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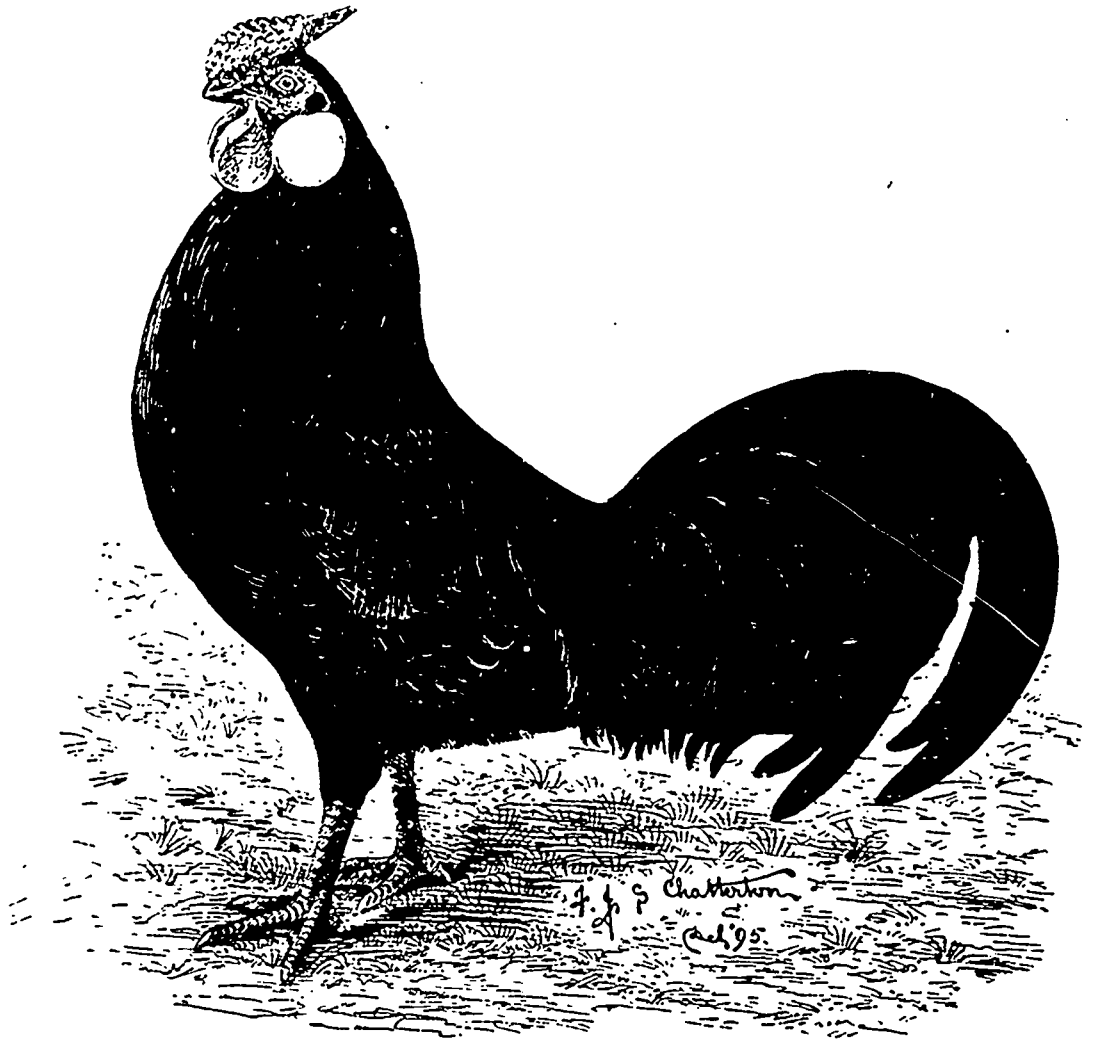
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An English Black Hamburg Cock

THE CANADIAN POULTRY REVIEW

DEVOTED TO A
POULTRY, IN ALL ITS BRANCHES

Pigeons, Cage Birds, Rabbits & Pets.

VOL. XX.

124 VICTORIA STREET, TORONTO, AUGUST 1897.

No. 8

NOTES AND COMMENTS

SHOW DATES.

Montreal, August 23rd to 27th.
Sherbrooke, August 31st to Sept. 5th.
Toronto, Sept. 2nd to 10th.
London, Sept. 13th to 17th.
Ottawa, Sept. 20th to 24th.

ENTRIES CLOSE.

Montreal, August 16th.
Toronto, August 21st.
Sherbrooke, August 24th.
London, Sept. 9th.
Ottawa, Sept. 14th.

POULTRY JUDGES.

Montreal—Not yet announced.
Sherbrooke—Butterfield.
Toronto—Butterfield, Jarvis, Smelt.
London—Butterfield, Jarvis, Smelt.
Ottawa—Butterfield.

THE "BIG" ASSOCIATION.

THE year's statement for the Poultry Association of Ontario will be found elsewhere in our columns, and must be a source of satisfaction to the officers of the Association, and particularly to Mr. Browne, the energetic and economical Secretary. A comparison with the statement of last year will show that although an increase of one hundred and sixty-three dollars in the prize money paid occurs, the bank balance is augmented by twelve dollars, now amounting to \$100. The membership last year numbered ninety-seven, this year one hundred and thirty-nine, almost a fifty per cent. advance. This is a healthy sign, and should go far to combat the derogatory hints which, we learn, have been whispered in the official ear of the Department. In the face of the excellence of the last

show, the splendid meetings held, and now the grand financial showing, we could not, even supposing we were not altogether in favor of the methods of the directorate, do other than offer THE REVIEW'S most distinguished and warm congratulations to both members and officers alike.

MR. S. M. CLEMO

has disposed of his business in Galt and intends locating in Welland. Correspondence should be addressed to him there.

AT WINNIPEG,

at time of writing, Mr. Jarvis is judging the poultry. We look for a brief report from him for next issue. The show we learn was a success in numbers and quality but rain spoiled the pleasure of it.

"GRANDPA" JAS. MAIN,

has just returned from a hasty trip across the pond and stopped off at Toronto on his way home on July 13th to give us a private glimpse of the black-reds he brought back with him. They consist of two pairs old and two pairs young of Capt. Heaton's and Mr. Garns stock. One cock was third at the Royal a big reachy bird. The other is a Heaton bird, grand all over, splendidly cut away, short hackle and great reach, which he evidently has been taught to make the most of, as he stands up like a pole. He is a bird that should do some winning. We liked the better of the two cockerels, a big reachy bird, hard in feel, long on his limbs and with a good head. The pullets are young but show much quality, one a sweet youngster from Capt. Heaton's yards, beautiful long clean head, well up on her pins. The hens are good and all in all Mr. Main should be able to make it interesting in black-red circles this fall.

Poultry, LONDON, ENGLAND,

of June 25th draws our attention to the fact of the omission

in June REVIEW of credit to that journal for Dr. H. B. Greene's able article on Diseases of the Egg Organs, for which we apologize. We regret it was overlooked at the time, but hope this amend may help us to retain our lively contemporaries good favor. It was quite unintentional as this is a point on which we are most particular and on which in the past we have frequently suffered ourselves.

EGGS FOR SHIPMENT.

Speaking before the committee of the House of Commons on agriculture, Prof. J. W. Robertson, commissioner of agriculture and dairying, voices an old complaint. Prof. Robertson said :

"I find the egg business in Canada during the past few years has been managed in such a way that eggs have been so mixed, no matter by whom handled, that eggs two days old, two weeks old, and three weeks old have all gone into the same case. There has been no effort made to keep separate the eggs collected on the several trips. If the fresh flavored eggs are not kept separate from the time they are originally collected they can never be separated afterwards. I have seen all kinds of tests made and have got information from the shippers. In my opinion, looking through an egg at a light only does one of three things ; it gives you information whether the position of the yolk has changed by settling, or whether the egg is decayed or is partly hatched.

