

is the cheapest, and will produce as large an egg yield as any other grain grown by the average farmer. This is fed twice daily in a litter of fine straw, with a small feed of pulped roots at noon. Sometimes we give a feed of buckwheat at noon, thrown in the litter. To get this grain, it is necessary to scratch for it, it is such a small seed. A drink of water, chill taken off, is given twice daily.

Regularity is one of the chief things in feeding fowl, if profitable returns are expected. Throughout the summer season, I feed fowl two small feeds of grain per day, morning and evening. My early pullets, hatched the last of April, 1908, are now laying.

Last spring I bought an incubator, and, considering first experience, I had good returns, hatching 180 chicks in two settings; 130 eggs each hatch were set. Most of these birds were raised. After the first 48 hours, I started feeding young chicks hard-boiled eggs and bread, and, after a couple of days, changed their feed to shorts and corn meal, the latter a cheap grade, bought for 2½ cents per pound. Throughout the entire feeding period of these combined foods, I used a poultry food. Every couple of days I dusted the young chicks with some insect destroyer. As soon as young chicks would eat small wheat, I commenced feeding Western wheat, as it could be bought much cheaper than Ontario wheat.

The first clutch of chicks I raised without brooder or use of hen. I kept them in a box beside the stove at night, and let them run in yard at daytime. Lost only seven, as they would not ramble far away. The second ones were raised with a hen, and she lost quite a few; she would take them away, and they would get lost in weeds and grass. When old enough, I taught them to roost in an unused stable, and there never was any trouble with them after the first few nights.

When they were about seven weeks old, I sold the young cockerels for 75 cents per pair. For others, when older, we got from 75 cents to \$1.50 per pair; the latter is market price at present. For eggs, our lowest price during year was 18c., and highest 45c., per dozen. At present, our strictly fresh eggs price is 50 cents per dozen.

During last season my hens laid in the neighborhood of 500 dozen eggs, at an average price of 22 cents. We also sold 45 pairs fowl, at an average price of \$1.10, with a sale of feathers at 7 cents per pound.

This year I intend to keep a daily record of all eggs laid. Last year it was only kept of all eggs sold. We place no value on eggs or fowl eaten on our table. To raise those chicks to be two months or more of age, I bought the following: One package of poultry food, 85c.; 80 pounds corn meal, 2½c.; 1 bag shorts, \$1.40; wheat, \$4.60. Carleton Co., Ont. SUBSCRIBER.

Over Ten Dozen Per Hen.

Editor "The Farmer's Advocate":

I notice in a December issue of "The Farmer's Advocate," that any who are interested in poultry are invited to contribute their experience for the Poultry Department. I hope this account may be of interest to some of your many readers. To begin with, we started with 90 hens the first of January, 1908. About the first of October we sold 50 of the hens, and replaced them with 40 pullets. Of course, this lowered the egg yield considerably for some time, but we hoped to gain by it later. This is our account for the year: January, 39 dozen and 10 eggs; February, 53 dozen and 11 eggs; March, 94 dozen and 10 eggs; April, 129 dozen and 8 eggs; May, 125 dozen and 3 eggs; June, 99 dozen; July, 101 dozen and 5 eggs; August, 95 dozen and 7 eggs; September, 71 dozen and 10 eggs; October, 38 dozen and 4 eggs; November, 31 dozen; December, 22 dozen and 4 eggs, making a total of 905 dozen. Of these, we sold 614 dozen at an average price of 22 cents per dozen, 30 dozen were used for hatching, and the rest, 231 dozen, were consumed at home. As those we used were worth as much as the eggs we sold, the amount for eggs alone for the year was \$199.10.

