one night killed three big chickens. I was determined not to be beaten so I lined the floors along the walls with a fine meshed poultry netting and have had no trouble with them since. The rats are there however, but their end is near. I would strongly advise anyone who contemplates building a henhouse which requires a floor, to put the floor high enough above the ground for cats to enter. Cats are the natural enemies of rats. Nearly every morning one or two old tabbies can be seen sneaking round the pen.

Another very important point I learned during the past year is, that the eggs of hens that are good layers will not always produce a good laying strain of pullets. When I commenced the poultry business I bought three Columbian Wyandottes and they were hustlers to lay. I naturally decided to breed a flock of pullets from these Columbians that would astonish the community by their egg-production. I placed them in a pen by themselves, with a pure-bred white Wyandotte cockerel; saved all the eggs and hatched out two settings of as fine-looking chickens as ever delighted the eyes of a hen fancier. I could hardly wait for those pullets to grow up, so anxious was I to see the results of my experiment. To make a long story short I wish to state I never owned such poor layers and such inveterate "sitters." It was almost impossible to break them off the habit. They had one redeeming feature, however, which enabled me to make the most out of a disastrous experiment. They would sit any place, hence, I made some good trades with my neighbors who wanted "cluckers."

Last year I determined to make a change in the breed and so invested in a setting of black Minorcas, two settings of brown Leghorns and a setting of Rhode Island Reds. But as luck would have it, half of the chicks were cockerels, so that with rats and roosters my stock of pullets was disappointingly small, and the funny part of the experiment is that two of the Rhode Island pullets are always wanting to "sit."

Another fact that I have learnt worth noticing is this, it doesn't pay to keep a hen more than two years. After that age they do not lay as well, as a rule, and are more likely to take some disease. Another fact worth remembering is that hens should have a varied diet in which corn should predominate. I feed a mixture of corn, wheat, oats, barley and buckwheat. Of the foregoing cereals barley is of the least value and corn of the greatest value for egg-production. It is no wonder that people who feed their hens nothing but barley get very few eggs. At noon our hens are fed with a mixture of shorts and alfalfa, into which has been sprinkled a little condition powder. Our hens are also kept well supplied with ground charcoal, grits, oyster shells and cut-bone. It is sometimes possible to get fresh cut-bones with just enough meat on them to furnish the necessary animal diet. Plenty of litter, preferably straw, should be kept in the scratching pen, and it must not be forgotten also, that hens should have ready access to a box of clean ashes or dust. I find it necessary to clean off the dropping boards at least once a week, to put coal-oil on the roosts occasionally, to change the litter in the nests quite often, to seperate sick hens from the rest of the flocks, and to take a live up-to-date journal like "The Farmer's Advocate."

In conclusion, I wish to say that I am quite sure there is money in keeping poultry if the business is managed carefully and intelligently.

As I intimated at the beginning of this too lengthy article I have not found the secret of making hens "lay golden eggs," as the following statements of receipts and expenses will prove, but I am far from discouraged, for the balance, even if small, is still on the right side of the account.

Disbursements: 1,050 lbs. of mixed feed, $19.70; 15½ bushels of wheat, $14.70; 9 bushels of corn, $7.35; 6½ bushels of barley, $3.65; 4 settings of eggs, $3.25; 205 lbs. shorts, $3.03; 3 bushels of buckwheat, $2.45; 4 packages of poultry food, $1.25; 100 lbs of screenings $1.15; 35 lbs. of chick-feed, 85c.; bag of tailings, 75c.; 50 lbs. oyster shells, 50c.; 1 bushel of oats for sprouting, 40c.; 12 lbs of cut bone, 36c.; 12 lbs. alfalfa, 35c.; 20 lbs. grit, 20c.; ground charcoal, 10c.; making a total of $60.04.

Receipts: 588 eggs, April, $11.76; 510 eggs, May, $9.35; 380 eggs in June, $3.96; 394 eggs in July, $7.04; 282 eggs in September, $4.66; 147 eggs in October, $3.06; 51 eggs in November, $1.77; 90 eggs in December, $2.75; 108 eggs in January, $2.50; 303 eggs in February, $6.80; 459 eggs in March, $9; and 22 broilers worth $9.80, making a total of $75.45. As there were 35 chickens in the flock in the beginning of the year and only thirty at the end of the year my net gain was only $13.41.

Perth Co., Ont. W. J. BLAKESTON.

[Note.—Corn is all right for egg-production when it does not make the layers too fat, but to avoid this it must be used in very limited quantities, especially in mild weather. Even in cold weather the feeding of much corn in confinement is attended with the risk mentioned.—Editor.]

Some Poultry Hints.

Farmers' Bulletin No. 528, of the United States Department of Agriculture contains some good advice for poultry keepers. Among other useful hints are the following:

Be sure that the male at the head of the flock is pure-bred.

Toe-mark all the chicks as soon as they are hatched. This enables one to tell their ages later.

Powder the chicks occasionally during the first eight weeks.

Chicks should not receive feed until they are 36 hours old.

In cool weather 10 to 13 chicks are sufficient for one hen, while in warmer weather 15 to 20 can be cared for successfully.

Never mix chicks of different ages.

Confine the hen until the chicks are weaned.

The coop for hen and chicks should be well ventilated, easy to clean, and of sufficient proportions to insure comfort.

In connection with the poultry house:

Select a location that has a natural drainage away from the building.

A dry, porous soil, such as sand or gravelly loam, is preferable to a clay soil.

In most localities the buildings should face the south, as this insures the greatest amount of sunlight during the winter.

Proper ventilation and sunlight mean a dry house and healthy birds.

The partial open-front house is conceded to be the best type for most sections.

The colony plan of housing poultry may be adopted to good advantage on many farms. This system does away with the danger of tainted soil.