The egg may have the yolk in the centre and be apparently not decayed, and yet be a stale egg. The English buyer does not want that class of eggs. If he gets one or two of those in a dozen he says he does not want to buy them. If they go into cold storage stale, they will come out in the same state. If we sent over strictly fresh flavoured eggs to England I think we could get perhaps six cents a dozen more for them.

Question by Mr. Cochrane.—Suppose an egg is put into a dark cellar, how long will it remain fresh ?

Ans.—I would like to illustrate my answer. Let us take this tumbler as representing an egg. When the egg is laid there is over it a slight film of albuminous matter which protects the eggs from the admission of spores through the shell. Mostly that glare is rubbed off by handling. That egg may begin to decay in one of two ways, either by fermentation or hatching. If the egg be exposed to any foul air, some spore or bacteria from the atmosphere may adhere to the shell ; in that way decay commences. If you go into a store and watch an expert dealer testing eggs, he breaks one, pours out the contents and smells the shell. Evidently he knows where decay first begins. Professor Saunders and

myself are planning some experiments with a view to obtain a knowledge of something which will sterilize the exterior of the shell and so prevent decay.

Ques.—You think there is a good deal of importance to be attached to the way the eggs are gathered ?

Ans.—A great deal indeed.

Ques. by Mr. Carpenter.—Gathering twice a week would not be sufficient ?

Ans.—I think this will be the outcome of experiments from our work. If the eggs are collected twice or three times a week and are put through a sterilizing solution to kill any germs, and then put into cold storage, they would remain in a fresh flavoured condition.

Ques. by Mr. McGregor.—What do you think of oiling eggs ?

Ans.—The people on the other side of the Atlantic object to a greasy egg.

SPECIAL IMPORTANCE

is attached to the regular collection, the sorting by size and color, and the proper cold storage of eggs intended for shipment. Gain the confidence of the Englishman, send him a good article and he will pay the price.

MR. A. W. GRAHAM

is now offering several of his breeding pens for sale to make room for young stock. They consist of black Langshans and golden Wyandottes.

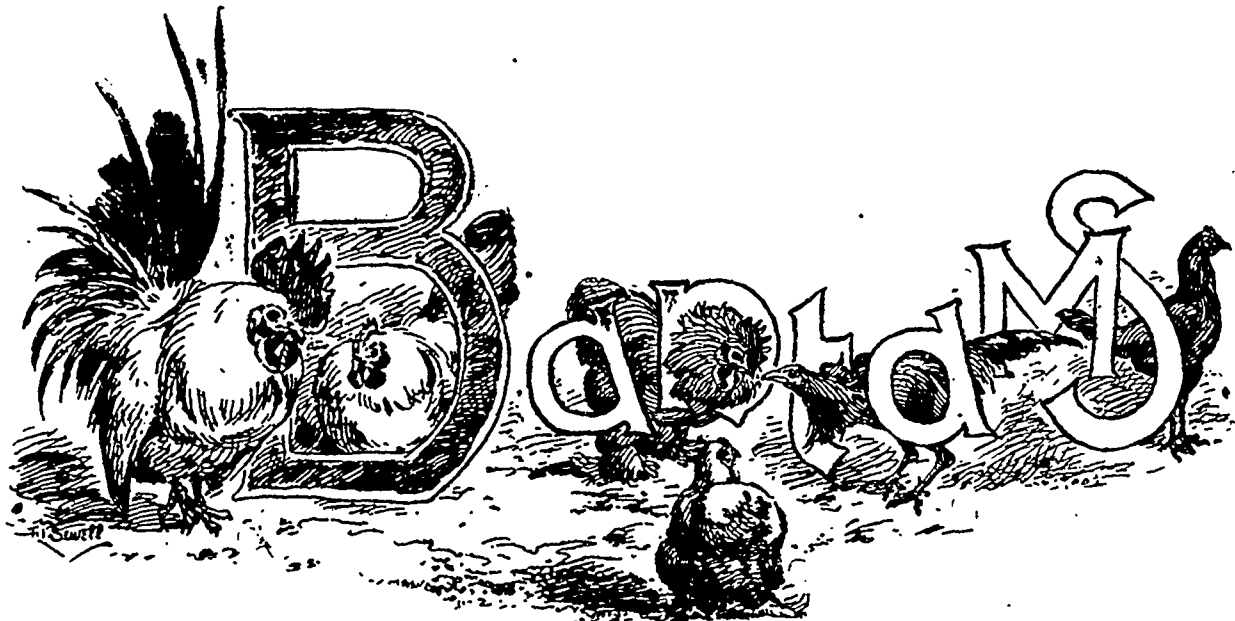
AT THIS TIME

when many exhibition fowls are shut up for the moulting process, a liberal supply of green food is an absolute necessity. For fowls in confinement nothing is better than lettuce it is easily grown and in strong land comes in with a rush. It may be sown broadcast and thinned out as it grows. The waste or specked tomatoes a little later on are also one of the best tonics obtainable. Keep away from the medicine chest if possible.

NEW HAVEN, CONN., POULTRY ASSOCIATION.

THIS society will give an exhibition in New Haven, Dec. 29, 30, 31, and Jan 1st. We always give good shows and pay all premiums in full. Premium lists issued in December, and the advertising rates reasonable.

N. D. FORBES, Sec.,
Montwese, Conn., U.S.A.



GAME BANTAMS.

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

II.

ALL varieties of Game Bantams should have the same typical shape, a shape characterized by "reachiness." The head should be even and long, the neck even and slim, with as close a hackle as possible; the back rather short and with a downward slope; the tail short, carried but a little above the horizontal line, closely folded, and in the male furnished with very narrow sickles; the shoulders should be broad and the wing fronts prominent; the breast not protuberant but almost even with the wing fronts; the body compact and the fluff close; and the legs should be long in thigh and shank, and should make a broad angle at the hock and be straight to avoid the fault of being "cow-hocked." This gives us a bird that looks racy in all his lines, and yet, despite this racy look will appear to have great strength and vigor—a combination of airiness with power. Given such a bird, and whatever the color, it cannot fail to be a very "catchy" one.

This is the shape Game Bantam breeders seek to obtain, and considerable success meets their efforts, for in nearly all varieties a fair approximation to perfection of shape can be found. Yet no bird is absolutely perfect. There is always

something left to be desired. Fortunate that it is so. It we could reach absolute perfection, if all our ends were attained, the charm of breeding would disappear. It is the hope of attaining that spurs us on. Was it Jean Paul Richter, or some one else, who said, "If I were offered truth or the search for truth I would unhesitatingly choose the latter?" And similarly a Bantam fancier might say, "If I were offered perfection in my fowls or the attempt to attain perfection, the latter would be my voluntary choice, for the former would pall with possession, but the latter has never-ending charms." We sometimes almost despair when matings go wrong, and when the labor seems wasted through the tendency towards variation, but if variation did not exist, then all hope of improvement would cease, and breeding Game Bantams would have less charms than raising white beans, for white beans do vary. All skill would die with this permanent condition. Mating would be nothing more than placing a male with a number of females. A boy of ten would equal a veteran of seventy, for in neither case would skill count. Such a state of affairs would destroy the poultry show and the poultry fancy. Fowls might still be kept, because they would lay eggs and furnish palatable flesh, because they are a source of pecuniary profit. Even Bantams might be kept because they are really profitable fowls. But the interest would be gone—the glory would have gone out of the day, the charm of poultry-breeding would be dead.

