

Sickness is usually the result of mismanagement, wrongful feeding or neglect. They were a well-fed, busy, healthy, happy, interesting, profitable lot of birds.

EGG YIELD AND PROFIT.

The hens began laying on January 6th, nearly a month after they were purchased. To the end of January they laid 106 eggs, or an average of almost 9 per hen; during February 216, an average of 18 per hen; March, 277, average 23; April (up until the 14th, when they were sold to clear the coast for gardening operations), 135 eggs, nearly equal to an average of 25 eggs per hen for the whole month. The last three days, the eleven remaining hens (one having been sold as a sitter) laid ten eggs each day, and, when killed, were fat, and full of eggs. Taking it for the whole period, the 12 birds laid 61 dozen and 2 eggs, which is likewise a fraction over 61 eggs per bird for the period.

While fancy prices could have been realized for guaranteed fresh hen fruit, such was not attempted. The product was sold to friends and neighbors at barely market prices, 30 cents being the highest and 18 cents the lowest figure. Those used at home were credited at the same value as those sold. Total sales of eggs amounted to \$12.82; proceeds from birds sold at market prices in spring, \$7.70; total receipts, \$20.52.

Original cost of birds	\$ 5.00
Feed, litter, and miscellaneous supplies.....	7.42
Total outlay, except for building	\$12.42
Profit	\$ 8.10
Cost of building material	6.10
Profit over all	\$ 2.00

The fact is not overlooked that these chickens were kept in a new building, free from disease, germs and vermin. The small number housed together was also a favorable factor in the result. It is further acknowledged that, in commercial operations, labor cost would be an important consideration. In this case the labor cost would probably wipe out any profit, as the flock suffered no lack of attention. On the other hand, it must be remembered that eight or ten times as many head would have entailed probably not more than twice as much work as this small flock, particularly if they were kept under farm conditions. In that case, also, the feed bill would be greatly reduced by skim milk, waste fruit, tailings, waste grain, and pickings of various kinds, while such items as litter would not figure in the balance. Leaving the labor out of account, therefore, in this calculation, and setting the load of manure over against interest on and depreciation in value of plant, what other stock will in four months and one week return a clear profit amounting to 162 per cent. of their original value? No doubt there are poultry-keepers who have done still better. Let us hear from them, and also from those who have not done so well.

Poultry Expert for B. C.

Morley A. Jull, B. S. A., recently connected with the Poultry Department of West Virginia Experiment Station, U. S. A., has been appointed Poultry Expert for British Columbia. The poultrymen of British Columbia have long felt the need of the services of a specialist, and Mr. Jull finally has been appointed. The Pacific Province is destined to become the greatest poultry-raising region in America, as all conditions are quite favorable. Mr. Jull is an experienced poultryman. Born and raised among the feathered tribe, his fancies have ever turned that way. His education and practical training makes him a capable man, and the Department of Agriculture for the Province was fortunate in securing his services.

Organization and institute work for a time will take up his attention. He is also arranging for the publication of a bulletin on Practical Poultry Industry. From time to time, other bulletins will be issued on the work.

Revised Edition of Standard.

From letters we are receiving from prospective purchasers of the "American Standard of Perfection," the impression seems to be that the new revised edition will be printed and ready for sale early in 1910. The facts are, the illustrations for this Standard will be submitted for approval at the next annual convention of the American Poultry Association, in August, 1910. After this, it will require several months to complete and print the Standard, so that it will be impossible to have the new edition ready before 1911.

S. T. CAMPBELL,
Sec. American Poultry Association.

A single-fare rate on all railways is announced for the Ontario Horticultural Exhibition, to be held in the St. Lawrence Arena, Toronto, Ont., Nov. 9th, 10th, 11th, 12th and 13th, 1909.

GARDEN & ORCHARD.

Formula of Work and Brains.

