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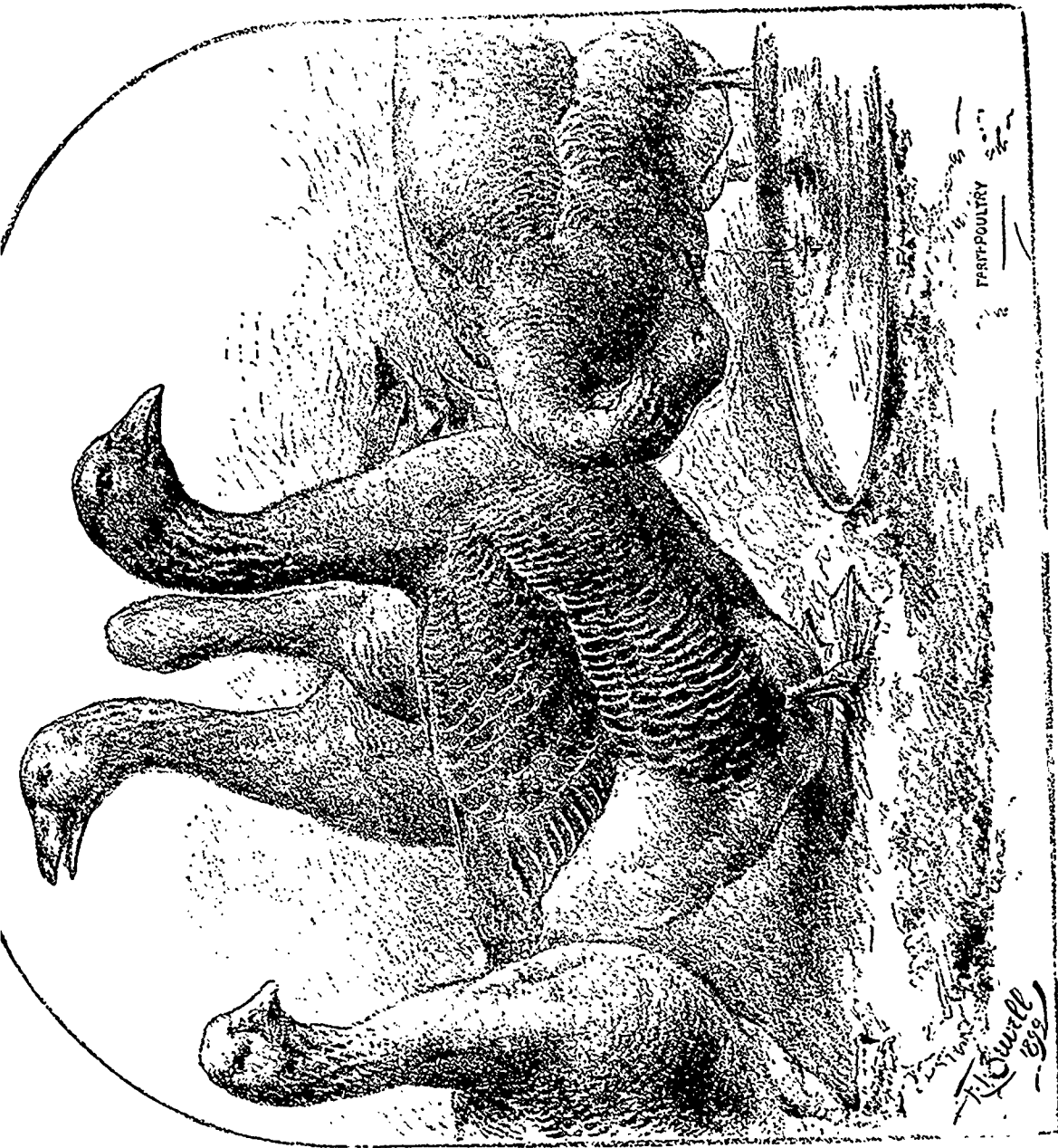
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TOULOUSE GEESE—YOUNG.

BRED BY SAMUEL CUSHMAN, PAWTUCKET, R.I.

—CANADIAN POULTRY REVIEW, Toronto, June, 1899.

THE CANADIAN POULTRY REVIEW

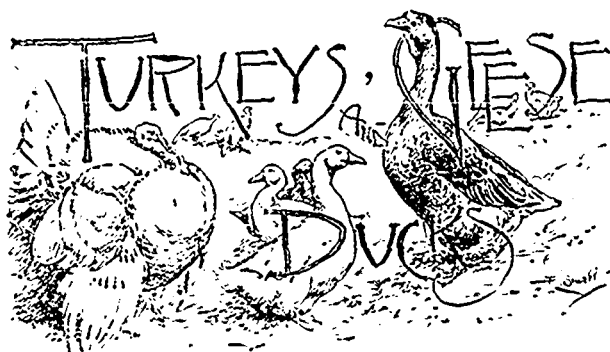
DEVOTED TO POULTRY, IN ALL ITS BRANCHES

For the FANCIER, the FARMER, and the SMALL BREEDER

VOL. XXII.

124 VICTORIA STREET, TORONTO, JUNE, 1899.

No. 6



GOOSE BREEDING.

(Continued.)

EDITOR'S NOTE.—We are indebted to Mr. A. A. Brigham, Ph.D., director of the Rhode Island Agricultural Experiment Station, for advance proofs of this most valuable and comprehensive article on Goose Culture, and also for procuring for us duplicates of some of the engravings to be used in connection with the Report. The copies of REVIEW containing this series of articles should be carefully preserved for future guidance. The first part appeared in November, 1898, REVIEW.

WE believe that to be the factor which has made goose raising on the east side of the bay so much more profitable than elsewhere in the State. Stimulated by the ready sale of the birds at a fair price, farmers have given attention to the conditions required to assure success, until the business is better understood there than elsewhere. We believe that with an equally good opportunity to dispose of the live goslings the residents in the four shore towns above mentioned would soon be as successful in the goose industry as those in Little Compton. In 1885 the four towns owned a total of 936 geese, and the total product from them, as stated in the census of that year, was \$717, an average product per goose of only about 76 cents, as compared with \$2.72, the average of the State, or \$3.79, the average product of each of the 3,261 geese kept in Little Compton. If the inhabi-

tants of the four towns named entered into the business as extensively, and with the same degree of success as achieved by the farmers of Little Compton, the product of the industry would be of considerable importance.

Little Compton had, in 1885, one goose to each 2.93 acres of area; at that rate there could be kept in the four shore towns of Washington County 30,464 breeding geese, and could they be made to yield the same value of increase per head, \$3.79, as was obtained in Little Compton in 1885, the sum realized would be \$115,458.56, a handsome addition to the agricultural receipts of the four towns. Is there anything impossible or improbable about these figures? We think not when we reflect that the average product per goose for the whole State, derived from the advance figures of the 1895 census, is \$6.76. Some one, however, may say that such a development of the business would glut the market with green geese, which would doubtless be quite true if it should take place in one year, but for evident reasons it could only come about gradually, and with proper effort the market for them could be greatly enlarged. A very few dealers in Boston and New York now receive about all the green geese put on the market by the only two parties at present engaged in the fattening business. Other cities and the summer resorts of New England would consume a large annual product when once made acquainted with the tender, delicious quality of a roast green goose. Its merits were doubtless appreciated in Shakespeare's time, and if more frequently met with in our markets, and more readily obtained, the demand for it in our time would, without question, largely increase.

SUITABLE LOCATION.

• While a pond, brook or stream of water large

enough to provide a permanent supply throughout the season makes the most desirable place for keeping geese, they are not entirely dependent upon it. Water may be supplied in tubs, or barrels, sunk in the ground during the breeding season, and through the fall and winter a supply of water in pails or shallow tubs to serve for drinking, will be quite sufficient. In the keeping of Canada geese, however, a natural body of water, pool, pond, or stream appears to be quite essential to successful breeding.

A colony of geese may often be confined in a field fenced with an ordinary stone wall. Fences, however, must be tight at the bottom, that they may find no openings through which to crawl, as they are much more likely to creep out than to fly over a fence or obstruction.

In many mild climates, where snow remains for only a short time on the ground, and where the temperature does not often go below zero, geese will frequently ignore any shelter whatever, requiring only barrels or boxes in which to make their nests. It is always well, however, to have some shelter, as an open shed or cellar, into which they can go in the severest weather. A rough shelter of poles, thatched with straw, and provided with a bed of dry straw, serves a good purpose, and is all that they require. A comfortable shelter in the most severe weather of winter will doubtless help to increase the egg production later in the season.

No kind of poultry keeping can be carried on at so little expense for buildings and equipment as goose raising, because of the hardiness of the birds, and their desire to remain in the open air. Geese dislike confinement, and the successful breeder endeavors to so locate his colonies of geese as to have them realize their confinement as little as possible. The more freedom they have, the better they are likely to thrive.

A piece of low swampy ground in which pond holes exist, or may be artificially made, is an excellent place for geese, and when a piece of dry upland can be also utilized for the same flock, it makes an ideal location. The geese delight to rest on a sunny side hill after their swim and exploration of the pond or brook. The short green grass of the upland is also relished by them, and promotes more rapid growth than the coarser and less nutritious grasses of the swamp.

(To be continued).

THE BLACK EAST INDIAN DUCK.

BY H. S. BABCOCK, PROVIDENCE, R.I.

ONE of the most beautiful of the small ducks is the black East Indian. In size it is a counterpart of the Call duck; in shape there is a strong resemblance, but in color it is one of the loveliest green blacks that ever the eye of mortal man rested upon.

I used to breed these little beauties, and from my experience I think it strictly within the line of possibilities to rear fifty from a trio in a season. With me the eggs proved remarkably fertile, and the little ducks good layers.

I sold my stock of East Indians to a New Jersey fancier. I saw him not long ago and he told me how much pleased he was with them. In the course of the conversation he said, "I always objected to ducks because I thought they were nasty, but I find nothing of this to complain of in the East Indians. They seem to be as neat as any fowls can be."

If a fancier wished to have a lovely contrast in colors, let him keep a pen of black East Indians and a pen of white Call ducks. Each would heighten the beauty of the other, and it would be difficult for one to declare which was the lovelier. I think many would cut the gordian knot by selecting both kinds.

Black East Indians, however, have one advantage over white Call ducks, they can be kept where the latter would grow dingy. Take a city like Cincinnati, Ohio, where soft coal is quite generally consumed. The air gets filled with the soot, and it comes down to blacken and stain all things white. In such a place the East Indian would remain presentable, while the white Call would look as if it needed a good scrubbing with Soapine. In Indianapolis, Ind., a city where similar conditions exist, I observed that the Sparrows were much blacker than here in the East. At first I thought it was a variation due to climate, but after reflection I discovered that soft coal soot was the reason.

In such places no duck will better suit a fancier than the East Indian. Here is a field where it alone can enter without a handicap. The gray Call would look nice, but even this variety would show the stain more than the East Indian.

I can thoroughly recommend the black East Indian as a suitable variety for a fancier, as a variety that lays well, produces admirable, though small, birds for the table, and is withal extremely beautiful. If that is not a sufficient recommendation, I am at a loss to know what is. May these little black beauties increase and multiply till they shall become as common in our exhibitions as they now are rare.

MR. GRAHAM'S PROGRAM.



MR. W. R. GRAHAM.

The new Manager of the Poultry Department,
Ontario Agricultural Farm, Guelph.

IN asking Mr. Graham to favor us with a copy of his photograph, so that we might make him known to the REVIEW's many readers, we also requested him to state in a few lines an outline of the program he purposed pursuing in his new position. We give his reply in his own words, with the hope that he may be able to do all that his desires lead him to in practical poultry raising.

Poultry Department,
Ontario Agricultural College,
Guelph, May 13, 1899.

Dear Sir,—Your letter to hand re the course I intend to pursue while in charge here. I might say as follows: While in my charge the poultry department will be conducted strictly on practical lines. I do not purpose discarding the fancy altogether, but shall make the practical side the main object in view. Some experiments will be conducted such as are of practical value to the farmer and poultryman. It may be necessary to dispose of some of the smaller varieties and replace them with more of the general purpose breeds.

The production of eggs, especially in winter, and the raising of chicks and ducks for market purposes will be among our main objects. Some work will also be done along the line of individual records of each hen in certain breeds, the object being to establish a strain that will lay a large number of eggs, also to cull out all undesirable hens.

Two experiments will be conducted this summer. One to ascertain the exact cost of raising a chick for the market and also the growing and fattening of chickens for the English market. The cost of the fowls will include the eggs, oil for the incubator, and feed. Second—Several different rations will be tested in growing ducks. We want to get a ration that will grow them rapidly yet at minimum cost.

We shall endeavor to show about how much money can be made from a hen in a year. The labor of taking care of the hen will not be taken into consideration. The profit will simply represent the wages that can be made from keeping hens under circumstances similar to ours. Yours truly, W. R. GRAHAM.

POULTRY NOTES FROM PETERBOROUGH.

EDITOR REVIEW.

I AM very pleased to be able to inform you and your many readers that our poultry fanciers here are at present very busy with their pets, old fowls and young chicks, of which they have a large number. All our previous young breeders and a few others have joined in for their first time this year to try their luck in the fancy. Some have procured eggs from some of our best Canadian breeders, while others have sent their orders to some of the very best of the Americans. It seems as if they intend to get some of the very gilt-edged, so as to be able to make a creditable showing next winter at the "Ontario."

