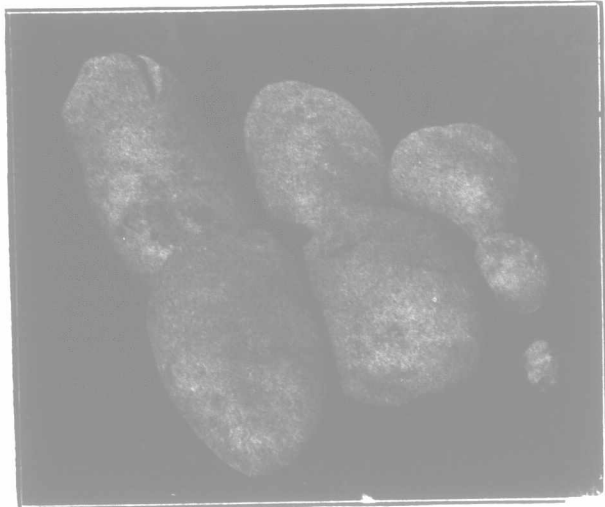


A Potato Yield.

While exceedingly large potatoes are not desirable, yet large potatoes, like large yields, are always interesting. E. D. Nelson, of the office where this paper is printed, planted one fairly-large potato, without cutting, in his garden last



The Product of One Potato Planted Uncut.

spring. The above photograph represents the resulting crop. The largest potato in the hill was 6½ inches long, 10 inches in circumference, and weighed 1 pound 6 ounces; while the total yield weighed 5 pounds 1 ounce. Can anyone excel it greatly?

POULTRY.

An Ineffective Egg Preservative.

A first-class egg-preservative, convenient to use, reasonable in cost, and unattended with any serious objections, is greatly to be desired. The lime-water and waterglass methods of treatment are fairly successful, but not attempted by a great number of ordinary producers. Some of the simpler methods such as packing in salt and bran or wrapping in paper, are fairly efficient, but not perfectly so.

This season, a commercial egg preservative called "Galo" was placed on the market by the Canadian Galo Company of Hamilton, Ont. It was praised in literature sent out as a "wonder without bounds" and was described as a "bacteriological colorless, highly antiseptic and non-poisonous fluid which will form a non-porous, airtight, hardly visible film on an egg after a momentary dip which dries in 15 to 30 minutes." It was sold in tin cans, containing about a quart of liquid, for \$1.00 a can, and on the can labels was printed: "We guarantee fresh-laid eggs dipped in Galo will remain absolutely fresh for a period of twelve months or more under any ordinary conditions." It was said to be a by-product of skim milk, discovered accidentally. It seemed to have a flavor of formaldehyde. Arrangements were made to advertise it in "The Farmer's Advocate," but, the matter coming to the attention of our editorial staff, who had misgivings concerning the merits of the article, the advertisement was withheld pending investigations. Letters of inquiry were addressed to the Poultry Depts. of our leading Exp. Stations and Agricultural Colleges, as well as to one or two of the foremost poultry journals across the line. None of these had ever heard of the article, but all the experimenters expressed willingness to give it a trial, which several of them have done. The company offering the preservative was also communicated with, but a request for definite data of indisputable reliability was met with several alleged testimonies from parties in the States totally unknown to us. The upshot of the matter was that we requested the company's consent to our withholding of the advertisement until we could satisfy ourselves as to the value of the article, to which they graciously agreed. We might say that the company also sent us a tin can of half a dozen eggs which they had recently treated with Galo. All of them but one were cracked or broken on arrival. This one was kept in our office from June 22nd until about the middle of September, when it was opened and found to contain a partially-decayed chick. We also sent a dollar to the Canadian Galo Co. and ordered a can of Galo, in which one of our editors dipped, according to directions, about four dozen fresh-laid eggs, purchased from a reputable poultry fancier who gathers his eggs daily. On June 29th, at 8 a. m., 24 eggs were treated, said to have been all laid on the previous day. Another 23 eggs, laid June 29th, were dipped at 7 p. m. on the evening of the same day.