The Maine State Pomological Society held a field meeting at Highmoor, the new Experimental Farm, recently purchased by the State. About 250 were present at the meeting. Wm. Craig, President of the Society, called the audience to order immediately after dinner, the morning having been spent in visiting the different orchards.

In the purchase of the farm, four points were considered necessary: an orchard, land beside the orchard, suitable stand of buildings, and easy access to railroad. Highmoor meets these requirements.

A demonstration in apple-packing was given by Prof. V. R. Gardner, who worked as he talked, showing the pack from time to time in demonstration of what he was saying. The standard box he described as 10 x 11 x 20 inches, of soft wood, which is cheap and light, and gives a desirable spring to bottom and top, where the bulge comes in a well-packed box.

He would not advise packing unclassified and No. 2 fruit in boxes, but it was a business proposition to so pack fancy and No. 1 apples, as it showed off the fruit to advantage. The different style packs were explained, and two boxes were packed by the diagonal method as the audience watched. The bulge seemed so much that it was a question to the onlookers whether or not the boxes could be nailed up without injury to the fruit. Prof. Gardner guaranteed that they could also that, put in without being packed, the same number of apples would overflow the box.

Walter Bonns, from Cornell, who is to have charge of the orchards at Highmoor the coming years, said of the farm, in addressing the audience: Of the 225 acres, 175 are available for cultivation, and 50 are in orchard. The soil is a light sandy loam, well drained, with a sandy subsoil. Frost is six or seven weeks later in striking here than in other sections. The trees are chiefly Baldwin and Ben Davis, and conditions could not be worse and all the trees alive. Some have never been cut; they have never been cultivated, sprayed or fertilized. Everything that should not be done has been done, and what has been done should not have been done. Cutworms are here, and the curculio is here. It will take about three years to get it where it ought to be.

We shall cultivate every bit if we can get help. We are pruning now, and it will take three years to get out the needful amount of wood; so much cannot be taken out in less time without injury. We shall use a high-grade nitrogenous fertilizer, and, with proper treatment, the whole area will become a demonstration of what can be done with a run-down orchard by means of lots of work and all the brains you've got. I have heard of Fisher's formula. What it is, I do not know, but I know of a formula that should be used—50 per cent. hard work, and 50 per cent. brains.

"Where shall we get it?" was asked.

"Right in yourselves," was the reply.

M. B. AIKEN.

Protecting Trees from Mice.

The amount of injury done to orchard trees by mice is enormous. Many a farmer and orchardist has experienced the bitterness of seeing, in the spring, trees that had been carefully attended to girdled for a foot in height down to the solid wood. There is not much danger of this happening if clean cultivation is practiced, but where there is rough grass or weeds around young trees, and the snow lies deep in winter, conditions are ripe for mice to work destruction.

If memory could be trusted, such damage could be prevented by tramping the snow firmly around each tree after every fresh fall, but there are few people who could be trusted, or could trust themselves, to do the little job at the proper time.

Heaping a mound of earth around the tree before winter sets in will prevent mice from getting at the bark.

A very good protection is furnished by encircling the trees with wood veneer. In some districts the pieces of veneer used are of such size as to extend a considerable distance up the trunk, when they serve the double purpose of protecting from sunscald as well as from mice. Tar paper wrapped around, not too snugly for fear of injury to the bark, and tied at two places with binder twine, furnishes complete protection. Even ordinary newspaper is quite efficient. Wrapping should be begun at one corner of the paper, in such a position that the paper will come snugly down to the ground, and being finished at the opposite corner of the paper, there is not so much danger of its being torn off by the wind as if put on squarely. Tie at three places, and throw on a little earth around the bottom.

That painting the trunks of fruit trees will save them from being attacked by mice, is vouched for by W. T. Macoun, Horticulturist at the Central Experimental Farm, Ottawa. The paint should be rather thick, and a good heavy coat applied all around. He warns, however, against using any

of the ready-mixed paints, for fear of there being some harmful mineral oil in their composition, but says that with pure linseed oil and white lead no harmful effect has ever been noticed.