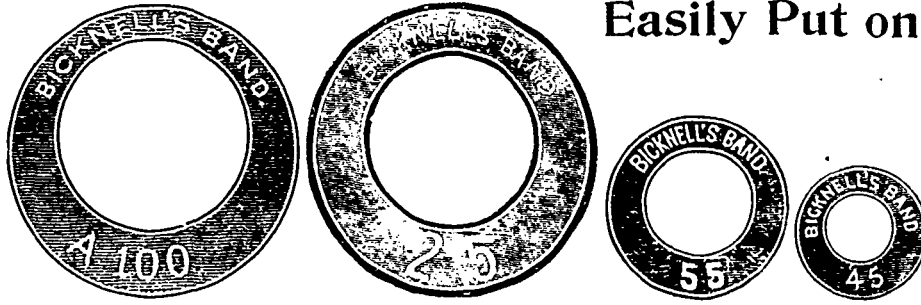
We had the pleasure of a call from Dr. A. W. Bell, of Toronto, ex-President of the Ontario Association, a short time ago, and were highly delighted to have an opportunity of having a talk with him and getting some very valuable information in relation to the next "Ontario" show, also on things in general. We believe the Doctor to be an enthusiast in poultry matters.

We would be very pleased to have some of your readers criticize or discuss my letter which appeared in the April REVIEW about those county grants by the Government to local Association shows. I think we should get assistance and would like to hear from others, and if anything is likely to be done would suggest that a meeting of the poultrymen might be held in Toronto at the time of the Industrial, and try to formulate some definite line of action towards that end.

WM. COLLINS, Secretary.

Bicknell's Rubber Bands

Easily Put on. Don't come off



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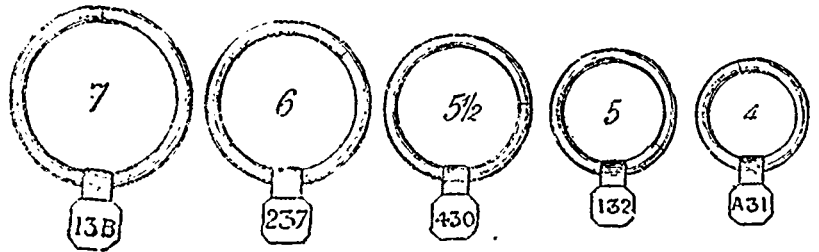
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METAL LEG BANDS

Stay on. Require.

No Tools.
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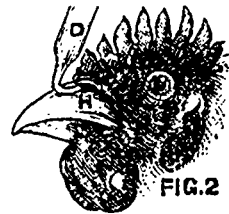
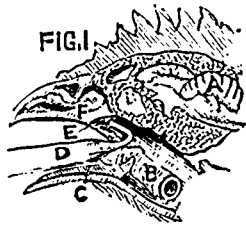
SPECIAL NUMBERS OR LETTERS TO ORDER.

PRICE PER DOZEN, ANY SIZE, 40 cents.



POULTRY PUNCHES or MARKERS

Small size for Chicks, and Bantams, Large size for Large Fowl.
30c. each. 60c. pair, free by Mail.



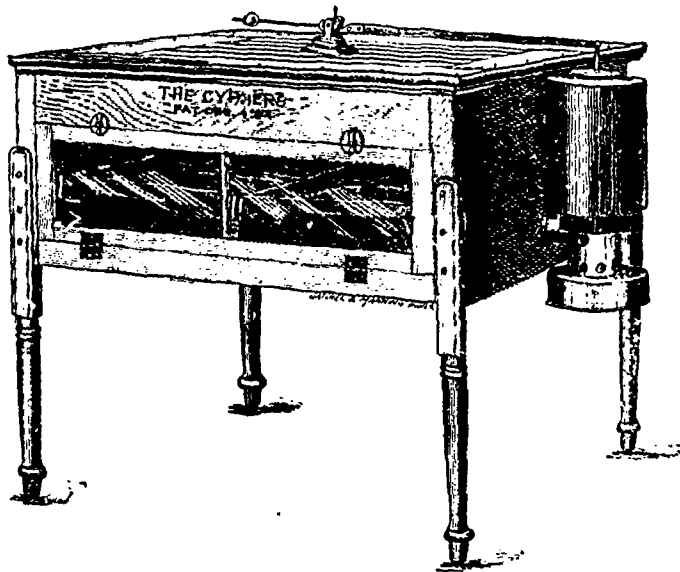
ROUP OR POULTRY SYRINGE, 15c. each : free by mail.

H. B. DONOVAN, 124 Victoria Street, Toronto.

Incubator & Brooder Department



We invite correspondence for this important department of commercial poultry raising, which is growing so rapidly in Canada



THE CYPHERS INCUBATOR.

IN considering the question of incubators, the "Scientific American," recognized as the leading scientific paper of the world, has to say about The Cyphers Incubator:

"In all methods of incubation, the prime requisites are effective means for the regulation of heat and for the supply of fresh air. Heat by its action arouses life in an egg; pure air furnishes the oxygen by means of which necessary chemical changes are produced.

In natural incubation the bird, under normal conditions, maintains in the eggs the constant temperature required in hatching out the chicks. When this temperature loses its uniformity and the eggs are subjected to extremes of heat and cold, the embryo dies. The conditions under which a bird can successfully

hatch are therefore limited. In endeavoring to effect by artificial means what a bird accomplishes by natural means, it is of the utmost importance to provide some mechanical device by means of which a reasonably uniform temperature can be automatically maintained. It is furthermore essential that the heat be uniformly distributed and that proper means of ventilation be provided. These exacting conditions seem to be the most satisfactorily filled in the incubator made by The Cyphers Incubator Co., of Wayland, N. Y.

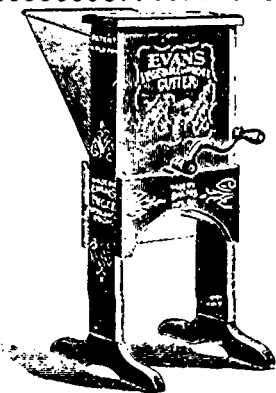
"The first requirement—the provision of an automatic heat regulating device—is met in the Cyphers Incubator by a positively acting sensitive thermostat composed of aluminum and steel. The thermostat is connected by means of a rod inclosed within a brass tube and passing through a cast head with a lever mounted on knife edge bearings. A counterpoise is adjustably secured to one end of the lever and a disk is attached to the other end of the lever and hung over the heater.

"As the temperature within the incubator rises above the degree desired, the aluminum, expanding more than the steel, is thrown toward the center by the use of sliding rivets, and assumes the bow-like form indicated in the illustration. The expansive force of the metal being transmitted to the connecting rod causes the lever to operate the disk, so that the heat may be regulated to conform with the required temperature.

"In order that the second condition—the uniform distribution of the heat—may be fulfilled, the manufacturers of the Cyphers incubator have devised a system according to which the warm air coming from the heater is first passed over and through a diaphragm into the hatching chamber, thence to be conveyed downwardly around the eggs and through a double porous diaphragm placed above a shallow chamber in the bottom of the incubator. After passing through the second diaphragm, the warm air, now impregnated with poisonous gases thrown off by the eggs, is conducted out of the incubator. The fresh, warm air, it will be observed, is evenly distributed over the whole area of the hatching chamber before entering. The downward movement is slow and positive, thus permitting the use of a larger volume of air than is employed in most incubators.

BARNUM SAID

"You can fool all the people sometimes and some of the people all the time, but you can't fool all the people all the time." We have Barnum competitors that have been telling the public for some few years past that they have a perfect incubator, telling us of 100, 97 and 96 per cent hatches, and so on, and advising the public against buying any Yankee machine, as their machine could knock the spots off any Yankee machine ever invented. This was good twaddle until the only up-to-date hatcher (the Cyphers) made its bow. Now the scene is changed, now they go to work and discard those wonderful 100 per cent hatchers, throw them overboard, no earthly use, buy a sample Cyphers machine, pull it to pieces, steal Cyphers ideas, and put right on their machines "patents pending," which they know is a direct falsehood. Truly our competitors are in a tight place when they have to resort to such bareface robbery. Putting a Cyphers machine together to look like a Cyphers does not make a Cyphers. You would not think of taking that Elgin movement watch of yours to a blacksmith to have him put it together and expect it to run well. Our competitors know no more about the workings of the Cyphers machine than the blacksmith in question. We are having lots of these machines offered us in part exchange for Cyphers machines. We have taken some and made kindling wood of them. The Cyphers Incubators have been on the market five years. It would be hard to find a second hand machine of that make for sale to-day. The cost of a genuine Cyphers machine is but two or three dollars more than the worthless imitations. If you buy a genuine Cyphers you will have an incubator that will hatch every fertile egg. You will not have to sit up nights to watch it for fear it should catch fire, as our competitors machines do. One case of fire has happened already, and had it been night the whole establishment would have gone up in smoke. The genuine Cyphers are absolutely fire proof and as safe as the best bank safe manufactured. **MORAL - Don't be Humbugged.** Buy a genuine Cyphers Incubator and if machines are not what we represent them to be return them and get your money back. None of our competitors dare make this offer. **C. J. DANIELS**, Sole Canadian Agent, Cyphers Incubator Co., 221 River St., Toronto.



Evans' Vegetable and Root Cutters

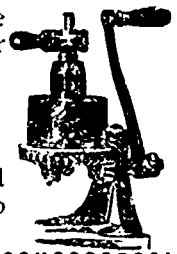
No. 5.

Price \$5

These machines meet a long felt want among poultrymen. They make possible the feeding of green and succulent food in the dead of winter when every spear of grass and green thing is killed by frost. They convert all kinds of roots into fine particles like angle worms that are greedily eaten by all fowls, big and little. The feeding of vegetables thus prepared doubles the egg product and saves fully 50 per cent. of the grain feed. It makes hens lay in winter when eggs are worth the most money. Endorsed by all the leading poultrymen of the country. Buy one and make money from your fowls this winter. Write for free circulars.

Read what Wm. McNeil, our Prince of Poultrymen, says about Root Cutters: "Your No. 5 Root Cutter is the slickest machine I ever saw. Every poultryman needs one. I would not be without it if it cost double the price."

Can give you any size Bone Mill required. Hand or power mills at rock bottom prices.



Our Bone Mills are the best on the market.

We can give you a Bone Mill at \$10, equal to an \$18 or \$20 mill.

Feed Clover Meal

Clover Meal is a boon to the poultryman, and is endorsed by all who give it a trial. It is the ideal egg food—in the long winter months when eggs bring a good price to the poultry-keeper—and if it is fed in connection with the mixed feed it will, to a great extent, prevent hens from becoming over fat. All know that fat hens will not lay many eggs, and what few they do lay will not show a good per cent of fertile eggs, nor will the eggs hatch strong active chicks. Put up in 50 lb. bags. \$2.00 per 100 lbs.

CONKEY'S ROUP CURE,

the only Sure Cure for Roup. Everybody says so. Price 50c. and \$1 Tube.

SANITARY DRINKING FOUNTAINS

Mica Grit, Oyster Shell, Death to Lice, Hen House Spray, Sheridan's Condition Powders, Egg Boxes. We have about everything in the Poultry Supply line.

BROODERS FROM \$6 and upwards,
Tested Thermometers, etc.
Also 14 varieties of

Standard Bred Fowls

Good stock for sale, and Eggs in Season for Hatching.

C. J. DANIELS, 221 RIVER STREET, TORONTO

"By means of the system of diffusive ventilation employed in the Cyphers incubators, the use of supplied moisture is rendered unnecessary. The Cyphers incubators provide their own moisture.

"The old systems of incubation requiring supplied moisture cause many chicks to die in the shell—a feature that has proved to be very annoying to old and new breeders alike. The system of diffusive ventilation employed in the Cyphers incubator, however, and the absence of the necessity of using supplied moisture, overcomes this perplexing problem. Chicks and ducklings break their shells properly and come out strong and active, making hardy birds that will live and thrive.

"Below the egg trays is located the nursery, in which the chicks or ducklings are deposited after having been hatched out. By disposing of the hatched chicks in this manner, those not yet clear of the shells are permitted to continue their development undisturbed."

Certain firms and individuals have from time to time sought to copy the leading features of The Cyphers, but in every instance have fallen far short of the mark. The outside case appearance is as near as they have come to the real thing.

Mr. C. J. Daniels, 221 River Street, Toronto, is the Cyphers Company sole agent for Canada. His announcement may be found on another page of REVIEW.

TWELVE REASONS FOR USING AN INCUBATOR.

- Because you can raise chicks any time.
- Because prices of chickens are as high to-day as they ever were.
- Because the supply never has been, nor is now, equal to the demand.
- Because there has never been an over supply of poultry on the market.
- Because it requires a very small investment to realize a good large income.
- Because you can hatch them in large numbers with but a nominal expense.
- Because you have less trouble hatching with an incubator than with the hen.

Because you can hatch chicks when you can get the most money for them.

Because raising poultry can be made to pay better than corn, oats, or most of the farm products.

Because you can keep your hens laying all the time if you do not let them hatch.

Because hatching chicks with the incubator is a labor-saving and a money-making business.

Because you can hatch chicks during the coldest weather by placing the incubator in the cellar.

SHOEMAKER.

VIBRATION.

EDITOR REVIEW.

RIB VIBRATION as a hindrance to successful incubation. Last spring we had an incubator with about one hundred eggs in it which had been there about a fortnight; at the same time there was in a magazine just one thousand yards from the house about twelve hundred pounds of dynamite, which exploded one night and wrecked shutters and windows galore all around the neighborhood, the sensation in our house being as though it had been taken up bodily in the air about a foot and dropped down with a jerk. Nevertheless we hatched 87 per cent.

That vibration will not hurt eggs seems to be proved by the fact that they are often sent thousands of miles by land and water and afterwards hatch well. That it does not hurt them at hatching time is evidenced by the practice of incubator exhibitors who frequently take quantities of eggs, just before they hatch, long distances and thereafter successfully complete the hatching. I am afraid that in attributing bad hatches to any vibration likely to be caused by passing railway trains, one would be "barking up the wrong tree."

Also, I regret that the Editor should think that I took his answer to the query as to artificial heat in hen house to be an "emphatic no."—I thought the answer was admirable, but as is the case with most answers of a general nature, not applicable in all cases without some qualification.

Yours truly, H. J. WOOD.

Hull, Que., May 11, 1899.

THE MORTALITY OF BROODER CHICKS.