The roosts should be built on the same level, 2 feet 6 inches from the floor, with a dropping board about 8 inches below them.

Good roosts may be made of 2 by 2 inch material with upper edges rounded.

The nests may be placed on the side walls or under the dropping boards. It is best to have them darkened, as the hens prefer a secluded place in which to lay.

A splendid mixture for laying hens is equal parts of cracked corn, wheat, and oats, which should be scattered in the litter.

Bran or middlings and beef scraps should be kept in receptacles to which the fowls have access at all times.

Plenty of exercise increases the egg yield.

Provide 4 or 5 inches of good, clean litter in which to scatter the grain.

Cabbages, mangels, potatoes, sprouted oats, etc., make excellent green feed.

When wet mashes are fed, be sure they are crumbly and not sticky.

For the first three days chicks may be fed a mixture of equal parts of hard-boiled eggs and stale bread, or stale bread soaked in milk. When bread and milk are used, care should be exercised to squeeze all the milk out of the bread. From the third or fourth day until the chicks can eat wheat and cracked corn, commercial chick feed is a good ration.

Plenty of pure, fresh water, grit, shell, and green feed should be available from the first day.

There is very little danger of overfeeding young stock.

Feed the chickens about five times daily and only what they will eat up clean in a few minutes, except at night, when they should receive all they want.

In regard to egg production the bulletin says:

Produce the infertile egg.

The hen's greatest profit-producing period is the first and second years, and unless a hen is an exceptionally good breeder she should be disposed of at the end of her second laying season and before starting to molt.

Few eggs can be expected until the pullets are matured.

If possible, mark the pullets that lay in the fall, and use them in the breeding pen for the following spring.

Soft-shelled eggs are often caused by fowls being confined, becoming over-fat, and from lack of mineral matter.

Uniform products command the best price on the market. Pure-bred fowls produce uniform products.

Begin marketing the cockerels as soon as they weigh 1½ pounds or attain a marketable weight.

When selling eggs to the country merchant or cash buyer, insist that the transaction be on a quality basis.

Ship or deliver eggs twice or three times weekly.

Small or dirty eggs should be used at home.

When taking eggs to market they should be protected from the sun's rays.

Infertile eggs will withstand marketing conditions much better than fertile eggs.

The free use of an effective lice powder is always in order.

A dust bath is very essential.

In applying powder hold the fowl by the feet, head down, and work the powder well down into the feathers.

The free use of kerosene on the roosts and in the cracks will exterminate mites.

Whitewash is very effective against vermin.

For common diseases the following treatments are recommended:

All diseased birds should be isolated.

Colds and roup.—Disinfect the drinking water as follows: To each gallon of water add the amount of potassium permanganate that will remain on the surface of a dime.

Canker.—Sprinkle a little flowers of sulphur in the mouth and throat of the bird, and put some chlorate of potash in the water. Also carefully remove the exudate with the aid of warm water and apply a two per cent solution of creolin to the diseased tissue.

Chicken pox.—Apply a touch of iodine and carbolated vaseline to each sore.

Gapes.—New ground and vigorous cultivation will often remedy this trouble.

Scaly legs.—Apply vaseline containing two per cent of creolin to the affected parts, and after 24 hours soak in warm soapy water. Repeat treatment until cured.

Diarrhea in hens.—Low-grade wheat flour or middlings is good for the trouble. Also give teaspoonful of castor oil containing five drops of oil of turpentine to each fowl.

Bowel trouble in chicks.—Well-boiled rice mixed with a little charcoal will often check this complaint. Dissolve fifteen grains of crude catechu in each gallon of drinking water.

It is urged that all poultrymen adhere strictly to the following rules in handling their poultry and eggs:

1. Keep the nests clean; provide one nest for every four hens.
2. Gather the eggs twice daily.
3. Keep the eggs in a cool, dry room or cellar.
4. Market the eggs at least twice a week.
5. Sell, kill, or confine all male birds as soon as the hatching season is over.

Period of Fertility in Poultry.

Have pure-bred R. C. R. I. Red hens. As our male birds of same breed died and we couldn't get another of same breed, we mated them with a buff Orpington on the 24th, and have now obtained a red cock; we have ten hens, six of them laying at present. By mating red hens and cock how soon would the eggs be pure-bred?

Ans.—We would not take chances by setting these eggs as pure-breds until three weeks had elapsed. Had there been no male bird with the flock it is probable that the eggs would be alright to save by the fifth day, as most of them should be fertilized by that time, but it is the effect of the previous fertilization that you have to guard against. To fill out an incubator this year, the first setting, we bought some eggs from a fancier, whose white Wyandotte pullets had been running with a Rhode Island Red cockerel until five days before commencing to save the eggs for hatching, after which date they were penned with a White Wyandotte male. The eggs we got were laid from the fifth to the thirteenth day after the change in mating. The percentage of fertility was fairly good, but out of twenty chickens hatched from these eggs, sixteen showed some color marks of the Rhode Island Red.

THE DAIRY.

In selecting cows to keep or breed from, do not fail to allow a few extra points for the one which is nice to milk, not too easy and not too hard. In the course of a year this means a good deal in convenience and saving of time.

Either the straight-sided or the narrow-topped milk pail has much to commend it, but the pail with a wire screen through which the milk streams have to be squirted, is an invention of very doubtful value. It seems as though the principal advantage of such a pail would be to dissolve as much as possible of the soluble dirt and bring the bacteria-laden particles into more intimate contact with the milk.

The quantity of milk a cow will yield in any given year is largely influenced by the daily average to which she is brought up during the first few weeks after freshening. The tendency is for the flow to diminish, from various causes, as lactation proceeds. The higher the point at which it starts off, the longer it has to run be-