A SUCCESSFUL SEASON.

MR. E. O. ROSELLE, in the *Country Gentleman*, relates his experience on a matter of interest to all breeders.

A successful breeding season is the delight of the poultryman's heart. Whether the season just finishing has been up to the mark with the majority, is impossible to say. We hear rumors that eggs have not hatched out over well, yet this is an annual complaint, and but little attention should be paid to it. With all the advantages of modern incubation, both natural and artificial, and the better understanding with regard to the care of the old stock, eggs should be as fertile one year as another, and they should hatch equally as well. Some seasons hens are inclined to sit early and others late, but as we are no longer dependent upon the whims of Mistress Biddy, it is the breeder's fault alone if he refuses to use an incubator and waits for the tardy hen to make up her mind to hatch him some chicks. I will venture to say that the breeders who use incubators and know how to run them successfully utter fewer complaints about poor hatches than the conservative hen men.

Artificial incubation is undergoing changes every season, and improvements are constantly being made, not so much by the inventors, but by the operators. In fact, the operators usually make valuable suggestions gratis to the manufacturers, and they are gladly accepted and added to the revised catalogues. The stumbling-blocks of a very few years ago have been removed, and to-day, or rather during this hatching season, the machine men have had many advantages and better opportunities for greater success than the last. The two great points of moisture in the machines and heat in the brooders have not yet been thoroughly tested to satisfy the majority.

A few remarks on my own season—the most successful I ever had—may be of benefit to the discouraged ones.

To begin with, I discarded the hen as a sitter and hatcher last year and made up my mind I had had trouble enough with her, and hence I used machines entirely. I shall not write a *record* of my season, but simply give a few points which I consider led to my success. First, I used no moisture whatever in my machines (Prairie State.) My hatches averaged about 88 per cent. of all fertile eggs. After the chicks were all out, I left them always 36 hours in bottom of machines, and some hatches as long as 48 hours. The result of this was strong, active, hungry youngsters, ready to stand the change to the brooder and strong enough to keep their legs under them and ready to eat at once. Every hatch was removed at night to the brooder and started at

90°. The next day they all remained almost constantly outside of the hover in the indoor runs and were ready for their feed every three hours. The second night I made it a practice to reduce the heat to 85°, and kept it so for generally one week, sometimes a little less than a week. On the fourth day I let them out-doors, to run in and out freely, and found they would invariably cover the entire length of the outdoor run (25 feet) almost continually. I must state, however, that my first hatch was not placed in the brooder until about April 1; hence the weather was suitable for outdoor exercise.

My feed was the same I had used for two previous years—Spratt's chick meal, with the addition of bone meal and a handful of small-size grit to every mess, thus compelling them to eat a little of the grit with the food. Instead of feeding every two hours, I fed about every three, and sometimes at longer intervals, taking pains to note that they were quite hungry before feeding them. Keeping them hungry compelled them to exercise and helped to keep them healthy. After one week, I fed them small grain and sifted cracked corn and reduced the Spratt's food to morning and night feed. I gave them green food usually the second day and continued it daily—first, oats grown in pans, and then, as soon as obtainable, lettuce. Charcoal and water were always before them; also a box of chick grit.

The result of the above system gave me strong, active chicks, and less bowel trouble than I ever hoped to see in any flock. In fact, I have had so little of this trouble that it has hardly been noticeable.

At the end of a week, the heat in the hover was reduced to 75°, and kept so until they were five weeks old, when they were shut out entirely from the heat and hover and left at night to the indoor runs; and if the weather proved to be warm, the windows were left open all night. The indoor runs are six feet long; hence the chicks were about six feet or less from the open windows and sufficiently protected.

To follow the course I pursued after the chicks were five weeks old, I placed them in the upper end of brooder house where they had the run of two or three acres free. Later I separated them, dividing them into flocks of fifteen or twenty, and placing them in dry-goods boxes for coops, giving them free range and feeding them three times a day—a mash in the morning, and whole grain noon and night, all they would eat. At present I have about fifteen hundred very strong, active chicks, of different ages, but all healthy and fine in every way.

I tried an experiment with my last hatch, which came off July 2. As the weather began to get hot, and I did not care to run my brooder-house stove to accommodate 78 chicks

I shut off the heat entirely when they were six days old, and they did not suffer any bad effects, nor did I lose one of them. They are all alive to-day, July 12, and no sign of bowel trouble or any other sickness. These were let out-doors when but two days old, and did as they pleased, running in and out.

I attribute my success to attention to the following points :

1. Keeping chicks in machine at least 36 hours after all were hatched.
2. Feeding only when hungry and not too much.
3. Grit and bone meal mixed with all soft feed from the first day.
4. Reducing heat in brooder as quickly as possible and as soon as chicks could stand it.
5. Plenty of fresh air and exercise and as soon as possible after being placed in brooder, weather permitting.

My method has given me the strongest lot of chicks I have ever had. My mortality has been remarkably small, except that I lost about one hundred and fifty from rats. When my brooder contained twelve hundred chicks I would throw out perhaps two or three dead ones each day. Just as soon as they had a more extended run and were separated and given free range, to find a dead chick was a surprise.

I do not consider that my success is phenomenal or that my system is at all extraordinary. It was all based on common sense and judgment. Many other breeders may have done better, but I know a few who did not do as well and it is for the latter that my experience is written. Beginners are too much the slaves of book instruction ; they become automatons and do not exercise any sense or judgment. What will succeed with one man may fail with another. Experiments may be expensive, but they are our best teachers.

Incubators run best in cellars, but all cellars are not alike ; hence one needs to experiment with his own to understand its qualities, especially as to dryness or moisture. Mine happens to be a trifle damp ; therefore my machines ran best without moisture, and with slides wide open from beginning to end of hatch, except during the pipping stage, when they were closed two-thirds. All hot water-piped brooder houses are similar. Mine is planned after the Prairie State sectional brooder ; hence by the raising or lowering of the floor of hover I can raise or lower the heat for the chicks, bringing them close or dropping them away from pipes. The food question is a personal study. If chicks grow and thrive continually from the start, then the food is right, no matter what is used. If you are annoyed with bowel-trouble, then the food or heat, or both, are to

blame. Chicks will never become chilled if they have suitable heat. I consider that too hot brooders have killed more chickens than all the food used by the whole world of breeders. If chicks become accustomed to less heat gradually, they will grow strong enough to do without it entirely in a few weeks. This is especially true from April on during the regular hatching season.

To those who have had poor hatches and have failed to raise the survivors, my experience may be of benefit for another season. Do not sell your machines ; if they are of standard make and reputation, try them once more. If your brooders have failed to work, experiment with them and make them work. If the system is faulty, try another, remembering always to have something in which you can control the heat. Brooders which run constantly at one temperature, will not do for chicks of different ages. Use common, practical sense, and let theory and fairy tales alone, and perhaps your next season may be your best.

POULTRY ASSOCIATION OF ONTARIO.

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR EXHIBITION 1897, HELD AT CITY OF GUELPH.

Receipts.

Balance Carried Forward	87 95
Ont. Government Grant (\$900) less Discount....	884 25
Entry Fees per Register	745 50
Members' Fees per Register.....	139 00
Specials Donated.....	39 00
Interest From Bank on Deposits.....	2 70
	\$1,898 40

Disbursements.

Special Prize Donated Fat Stock Show.....	10 00
Prizes paid at Guelph, including Commission....	1,318 75
Guelph Loca. Association for Expenses	106 12
Judges' Fees	125 00
Secretary's Salary.....	150 00
Printing, advertising and stationery.....	36 25
Postage, Express, Telegrams, etc.....	17 35
Secretary's Expenses at Guelph	7 15
Stenographer (Gov. Report and Minutes).....	10 00
Freight on Return of Coops to London	17 81
Balance.....	99 97
	1,898 40

Audited and found correct.
[Signed]

H. B. DONOVAN,
Auditor.

Toronto, July 22nd, 1897.