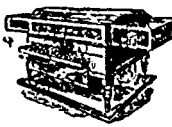
THE inventive genius of the American people has supplied the poultry breeder with a number of admirable brooders. The problems of furnishing the requisite degree of heat, of preventing crowding or rendering it innocuous, and of furnishing a reliable substitute for the mothering of the hen, have been quite effectually solved. And yet the chickens die.

Some attribute this unhappy result to the men who

operate the brooders. Doubtless there is a difference in the skill and care of the operators, and those who are most skillful and most careful obtain the best results. But as even these operators lose chickens, the explanation is not sufficient. Furthermore, as the writer knows from experience, the same operator will carry through one brood without the loss of a chicken, and from the next brood lose nearly every specimen. And these very different results may come when the same brooder is in use.

What, then, are the causes of the mortality in brooder chickens? After some study of the question, I believe the chief causes are as follows:

1. Some defect in the management of the incubator, whereby the chickens are hatched with a loss of vigor. It may be that their vigor has been impaired by over-heating of the eggs, or by the reverse—a chilling of the eggs. But whatever be the cause, I am firmly convinced that some broods are so weakly from the start that no brooder and no motherly old hen can possibly rear them. They are stupid in appearance when first put out, never learn to eat well, begin the dying act on the first day or two, and keep it up until few or none are left as evidence that a brood once existed.
2. Overfeeding. This is a cause where the blame attaches to the operator. He ought to know that brooder chickens should come to each feeding-time hungry. If they do not, the meal should be omitted, and they should have no food until they are hungry. Keep them hungry, so that they will make a grand rush every time one comes to feed them, and the chances of their living will be greatly improved. If this is done, even food not best adapted for the pur-



In the country, village, or in the suburb money may be made in the poultry business by the employment of correct methods. You can't afford to keep hens to hatch and brood your chicks. A better and more economical plan and one more certain of good results will be found in the use of the

RELIABLE INCUBATOR & BROODER.

The remainder of the story and plan of procedure is in our book on Incubation and Poultry. Send 10 cents for it.

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THE POULTRY PROFIT

is largely augmented by the use of the **MONITOR INCUBATOR** which hatches the largest percentage of live chicks from a given number of fertile eggs. This fact and many others of great value fully proven in our 80 page catalogue—sent for 1 ct. in stamp.

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Both books by James Rankin, the most successful man in commercial poultry business. Each book covers its own ground fully. Price 25c each by mail.

H. B. DONOVAN, - - Toronto



TORONTO INCUBATOR

Highest Awards at Toronto Industrial Exhibition

Winning 2 Silver Medals and Bronze Medal

Guaranteed to do as good work as the best Yankee Incubator, if not better. The following is from a well known resident of Toronto:

21 King Street West, Toronto, May 27, 1898

My fourth hatch for this season has just been completed, with the following result: 100 eggs, 95 fertile, 90 healthy chicks. [Signed] L. H. Baldwin.

Before you place your order, write for our Circulars and prices. Address

T. A. WILLITTS, 514 DUNDAS ST., TORONTO, ONT.

pose of rearing will be eaten and digested, and the chickens will live.

3. Improper food. This, as intimated in the previous paragraph, is not the most important cause, but it is to be reckoned as a cause. Sloppy food, sour food, food that is indigestible, is apt to cause diarrhoea, clogging of the vent, and ultimate death. My experience has led me to believe that dry food is the best. I certainly have had better results from such food than from the most carefully mixed messes that I could compound. Wild birds eat their food dry, and while domestication introduces changes in habit, yet the natural plan, especially with very young chickens, does not seem to have been successfully superseded or materially improved.

4. But the most important cause of all is the lack of exercise. If chickens have all the exercise they require they will seldom suffer from over-feeding. Exercise greatly increases their capacity for digestion. Chickens that have plenty of exercise will thrive even on improper food, for the improved digestion will enable them to assimilate almost any food that is given to them, and so prevent the diarrhoea and clogging of the vent, which are the results of indigestion. Demosthenes, was it not, defined the three requisites of oratory as action, action, action? And we shall not go far amiss if we define the three requisites of successful brooding as exercise, exercise, exercise. Somehow, some way, we must devise a plan to induce, or if need be to compel, our chickens to take exercise. I fancy that the benefits derived from keeping them hungry comes from the fact that hungry chickens take more exercise than those which are overfed. The man who will invent a brooder that will compel the chickens to exercise, or an attachment to our present brooders which will effect this purpose, will deserve the thanks of his fellow poultrymen, and secure, I believe, something more substantial than thanks as soon as his invention has demonstrated its efficacy.

While we should strive so to manage our incubators that chickens be hatched full of vigor, and to avoid over-feeding and the use of improper food, we ought, above all, to take measures to secure abundant exercise for the little ones, so that they will have keen appetites and strong digestions, and will live, thrive and develop as nature intended them to do.—H. S. BABCOCK, in the "Country Gentleman."

THE TORONTO POULTRY, PIGEON AND PET STOCK ASSOCIATION.

THE regular monthly meeting of the above Association was held in Temperance Hall, April 13, with Mr. Bonnick, the President, in the chair. The minutes of the previous meeting were accepted as read. Accounts for rent and printing were ordered to be paid.

The delegates to the Industrial reported to meeting. Mr. James Browne won all tickets on his black red Game. The Association instructed the Executive to select dates for show to be held next winter. The committee decided to hold the show Feb. 7 to 10.

R. DURSTON, Secretary.

(Received too late for last issue.—ED.)

BRANTFORD POULTRY AND PET STOCK ASSOCIATION.

EDITOR REVIEW.

WE have had a very successful year and after settling up our business found ourselves with a good balance to our credit. We have had a number of new members added to our membership, our meetings are largely attended and it is the unanimous desire of all to have a better show the coming winter. We have not yet fixed the date of our show, but expect to do so at our next meeting, and as soon as decided we will forward to you immediately. The following officers have been elected: Hon. President, Dr. Digby; President, J. C. Montgomery; Vice-President, Walter Westwood; Secretary, W. W. Telfer; Treasurer, Fred. Broome.

Yours truly,

W. W. TELFER, Secretary.

Brantford, May 10th, 1899.

LAMBTON ASSOCIATION'S CHANGE OF DATES.

WE have decided to change our dates to December 19, 20, 21 and 22, 1899, for our next winter show. We know of no other show on these dates and hope to make ours a great success. A dog show will be held in connection.

Yours truly,

JOHN W. KEDWELL, Secretary.

POULTRY FROM A PRACTICAL STANDPOINT

CONDUCTED BY A. G. GILBERT, MANAGER POULTRY DEPARTMENT, DOMINION EXPERIMENTAL FARM, OTTAWA.

Note- Mr. Gilbert is nothing if not practical and experimental. He will from his rich store of information on the subject of "Practical Poultry," give REVIEW readers each month the results of his experience for the past thirty years. He will be glad to answer questions or afford information on any particular subject.

DURING the third week of April last I had the very good pleasure of visiting the newly established poultry farm of the Toronto Poultry and Garden Produce Company, one mile east of Eglinton suburb. The selection of the site was a most happy one. As regards character and description of land and quality of soil, the farm is an ideal one for the purposes intended. The poultryman who could not be charmed at the beauty of the situation and gratified at its near location to the city markets, must be classified as a crank very much out of gear. Mr. T. M. Wilson, the manager, is a master of detail and an expert in management. Although the company only obtained possession of the premises in February last, at the time of my visit, I found an up-to-date brooder house, 160 feet in length, with over 900 fine strong, vigorous white Wyandotte, barred Plymouth Rock and white Leghorn chicks in it. Not a weakling among them. The old barn had been converted into a temporary poultry house and divided into four compartments, with open scratching sheds. The brick house of the farm was Mr. Wilson's headquarters, and a very comfortable managerial residence it will make when fitted up. For the time being, he had nine 220 egg Toronto incubators at work in the drawing-room, and pleasant music was furnished to the managerial ear as the chickens tumbled out of their shells and gave their first "peep" of satisfaction at their pleasant surroundings.

"Of course you make this your headquarters while in Toronto," said Mr. Wilson. "And what more delightful spot or surroundings could poultrymen desire?" I exclaimed. And stay I did, and any who have had the pleasure of being a guest of Mr. Wilson will tell you that he is a very busy man, but that he has time to be a genial host, withal. It is the in-

attention of the company to immediately erect an incubator room in connection with the aforesaid brick house, and three poultry houses, 360 feet each in length, with runs on each side. It is also the intention to add an additional 160 feet to the brooder house, making it 320 feet in length. But I have no time, and you have no space, on this occasion, to permit of my saying more. I should not forget to state that there are 500 apple trees on the farm, in the prime of their life, and among them the poultry buildings are to be put up.

On another occasion I may tell of a flying visit to the Massey Farm, where I found our mutual friend, F. R. Webber, in charge of the poultry department.

Prof. J. W. Robertson, Commissioner of Agriculture and Dairying, will leave in the middle of June for England. It is safe to say that Canadian poultry interests will not be neglected by him.

Several poultry ventures, of more or less extensive proportions, are being established in the neighborhood of this city. As a result sales of incubators and brooders have been lively. It is to be regretted that, in more than one case, the enterprising promoters have little or no knowledge of the difficulties to be met with and overcome. And there can be only one result.

I am informed by reliable authority that a farmer in the neighborhood of Toronto, named Cudmore, has by intelligent management done well with his poultry. Indeed, by their means, he has paid, in a year, for his house-keeping expenses, clothing, fuel, the wages of two hired men and the blacksmith's bill. And yet there are people who will gravely tell you that there is no money in poultry. Why? Because they had not the energy or brains to make the money out of their hens that Mr. Cudmore did out of his.

I was informed by the member in the Commons for North Ontario that Messrs. Dundas and Flavelle of Lindsay are preparing to do a large fall and early winter business in the way of exporting turkeys, geese and chickens to the English market. The firm have recently issued a circular to the farmers in their district, giving instructions as to the birds most desired for shipment, manner of caring for and feeding them, etc., etc. All of which is in the way of progress and usefulness. It is not difficult to surmise that Messrs. Dundas and Flavelle do not advise the

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H. R. FRASER, Manager and Secretary.

breeding or rearing of "scrubs." The barnyard non-descript is doomed.

Professor Shutt, chemist to the Dominion Experimental Farms, has been conducting some experiments to determine the relative merits of water glass and lime water as preservatives of fresh eggs. He was kind enough to associate me with him in the experiment. The following are particulars of the first experiment:

The investigation was commenced last September, perfectly fresh eggs from the Farm poultry house being used for the test, which consisted in immersing the eggs for varying lengths of time, from a few hours to six months, in (a) lime water, and (b) 10 per cent. solution of "water glass." Those eggs which were treated for a few hours, days or weeks, as the case might be, were subsequently placed, together with the untreated eggs to be used as a check, in a rack within a drawer in the laboratory till the close of the experiment, March 30th, 1899. All the

eggs were at a temperature from 65° to 72° F. throughout the trial.

The testing consisted in breaking the eggs into a glass and noting the appearance of the white and yolk, whether the yolk was stuck to the shell, size of air-space, odor, etc. The eggs were then poached and again the odor, appearance, etc., noted. Without giving in detail the results of the various trials, it may suffice for present purposes to summarize the conclusions reached, as follows:—

CONCLUSIONS.

- 1 In no instance, either of treated or untreated eggs, were any "bad" eggs found.
- 2 In all cases where the eggs were not kept covered throughout the period of the test with the preservative solution, shrinkage of the contents had taken place, as shown by the larger air-space, the less globular form of the yolk, and in many instances by the adherence of the yolk to the shell. The eggs treated for seven days and less with lime water showed some-

what less shrinkage than those treated a similar length of time with silicate of soda.

3. It would appear that lime water and "water glass" used continuously are equally efficacious in preventing shrinkage. They may also be said to give practically the same results as regards both external and internal appearances, flavor, etc., of the eggs preserved. Since "water glass" (silicate of soda) is more costly and more disagreeable to use than lime water, we could not from the present results recommend the former as the better preservative.

4. The albumen or "white" in all the preserved eggs was very faintly yellow (though not to the same degree in all the eggs) the tint becoming deeper on boiling.

5. No offensive odor was to be perceived from any of the eggs when broken, but in all instances a faint but peculiar musty or stale odor and flavor developed on poaching.

6. It is probable that no preservative will prevent the loss of flavor possessed by the fresh egg, but those which wholly exclude the air (and thus at the same time prevent shrinkage from evaporation) will be the most successful. Continuous submergence is evidently better than treatment for a few days.

THE TORONTO POULTRY, PIGEON AND PET STOCK ASSOCIATION.

THE regular monthly meeting of the above Association was held in Temperance Hall, Thursday, May 11th. The President, Mr. Bonnick, unavoidably being absent, Vice-President A. H. Lake occupied the chair. The minutes of previous meeting were read and adopted.

The dates of next winter show were changed to the third week in December, as the former dates were considered too late.

Mr. Dewey read a lengthy report of the late Ontario show. All accounts being paid the balance was turned over to the Treasurer of the Association.

Dr. A. W. Bell, R. Durston, J. H. Shales, H. Chambers, C. Bonnick, H. B. Donovan, A. Shaw and R. H. Essex were appointed a committee to carry on the winter show, Dr. Bell being convener.

Some very fine specimens in Hamburgs, Leghorns, and Sebright Bants were shown by members. Mr. W. Fox had a large display of rabbits, guinea pigs, etc.

R. DURSTON, Secretary.

RHODE ISLAND EXPERIMENTAL STATION.

ADVANCE NOTES IN THE POULTRY DIVISION.

BY A. A. BRIGHAM.

A BRIEF outline of the plans for this division, and a statement of several matters relating to the same, are given in the report of the director, who for several months has had special charge of the work in this line.

NEGLIGENCE IN BREEDING.

One matter already mentioned needs to be strongly emphasized. This is the frequent neglect of the fundamental principles of breeding in the management of poultry. Carelessness in this respect has doubtless paved the way for destructive diseases, like roup, blackhead, etc., to work their disastrous results. The practical poultry breeder of to-day must seek to know, as thoroughly as possible, the workings of heredity, atavism, prepotency, variation, and correlation, in their relation to the development of fowls.