In August we sold 20 young cockerels, averaging 3½ pounds each, at 10 cents per pound. About three weeks later we sold 16 more, of the same weight as the first lot; for these we just got 8 cents per pound, the price having gone down. Altogether, we received for the chicks \$10.60. The 50 hens sold in October averaged 6½ pounds, at 6 cents per pound, bringing \$18.75. These, together with the eggs, make a total of \$228.51. Quite a number of chicks were killed and dressed for our own table, of which we did not keep any account. Feed is principally dry mash mixed, the largest proportion being wheat. They get a mangel at noon during the fall and winter months; also, any refuse vegetables from the house. In addition to this, they were fed a warm mash two or three times a week during the very coldest weather, and through the whole year they had skim milk, as well as fresh water for drinking. Have had very little meat,

just the scraps left from the table. I omitted to state our flock of hens are Barred Plymouth Rocks; we have kept nothing else for several years, and we think, from our experience, they are one of the best all-round fowls for the farm. Grey Co., Ont. A FARMER'S WIFE.

Poultry on the Farm.

Editor "The Farmer's Advocate":

"Poultry on the farm" is a subject in which I have been interested for a number of years, being, as some say, a born poultry fancier. I have met with success, but have had obstacles to overcome. I advise any and all farmers to breed pure-bred fowl. Farmers of to-day are a progressive lot of men. They adopt all kinds of labor-saving machinery; they breed pure-bred horses, cattle, sheep and swine, but as yet many are harboring non-productive fowl upon their premises. Where everything about the farm is of the latest and most improved pattern, with registered horses, cattle, etc., it seems strange that a progressive farmer will still harbor fowl of all colors, all sizes and shapes, and, worse still, fowl which return no profit for their keep. There are, however, quite a few who have already made a change, and they are now convinced that pure-bred poultry is the proper kind for the farm. Canada supplies barely sufficient poultry and eggs for her own consumption. Why not increase the supply? Stock your poultry-yard with high-class poultry; feed and care for it properly, and it will yield a surprisingly large income, whereas now it may not be paying for the feed consumed. The hens lay in summer, when their product is at its lowest value. Make the change and see the result. Procure a number of eggs or a pen of pure-bred fowl this spring, and sell or dispose of your scrubs. Then keep your pure-breds pure, by introducing a new male at needed intervals. Renfrew Co., Ont. JOHN W. DORAN.

GARDEN & ORCHARD.

Non-guarantee of Seeds.

Paper read before the Vegetable Growers' Association of London, Ont., by J. S. Pearce, Park Superintendent, London.

This is a matter that has been discussed by the seed trade many times during the past 25 years, and the "disclaimer," as now used, has been revised a number of times by the best legal talent in this country—you are all familiar with it. "While we exercise the utmost care to have everything pure and reliable, we give no warranty, expressed or implied, as to description, growth, purity, productiveness, or any other matter connected with any seeds, bulbs, plants, shrubs, etc., we send out, and will not in any way be responsible for the crop."

I have heard the pros and cons of this question discussed many times, and, after twenty years' experience in the seed business, I ought to know something about its workings. After you have heard what I have to say, and have thought the matter out honestly and fairly, I venture to say there is not a man here to-day who would undertake the seed business without protecting himself in the same way. Were he foolhardy enough to embark, I venture to predict that he would be out of business in five years' time. There must be some good reasons, or would not some seedsmen, smarter than the rest, cut loose from present methods and sell guaranteed seeds? Should such a man do so, would his seeds be any better? Some so-called seedsmen do advertise along that line, but there is always some qualification, and others say they will refund money paid for seeds that do not give satisfaction, but are not responsible for damages through loss of crop. It is the crop loss which is the serious part of the guarantee. This is the sticker. I have watched the litigation that has occasionally been tried, and in none of the cases, so far as I have seen, has there been any proof of positive dishonesty, nor has the plaintiff succeeded in any case. It would be utterly impossible for a seedsmen to follow the seed he sells to a customer from his store until the time it is planted. In the event of poor seed, or poor germination, you have only the growers' word to prove whose or what seeds were planted. I could relate to you many instances of my own experience with seeds said to be poor or worthless. Many times the seed was faulted when the cause was local, or a combination of causes. Often purchases are made from several sources, and no record kept of the differently-placed orders. If a failure of one or more of these lots is made, how is the purchaser certain as to which was good and which was not? I have known any number of instances where seeds grew all right with one, and did not with another. I have known a number of instances where men have come in and blamed the seedsmen right soundly, and in two weeks' time have come back and frankly said they were mistaken, that the seed was all right. There are so many causes and conditions that go to retard or hinder