PROFITABLE POULTRY KEEPING.

BY T. A. WILLITTS, TORONTO, ONT.

(Continued.)

HERE are two ways of marketing the chickens. One plan is to sell them alive, the other to market them dressed. Broilers simply require to be plucked without tearing the skin, the head and feet should be left on, and the entrails are not drawn.

It depends on circumstances which plan is the more profitable. For my part I much prefer to sell them alive, as I have no great fancy for plucking chickens; in fact, I believe I would rather saw wood at any time, and I have no particular hankering after that form of athletic sport. However, every man to his taste. I believe the result will be about the same whichever plan is pursued. Marketing the chickens properly is half the battle. If you go to town with a dozen chickens nailed up in an old soap box with their heads sticking out through the slats that confine them, and go hawking them about from store to store with a sheepish manner that would lead people to think you had stolen them, you will have a hard job to sell them, and if you do it will be to some wily customer who will offer you forty or fifty cents per pair when they are honestly worth a dollar.

To sell chickens successfully involves the same principles as selling any other line of goods. Get a connection among the best dealers in the trade, give them to understand that you are in the chicken business, and impress them with the idea that it is no *small potatoes business* either; tell them that you purpose raising nothing but the very choicest market poultry, that you will have some to offer in the near future. You will undoubtedly be asked to give them a call when your chicks are ready for market; you will be expected, and if your stock proves to be as good as you promised, you will have no trouble to get the gilt-edged price, because you have created an interest in your goods and the people want them.

People who think it too much trouble to do all this in order to sell chickens may rest assured that if some other fellow does the selling for them that they will have to pay for his services. Before the prices of chickens begin to decline too rapidly the market poulterer should dispose of the most undesirable of his old fowl; if you wait until the market is flooded with spring chickens you will scarcely be able to give them away; these birds should be fattened and sold in as attractive form as possible. It is the attention to details that commands success in the poultry or any other business.

The poultryman must protect himself, not only from the cupidity of the city dealer who would buy his chickens at half their real value, but also from midnight marauders, skunks, weasels, foxes, and the most cunning fox of all is man. It is harder to protect yourself against him than against any other varmint; but we can fix him too. The chicken thief is the most contemptible of all thieves, in my opinion, and deserves the roughest treatment we can extend to him.

To grow chickens to marketable size and leave them unprotected, so that any sneaking thief can come along and walk off with the lot whenever it suits him is, in my opinion, the height of folly.

To allow millions of lice to suck the life-blood out of your fowls or chickens is even worse, because this has certain results which end in ruin; the midnight thief may never come, but the result from the presence of lice is certain and cannot be dodged. Keep the whitewash brush going during the hot weather, pour coal oil on the perches, clean out the nest boxes, see that the brooders are cleaned daily, and if this course is persistently followed lice will be a rarity.

(To be Continued.)

VENTILATION.

BY C. F. WAGNER, TORONTO.

NOTICE in July number of REVIEW a few remarks about ventilation of hen houses, top ventilation being condemned as dangerous to fowls. It is true it is very risky if the ventilator is so situated that the birds can roost underneath it.

About fifteen or sixteen years ago I experimented in ventilating my hen house by putting a box about twelve feet long and about ten inches square down through the roof to within two feet, or so, of the floor. I had a slide in the pipe which could be adjusted at any time to shut off the ventilation when necessary. My reason for bringing the pipe so low down in the poultry house was to allow the foul air (which is the heaviest and lies nearest the floor) to be drawn off through the pipe and still retain the warmer and purer air in the upper part of the hen house, but I found there was a down draught instead of one up the pipe. Had the vent pipe been heated in some way then it might have drawn off the foul air, but in poultry houses artificial heat is not used in summer, and in most of them scarcely any in winter. I had to abandon that system of ventilation, as it

was draughty. I found it very risky to have any openings in more than one side of the hen house. It matters not how many holes are made in one side, but holes in opposite sides or ends, or through the roof, will cause a draught which should be avoided.

I found the only satisfactory way to apply top and bottom ventilation together is to use the hole which the fowls pass through as a bottom ventilator, and have another hole about the same size directly above it at the ceiling of the poultry house, these holes have sliding sashes or boards over same which can be opened and closed when desirable. In summer I have these holes open all the time, and the birds cannot possibly sit in a draught, because I have the perches at the opposite side of the hen house to where the holes are. I trust, Mr. Editor, my experience may be of some benefit to others. I paid dearly for what I have learned in ventilation.

TWO INTERESTING EXPERIMENTS IN FEEDING.

MR. W. P. Brooks, in the Massachusetts Station Report, states the results of two feeding experiments. In the second experiment, the results from feeding dried meat meal rather upset our own opinions and returns.

Two experiments, each consisting of two trials, were made with light Brahma and barred Plymouth Rock hens. In the first experiment the value for egg production of animal and vegetable food as the chief source of protein and fat was compared. Two trials were made with two lots of hens. "Both lots had pure water, artificial grit, and ground oyster shells always before them, and all other conditions were made as nearly as possible alike." The two lots were kept in houses exactly alike in construction, each with nesting and laying room 10 by 12 ft., and scratching shed 8 by 10 ft. in size. In the first trial lasting from December 9, 1894, to Feb. 12th, 1895, one lot of hens was fed soja bean meal as a source of protein and fat, with cut alfalfa, oats and middlings in addition; and the other lot was fed meat meal, with boiled potatoes, ground clover, wheat, wheat middlings, and cut bone in addition. The nutritive ratio was kept substantially the same for each lot.

In the second trial lasting from January 1st to October 1st, 1895, one lot was fed linseed meal and cotton-seed meal as a source of protein and fat, with wheat, oats, bran, and middlings in addition; and the other lot was fed meat meal with wheat, oats, wheat meal, bran, and linseed meal

in addition. The nutritive ratio was kept substantially the same for each lot.

The results are briefly summarized in the following table:

Vegetable vs. Animal Food for Hens.

Food.	Duration of experiment. Days.	Daily cost per fowl. Cents.	Number of eggs.	Water free food eaten per egg. Pounds.	Cost per egg Cents.
Vegetable food, first trial . .	64	0.21	11	23.830	0.3410
Vegetable food, second trial	153	.29	400	.917	.0150
Animal food, first trial . . .	64	.24	77	3.554	0.550
Animal food, second trial . .	153	.33	622	.773	.0115

"In the above estimate of cost no charge is made for labor and no allowance for the droppings."

The young pullets used in the first trial were molting during the second trial, which in the author's opinion accounts for the small egg production.

"The results are decisive against the vegetable food and in favor of the animal in so far as effect upon egg production is concerned. The fowls receiving animal food were, moreover, in much better condition at the close of these experiments than the others."

The second experiment was made under the same general conditions as the first, and included 2 trials. The value for egg production of dried "animal" or "flesh" meals was compared with cut fresh bone. Some other feeds were given in addition, but the nutritive ratio was kept substantially the same. The results are summarized in the following table:

Flesh meal vs. cut fresh bone for hens.

Food.	Duration of experiment. Days.	Daily cost per fowl. Cents.	Number of eggs.	Water-free food eaten per egg. Pounds.	Cost per egg Cents.
Dried meat meal, first trial . .	64	0.266	185	1.185	1.70
Dried meat meal, second trial	153	.280	417	1.051	1.52
Cut fresh bone, first trial . .	64	.248	163	1.154	1.70
Cut fresh bone, second trial .	153	.300	444	.978	1.43

"These results are rather indecisive, as in one experiment the meat meal and in the other the cut fresh bone gave the better results, as measured by egg production. The condition of the fowls receiving the meat meal has, however, been uniformly better than in the other lots."