Further, the requisites in successful breeding of poultry may be summarized as follows:

- 1 Health and good constitution.
- 2 Good pedigree (a long line of good ancestors).
- 3 Good conformation and color.
- 4 Good temper and docile disposition.
- 5 Favorable environment and management.

Not to dwell at length on this subject, let us consider briefly one or two illustrations of certain lines of action. A study of the turkey raising industry of Rhode Island, in connection with the development of that dread disease, the "blackhead," brings out the fact that it has been quite a common practice in some sections where turkeys were raised in large numbers to sell all of the early hatched and best developed birds for the Thanksgiving trade. Later, when the question of raising the next year's supply came up, such birds as were "left over" from the previous autumn were used to breed from. These were usually closely related, and often the male used to head the flock was a late hatched, inferior bird. After this plan had been followed a few years the breeding stock began to "run out." Size, constitution, vigor and health all became reduced. The death rate increased, and then came the blackhead disease to complete the ruin of the weakened flocks. Spasmodic attempts to

turn the tide, by purchasing vigorous, healthy males, from a distance to breed with the debilitated flocks, have amounted to little. Moreover, the turkey breeding grounds of Rhode Island have apparently become thoroughly infected with the protozoon, which causes the disease, in some stage or other of its life cycle.

Good constitution and health, the first requisites in successful poultry breeding, have been neglected, while the principles of heredity and variation have kept working on, but, unfortunately, not in the direction of plump birds or of plump pocket books for Thanksgiving time in city or country. More than two centuries ago farmers had developed stock breeding to such an extent that they recognized two closely related rules concisely expressed in the axioms "Like begets like," and "Breed from the best." Those turkey breeders who have neglected these rules are, unfortunately, several centuries behind these wise old stockmen.

Another point is worth mentioning. It is a very prevalent belief among farmers who raise common fowls that "fresh blood," in the form of a male, from the yard of some other poultryman, should every year be introduced to keep up the vigor of the flock. Where careless breeding is the rule this is sometimes necessary to keep the flock in existence, but if, as is often the case, the new bird is chosen each time from a different flock, and perhaps from a different breed, then the result may possibly be increased vigor, and not much else. In following this course the poultry breeder disregards the second requisite—good pedigree (a long line of good ancestors)—and breaks the power of prepotency, which is immeasurably increased by judicious "inbreeding," and particularly by "line breeding," by means of which some of our wise Rhode Island poultrymen have systematically developed in their birds marvelous quality without neglecting the essential vigor and strength of constitution.

The fanciers delight in the development of color, and in this line wonderful results have been attained. There is one thing that needs emphasizing, and that is, if permanently valuable results in color of plumage are to be secured and maintained, one must work along with nature and not against her. If our experimentation is to be of any real or permanent value, this idea must be kept in mind. The breeder may leave the principle of correlation out of calculation,

but the birds will not. The whole bird and all its parts must be considered, hence a standard of a breed should give proper weight to all related characteristics. A false standard, or a lack of good judgment, may temporarily give to some "fancy fad" in color undue importance and cause a breeder to neglect conformation, size, vigor and breeding quality. Some breeders of barred Plymouth Rocks in their inordinate desire for "barring to the skin" are securing their object in the under color of the plumage, but with the accompaniment of a smoky outer plumage and numerous black feathers and in some cases loss of size and conformation. Does it pay to ruin a good breed, or even its surface color, for the sake of extending the barring to the fluffy, hidden parts of the feathers? Is enough gained by the practice of "double mating," so-called, to pay for the trouble? If there are Plymouth Rock breeders who are sufficiently interested in this matter to co-operate in an experiment to determine what can be done in developing the barred Rocks without double matings, this Station would like to hear from them.

Again, what will be the result of breeding the black out of the tails of the buff varieties? Will it not be a faded, characterless, yellow body color, with loss of vigor as well as beauty? And then there is the rage for the "chalky white" in the white breeds, which can be secured, but is there sufficient gain to warrant the breeder's keeping his fowls out of the sunshine, which, although it develops the yellow surface tinge on the plumage of these birds, helps their health, increases their vigor, and is destructive to the germs of tuberculosis and other diseases?

It is in the requisite last named in the list, the favorable environment and management, that the breeder has the greatest opportunity for influencing the development of his fowls. Heredity is in these times coming to be considered by some biologists as a less important factor than environment in developing the characters of animals. When more of our poultrymen have come to be strongly grounded in the principles of breeding, probably the most helpful investigation and experimentation which can be undertaken will be in relation to some of the phases of environment. Location, food, shelter and all the conditions that surround the life of the bird, have their influence.

One point further needs special emphasis here. The birds have lungs for the purpose of breathing air to

gain its oxygen. These lungs in their size, their coatings, and their rapidity of respiration, are adapted to an atmosphere of pure air containing in its bulk about twenty-one parts of oxygen to seventy-nine parts of nitrogen. This is essentially the composition of common pure air. If these proportions are materially changed, or if other gases are introduced, disorder and usually disease results.

VENTILATION.

Pure air being essential to the healthy life of poultry, it becomes necessary to provide some efficient means of supplying same constantly to the fowls. In attempting to ameliorate the conditions of our severe climate by providing shelter for the fowls, we must not cut off the supply of oxygen, or allow it to be supplanted by ammonia, carbonic acid or other useless or noxious gases arising from the fowls, their excrement or surroundings. In this line during the past year we have undertaken experimentation in brooding having for its definite object the securing "without injurious draughts, of a continuous and sufficient supply of fresh, pure air, delivered to the chickens throughout the day and night at a constant and suitable temperature." Through the kind efforts of Mr. Mark Dean, engineer, of Boston, Mass., a gravity apparatus, designed by himself by our request, was installed in one of the brooder houses of our poultry plant. The plan includes the taking of fresh air from outside the building, conducting it to a hot water radiator, where, passing between the hot pipes, it is warmed, and then rises through an automatic mixing damper to the top of the brooder box. A thermostat, placed in the conduit which carries the air to the brooder box, connected with the damper, being set for a certain temperature, causes the damper to close more or less and let in such an amount of warm and cold air as when mixed will give the right temperature. The fresh, pure, moving air of suitable temperature is constantly being supplied to the top of the brooder box, and sifts down through a cloth diaphragm into a chamber containing the chickens, thence passing out of the box in front where the chicks may at will pass in and out.

The preliminary tests of this apparatus indicate that we are on the right track. After further and most thorough testing of this and several other plans

of heating and ventilating brooders, a complete and descriptive report of the results will be published.

Enough has now been written, it is hoped, to indicate that poultry culture to succeed must be conducted along definite lines, based upon the laws of nature and of life, and that the poultryman should have as complete an understanding as possible of these laws. In order that this Station may be truly helpful our work must also have the same basis. That there may be no mistake as to the object of this statement of the situation, we would say in closing that it is not alone the fancier, but likewise the practical poultry keeper who must seek to become well grounded in the principles and natural laws involved in the breeding and keeping of poultry. Both the utility and beauty of fowls are developed most successfully by the poultryman who best understands his birds, is most familiar with the factors to be used, and studies most closely the relations of cause and effect. This statement applies to the practical farmer and the poultry keeper who seeks the most profitable results in eggs and dressed fowls for market. Neglect of first principles will defeat his object. With this idea in view, we invite the hearty co-operation of every poultryman in the State, or out of it, for that matter, in development of both our experimental and educational work for the advancement of poultry culture.

BREEDING AND EXHIBITING SILKIES.

BY F. M. COLLIS IN "FOWLS."

SILKIES are little more than a name to the great majority of poultry keepers, notwithstanding that the birds so named are such curious and beautiful little fowls, and that they are of very old pedigree. They are, as their name implies, particularly remarkable for the smooth, silky, hair-like nature of their plumage, but they are also remarkable for the decidedly purple color of the skin. Like many other of our domesticated fowls of the present day, they had their origin in the East, although they have been with us so long now that we may almost regard them as free-born Britishers.

They are certainly not profitable poultry in any ordinary sense of the word, though they are said to be good eating in spite of the purple color of the skin.

It is just this fact that they are not profitable as compared with many other breeds, which has unquestionably prevented their free adoption by poultry keepers generally. Take my own case as an example. It is now several years since I gave up Silkies altogether, because I had not sufficient time to go in for exhibiting them on anything like a decent scale, and because, consequently, they were occupying valuable space which could more profitably be occupied for the Langshans, which were naturally of much greater importance to me.

Nevertheless, anyone who can spare time and space will be well rewarded from the "fancy" point of view, and should be able to win, with the necessary care and attention, a fair proportion of the prize money at the shows. It is, of course, well known that at only a few of the larger shows are separate classes provided for these birds, and undoubtedly if there were more of these special classes provided there would be a much better chance of winning for the painstaking fancier who breeds and exhibits Silkies; but even allowing for this serious disadvantage, it is still possible to render a good account of oneself with them.

As "fancy" or exhibition fowls, Silkies have many good points, which can and should be properly developed by anybody devoting sufficient time and care to the purpose. Of course, this term of "anybody" does not include the absolute novice who is only just entering into the world of poultry. He is certain to be one of the disappointed exhibitors if he rushes headlong to the show room. But those who already know the fundamental principles of successful exhibition, and who have never seriously given Silkies a serious thought, might well do so now. As they know, for breeding exhibition poultry careful mating, namely, careful selection of the cock and his mates, to correct the faults on one side by the excellencies of the other, or at any rate not to "breed in" to a bad fault, is very necessary. And to get good, strong chickens for the show pen it is desirable that an excessive number of hens should not be run with one cock. When eggs alone are the object aimed at, it does not matter at all to the vendor or the eater of the egg whether it would have hatched into a strong chicken or not; but for breeding and rearing good exhibition stock it is of the utmost importance.

Hence it follows that it is most unwise to overcrowd the breeding pens.

If the prospective exhibitor of Silkies has a good grass run, little preparation for showing is necessary beyond occasional penning of the birds, to accustom them to the close confinement of the pen. After this occasional penning, they need only be put in the pens finally about four days before the show, when they should be carefully washed, and just as carefully dried after the washing. The length of this essay will not permit of my giving more detailed instructions for preparation, so I can only refer my readers to the several excellent essays which have appeared from time to time in these columns of on this especial subject of preparing birds for exhibition.

There is one curious purpose to which Silkies—the hens, of course—are sometimes put. They are set on pheasant and partridge eggs in the large game rearing establishments, and make first-rate sitters and equally good mothers to the young game birds after they are hatched.

To close, just a few words of description of the leading characteristics of Silkies. The head and beak are small, the face being a dark purple. The comb is a queer, lumpy, round rosecomb, of dark purplish color; the crest full and round, and not of the cockatoo shape. Wattles are long and purplish; ear lobes are purplish too, but tinged with white. The body is somewhat square, and covered with silky, fluffy feathers, the wings being carried rather low. The legs are short and moderately feathered, bluish black in color, and the outer toes are feathered. Altogether they present a very pleasing appearance to the eye and are in all cases a welcome addition to the poultry yard.

MANITOBA POULTRY ASSOCIATION.

The proprietors of the "Nor'-West Farmer" have kindly offered two handsome gold watches as special prizes at the next annual poultry exhibition. One watch will be given for the pen of fowl, consisting of one male and three females, making the highest score. The other will be given for the pen of turkeys, consisting of one male and two females, making the highest score. In each case the Association will offer a suitable second prize. Competition is restricted to the members of the household of a farmer living upon and working a farm in Manitoba or the Northwest Territories during 1899. All birds must be hatched and grown in these provinces in 1899.

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Brantford, Ont.

POULTRY AILMENTS.

We invite questions and correspondence for this department.

PARASITES IN POULTRY.

THE BIRD FLEA—(PULEX AVIUM, TG.).

THE bird flea is more or less common among birds everywhere, but is especially common on the pigeon. It is a slender, reddish insect, without spines on head, but shows 24 or 26 on hind edge of next segment.

TREATMENT—Thoroughly cleanse all houses or coops where fowls roost, and with a sprayer, sprinkler, or brush put kerosene emulsion or pure kerosene over the entire inside surface, into all cracks and over all roosts. Dust the fowls affected with insect powder. Always have at the fowl's disposal a good dust bath. Frequent fumigation with carbon bisulphide or anointing with ointment is recommended.

MITEs play a considerable part in the annoyance inflicted upon birds by insects. Among the more common genera we may specify the following:

THE SMOOTH BIRD TICK (*Argas marginatus* Fabr) This resembles the cattle tick. It infests poultry in the West Indies, but so far as known has not yet been found here.

THE HAIRY BIRD TICK (*Dermanyssus gallinae*, Redi)—This is a yellowish or reddish tick, about one-sixtieth of an inch in length. It is very common in poultry houses, pigeon houses, etc. It also infests wild birds. This mite is the cause of the common inflam-

WEST'S FLUID,

The Powerful Disinfectant and Lice Destroyer

A Sure Cure and Preventative

of Chicken Cholera, etc.

NON-POISONOUS.

\$1 50 per Imp. Gallon. 1 gallon reduced makes 50 to 100 gallons

Manufacturers **The West Chemical Co.,**

Agents Wanted

15 Queen St. East, TORONTO

999

ROUP CURE GUARANTEED ROUP

CONKEY'S ROUP CURE is the only remedy that will cure roup in all its forms as long as the fowls can see to drink. For canker especially in pigeons, this cure excels all others. It is simply put in drinking water and the fowl takes its own medicine. The lives of two chickens is enough to pay for one tube which will cure a hundred or more. Directions in every package. If this fails to cure we refund the money. Sent postpaid. Small size 50 cents, large size \$1.00.

Petaluma Incubator Co., Petaluma, California,

Pacific Coast Agents. **G. E. CONKEY & CO., Cleveland, Ohio.**

C. J. DANIELS, 221 River St., Toronto, Ont., CANADIAN AGENT.

Please mention this paper Do not send stamps.

mation of the hands of persons who have been plucking fowls. The same treatment is suggested as for the bird flea.