THE FARM BULLETIN.

Illimitable Wheat Fields.

It is through wheat, through a monomania of wheat, that the New Line runs from the Rockies back to Winnipeg, a thousand miles.

It is for wheat that the Grand Trunk Pacific, beginning at a point east of Winnipeg, on the Government section of the New Line, has built a branch southward to Canada's Lake Superior port.

It is for wheat that at that port, at Fort William and Port Arthur, the dominating objects in the landscape are clusters of circular bins, wheat wells, which have an immediately prospective capacity of 25,000,000 bushels.

It is for wheat, overflowing even such a prospect, that the Grand Trunk Pacific, at Fort William, beyond the Mission River, has driven 11,000 piles through soft soil to rock-bottom, has covered their tops with a solid concrete mattress three feet thick, and, on that mattress, is rearing concrete cylinders, twenty-four feet in diameter, to a height of ninety-five feet, seventy of them, in seven rows of ten each, touching each other, making fifty-four interspaces, making a capacity of 2,500,000 bushels, making one unit.

Four such units will make the storage part of one elevator. Four such elevators will complete the plan, a 40,000,000-bushel plan.

It is for wheat that more ships are needed every year to travel from Port Arthur and Fort William down to the ports on the lower Great Lakes.—[Wm. Hard, in November Everybody's.

Essex Notes.

The local "Fall Fairs" have come and gone, but are still fresh in the minds of those who were privileged to attend same. So far as can be ascertained, they were in almost every respect successful. The exhibits were much better and in greater number than in former years. The weather was everything that could be desired, being perfect in its conditions, thereby securing a very large attendance, materially assisting the monetary aspects of the societies. The Leamington exhibition gave a fair sample of what can be produced in the Italy of Ontario, so far as animals, poultry, vegetables, fruit and flowers are concerned. The only exhibit which failed in meeting the expectations of your correspondent was that to be found in the cattle sheds. While there were a goodly number exhibited, and some well worthy of commendation, yet too many gave evidence of inferior breeding and carelessness in preparing for exhibition.

Our fairs, whatever else may be said about them, are at least a benefit educationally. Exhibitions past, farmers have again turned their attention to the more stable phases of their daily occupation, not forgetting, we hope, the lessons taught during a period of relaxation and recreation. Now that corn-cutting is over, shredding and husking become the order of the day. The season has been extended sufficiently to enable vegetable-growers to secure their crop. The last loads of tomatoes were delivered at canning and pickling factories about the middle of October. The financial results of the tomato crop have surpassed the expectations of many.

Owing to the abundance of rough fodder, young cattle, or animals suitable for winter feeding, are in considerable demand. A goodly number of farmers have been enabled to secure a valuable and large increase to winter feed by cutting fields of freshly-seeded clover. Several have given as high as 1½ tons of splendid clover hay per acre. John Robinson, 9th concession Mersea, reports a yield of sixteen large loads from 10 acres of ground which was seeded last spring, and from which he harvested a fairly heavy crop of wheat. A greater number of farmers might have followed the same course, but preferred allowing pigs and cattle to graze thereon.

Quantities of hogs are being rapidly pushed forward so that they may be ready for market before a drop in prices occurs. The tendency to rush pigs from the time they are weaned until fit for the shipper is being adopted on every side. Hogs six months old, weighing from 200 to 250 pounds, are no uncommon thing.

Horse and cattle buyers are scouring the country in search of animals suitable to meet the ever-increasing demand. Prices are much as usual, no drop being evident, as is so often the case when season for winter feeding is drawing nigh.

The tobacco crop has been almost entirely purchased by large companies, figures paid being far in advance of former years. Some express the opinion that these large companies are attempting to secure a corner on tobacco, while others express it as their belief that an attempt is being made to undermine the Heinz Pickling Factory by holding forth the bait of high prices for the weed. Time will reveal the true purpose.

A. E.
Essex Co., Ont.