The author remarks that it is difficult to feed cut bone so that it is evenly distributed.

"Some hens almost invariably secure more than their

share, and this is equally true, whether the cut bone is scattered or mixed in a mash. The result is frequent diarrheas. The meat meal, on the other hand, can be evenly mixed in a mash, so that all fowls share alike, as it can not be picked out. Our results indicate that it is a safer feed than the bone; it is also a much cheaper feed; and, if it will give practically as many eggs, it is to be preferred. This experiment will be repeated."

WEEDING-OUT AND SEPARATING THE CHICKENS.

BY J. P. W. MARX.

WEEEDING-OUT, or decreasing the number of one's chickens to avoid overcrowding, and separating the sexes, are two matters which ought to have attention, yet are often neglected on account of the difficulty in carrying them out; over and over again we try to rear more chickens than the ground can carry, and as often we meet with the resultant failure. Hatching chickens by hens or incubators is all very captivating, but the wise breeder will look ahead and consider what is to be done with the fluffy mites when July, with its hot days and sultry nights comes.

Plenty of room by day and plenty of room by night must be our aim, so if the limit of house and run accommodation be reached, it only remains to decrease the number of the tenants. The same remedy must be applied if the food bill runs high; growing chickens must have plenty of food, and that of the best; to attempt to reduce expenditure by limiting the food supply is only to stop the progress of the growth of the flock. I have said the food should be of the best, it will be the cheapest in the end. The grain should be a clean, bold, well-filled out sample, colour perhaps of little object, but the corn should have good weight and be in good condition, no trace of fustiness nor kiln-drying.

Each succeeding season the observant fancier has less difficulty in deciding which chickens shall be cleared off to give more room to those worth keeping, the thorough knowledge he has of his particular breed is now of good service to him; here, then, is an instance the beginner may take to heart, namely, the desirability of working up one breed thoroughly rather than dabbling in several.

The fancier who has confined his attention to one breed has little hesitation in deciding whether this or that chicken should be kept, whereas he who has divided his attention between many is lost in uncertainty whether a doubtful

specimen may not ultimately turn out a good one. Without going into details, I may observe all structural failures (single instead of rose combs, misplaced toes, etc.), should be quickly discarded, but breeds wherein feather marking is a valuable point (e. g. lacing or pencilling) demand more caution than whole-coloured birds. The experienced breeder, too, will be careful how he deals with those nearly bare, gaunt, lean, bony-looking chickens. He knows very well that some of his choicest specimens at one time of their lives were most unsightly objects, mere skeletons, with scarcely any flesh on their bones, and if possible fewer feathers on their flesh. If we have any young ones qualified to compete in this class, let them be for a time, they may undergo a wonderful change and grow into marvels, or—they may not. Those chickens which show defects which cannot possibly improve are the ones to clear off.

This clearing off is not quite so easy as it reads; certainly it is not wise to sell alive defective but well-bred birds at barn-door prices; the strain is there but may be disfigured; perhaps the chickens are neither suitable to nor large enough for the poulterer, who accordingly offers an apparently ridiculous small price; but my advice is to let them go. Eat as many as you can yourself, but by hook or crook clear off the others, even if it is by death and burial, (this, of course, is from a fancier's not from an economist's point of view.)

Unless you have as much space as you may require, don't be afraid of putting yourself in such a position that you can truthfully only own up to a dozen or score of chickens. Some fanciers, like cricketers, are all for three figures, and unless they have a hundred or so of chickens, think they are doing very badly; but ten or twelve real good ones are worth all the hundred bad ones. So if you have one or two undoubted gems (looked at, mind, with an unbiassed eye), hurry away all the spurious articles, so that you may give the real jewels a better setting. Overcrowding is so frequent, is attended by so many disasters, so many fatal consequences, that we cannot be too much on the alert to avoid it.

Simultaneous with the weeding-out, the chickens should be separated according to sex. When the young combs begin to grow red; when horrid choking kind of noises signal first attempts at a crow; when the long tail feathers begin to show, and the neck and saddle hackles to appear, then the boys are better drafted off to quarters of their own, there to lead a life monastic in its exclusion of the opposite sex. Youthful flirtations, prolific of incessant activity and restlessness, pugilistic encounters, begotten of amorous rivalry, then

give place to calm philosophic contentment and peace combined with plenty. For a short time after the loss of their former playmates and companions the cockerels seem to mope, and apparently make no progress; but providing they really keep growing and are healthy, that is exactly what we want, if our expectations are to be realized of ultimately turning them into young giants.

The masculine characteristics of a youthful bird can be rapidly developed by placing him on a walk or penning him with three or four hens. Fed on a strong flesh diet, and strung up by a mild tonic in his water, he will soon assume the manners and feathers befitting his appearance in the show-pen. But how about his size and stamina? He will never make a real big one, and as a father the inherited weakness of his progeny may cause him many family cares. To produce those large, well-developed, sound-constituted cockerels, birds alike meet for the breeding-pen or the autumn and winter shows, we should keep them in the awkward hoyden state as long as we can, providing they are growing; we want all their growth directed to their hidden corporeal frame, so that when the time arrives for their final development we shall have something substantial to work on.

The cockerels, then, as soon as they have really found their feet should be drafted according to age into large roomy pens, or so much the better if they now can have unrestricted liberty on a suitable run. A batch of cockerels all about the same age will grow up together in perfect harmony if none of the other sex appear on the scene, at the same time one should be on the look-out for any bullying, and if one bird becomes particularly masterful the offender should be removed for a time; an adult cock may run with the party, when he will check the youthful spirits and take care no rioting occurs. If it be necessary to supplement the number of cockerels on a run by the addition of a younger lot, the old occupants should be penned up or removed for a week or ten days until the newcomers are established. When the two parties are amalgamated there may be a little fighting until things settle down, but certainly not so much bullying as there would have been if the younger had been turned down to make their way amongst their elder brethren. I should perhaps caution the inexperienced against picking one or two birds out of a lot of crowing cockerels and keeping them apart for a week or so, and then turning them down on their old run with their old companions; there will be a free fight, and probably the separated birds will be killed or disfigured for life. If it be absolutely necessary to temporarily remove one or two birds for a brief period, the run of the whole party should be entirely changed at the time they are replaced; even then very rarely can a bird be

safely returned again to his mates, although his absence may have been merely for a few days.

Pullets may be similarly dealt with; but in selecting their runs or pens one must bear in mind that, while the cockerels may remain on the same run or pen until maturity, it may be very desirable frequently to change the pullets' quarters.

Rearing the sexes together encourages the same precocity amongst the pullets as the cockerels, and early female maturity, early laying, arrests the growth or complete development. We also know that pullets permitted to remain on the same run lay or develop quicker than if they are subjected to frequent changes; or, in other words, if we desire to postpone the laying of our pullets and so promoting their growth, we should try to give them various changes of runs. The runs should be largely dissimilar; for instance, if a square area be divided into two runs precisely alike—save that in one, the nouse is on the north side, and on the south in the other—sufficient novelty is not obtained to effect our purpose. We should try to change the chickens to fresh surroundings, a house of different pattern, to unaccustomed pasturage.