the germination that, even when testing seed under the most favorable conditions, one cannot reach a safe conclusion without a second test. I have often known a second test give entirely different results from the first. Often, good seeds, owing to poor soil, adverse climatic conditions or fungous diseases, produce such unsatisfactory results that an expert would find it difficult where to lay the blame or find the cause. I have known mangels to lie in the ground for two or three weeks before coming up, for want of sufficient moisture. Again, I have known the seed to be blamed when the ground was so packed with rain that the seed could not get up. The turnip fly will clean up acres and acres of turnips, and the onion maggot will ruin the stand of acres and acres every year, and hardly a season will go by but some ignorant planter will blame the germination of seed of high vitality, instead of examining his field and getting at the exact cause.

Few, if any, seed-planters have ever given a thought as to the risk of insurance on a parcel of seeds, for that is what it means to guarantee seeds. Suppose, for example, a seedsmen sells a pickle manufacturer 100 pounds of cucumber seed; should that seed prove to be poor, the pickle man can easily lose several thousand dollars. What is the seedsmen's profit? Perhaps \$15 to \$20. Would anyone guarantee such a lot of seed, with the possibilities of mixture in growing, harvesting, shipping, storing and marketing, with such a profit. If the pickle man wants an insurance or guarantee, what should he pay for the same? Would \$100 insurance be too much? Would any one of you men here be willing to guarantee such a crop at any price? Again, take the greenhouse man, whose seed bill for, say, tomatoes might be \$3 to \$5, and who might lose thousands of dollars from poor seed, or good seed and bad management, but the poor seedsmen would get all the blame. Again, a careless or disgruntled employee of a large seed-house might easily cost the house ten or fifteen thousand dollars loss on guaranteed seeds. There is an impression among many growers that seedsmen use this non-guarantee to cover any carelessness, and oftentimes dishonesty. But such is not the case, at least not with any reputable or honest dealer. That a seedsmen should know more about the seed he is selling than his customer, cannot be denied; but, with a careful, painstaking seedsmen, there is little, if any, risk. But if a mistake should occur, which, with the best of care, will happen sometimes, the honorable seed-dealer will consider the case on its individual merits, and the customer will be fairly treated. Where a seed merchant sells one kind of seed for another, where reasonable care could have prevented such a mistake, then, undoubtedly, the seed merchant is morally, if not legally, under obligation to make such claim satisfactory.

Now, I want to say that there is not the importance attached, nor that care taken by the average gardener or farmer, in handling his seeds, either after he buys them or during the time they are being sown or planted, or during the process of growing, harvesting, threshing and preparing for market, or delivery, on his contract. I could tell you some most incredible things about my experience with parties who undertook to grow seeds for me. In many cases the ignorance or negligence was really criminal.

Another phase of the seed question is the buyer trusts too much to his seedsmen as to vitality and other matters. Seeds are so easily tested that there is really no excuse for the planter not testing the seed he buys. It would save him many dollars did he do this. Again, many have a tendency to change about too much. When you get a good strain, if possible, stay with it, and try to improve it. When your seedsmen is giving you satisfaction, stay with him. Too many change about too much. One variety will do better on your soil and in your locality than another. When you get a good thing, keep it, and try to make it better.

Another matter—don't haggle over the price. You cannot expect to get first-class seeds at cheap or ordinary prices. Few have any idea of the care and close attention required in the seed business, and the long years of patient work that has brought our seed up to this state of perfection.

You have heard it said, "Anyone can grow seeds." So they can. But real seed-growing does not consist in merely sowing seeds. This is only a small part of the successful work of seed-saving. To be successful, a practical knowledge of varieties, the art of selection and discrimination and, most important of all, a love for the work; close observation, close attention to all details, and that for years and years.

The citizens of Paris, France, have erected a very handsome monument (only recently completed) to Vilmorin, the founder of the noted seed-house of Vilmorin, Audrieux & Co., Paris. This monument bears the following inscription: "Without the Vilmorins there would perhaps be less grain in our fields, doubtless less sugar in our beets, and certainly less flowers in our gardens." Here was a man who spent his whole life in im-