LEG MANGE (*Sarcoptes mutans*, Rob.)—Leg mange is most frequently seen in the heavy Asiatic breeds of poultry which have feathered legs. It also occasionally attacks turkeys and cage birds. It does not attack waterfowls. The cause of the disease is a very small

Use Guest's Roup or Tonic and Condition Pills.

If your fowls or pigeons have Roup, even if almost dying, give one Pill every day, for four or five days. They are especially suited for Roup, Roup diseases, Bad Moulting, Bad Fledging, Weak Young Pigeons, Chickens, Turkeys or Ducks, &c. For General Unhealthiness in Birds, either young or full grown. Skin diseases, Inflammatory diseases, Colds, with great difficulty of breathing. Indigestion, Cramp, Pip, when Apoplexy is feared, and going Light if given before the vital organs are too much affected. As a tonic give an occasional dose when required. For pain and Inflammation in the Egg-producing organs. When used for Egg-bound, oil must also be applied in the usual way. From weakness and prostration from Overlaying. For Scour or Diarrhoea in Chickens, young Pigeons, Turkeys, etc. Canker. Leg-weakness.

Since the introduction into Canada of these Pills, the Agent has received numerous letters from Fanciers all over the Dominion endorsing the Pills in the highest manner.

Read This. Dear Sir,—I can recommend them to be the best. I tried several other receipts, but no good. I had one hen nearly blind, I gave her three Pills. She is now in good trim. Send me another packet.—B. J. YOUNG.

Dear Sir, Please find enclosed one dollar for your celebrated Roup Pills. A brother fancier met me in the street to-day, he wished to get the pills as he had some sick birds. He used them last winter and found them good. A good article always will recommend itself.—JOHN FINCH.

Sold in Packets for 25 Cents and One Dollar. Address James H. Cayford, Box 1168 Montreal.

WARDSVILLE, ONT., Jan., 1897.

I had one hen nearly blind, I gave

SEAFORTH, ONT., Oct. 6th, 1896.

to-day, he wished to get the

mite, about one-fiftieth of an inch long. The most favorable circumstances for disseminating the disease are lack of exercise and uncleanness. The disease is characterized by scabs, then running sores, and finally (in bad cases) one or more of the toes may drop off. The disease is highly contagious.

TREATMENT—Absolute cleanliness of cages, coops, or houses. All diseased birds should be isolated, and those badly diseased killed. Fowls should be removed to clean runs, and given as much room as possible. Compel them to scratch for their food. Scabby legs should be soaked in warm water for five minutes, and then rubbed with a stiff brush to break the scabs. Then apply an ointment made of lard 10 parts, sulphur 3 parts, and crystallized carbolic acid 1 part. An application of pure kerosene oil twice per week, after a careful washing with warm water and soap, is very good, and is used perhaps more extensively than any other remedy. If the legs bleed, wrap them up with cloths after applying the ointment. Usually one application will suffice, and a cure will be had in three or four days. Repeat application after three days, if necessary.

FEATHER-PULLING ITCH MITE (*Sarcoptes laevis*, variety *gallinae*)—One of the most common and troublesome diseases of the poultry yard is feather-pulling and an unseasonable shedding of plumage. The real cause of this trouble is a very small mite which gets into the lower part of the quill or root of the feather. These mites often fill up the root entirely, causing the feather to become dry and brittle and break off at the surface of the skin. The shedding of feathers from this cause can always be distinguished from natural moulting by the fact that in this case the feather breaks off. The itching caused by the mites induces the fowls to help each other by pulling out the infested feathers; hence the oft-described affection, "feather-pulling." The disease is highly contagious, and when a bird infested by these mites is introduced into a healthy flock the parasites are soon conveyed to every member of the flock.

TREATMENT—The lard, sulphur, and carbolic ointment, well rubbed in will suffice. "Schleg's solution" may be used with good results. This is composed of white arsenic and potassium carbonate each 1 drachm, 3 pints of water, and 3 pints of vinegar. To prevent

Lice and Mites



Mites and Lice on your poultry. Paint roosts with Lee's Lice Kill. All done. Next morning look, and see all mites and lice lying dead on roost boards. Many customers report finding them in piles a half inch deep where each fowl roosted the night before. Seeing is believing.

Same with hogs. Paint rubbing posts or sprinkle floor of sleeping pen. All done. No more lice, mites or fleas. No handling, no labor. Cheap. Only \$1.00 for a gallon can. Want some?

Lee's Lice Killer makes poultry raising easy and profitable. Lice and mites at the bottom of most of the poultryman's troubles at all seasons of the year. Young chicks will have no lice if the old fowls are free from vermin.

Don't judge the genuine by the imitation. If there were no genuine there would be no imitations. Adopt new methods. Hours spent in dusting and greasing the poultry can be more profitably utilized elsewhere.

TESTIMONIALS.

Dunbarton, Ont., March 14th, 1899.

C. J. Daniels, Esq., Toronto.

Dear Sir.—I beg to acknowledge the receipt of two gallons Lee's Lice Killer, recently ordered from you. As a liquid lice destroyer I consider it superior to all others ever tried by me, and I have used it in California, where they claim that lice never sleep, but I could paint my roosts in the afternoon and could almost give a written guarantee that my fowl would rest well for many nights to come. If properly applied (a very simple matter) it will do the business.

Very truly yours, WILL SECKER.

536 Ontario St., Toronto.

C. J. Daniels.

Dear Sir,—I have tested Lee's Liquid Lice Killer at different times and in different ways and found it as a disinfectant most excellent.

If Lee's is used according to directions it will keep fowls and houses free from lice and mites. The use of Lee's makes poultry keeping much easier, I can therefore most heartily recommend it to all breeders and keepers of fowls. It is a dead shot on all insect life.

A. W. BELL, M.D.

PRICE OF LEE'S LICE KILLER.

FOR POULTRY AND STOCK.

1 quart can.....	\$.35
2 " ".....	.65
4 " ".....	1.00
5 gallon ".....	4.50

CANS FREE.

SOLE GENERAL AGENT FOR ONTARIO, ADDRESS

C. J. Daniels, 221 River St, Toronto

AGENTS WANTED EVERYWHERE.

the disease spreading, remove the cock until the danger is over.

LICE ON POULTRY—A second class of bird-lice, and the class by far the most numerous, belong to the order Mallophaga, which is by some entomologists reduced to a sub-order of Neuroptera, and by others to a sub-order of Hemiptera. We will follow Comstock, and consider it a distinct order. The insects of this order rank among the very lowest of their kind. They are wingless, never more than one-sixth inch long, have three, four, or five-jointed antennae, or feelers, and mouth-parts fitted for biting or gnawing. Their metamorphosis is incomplete. The insects of this class do not suck the blood, like Acanthia, and are rather mutualists than parasites. They feed upon the secretion and excretions of the skin and feathers, and sometimes gnaw off the inner fluff of the feathers. It is probable that the irritation caused by these insects causes more or less discomfort to the fowls, and may lead to the habit of feather-pulling. It is, however, certain that the worry and damage done by

the single species of Acanthia, or nest louse, far exceeds that of all the genera of this family combined. The same treatment can be suggested as for the bird flea.—“The Rural World.”

FROSTED COMBS.

Your reply to “H.S.S.” in the issue of the 18th of March, giving remedy for frosted combs, prompts me to give my remedy for frost bites. Although I have used it for years and found it far superior to any other remedy I have ever tried, I never have seen it in print. You are at perfect liberty to use it for what it is worth, and if you should happen to freeze your own lobes up in that rigid climate it will work equally as well. Well here is the remedy. First thaw out the frosted parts with the usual application of snow or cold water and then apply with a camel’s hair brush compound tincture of benzoine to the frosted parts. Apply this once a day for four or five days (or longer as the case requires), keeping the bird away from all danger of frost and no part of the frosted parts will be lost. Even if the injury is not discovered until the parts are thawed out, this treatment will save the frosted parts to a great extent.

I have had Leghorn males for treatment whose combs had turned black below the serrations and after being healed by this treatment did not show the least sign of having been frozen. With best wishes for your success I still remain “a chicken crack.”

F. W. GAYLOR, in

“American Fancier.”

NEW BRUNSWICK TO N.W.T.

I think it my duty to write and thank you for your kind attention to my ads. as I have fully profited by my ad. in your valuable journal.

I have shipped eggs in all directions, as far west as Winnipeg and Edmonton and as far east as New Brunswick. I am raising 400 buff and white Wyandottes and they are promising to be good stock.

MRS. J. H. SHALES.

Toronto, May 8th, 1899.

TORONTO'S NEW DATES.

The dates set by association are Tuesday, Wednesday, Thursday and Friday of 3rd week in Dec. I think these more suitable than the previous dates.

R. DURSTON, Sec'y.

What the People Say

Two Self-Explanatory Letters from the Veteran Prize Winner, Mr. Wm. McNeil.

(No. 1.) The London Poultry Yards,
778 Waterloo St., London, Aug. 8, 1898.

Messrs. John S. Pearce & Co., Poultry Supplies, City.
Dear Sirs, I have been giving your Tonic Poultry Food a trial for a short time, and I think it grand for both fowls and chicks; I have, however, not been using it long enough to give it a fair test, but will do so, and let you know later on. I have given your Electric Louse Killer a fair trial, and it is the best I have ever used, and I would highly recommend it to all poultrymen. It is sure death to hen lice.
Yours truly, WM. MCNEIL.

(No. 2.) The London Poultry Yards,
778 Waterloo St., London, Dec. 10, 1898.

John S. Pearce & Co., Poultry Supplies, City.
Dear Sirs,—Early last August I used your Electric Louse Killer and also your Tonic Poultry Food. Then I did not have time to give it a fair test. Since that time I have given it a fair test, and I find your Louse Killer the best I have ever used and would highly recommend it to any one keeping fowl. Now, about the Tonic Poultry Food I cannot speak too highly; I have given it a fair test. It is grand for keeping chicks growing and keeping them in health. For old fowl it is extra good for them in the moulting season, and when fitting them up for exhibition there is nothing better. It puts a gloss on the plumage better than any other poultry tonic or condition powder I have ever used. Use Pearce's Tonic Poultry Food and there is no danger of roup in your yards.
Yours truly, WM. MCNEIL.

Please note the dates on above letters. We need add nothing, only send for our Poultry Supply Catalogue.

John S. Pearce & Co.,
The Canadian Live Stock and Poultry
Supply House.

119 Dundas Street and Market Square.

LONDON, ONT.

Manufacturers and Importers of and Dealers in all kinds of Poultry and Live Stock Foods and Supplies.

BANTAMS FOR SALE.

Having purchased the stock of Messrs. Gray & Baldwin, I have a few Cockerels and Pullets to dispose of in

BROWN REDS, BLACK REDS AND RED PILES.

Readers of the REVIEW do not require to be told the quality of this stock, as the NUMEROUS PRIZES won by Messrs. Gray & Baldwin are sufficient to warrant the stock as being second to none. Write me what you want and I shall only be too pleased to describe you what I have.

FANCY PIGEONS.

I have A GRAND LOT of birds TO DISPOSE OF in pairs or odd birds in all varieties and offer them for sale AT LESS THAN HALF THEIR WORTH in order to make room. Write me for price list and description of anything you want. BIRDS WILL BE SENT ON APPROVAL to reliable parties.

A. P. MUTCHMOR,

162 SPARKS STREET, OTTAWA.

1299

Look!

*Barred P. Rocks, S. C. Brown Leghorns,
R. C. Brown Leghorns.*



My yards are headed by strong, vigorous males, mated to females especially selected not only to produce high scoring specimens but large sized birds and **unfailing egg producers**. Parties purchasing eggs from me can feel assured to receive **eggs from my best pens only**. Barred P. Rock eggs \$2 per sitting. R. and S. C. Brown Leghorn eggs \$1.50 per sitting. Satisfaction guaranteed. Correspondence promptly and cheerfully answered.

Address **Chas. Mueller,**

Box 391, - - Waterloo, Ont.

HANDLE WITH CARE

**EGGS FOR
HATCHING.**

25 Labels like this, on Red Express Paper, 10c.

H. B. DONOVAN, Toronto.



MORE PREMIUMS HAVE BEEN WON

by these two strains during the last four years, when competition was hottest, than all others combined. The \$250 cup is included. Our customers are winning right along, and we don't take the honors from them.

Eggs from 7 pens of B. Minorcas, 10 in each pen. **JUST THINK OF IT!** 70 hens shelling out, and not a bad one in the lot. We also have three special matings on separate farms breeding for fall customers. Two yards, ALL EXTRA BIRDS. Every yard has some high scoring ones, and every one, in every yard, has the right blood in it. Come and see us.

Don't forget our **Black Cochins** Bantams—regular miniature Cochins in shape and style. Grand color in males and females. Remember, we are breeding the choicest Black Javas and B. P. Rocks, 20 years' experience in the former and 30 in the latter. Breeders and winners for sale.

Eggs from either or some from each, \$3 for 13, \$5 for 25. **PACKED TO HATCH.**

Address **J. Y. BICKNELL, 314 Vermont St., Buffalo, N.Y.,**
Poultry Farm at Darien, N. Y. or **C. S. WHITING, Darien, N.Y.**

Name the REVIEW. My Score Cards and Rubber Bands will be furnished by the Editor of the REVIEW and duly saved. **J. Y. BICKNELL.**



Persiatric Poultry Powder

Kills all Vermin peculiar to the Feathered Stock.

Powerful but non-poisonous, acts instantly without inconvenience to the fowl. Has been thoroughly tested by leading fanciers all over the Dominion and found to give unequalled satisfaction. Serves a double purpose—kills vermin and is a disinfectant and germ destroyer. Used liberally it is a preventative of Roup and other diseases.

Put up 1 lb. cans. **PRICE 25c.**

For sale at all dealers and by

C. J. DANIELS,
221 River St., Toronto.

The Pickhardt-Renfrew Co.,
Limited,
Stouffville, Ont.