The fancier often desires to keep back his pullets so that he may have them on the point of laying at the date of some particular show. Rarely, however, does he seek to check the cockerels, providing he has not begun to push them at too early an age. A pullet looks her very best just before she lays, or when she has laid an egg or two, and for a big bird one endeavors to put her in the show-pen just in that condition. There is such a difference between the appearance of a pullet a few days before she lays and after she has laid half a dozen eggs that I am tempted to put in a plea for our judges, yet with all due respect to the learned bench; for at the chicken shows complaints are often heard about in-and-out judging, and one is asked to reconcile the dicta of the same fowl being, so to speak, first last week, second to day, and nowhere next week, when as often as not she has come on to lay during the interval and lost her early bloom, while her competitors have arrived at the state of maturity she formerly occupied; the gain in condition, the bright, active appearance, the glossy bloom of the one now give her the position the other has lost by her more lethargic and duller appearance. When two or three birds pretty much of an equality meet, appearance and condition very properly merit grave consideration.

Writing for a "fancy" paper, I pen with trepidation the suggestion that if a nice clump of trees adjoins the meadow where the chickens run, and if the chickens should take a fancy to roost in those trees, to let them have their own way. I fear me this is so unorthodox as to be scarcely acceptable

to my brother fanciers. Not so long ago I sought an appetite for supper by hunting the chickens at eventide down from the trees at the point of a fishing-rod, and driving them into little stuffy houses their own good sense taught them to avoid. Not so long ago I was a good customer of the patent roup curing physic; now I am tired of popping pills down throats night and morning, and squeezing nostrils and wiping beaks with red, white, or blue fluids, so I let the chicks go to roost up in the trees if they feel so inclined, exercising, at the same time, a certain oversight that their choice is likely to be attended with due security. Have you not told us a good lock and key is desirable on the fowl-house doors as a protection against thieves? True; but it is easier to steal your chickens from a roost than from trees, for they generally select weak branches, and any disturbance makes them scatter in all directions, whereas if a man once gets into a house the inmates are at his mercy. Have you not told us to avoid early morning damp? True again, Oh reader; but the chickens get acclimatized sleeping in the open air; they grow up hardy, and can laugh at a dew which gives my house-roosting chickens the snuffles. Have you not advised the chickens should have perches? True once more; but then those roosting in trees have ample room to steer a safe, slanting descent earthwards, but the cockerel perched six feet high in an eight-foot-square house has to jump down almost straight, and then often on to a hard, unyielding surface.

I know how enticing and fascinating it is to see your chickens nicely arranged night by night in neat, pretty little houses, each little party, after due handling and feather worship, safely locked up by its own neatly labelled key; and on the other hand, I know how irritating it is only to be able to admire your pets (!)—wild as hawks—at a distance, and never to be able to touch them; but so sure am I of the advantage of rearing chickens, when they have arrived at a fitting age, in this hardy, rough, but natural manner, that I earnestly commend the method to those who may have suitable surroundings.—*The Feathered World.*

GOOD NEWS FOR EXHIBITORS AT "THE INDUSTRIAL," TORONTO.

WE are able to announce a large increase in the number of medals offered for competition by the Industrial this year. The medals too, though not as large as the regular Association medals offered, will be

unique in that, they will be specially designed in honor of Her Majesty's Jubilee year.

The local members of the poultry committee met on July 10th, those present being Messrs. Dilworth, (Chairman), Barber, Essex, and Collins, Mr. Donovan acting as Secretary.

In addition to the medals already offered in the printed schedule it was decided to offer a silver medal for the best collection of one color of one breed in each of the following sections: Asiatics, American, Mediterranean, Dorkings, Hamburgs, Polish, French, Game, Game Bantams and Ornamental Bantams.

It was also decided to offer a silver medal for the best cockerel in each of the above sections, in all an addition of twenty medals.

CANARIES.

In the Canary classes bronze medals will be offered for the best individual specimen in Scotch Fancy, Norwich plain head, crest (any variety), Yorkshire, Lizard, cinnamon.

PIGEONS.

Pigeons are provided for with silver medals for best collection Pouters, do. Carriers, do. Fantails, do. Jacobins. Bronze medals for best collection of Barbs and do. Turbits.

ORNAMENTAL.

A silver medal will be given the best lop-ear rabbit and a silver medal to the best Belgian hare. Any age or sex.

THE HAMBURG.

AMONGST the many handsome varieties of the poultry world, there is none more beautiful and more gracious than the Hamburg. Years ago, before our time, Hamburgs were quite as great favourites in many of the Yorkshire Dales as they are at the present time, although at that time they were not so perfect in markings and characteristics as they are to day, but to such old breeders as Mr. Henry Beldon, Mr. Teebay, who have long since departed, and to Mr. Job Rawnsley, and other well known breeders who are still with us, we owe much of the success that has been attained in the Hamburg. As a fancy fowl, the Hamburg, be it spangled, pencilled or black, stands out from all other varieties as a thing of beauty. The variety of markings in the spangles, the fine pencilling in the pencilled and the lustrous beetle green sheen in the blacks, are unequalled in any other variety of the poultry yard, whilst their laying powers are equal to many other of the less beautiful varieties. Although the varieties differ in color, the

shape, carriage and feather, as well as head points, are the same, although we sometimes get the blacks and spangles larger than the pencilled. The spangled and pencilled varieties are difficult to breed up to the show standard on account of the variety of markings, but there is always a good demand for really high-class exhibits, at very remunerative prices. Blacks, being self colour, do not present the same difficulties, but in this variety the birds must be kept shaded to protect the sheen and lobes, both of which are important points.

Hamburgs are the most difficult of all fowls to judge satisfactorily, as they are all points, and fine ones, too, from the beak to the tip of the tail, points which many of the present-day judges fail to notice sufficiently. The most important of these points is the comb, which offers such a wide scope to the would-be trimmer and fakir, and we know that there is no other fowl in the fancy that is subject to more trimming, where exposure is almost impossible than the Hamburg, although there are cases, from time to time, that have been brought before the Poultry Club, where the exhibitor has overstepped the boundary line in the art of trimming, for what with wire, the use of needles, scissors and shields, the Hamburg comb, in a practical hand, when the bird is in its chickenhood, can be manufactured to perfection, no matter what the deformity may be. Next to head points, colour is the next important, and in the golds of this variety, the shade varies considerably, and then the fancier turns to colour feeding to improve those of the paler shade with beneficial results that baffle detection even to the best of judges. Apart from all this, the Hamburg can be bred to meet the requirements naturally, and, when thus produced, the fancier will have a bird that is a pleasure to the eye, and a reliable laying fowl as well.—*Fanciers' Gazette.*

TORONTO POULTRY, PIGEON, AND PET STOCK ASSOCIATION.

THE Show Committee held a meeting in Temperance Hall, July 22nd, to arrange dates for the winter show. After looking over the list of shows, and not wishing to conflict with others, they finally decided to hold it on December 16th to 20th, both days inclusive. The committee who have charge of the show looks like a very strong one, and nothing will be left undone to make it a success. The committee is composed of the following members: The President, Mr. R. H. Essex; Dr. Bell, J. Dorst, F. Coulter, Jos. Bennett, J. Barker, J. S. Carter, W. V. Todd, C. J. Daniels, J. Brown, J. Powell, F. Spry

and A. H. Lake. The next regular monthly meeting will be held August 12th. This meeting is a very important one, as the Ontario prize list is to be looked over, and other suggestions will come before the meeting; every member should try and be present. The September meeting will be held on the 2nd Thursday, the 9th. As this is the Industrial Exhibition Show week all outside poultry exhibitors are to be sent invitations to attend the meeting, and a big time can be looked forward to.

R. DURSTON,
Secretary.

IMPROVEMENT IN EGG PRESERVATION.