These eggs were placed in a good cellar, reasonably dry, except for two weeks in August, when it was somewhat damp. From time to time the eggs were examined, and appeared to be

keeping far otherwise than well. The yolk thickened to a lung-like consistency, the air-space enlarged, and most of the eggs, when opened, were quite unfit to eat. The last of them, opened this month, were fairly putrid.

Not content with our own test, we wrote several other experimenters.

Prof. F. C. Elford, Macdonald College, Que., had 30 dozen eggs treated with this mixture during July and August. Upon receipt of our letter, dated September 27th, he opened several of them, and, to quote his own words, "found that there had been considerable shrinkage, the air-space being almost as large, in many instances, as an egg that had been between two and three weeks in the incubator. On breaking them, there was noticed a musty odor. The egg itself lacked the appearance and character of a new-laid egg. Both the white and the yolk flattened out considerably. Judging from what was opened, I would not think the preservative a success, though I would like to have a little more time before giving a definite opinion."

A. G. Gilbert, Poultry Manager, Central Experimental Farm, Ottawa, replied to our letter under date of October 14th, enclosing the following memorandum, received by him from Frank T. Shutt, Chemist, Dominion Experimental Farms:

"We to-day concluded the first test period—three months—in the comparison of Galo with lime-water and waterglass, as egg-preservatives. The results showed unmistakably the inferiority of Galo. While the eggs that had been kept in lime-water and 5-per-cent. waterglass solution were in excellent condition, and quite free from any objectionable properties, those which had been treated (according to instructions) with Galo were characterized by discolored whites, degraded yolks, and a musty, disagreeable odor."

"(Sgd.) F. T. SHUTT."

Black-head in Turkeys.

Many of the newspapers gave space last week to an Ottawa despatch purporting to emanate with the authority of Dr. Chas. Higgins, Dominion Pathologist, accounting for the soaring prices of turkeys by the fact that black-head is responsible for an alarming turkey mortality in all the Provinces. The disease is due to a parasitic affection of the liver and intestines, particularly the caecum or blind gut. It develops no special symptoms until in an advanced stage, when the dark heads of its victims denote its presence, giving rise to the name "black-head."

Robinson, an American author, in Diseases of Poultry, speaks of it as having been most prevalent in Eastern and South-eastern sections, where turkeys have long been raised on the same ground, but adds that instances of it as being epidemic in other sections seem to be on the increase. Besides the discoloration of the head, a conspicuous (though less conclusive) symptom of the disease is diarrhoea, with weakness and emaciation. A post-mortem shows the caecum inflamed and sometimes clogged with tumorous matter, and the liver enlarged and discolored with whitish or yellowish spots.

"The course of the disease," according to Salmon, "is variable. In some cases it develops rapidly after infection, and the affected birds die in from two to six weeks. In other cases, the morbid processes may come to a standstill, but the amount of dead tissue in the caeca and liver may be so great as to favor the entrance of bacteria which are directly responsible for the death of the bird in the summer or fall. In still other cases, regenerative processes may begin, and lead to complete and permanent recovery."

The parasitic protozoa multiplying in the caeca are voided with the excrement, which contaminates food and drinking water; and, these being consumed by healthy birds, the disease-producing organisms reach the caeca of healthy birds through the digestive tract, thus distributing the infection. Land which has been contaminated with the droppings of black-head infested turkeys is not safe for healthy birds for at least that season, possibly not for a considerably longer time.

It is held by some turkey raisers that black-head is not so much a cause, but to some extent a result, of unhealthy conditions in the birds; that the germs of the disease are quite widely distributed, and that they produce the disease only when the vigor of the stock is not up to the mark. Whether this be partially true or not, there seems no room to doubt that the presence of the germs is attended with much risk to healthy stock.

Robinson says that medical treatment of black-head in individuals in which it has developed so much as to show the external symptoms which identify it, is generally ineffective. As treatment for mildly affected birds, Salmon suggests:

Sulphur 5 to 10 grains, sulphate of iron 1 grain, or—

Benzonaphthol 1 grain, salicylate of bismuth 1 grain.