Breeders' Cards

One of these Spaces

3 months.....	\$3 00
6 "	5 00
12 "	8 00

No Extra Charge for the Use of Cuts.

LONDON POULTRY YARDS

W. McNEIL Proprietor,

778 Waterloo St. - - London

BREEDER OF HIGH CLASS POULTRY, INCLUDING

White Cochins, all kinds of Polands and Hamburgs, Golden and Silver Sebrights, Black African, Pekin and Japanese Bants. Fowl for sale at all times, and eggs in season.

Pheasant Culture FROM EGG TO EGG.

BY DR. T. SHANNON MCGILLIVRAY

A treatise that gives all the successful points in keeping and breeding this handsome and profitable inmate of the yard and aviary.

Price 25c free by mail.

Address:

CANADIAN POULTRY REVIEW,

Toronto, Ont.

USEFUL THINGS TO KNOW ABOUT
POULTRY.

THE POULTRY YARD.

BY VICTOR FORTIER, ST. THERESE, QUE.

FOOD FOR ADULTS.

EVERYTHING produced must proceed from something. Food is the foundation of all animal life, just as by fertilization proceeds healthy vegetable production.

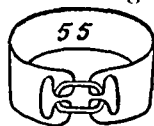
Hens are live stock and, like all animals, should eat to maintain their species, then to transform into either flesh, fat or eggs, the surplus food they are apt to take.

First—The free hen. The hen being omnivorous her subsistence is an easy matter when she can go and come and wander about all day long. Those which

live at liberty in the farm yard and its neighborhood, which can visit the stables whenever they wish, the vicinity of the kitchen, the manure piles, which can run on the street, in the orchard, fields and meadows, everything found is good for them and some scrap of food is picked up everywhere. Nothing escapes their notice; scattered grain, oats in horse dung, vegetable peelings, thousands of waste matters and myriads, to us, of invisible insects, weeds to be met with almost everywhere, near roads, by the sides of ditches, around fences, etc. Running around thus, hens partly feed themselves and, in fact, during the summer months, but little need be given them. Nevertheless, there is one fact to be noted: Are these external supplies in proportion to the number of fowls in your poultry house? The poultry raiser should supply such substance in proportion to what is lacking. Such should be the extent of his intervention at all times. Therefore, he should distribute, measure out, to them once or twice per day, and always in the

The "PEERLESS" LEG BAND

Made of Aluminum. Is bright. Stays bright.



This band is light, neat and durable. It is easily put on and it "stays on" SURE. To put Band on, place it around the fowl's leg. Press it together. Then take the small locking piece with slot in it and slip it over the parts of the band that project outward. Then turn locking piece so that slot runs in the same direction as the band, i.e., horizontally. Then bend down backwards the two projecting pieces, flat with the rest of the band. The band is then on "to stay." This is extremely important, for it is most provoking to have a lot of birds scored and a week later find half the bands off. To have the birds scored again costs money. The "Peerless" stays on. It CAN'T come off. Price, post paid, 30c. per dozen. State breed and sex when ordering.
H. B. DONOVAN, 124 Victoria Street, Toronto.

Fulton's book of Pigeons

Reduced to \$5.

Large full page engravings of all varieties.

New edition re-written right up to date. For sale by

H. B. DONOVAN, Toronto.

The 4th edition of James Rankin's book, "Natural and Artificial Duck Culture,"

is just out. It has been enlarged, revised and illustrated. A question bureau has been added, designed to answer all questions concerning the diseases, cure, management and feeding of the duck from shell to market. Price 25 cents.

Address H. B. DONOVAN, Toronto

W. BARBER & CO.

Importers and Breeders of all kinds of

Games and Game Bantams

Also Fox Terrier Dogs

OUR RECORD AT THE PRINCIPAL SHOWS:

Jan. 1891—New York. 18 firsts, 7 seconds, 1 V.H.C., 1 I.C., 3 ten dollars in gold, also 3 five dollars in gold. 1893—The World's Fair, Chicago. On 15 entries, won 33 firsts, 7 seconds, and 3 thirds. 1898—January—Buffalo, N. Y. 15 firsts out of 20 on Games. First on Game pen, also ten dollars in gold for best collection; also a good share of firsts on Bantams. 1898—January—The Ontario Show at London. We won more specials than all the Game and Game Bantam breeders, including the Champion Game Cup, the Champion Game Bantam Cup, and a wagon load of other Specials, too numerous to mention. 1898, September—The Toronto Industrial. 16 firsts, 11 seconds, 12 thirds and two medals. 1898, September—The Western Fair, London. 11 firsts, 12 seconds and ten thirds. 1898, September—Ottawa Central Fair. 16 firsts, 11 seconds, and 15 thirds. "Ontario," Toronto, 1899, 9 1sts, 13 2nds, 14 3rds and 6 specials. At the great New York Show, 1899, 8 1sts, 6 2nds, 3 3rds, 1 4th and 7 specials.

Birds for Sale at all Times and Eggs in Season.

242 Queen St. W. Toronto

same place, waste grains, siftings, buckwheat, barley, wheat, rice, etc., taking care not to give out more than what is really necessary, for, in the outside life, it is better that hens should cultivate the habit of searching for their food.

They should have a greater variety of food when enclosed in their pen and when food can no longer be found outside. Then, one should be careful to give them now and again different vegetables, as cabbages, potatoes, Jerusalem artichoke, etc., either raw or cooked, well crushed and either pure or mixed with bran, moulie, corn meal, etc. We should also know that grain favors the production of eggs, while other foods produce flesh. Fat hens never lay well. While the hen is occupied in producing fat, the production of eggs is at a stand-still and vice versa.

I said that meals should be given at exactly the same hour each day, yes, regularly and always in the same place, near the poultry house on a clean surface where nothing may disturb them. Poultry becomes very quickly accustomed to regular habits and will always be punctual at the "rendezvous." This affords a good chance to examine them, to count them, and note the condition of the flock. A glance may be easily given to the whole flock, but those which show some peculiarity, as sick ones, for example, would attract our attention, or the absent ones.

Pure, fresh water frequently changed should always be kept near the eating place.

PENNED UP POULTRY.

Fowls confined in a straitened place have not the many advantages of free poultry. It is thus with those that are kept penned up: they are not the happiest ones, so, we must give them the greatest care, and, by such means redeem the violent suppression of their own free will. We should not wish to deprive these but should feed them well in their house.

Having no outside exercise, all that they consume will be reproduced either as eggs or meat.

These do not require different food from free hens, but more of a variety each season. They have especially need of greens, such as lettuce, cabbage, sorrel, &c., well chopped up so as to avoid waste. It must be said, although not very creditable to them, that hens are really sloppy in their eating.

Although they are very careful about the smallest Godsend they may find in their self-interested wander-

ings, they are just as much wasteful when it is brought to them in abundance. They are active and busy workers when allowed to go and come but lack economical order and forethought when kept in and forced to a retirement which is not at all to their taste.

They look on the raiser as their manager and provider. This they feel and do not bother helping him or lessening his work. Otherwise, they accommodate themselves to almost anything. So newly pulled weeds from the garden are acceptable, only to avoid their wasting them which they are sure to do, put them in small hanging boxes within their reach. Prepared thus, clover and lucern are joyfully received.

We may give them, without the least fear of a cool welcome, refuse of beets from distilleries, barley from breweries, skins of grapes, apples and any fruit which spoils, and all the mixtures imaginable, chiefly those of bran and cooked roots.

The May bug, all kinds of worms and table scraps are great feasts providing they are not over done. Hens are very fond of these dainty tid-bits, but if they eat these exclusively or for a prolonged length of time, as we have already said, they will no longer give us the fine eggs or the juicy meat. The surest way to eat bad eggs and poor flesh is to keep hens exclusively on animal diet. Hens are omnivorous, that is to say, they are just as well fed by following their instinct and as well provided for by nature as by foods more or less exclusive, more varied. If one give them nothing but herbs or liquid food, grain alone, insects or hashed meat either would prove an equally harmful diet.

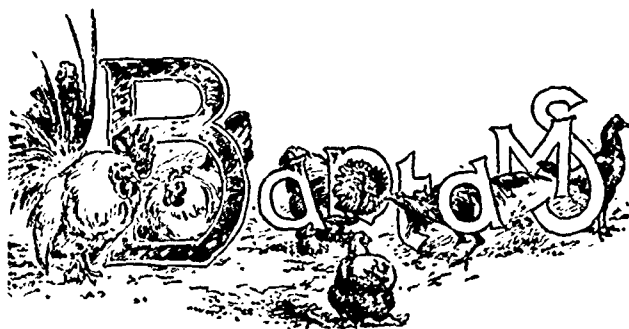
Herbs determine the chlorosis and bad condition of the organs of the body, grains are much too stimulating and produce very serious inflammatory irritation, animal food gives productions and inconveniences of a bad kind which we need not discuss here. It is a mixed diet that agrees better both with the appetite and constitution of hens which renders their productions better and abundant.

I insist that the hen is omnivorous, let her be what she is since she was made so by the Creator.

HURON COUNTY DATES.

The Huron Poultry and Pet Association have selected Jan. 30th, 31st, Feb. 1st and 2nd for holding their show. Please note. Yours truly,

JNO. A. WILSON, Sec'y.



PEKIN OR COCHIN BANTAMS.

BY P. PROUD, IN "THE FEATHERED WORLD."

THERE is no doubt whatever that next to the rose-combs in popularity comes the Pekin, or what was formerly called the Cochin China Bantam, owing to the variety having originated from China, the first pair we believe having been imported from Pekin about 40 years ago. At that time buff was the only color established, but to-day we have buffs, blacks, whites, cuckoo, and partridge; to say nothing of mottles or Ancona Pekins, which are the very latest additions to the breed. The original buff was quite different from the present-day type, both in shape and color, being higher on leg, longer in back and more inclined to be what is termed "vulture hocked," more after the style of the booted Bantam. Through the introduction of Cochin blood by breeding down from the larger breeds, the shape and feather, as well as color, has been greatly improved, whilst the size also has been reduced.

With the exception, perhaps, of the very best exhibition specimens of buff Cochins, the Pekin Bantam can lay claim to superiority over all the other varieties of Cochins, from an ideal standard of perfection point of view.

As an instance of the growing popularity of the Pekin I need only refer to Liverpool show of 1899, where in the two block rosecomb classes we find thirty-nine entries, and in buff Pekins alone there were no less than thirty-eight entries. Although the cup for the best Variety Bantam cock was secured by the winning rosecomb cockerel, the cup for the best hen

fell to the black Pekin, the honors being thus equally divided, and both these birds were pronounced to be as near perfection as it is possible to attain. Pekins can be kept under almost any circumstances, provided they are liberally supplied with fine sand for the floor of their houses and runs to protect the foot feather which is the only drawback to the variety. They are capital layers of tinted eggs, they lay early in the season, and the chickens are easily reared if the breeding stock are healthy. Of course, like all heavily feathered birds, unless the foot-feather of the male stock bird is cut short there will be a large percentage of clear eggs, but this can always be remedied by cutting the foot feather short in cocks and round the vent of the hens, and for this reason it is best to keep birds, especially for stock, apart from the exhibition ones. This is done by some of our most successful Cochin breeders, and is a system I can thoroughly recommend to everyone, as by doing so you will not only have a greater percentage of fertile eggs, but the chickens will also be much stronger and a pleasure to rear. Pekin hens are capital sitters and mothers, they very rarely lay more than a dozen eggs before becoming broody—this is one of the drawbacks to keeping Pekins. Again, for breeding the very best broody hens by crossing the Pekin hen with a Silky cock, their produce cannot be equalled. There is little wonder then that Pekins are such favorites, as even the "culls" in pullets will fetch 5s each as brooders, and find ready sale at this through an advertisement in "The Feathered World" during the hatching season from January to June. I have proved this over and over again, in fact, just through a casual mention of their being such reliable sitters in one of my recent articles I have been infested with applications from all parts for sitters, and have had to refuse quite fifty or sixty applicants, as I have none to spare. Sitting hens suitable for Bantam eggs appear to be a very scarce commodity indeed, and I am surprised that someone does not go in for these as a specialty. Where the fancier has plenty of accommodation I feel sure it would pay well. Unlike the rosecomb mentioned in my last, the Pekin offers little scope for the habitual faker or trimmer, apart from its tail, which, I am sorry to say, is more often left at home than sent with the bird to the show. The time has now come for this fraudulent practice to be discontinued, for it

is nothing short of fraud or dishonesty to show a bird with a pulled tail. A Game Bantam or a rosecomb Bantam with a pulled tail would not be acknowledged by the judge. Then, I say, why should the Pekin be made an exception, and be allowed to score in the prize list, as is now the case in 50 per cent. of the present-day Pekins?

I will now describe what I consider an ideal Pekin, and, for simplicity give the shape and type first, which is the same in all the varieties. In the first place, the Pekin is intended to represent the large Cochin in miniature, and should therefore be as near as possible the same shape as the Cochin. Commencing at the head, the comb should be single and finely serrated, and the smaller the comb the better, although it is almost an impossibility to breed Pekins as small in comb in comparison to the Cochin; eyes red, or nearly red, face red and smooth, lobes free from white, neck short and thick, chest broad and carried well forward, back short and broad, shorter the better; cushion full and nicely rounded, tail short and full, the feathers of the tail proper, twelve in number, being much softer in the quill than in any other breed of Bantam, and should be curved, not straight, as in other varieties. In addition, the cock's tail should be well furnished with side hangers corresponding in color with the body. The wings should be short and tightly tucked up, legs short as possible, so that the body almost touches the ground; the legs should be abundantly feathered right to the end of the middle toe without being "vulture hocked," which is a great defect in Pekins. The color of legs in all the varieties of Pekins should be yellow, and the richer the yellow the better, although it is a difficult point to get in blacks. Willow or green should count heavily against the bird in the show pen. The one prevailing weakness in all Pekins is scaly leg, but this can be prevented by proper care and attention in keeping the houses and runs dry and clean. Where the birds are kept on nice dry sand scaly leg will rarely appear.