THE preservation of eggs by simple cold storage has proved the most satisfactory. Various patent preservatives have been tried from time to time but none have shown merit enough to induce any general use. Even preservation by liming, which has some advantage, is being gradually superseded by simple cold storage as the later method has been made more and more effective by improvements in warehouse construction and refrigerating machinery. The quantity of cold storage eggs, age for age, is much better than it was five years ago, but is still irregular and open to much further improvements. As a rule the modern storage houses are carrying goods well, but there are a good many houses where a lack of proper facilities for ventilation, temperature or the control of moisture in the holding rooms results unfortunately. It is probable that the present method of holding eggs in cases ready for market cannot be superseded. But it must be admitted that the carriage of stock in fillers of the usual kind is objectionable, especially when the conditions as to moisture are not the most favorable. The odorless egg case filler has reduced these objections to a minimum, but experiments have proved, we think, that the most perfect results are obtained when the eggs are carried free from contact with any foreign substance of an absorbent nature.

Some storage operators have devised methods of carrying eggs in this way which have proved the most satisfactory results. Egg holding rooms have been furnished with crates or trays capable of holding the eggs in bulk, and so arranged as to permit turning by a simple mechanical contrivance. It has been found that eggs carried in this way, with proper regulation of temperature, may be kept sweet and sound when there is sufficient moisture in the air to prevent much evaporation and consequent shrinkage. Further material advantage is secured by the fact that the goods when mar-

keted, are freshly packed in new fillers and cases. Some lots of eggs carried in this way have been saleable at a substantial premium above the value of the best goods marketed in the packages in which they were held. The field is a good one for further experiment.—*Inland Poultry.*

LATE NOTES.

MONTREAL JUDGE.

AS Mr. Jarvis will not return home until after the Brandon, Man., show, where he is judging, we are unable to verify our Montreal correspondent's hint that Mr. Jarvis will likely judge the poultry there. Mr. Jarvis will be back from Manitoba about August 6th.

INCUBATOR THERMOMETERS

of undoubted reliability are now offered for sale by Mr. J. B. Everall, London, England. Some of our incubator makers here might save money by applying to him for prices.

MR. MAIN'S BLACK-REDS.

Mr. Main sends us the winnings of the Capt. Heaton cock, we notice elsewhere, as follows—3rd, Crystal Palace, in 1895, as cockerel; twice shown at Birmingham, being second each time, first as cockerel and then as cock, the latter in 1896.

MASSIE'S WYANDOTTE AD.

was omitted from last REVIEW; why, we don't know, though perhaps our printer does. The editor proposes, but the printer disposes oftentimes. Massie and white Wyandottes are of course inseparable.

MR. FRANCIS H. GISHORNE

is so well known in connection with the poultry interests of Ottawa, being identified with the Eastern Ontario Association and the Central Canada Exhibition—of which he is chairman of the live poultry committee—that the error made in his name in last REVIEW is unpardonable, almost. We can again but blame it on the printer.

THE OTTAWA FAIR LISTS!

are now ready, and can be had on application to the secretary. Fowls are well looked after—three money prizes

being offered in both old and young classes, and this show should suit breeders whose stock is not far enough through moult, or in the case of youngsters too immature, for the earlier shows.

THE WESTERN FAIR.

We may say the same of the Western, whose dates are from 13th to 17th September. A week or two at this season makes a wonderful difference in the forwardness of both old and young stock. A full list is provided, all single birds, \$1.25 and \$1.00 being offered as first and second money. Even the pheasants are shown singly; this being the only show that we know of where this plan is adopted in their case. Turkeys, ducks and geese are honored with an extra 25 cents tacked on to their first prizes.

SHERBROOKE'S GREAT FAIR

will this year be held from August 31st to September 5th, thus following Montreal. The prize list this year has been increased in all departments, including that for poultry, in which the prizes for chicks have been made equal to those for old birds; a number of new sections added, and, better still, a large list of specials is offered. The grounds and buildings have been improved, and the grand stand enlarged to seat five thousand. Prize lists are ready, and may be had on application to the secretary. Mr. Sharp Butterfield is to judge all poultry. Our Eastern breeders should see that this progressive show is more largely supported.

THE MONTREAL EXHIBITION.

(From our own Correspondent.)

The Montreal Exhibition Co. are holding a Diamond Jubilee Exhibition this year. The date is earlier than previous years, viz., from the 19th to 28th of August so as not to conflict with the other shows.

The services of Mr. W. H. Ulley have again been secured as Superintendent of the poultry and pet stock department, which is a guarantee that everything will be in first class order.

Two rotary ventilators have been placed in the poultry house which will make it as nearly perfect as possible.

Two refrigerators have been built to contain the dressed poultry exhibit which is a new feature this year and prizes to the extent of \$30 are offered and a special prize of \$10 for the best collection of eggs. Additional coops have been secured making over 1000 available. Additional prizes

have been offered making the total over \$1500 in cash offered. The buff varieties have been looked after in the new prize list. It is expected that I. G. Jarvis will judge the poultry and James Ainslie the pigeons. Don't forget that entries positively close on the 16th of August, and must be on the grounds by 10 a.m. of the 23rd.

DUBBING GAMES.

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

AN agitation of the subject of dubbing Game fowls is going on in England. The reasons advanced are "first, that it is clearly cruel," and secondly "that it is illegal." The writer also says, "I think there can be no doubt that a dubbed bird, deprived of its ornaments, cannot compare for a moment in beauty and gracefulness with one allowed to retain the adornments which a bountiful nature has provided."

Game fanciers, as a class, believe that dubbing adds to the beauty of the fowl; but probably this feeling is due almost wholly, if not entirely, to custom. What we are accustomed to see, we think is the desirable thing. And, as we believe that the combs of other fowls add to their beauty, because they are allowed to develop, we have very good reasons for believing that the comb of a Game fowl will add to its beauty, if we accustom ourselves to its appearance.

But there is another important matter. Under present arrangements the breeder is compelled to show the females with combs. These combs have to be bred. The character of the comb depends upon the male as well as the female, and to breed females with good combs it is necessary to know what kind of a comb the male had. And here is a case for consideration. A. has after much trouble succeeded in producing upon his females excellent combs. But he attends a show, sees a magnificent dubbed cock, and purchases the bird. He brings him home, mates him to his females, and finds in the progeny that the combs, which he has perfected for so many years with such great care, are ruined. The cock had an outrageously bad comb, but after dubbing there was no evidence of the fact.

Again, is it fair to compel breeders of other fowls to show their fowls with combs, and suffer a cut from $\frac{1}{2}$ to $\frac{3}{2}$

points in the score, while all the imperfections in the Game cock's are removed by the dubbing scissors and he runs no risk of being cut for comb? Would it not be fairer all around to compel the Game fancier to show his skill in breeding combs, rather than his skill in handling scissors? Ought the test not to be the intellectual one of breeding, rather than one of mechanical skill in operating?

If we answer these questions affirmatively, then we all ought to range ourselves on the side of undubbed Games, and leave to the cocker alone the dubbing of the birds, for he alone has a good excuse therefor.

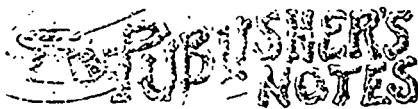
"Hamish," the *nom de plume* of a writer in the *Fanciers' Gazette*, argues, anent the dubbing of Games, that it is possible, perhaps, to breed off the combs and wattles. He instances the power the fancier has shown in changing all traits of the fowl, and even, in the case of Polish, in breeding off the combs. We are inclined to believe in the possibility of doing this, for the reason that we have produced, in another breed, females that had no comb, or so near none, that only a red strip of skin appeared where the comb usually is. We have seen Indian Game females that were almost combless, and in the Gueldreland fowl—a race which now appears to be extinct—the comb was almost entirely wanting. One season we had a duckwing Game Bantam cockerel that was nearly combless—the comb looking as if it had been imperfectly dubbed—and in the white Indian Game Bantam some chickens had almost no comb. But if we are to breed a combless Game fowl, it will be necessary to have the females combless, for combs disappear more quickly and easily in the female than in the male sex, following the mutual law of sexual relation that ornaments, as a rule, are more strongly developed upon the males.