Sulphur 10 grains, sulphate of iron 1 grain, sulphate of quinine 1 grain.

These remedies are to be given two or three

times a day, and continued for a considerable time. The doses mentioned are for turkeys weighing four or five pounds each, that being about the weight at which most of those which require treatment will have arrived. The disease attacks mostly young turkeys, and in these does not generally show outward symptoms until the season is well advanced.

A remedy suggested in the newspaper item was to starve the bird forty-eight hours, and then let it drink from a mixture composed of a teaspoonful of muriatic acid to a quart of water. Communicated with by wire, as to whether muriatic acid was effective in advanced cases, Dr. Higgins wrote us, in part, as follows: "Experience in one case indicates that it exerts some beneficial action, but whether it will act similarly in all cases, is very hard to state at the present time. I have for some years advised the use of muriatic acid for fowls suffering from various forms of indigestion, some of which have been accompanied by profuse diarrhoea, and mistaken for fowl cholera. There is in many an infection involving the digestive tract. . . . Personally, I am of the opinion that, in dealing with the black-head problem among turkeys, the most satisfactory results will be achieved through obtaining some means by which we can carry the birds over the acute attack. Other methods will naturally follow which will lead to the extermination of the disease, but the extermination can come only after we have a much fuller knowledge of the problem than is at present available. I may further state that the use of muriatic acid in the amounts indicated can do no harm, but that it should be supplemented by ordinary precautionary measures to prevent re-infection, together with a change in feed, as far as possible."

Handsome Returns from Egg-production.

All but recent subscribers will recall the very creditable account of profitable egg production published in our Exhibition Number, 1909, describing the poultry practice and setting forth the results obtained by Mrs. R. J. Temple, of Middlesex Co., Ont., who had sold an average of \$130.49 worth of eggs per annum for 17 years, with an average flock of about 80 to 85 hens. The eggs are regularly sold wholesale to a grocer for the highest cash price, and, being of good size and reliable freshness and quality, are eagerly taken. Mrs. Temple has recently favored us with a monthly memorandum of egg sales for the seven months beginning March 1st, 1910, from a flock of 90 hens, the total footing up to \$153.27. We may add that Mrs. Temple left with us an egg preserved for 13 months by simply keeping it wrapped in paper. It was opened, fried and eaten by our poultry editor, who found it of good flavor, the yolk standing up well, and both yolk and white opening out in such good condition that it might almost have passed casually for a fresh-laid egg.

THE FARM BULLETIN.

Fine Dry Fall in Simcoe Co.

Editor "The Farmer's Advocate":

Permit me to call the attention of your readers to this remarkably fine fall—too fine from the farmer's point of view. We have had no rain to speak of since the first week in September, and the result is fall wheat generally has made a poor growth, pastures were done some time ago, clover seeding has made but little growth, and the turnip crop has grown more to top than bulbs. It has been splendid weather to harvest the potatoes, corn and maize crops, which, speaking generally, are all good. These, with abundance of hay and the fair crop of straw, relieves us of all anxiety about winter feeding. Since the first of the month we have been enabled to feed our stock night and morning to supplement the fading pasture. We have had a good harvest. Prices are fair, and stock is selling high. We are in fine shape to brave a good old-fashioned Canadian winter, should it come. F. FOYSTON, Simcoe Co., Ont.

Premium for Pure-bred Sires.

Welsh agriculturists are going to have a share of the funds provided by the British Development Commissioners, and have declared that the best results would be obtained by a system of giving premiums on sires of pure-bred stock for the use of farmers. They recommended that a central committee be formed to administer the funds.

At a conference, the Parliamentary secretary of the Local Government Board spoke of the remarkable progress made in agriculture by Norway, Sweden and Denmark. In Denmark they have actually made a light railway for the purpose of making additional land by laying soil upon rocks. That was one illustration of the advantage of scientific education.