Color will now engage our attention, commencing with the leading variety, Buffs. The exhibition cock should be a rich dark orange, not red; one uniform shade throughout, including tail and flight feathers, when the wing is opened out. The fluff should also be solid buff, not white or dusky, which is often the case. White or black in the flight feathers or tail is a

serious defect, more especially white, and a cock showing this defect should not be retained as a stock bird, for in all probability a great percentage of the produce would be useless. The hen to match the cock should be a rich golden buff, just a shade lighter than the cock; or to be more definite should correspond as near as possible with the breast color of the cock. This is also a capital guide in matching up the breeding pen. The color should be even throughout, not paler in breast than in body color, but one rich level buff all through free from white and black, and buff in under color or fluff as well.

From outward appearance a bird may seem a solid buff, but when examined carefully may be found slaty in buff, sometimes almost black. The flight feathers when the wing is spread out may contain more black or white than buff and the tail likewise. It is, therefore necessary in judging buffs to examine each specimen carefully for these defects which are often hidden by outward appearances. In mating up buffs preference should be given to a male bird of the darker shade, providing he is pure in flights and tail, especially free from white, which is highly important. When I say darker shade, I do not mean a red or dark cinnamon, but a rich, deep orange buff of a level color, not dark in saddle and pale in breast, the richer and deeper in under color or fluff the richer will the color of the produce: this is one of the most important features in buff breeding. The bird may appear to be an excellent top color but on examination his under color may be white or nearly black, both of which is detrimental to producing satisfactory offspring.

The hens to match this cock should be as rich and level in color as possible; don't breed from pale mealy hens, or those showing a mixture of white in the feather, and, above all, avoid those white in flights or tail. By selecting a pen as described, say not more than four hens and a cock, exhibition specimens of both sexes can be produced from the same pen. Unlike most varieties of Bantam, the Pekin does not attain perfection until after the second year, as it is not fully developed until twelve months old. They can be hatched as late as July with success and by hatching late the size and length of leg are reduced, both important features in Pekins.

WINTER SHOW DATES.

The dates so far chosen that we can learn of are as follows. Show committees should try as far as possible to avoid clashing of dates as it must necessarily tend to lessen entries.

Woodstock	Dec. 6, 7, 8.
Petrolia	Dec. 19, 20, 21 and 22
Ingersoll	Dec. 13, 14, 15.
Hamilton	Dec. 13, 14, 15, 16.
The Ontario	Jan. 8 to 12.
Montreal	Jan. 17 to 22.
Eastern Ontario	probably, 10th week in Jan.
Stratford	Jan. 15 to 20.
Galt	(probably), Jan 16, 17, 18.
Owen Sound	Jan. 16 to 19.
Boston	Jan. 15 to 20.
Toronto	Dec. 19, 20, 21 and 22.
Huron	Jan. 29, 31, Feb. 1 and 2

Other secretaries of shows in Canada are requested to send dates.

NOTES AND COMMENTS

UNITED POULTRY ASSOCIATION.

At a meeting of the committee of the Toronto Poultry Association held on May 25th and presided over by Mr. R. H. Essex it was decided to recommend the formation of an organization to be known as the United Poultry Association of Canada. The object of the organization will be to foster the poultry industry of Canada. It is proposed to admit to membership all local poultry associations, and the organization will be controlled by delegates from such associations. It will fix dates and form a circuit of shows. Circulars will be sent throughout Canada asking suggestions from local poultry associations.

MINORCA CHICK COLOR.

I have hatched some chicks from Minorca eggs obtained from a well known breeder. I noticed that they have two colors, yellow and black and that the legs of some are yellow and others part yellow and part black.

Having understood that thoroughbred Minorca chickens should be all black, including legs, I wrote the breeder and he says my chicks are O.K.

Is he correct or not? Yours, SUBSCRIBER.

This is no indication of impurity as the best colored mature birds often show much foreign color when hatched. It is impossible to say till first moult how the color will be, but it is doubtless all right if birds are from a pure strain and so guaranteed.

A SILVER MEDAL FOR PIT GAME.

Mr. E. H. Benjamin, who is an ardent admirer of the Pit Game as a utility bird, has kindly donated a silver medal, to be competed for at the Ottawa Show in September, and has so informed Mr. McMahon, the manager of the Association. Not less than six birds must be shown, to compete, three of either sex. The donor, of course, will not compete.

MR. H. W. PARTLO,

is in July leaving Dorchester to take charge of a large milling business in Woodstock.

A BUFF LEGHORN RECORD.

Mr. Henry Dunne, Toronto, gives us the record for five months, ending April 30th, of his buff Leghorns. as 914 eggs, having 11 birds in December and nine the other four months. He is giving the rose-comb black Minorcas a trial this season.

THE PROCEEDINGS

of the American Poultry Association at Toronto have been published in neat pamphlet form under Mr. A. E. Felch's direction.

CANADA'S GREAT EASTERN EXHIBITION, SILVER-BROOKE, QUE.,

is early in the field with the announcement of improved prize list, increased accommodation and Sharp Butterfield as judge. This show has grown by leaps and bounds and is run by the proper class of people, alive to the value of the poultry industry. Entries close August 28th and prize list may be had by addressing the Secretary, Mr. H. R. Fraser.

MR. J. F. MONCK

has moved from Owen Sound to Toronto Junction.

THE INDUSTRIAL EXHIBITION,

Toronto, prize lists are now ready and may be had by addressing the Manager, Mr. H. J. Hill.

THE BRANDON, MAN., LIST

has also been mailed, dates July 18 to 21. The Secretary will supply list on application.

MR. THOS. A. BROWNE,

of whom we all know so favorably, has been appointed to the important Government position of postmaster at London, on which we most heartily congratulate him. This will necessitate Mr. Browne's vacating the management of the Western Fair, which has proved so prosperous under his regime, and also the Secretaryship of the Poultry Association of Ontario, a position that is growing in importance yearly. While congratulating Mr. Browne we sympathise with his successors, whoever they may prove to be, as it will not be easy to find equity and energy combined in such nice proportions elsewhere. Besides, the work in its routine is difficult at first to grasp. Mr. Browne's resignation of the "Ontario" will reach the Directorate at the meeting in Toronto in September.

Here is what an influential local paper says of the new P.M. :

LONDON'S NEW POSTMASTER—MR. THOMAS A. BROWNE RECEIVES THE APPOINTMENT.

We understand that Mr. Thomas A. Browne, who has for many years acted as secretary of the Western Fair Association, has been appointed postmaster at London, in succession to Mr. Dawson, who will be superannuated, after long and faithful service, on July 1 next. We congratulate Mr. Browne on his preferment. During the years that he has been the right-hand man of successive presidents of the Western Fair, the new postmaster has shown himself to be a man of excellent executive ability, and his experience in managing affairs and men will have fitted him to make an ideal postmaster. Our only regret is his retirement from the position which he has so well filled in the public interest. It will be very difficult to get a successor equally equipped for the important duties which have year after year been performed with exemplary fidelity by him.

FROM LONDON.

Enclosed please find money order for \$6.50, the amount of my account. Never have I been so busy as I have been this spring, fixing up my new ranch, and the season has been so backward. I have a lot of chicks out but not as many as in former years at this time. In the early part of the season eggs hatched very poorly.

Yours sincerely, R. OKE.

London, May 15th, 1899.

Yours to hand, and glad to hear from you, and also

your bill. I can assure you it gives me the greatest of pleasure to pay your bill and I would not be without the REVIEW for any amount of money. It does me good to see it coming every month. Every fancier should have it. I sold quite a lot of stock and eggs this spring to parties who said they saw may add in REVIEW. Best wishes to all. Enclosed you will find amount.

Yours truly, WM. McNEIL.

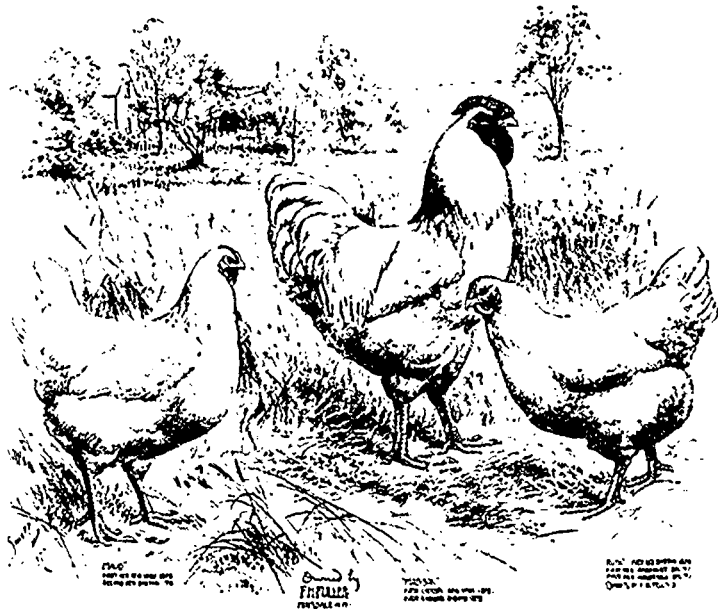
London, Ont., May 17th, 1899.

WHAT MR. BUTTERFIELD THINKS OF THE LANGSHAN PICTURE.

HE DOES NOT LIKE THE SHAPE OF BACK AND SAYS SO.

I WOULD have liked to have said something about the Langshan male, it was a very fine piece of work, but my idea don't accord with the outline of the Langshan cut. Should you ever notice as I do in judging at New York, where certainly all the big guns meet, and Sir, the cut is about a perfect likeness, as the Langshan Club endorsed. And I said to the Club at New York show several years ago that the back being too short makes the bird look as if there was something lacking. My idea, I said, was that the back should be lengthened out and if it was the bird would be much larger, and look larger, and be further away from the black Cochin family. And they apparently all came to the conclusion that I was right, for you could not find Dr. Robinson or Kirby & Smith showing a short backed bird since. And the reason why I did not send you my criticisms was that my Standard was away from home and I was not sure whether the revising committee had made many changes. I wrote three times to the party that I needed my Standard and last week it came to hand, or I had fully intended to give my views on what I consider the weak part of the bird. I am sure that the cut met my views in everything except length of back and body. I am sure if the cut had shown back say one-half as long again, the cut would be my ideal of a first-class Langshan in shape. Mr. Hill, of Weland, showed one this winter about the best I ever saw in color and very neat all over except too short in the back and body. The cut was grand all over and the coloring immense. And though I would not have you to believe that I am giving my ideas to be different to any one else, but it is my candid opinion and I am sure if you were to see some of the Doctor's Langshan ideals of what he calls great in Langshan shape, you would surely agree with me in the matter.

BUTTERFIELD.



TRIO WHITE WYANDOTTES.
 First Prize Winners at Amesbury, Haverhill, Boston, and Madison
 Square Garden, New York.
 Owned by F. H. Fuller, Hinsdale, N.H.

MR. FELCH'S TORONTO BANQUET SPEECH.

"UNCLE ISAAC" COMPLIMENTS THE LADIES AND
 GETS IN A FEW GOOD WORDS FOR THE OLD
 FAVORITE LIGHT BRAHMA.

Mr. President and Fellow Poultrymen and Women :

I am always at a loss to know what to say in an after dinner speech. To be amusing and to instruct is too often demanded of the speaker. The past in poultry culture is an open book to us all—it's future is only conjecture. Twenty-six years ago few believed it to be the largest agricultural industry we had, and its money-making power to the nation to-day few doubt.

Twenty years ago, in Boston, when speaking for the American Poultry Association, I cautioned the membership in making Standards to do so in the interest of the breed's practical worth, to beware of that dictation that when breeding to the Standard we diminish the egg production.

I was told at that time that our exhibitions had nothing to do with practical worth, that they were but pigeon shows. To-night I wish to take the same stand I took then and say that unless our breeds can

maintain a first-class position as egg producers and the carcass present a first-class broiler or roaster, that such breeds that fail in this will soon drop into the obsolete lists. I wish to ask you what breeds are the most popular to-day, which are sold in the largest numbers, which bring the largest prices as exhibition stock? Is it the practical sorts or is it the fancy or exhibition breeds, so-called?

The all-round good breed takes the popular position. Is it not a special merit? It is a case where specialists fail, the breeds that are broilers, roasters and egg producers, all combined.

The A. P. A., or I should say, the breeders who control the Association, will do well, then, to see that all legislation is in line with practical common sense, that will make to the very utmost the breeds money-earners in our yards.

Public records of the number of eggs laid are attracting attention but, breeder, the number laid is only half the story.

I travelled the length of one retail street and weighed the eggs they were vending, to find them to weigh their mixed eggs as our stores usually gather them, and they varied but little, 22 to 22½ ounces per dozen. I then worked among the breeds, to find that the average weight of Wyandotte eggs was less than 22 ounces, Plymouth Rocks 24 to 26 ounces, Langshans 26 to 28 ounces. Brahmas varied from 28 to 37 ounces, with the average 30.

I have quite a number of pullets that were hatched from 37 ounce eggs and the first pullet from them to come to laying, her first egg weighed 2¼ ounces, being at the rate of 35 ounces to the dozen. What does it say to us who pretend to control poultry culture in America? Why, that we must become practical poultrymen as well as fanciers.

If the first-class Brahmas will give us 150 eggs per capita. (I know individual records are shown us from 140 to 316 eggs in one year. These phenomenal records I am not dealing with now). When a hen gives us 12½ dozens that weigh 30 ounces per dozen, this is producing 23 5-16 lbs. of food supply, and Wyandottes must lay at the rate of, 195 eggs per year to be classed with them as egg producers; that the Plymouth Rocks, with an average of 26 ounces, must

lay 173 eggs to equal the Brahmas ; that the Langshan at her average of 27 ounces must lay 165 eggs.

Now, unless the breeds produce the same weight of eggs upon the same cost of grain, they cannot be said to be of equal merit, no matter what the number. Is it fair for a breeder producing 30 ounces of eggs to sell them for the same price as the breeder who sells only 22 ounces for the same money. Now, who is to blame if we allow it, but ourselves.

Is it not time we asserted our rights and forced merchants to respect the law that demands they should be sold by weight. Concerted action will bring this about, and we will see our exhibitions more evenly balanced and more breeds in the popular line, and many Bantam breeds will be found among them, while justice will be done the Asiatics and more breeders take them up. It is useless to deny that eggs will cost about the same price per pound to produce them.

Make Brahma and Minorca eggs a standard at 28 to 30 ounces, and 155 eggs the standard number for these two breeds ; Plymouth Rocks, gray and colored Dorkings, 24 to 26 ounces, the number to be 180 ; Wyandottes and Leghorns, 22 to 23½ ounces, and their number to be 187.

The question then comes home, do these breeds lay their relative number of eggs—which comes the nearest to the standard set for them? In this way you come to the real facts—which breed has the most merit for home consumption. When you cannot get a price to sell equal to worth for home consumption, you are being defrauded.

I have not amused you but I hope I have set you to thinking of some things that in the past have been lost sight of. There is no solid reason why our Asiatic breeds should lose cast and drop into the obsolete breeds. Adjust the egg trade and all will be more popular. It is your work, brothers, to see this reform brought about—when all work together 'he building moves.

Now, Mr. President, ladies and gentlemen, allow me to propose a toast, and that is to the great united family of breeders and fanciers, for you cannot separate them, on this continent, of which we are all children, no matter which flag waves over us.

So much for the practical, but the presence of the ladies at this banquet fills me with pride and appreciation for the Canadian fanciers, that they at this time inaugurate a practice which should continue at every poultry banquet of the future. Woman's hereditary education has peculiarly fitted her for the position of fancier and poultry woman. In all situations and callings where care as to minuteness and detail is demanded, woman excels man. She can think of many things at the same time, and allows "no iron in the fire to burn." If you could see, as I have seen, in my itinerant life as a judge, the solicitude and care

extended to their pets, the interest they take in all that pertains to poultry culture, you could not but feel, young man, that should you be fortunate in securing such as a life partner, you would be fortunate, indeed. But, God forbid that you succeed, if there is not in your makeup that reciprocity which would repay that care and solicitude, with interest, and you who are thus fortunate beware that you do not become jealous of her pets and that she does not become conscious that you are less worthy than her pets. This care and solicitude, which emanates from the maternal intrusion of the sex, fits her for the work, and thus does woman crystalize into our best fancier and poultress, for whatever her position in life she takes the blue ribbon of her class in competition with man. The whole question brings to my mind this thought, that no man is worthy of such a mate unless he has in his make-up sentiment that shall live with him, and he be able, though forty years have passed, though the hair is gray and wrinkled lines in the face, coming from the cares of motherhood, are visible to those not interested, unless he can see through and beyond it the brown tresses, the vivacity and affections that attracted him in his youth, and is able to be thrilled by that good old song, "To Me You Are as Fair as Then, Maggie, When You and I Were Young," or, with Holland, you can say and feel it :

" Oh ! woman, mother, woman, wife,
The dearest words that language knows,
Thy bosom with holy emotions rife,
With holy emotions glow,
Thou queen, thou angel of my life."

If you are equal to all this, then your marriage with the girl fancier I have alluded to will be the grandest mating in poultry culture, for from such have come the fanciers that have made poultry culture on this continent what it is to-day, and from such must we look to for those who are to carry the work forward to grander achievements in the future.

ON THE TRAIN.

As I left the hall, my son asked me if I understood the grand tribute to me, and toast, that introduced me to the audience. I told him I did not. I regret that I could not have said this much in answer to it : To be President of the United States should be worthy of the responsibility of any living man, but surely there is pride and personal satisfaction in having filled the office of President of that Association which controls the poultry culture of Canada and the United States. And to-night I would bow in courtesy and thus figuratively take the hand of the Queen, that grandest patroness of poultry culture, and to her who is her representative here to-night, who guides the helm of "The Feathered World," and through them the hand of every poultry culturist in every land.

With
Review Advertisers.

In this column we note from month to month new display advertisements 'changes' in same and the advent of yearly "for sale" ads.

Mrs. Shales will have four hundred head of young stock to choose from and has also a few of this season's breeding stock to spare. Write for particulars.

Buff Rocks on top. See Jas. A. Livingstone's new ad.

See A. W. Graham's new ad, for bargains.

H. E. Beckworth offers eggs at reduced prices and has birds for sale. Here is what one of his customers says. "The bird has arrived and to say that I am pleased would not be doing you justice. I am more than pleased. He is a grand good one and worth twice the price I paid for him. He is at least three or four points better than I expected for the money. I hope you have not robbed yourself in order to please me. If you should have occasion to write to me again, I would like to know what kind of drinking fountains you use. I shall want some eggs this spring, silver Polish, and may want some buff. You shall have the order for whatever I want in Polish. I must say again, that is the best bird I ever bought for the price, thanking you and wishing you success, I am resp'y. I. H. REAM.

Coral, Mich, May 27th.

P.S. -The bird came Friday morning at 8:20.

ACTIVE SOLICITORS WANTED everywhere for "The Story of the Philippines," by Murat Halstead, Commissioned by the Government as Official Historian to the War Department. The book was written in many camps at San Francisco, on the Pacific with General Merritt, in the hospitals at Honolulu, in Hong Kong, in the American trenches at Manila, in the insurgent camps with Aguinaldo, on the deck of the Olympia with Dewey, and in the roar of battle at the fall of Manila. Bonanza for agents. Brimful of original pictures taken by government photographers on the spot. Large book. Low prices. Big profits. Freight paid. Credit given. Drop all trashy unofficial war books. Outfit free. Address, H. L. Barber, Gen. Mgr., 356 Dearborn street, Chicago. 709

212 Queen St., West., Toronto, Jan. 5th, 1899, The West Chemical Company, Toronto

Dear Sirs, - Having used your Fluid in my hen houses and dog kennels as a disinfectant, and also a lice destroyer on chickens, and fleas on dogs for the past two years. I beg to state that I have found it cheaper and more effective than anything I have tried for similar purposes, and I have no hesitation in recommending it to my brother fanciers to do all the West Fluid Company claim for it.

Yours truly, W. BARBER.

H. W. Partlo is moving to Woodstock to take charge of a large mill and so must dispose

Our Bone Cutter Book

treating of balanced rations for all fowls, young or old, will interest any poultryman. It also tells about the Webster & Hannum—the only bone cutter receiving an award at World's Fair, Chicago. Also Clover Cutters and Grit Crushers.

It is free, but may save you many dollars on your feed bill. Write for it

E. C. STEARNS & CO., Box 16, Syracuse, N. Y.

of all his grand light Brahmas. He will accept reasonable rates for the lot to effect a clearance. Some of these birds were bought at high prices, and all are good and so should find a ready sale.

W. J. Roberts, owing to business which keeps him away from home, is compelled to dispose of all his stock. For particulars see his business announcement.

The Excellence Wire and Poultry Supply Company sends us a catalogue of appliances, &c., the best we have ever seen. It contains everything and anything required in the fancier's or breeder's yard, and as a work of reference is valuable.

In last issue we referred to Mr. R. McKay as one of our oldest Rock breeders. We were in error, as this is Mr. McKay's third year in this breed. His forte used to be light Brahmas. "Best bred" in his ad, should read "best barred."



Mr. J. H. Cayford, Box 1168, Montreal, is our Agent and Correspondent for the Province of Quebec. Any correspondence relating to subscriptions or advertising may be addressed to him.

SEND A STAMP FOR REPLY.

Enquiries not of a business nature must be accompanied by a two cent stamp for reply.

This paper is mailed regularly to its subscribers until a definite order to discontinue is received and all arrears are paid in full.

ACTIVE SOLICITORS WANTED everywhere for "The Story of the Philippines," by Murat Halstead, commissioned by the Government as Official Historian to the War Department. The book was written in many camps at San Francisco, on the Pacific with General Merritt, in the hospitals at Honolulu, in Hong Kong, in the American trenches at Manila, in the insurgent camps with Aguinaldo, on the deck of the Olympia with Dewey, and in the roar of battle at the fall of Manila. Bonanza for agents. Brimful of original pictures taken by the government photographers on the spot. Large book. Low prices. Big profits. Freight paid. Credit given. Drop all trashy unofficial war books. Outfit free. Address, H. L. Barber, Gen. Mgr., 356 Dearborn street, Chicago. 709

CANADIAN POULTRY REVIEW.

IS PUBLISHED AT
Toronto, Ontario, Canada,

BY H. B. DONOVAN.

Terms 50c. per Year, Payable in Advance.

ADVERTISING RATES.

Advertisements will be inserted at the rate of 10 cents per line each insertion, 1 inch being about 10 lines.

Advertisements for longer periods as follows, payable quarterly in advance:—

	3 Mths	6 Mths.	12 Mths
One Page.....	\$30 00	\$50 00	\$75 00
Two columns.....	20 00	35 00	60 00
Half Page.....	15 00	25 00	40 00
One column.....	12 00	20 00	35 00
Half column.....	8 00	15 00	25 00
Quarter column.....	6 00	10 00	15 00
One inch.....	3 00	5 00	8 00

Breeders' Directory, 1-5 col card, 1 year \$8; half year, \$5.

Advertisements contracted for at yearly or half yearly rates, if withdrawn before the expiration of the time contracted for, will be charged full rates for the time inserted.

Back and front cover pages a matter of special correspondence

These are our only rates for advertising and will be strictly adhered to. Payments must be made invariably in advance. Yearly advertisements, paid quarterly in advance, changed every three months without extra charge.

All communications and advertisements must be in our hands by the 15 to insure insertion in issue of same month. Address, H. B. DONOVAN

124 Victoria Street, Toronto, Ont.

Twelve Adv. \$2.50

An advertisement of 30 words will be inserted EACH MONTH for one year in this column for \$2.50, paid in advance. Advertisements may be changed every month if desired.

This Coupon is good for one advertisement of 30 words in the "For Sale and Exchange" column THE CANADIAN POULTRY REVIEW, Toronto.

To meet the wants of advertisers who are continually using this column, and who find it a great trouble to be constantly remitting small amounts, we have adopted the plan of issuing Coupons (as above) good for 30 words each, 4 for \$1. Any one buying these Coupons can use them at any time in lieu of money when sending in an advertisement. Not less than four Coupons sold.

THESE RULES must be followed:

1. Payment MUST be made in advance, the amounts are too small to permit of bookkeeping.
2. Write copy for ad on a separate sheet from any other matter, and on one side of the paper only.
3. See that ad. is fully prepaid as per rate above.
4. Say plainly how many times ad is to be inserted
5. Give heading under which it is to appear.

Unless above rules are followed we cannot guarantee correctness.

Advertisements of 27 words, including address, received for the above objects, at 25 cents for each and every insertion, and 1 cent for each additional word. Payment strictly in advance. No advertisement will be inserted unless fully prepaid.

FOR SALE OR EXCHANGE.

Bantams.

C. H. Proper, Edmeston, N.Y. America's best golden and silver self-bright white and buff faced Polish Bantams. Highest honors at New York for three years in succession. 639

Eggs from white Polish Bantams \$3 per 13, buff Cochon Bantams \$2.25 per trio; eggs \$8 per 13. Davton Murphy, Wellington, Ont. 739

Brahmas.

Light Brahmas for Sale Four male birds two years old, two one year old, and some good pullets. Eggs in season. John Cameron, Brantford.

For Sale Cock and three hens, light Brahmas, eminently good. Speak quick. A. H. S. Ashton, 19 Orchard St., London, Ont.

Cage Birds, etc.

English Birds Imported, Goldfinches, Linnets, Skylarks, Thrushes, Jays, Starlings, etc. Mocking Birds, Cardinals, Fancy Finches, etc., at Hope's Bird Store, 169 Queen Street West, Toronto.

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Partridge Cochins, barred Rocks and black Javas; eggs and stock for sale; a pen of Javas, cock and four hens, good ones; also Mastiff dog, 15 months old and a beauty. L. G. Pequegnat, New Hamburg, Ont. 11

Isaac J. Rank, of Tavistock, Ont., breeds white and barred Plymouth Rocks, black Minorcas and buff Cochins in accordance with the Standard of perfection. My stock will bring you success. Eggs \$1.00 per 15. 639

Brown and Buff Leghorns—Eggs direct from the winners. See ad. elsewhere. Player, Nassagaweya. 639

I will have a few settings of eggs to spare this season from birds scoring from 90 to 91 points, including black Minorcas, silver spangled Hamburgs, brown Leghorns, Polands, Red Caps and Sebright Bantams, at \$1.50 a setting. Colin W. Campbell, Goderich, Ont. 639

For Sale One trio pyle Games, one golden Hamburg hen, Bants, golden Sebrights, white Cochins, one black African cockerel; white Fans, black Carriers. Wanted in exchange, black African hens. Joseph Malkin, Barrie P.O., Ont.

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Eggs from my Prize Winners in white Rocks, \$2.50 per setting; white Wyandottes, light Brahmas, black Minorcas, \$2 per setting; white Cochin Bants, black Africans, red pyle, golden Sebright, B.B. red Game, \$2 per setting. Joseph Malkin, 27 Ross St., Barrie, Ont.

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For Sale - One trio of Indian Game, black Pouters, white Fans and red Tumblers. Will sell cheap if taken at once. O. R. Jones, Bowmanville, Ont.

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Pekin Duck Eggs - Very fertile, also white Wyandotte eggs for sale. Mrs. Mary T. McGregor, Davisville P.O., Ont.

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Eggs From Prize Winning Strains of white Minorcas, white Wyandottes, S.C. white and brown Leghorns, after May 20th \$1.25 for all varieties. Also a few pairs of birds in white Minorcas, white and brown Leghorns and pullets in white Minorcas. Also a good barred Rock hen for sale. Meild Bros., Constance, Ont. 999

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SELL FOR HALF PRICE

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