OUR ILLUSTRATION.

THE plate we use as frontispiece in this issue we have had engraved from the English *Fancier's Gazette*. As "open confession is good for the soul" we are glad to see our contemporaries' admission that many English Hamburg breeders are adepts with the scissors and knife. Too many combs are made, not bred.

Who said hens would not lay if fed too much corn? We have been experimenting with our flock of Leghorns, feeding them all the corn they would eat for the last ten weeks and they are laying right along two eggs for three hens on the average, every day. They have the fullest liberty and are Leghorns. Maybe the liberty and the breed accounts for it.—*Michigan Fancier.*

Corn is all right for the light breeds, where they have ample liberty. Try it on the heavy breeds in confinement and it is just the opposite. The liberty and the "accounts for it," sure.



Mr. J. H. Cayford, Box 1,168, Montreal, is our Agent and Correspondent for the Province of Quebec. Any correspondence relating to subscriptions or advertising may be addressed to him.

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Brahmas.

Dark Brahmas—I have some grand Yearling hens and cocks at \$1 to \$2, each good leg and toe feathering, grandly pencilled. J W Potter, Walsh, Ont.

Ducks.

For Sale—a Bargain—3 Pekin Ducks, 1 Drake, Rankin's prize strain, all for \$5. These are hard to beat. I have got to sell. Ducks laying. John A. Noble, Norval, Ont.

Game.

Free, Games, Illustrated Circular—EGGS \$1 per 13, Heathwoods, Irish B.B. Reds, Tornados, Irish and Mexican Grays, Cornish Indians \$2 per 13, fowls at all times. C. D. Smith, Fort Plain, N.Y. 193

Trans Atlantic—Have fought under four flags and never met their equals yet. If you want Game fowls get the best. Circular free. Mention REVIEW. H. P. Clark, Indianapolis, Indiana.

Hamburgs.

Hamburgs, Golden Spangled a specialty for 30 years. At the exhibition just held in Boston, in which there were 167 Hamburgs in competition, 53 of which were Golden Spangled, I succeeded in taking all the 1st prizes in this variety, viz., 1st on cock, 1st on hen, 1st on cockerel, 1st on pullet and 1st on exhibition yard. Prices according to quality. John Lowell, Jr., Chestnut Hill, Mass., U.S.A. 1297

Leghorns.

Buff Leghorns for Sale Cheap—3 good cocks, 6 hens, amongst them 1st prize cock, Toronto, '96; must sell, want room. Geo Whillans, 150 Argyle St. Toronto.

PIGEONS AND PETS.



PIGEON HINTS.

BY W. FELLOWS.

(Continued.)

Insects in the Loft.—When the breeding loft, and especially the nesting places, are kept thoroughly clean, the nesting material frequently renewed, and a bath allowed, there is generally little danger of insects accumulating to any extent, but great care should be taken in the very hot weather that they do not get settled, or it will take great trouble to rout them out. They will find out any nook or cranny in the woodwork, and from these lurking places they will sally out, chiefly in the night time, and torment the young squabs. They consist of two kinds—first, what is known as the flea, which seems to suck the blood of the helpless young squab, and the small red insect called the mite, which infest the ears and nostrils, and if not soon checked accumulate to such an extent as to cause the death of the young ones. To clear off these pests the squabs should be taken in hand and well dusted with insect powder, and the nest pan thoroughly cleansed and fresh material placed in it before the young ones are returned. With respect to the woodwork, the lime-whiting or washing down with disinfectants may prove sufficient, but as a further preventative an occasional sprinkling with the diluted disinfectant may be resorted to. For the nest-pans a plentiful supply of fresh pine sawdust, which contains a good supply of turpentine, may be sufficient, but when it is kept for any length of time this ingredient loses its strength, and its place may then be supplied by a little insect powder, powdered sulphur, or Sanitas sawdust. In the hot weather the rubbed straw may be dispensed with as a nesting material, as it may form a hiding place for insects, and sawdust only used. In renewing the nests an extra supply of pans should be kept, so that they can be quickly changed, and so prevent undue interference with the old birds, and if this can be done when they are off the nest for feeding or changing so much the better, the plan I have found to answer best is to make the first change when the young ones are about a week old, and from that time till a fortnight, as soon as the

droppings accumulate to any extent. After a fortnight the changes need not be so frequent, as the droppings will be found mostly outside of the pan. These should be removed once or twice a day, and the sawdust outside the pan kept sweet and clean by frequent changing, and the sprinkling about of a little of the insect powder. These small insects do not seem to interfere with the old birds, but they in their turn may be worried by a larger kind called the tick. Their presence is generally shown by a continual pecking among the feathers, and this is accompanied by a stamping with the feet. When this is seen they should also receive a good dusting with the powder. If allowed to accumulate the birds will often desert the nest and the eggs or young ones it contains.

Re mating.—Owing to the many difficulties and disasters which attended the early part of the breeding season, the number of young ones in many lofts will not be very large, but where the results have been fairly good it will be well to examine the young stock to see if the quality has come up to expectation and to decide whether it is advisable to let the pairs remain as they are, or to try a change. Where the quality is poor it may be desirable to make some alteration in the mating, but if there is any doubt they should not be interfered with this season. If a change is thought necessary the birds should be separated for a time and then paired up as required, but care should be taken that this is carried out thoroughly before they are returned to the breeding loft, and no two birds previously paired should be put into the same loft. If this is not done there is sure to be trouble, either from the dissolving partnership and mating up as before, or from the birds going back to their old nesting boxes and fighting for the mastery, when, if eggs have been laid or young hatched, the former are likely to get smashed and the latter either trampled to death or thrown out of the nest pan and starved. Again, where it is found that any pairs are bad sitters or feeders, a few pairs of foster parents should be provided to do their work.

Choice of Food.—I would again warn young fanciers about being very particular as to the quality of the corn given to the stock, and more especially with respect to the peas. Several specimens have been sent to me for examination that have contained grains showing partial germination, and in every case where such samples have been used the condition of the stock kept has been far from good. In the worst cases acute diarrhoea and inflammation, resulting in loss of flesh, has been the result, and in others, where the number of grains infected was smaller, a gradual loss of con-

dition and sickness before laying was set up. Again, it sometimes happens that with the peas or tares there are often found long grains of oats. These should be removed, or they are likely to do much harm to the young ones fed on them. A case came under my notice this week, where one of these grains had stuck crossways in a young bird's throat, the result being that it was choked. A case of a somewhat similar nature was told me by a friend recently, but it was a pea in this bird that caused the stoppage, and luckily it was found out in time to save the bird's life. Moral: Do not feed the smaller varieties with large peas when they are bringing up young ones.—*Feathered World.*

SWALLOW STANDARD.

Standard description of the Swallow pigeon, as given by Rev. W. F. Lumley in Fulton's book on pigeons:

BODY.

1. Shape—Chubby and crouching.
2. Head—Dove-shaped, showing an indentation over the wattle; rather low, but slightly convex on the crown.
3. Beak—Slender, rather long and straight, the upper mandible dark, the under one light in color.
4. Wattle—Very small and smooth, showing a whitish bloom.
5. Eye-cere—Very fine in texture and dark in color.
6. Eyes—Black or "bull eyed."
7. Neck—Short and rather thick or cobby in appearance, but having no sign of gullet.
8. Shoulders—Broad and rather full-set, the back being also wide and flat.
9. Legs—Short and rather wide apart.

FEATHER.

1. Markings—Whole body white, with the exception of the cap, wings and the leg and foot feathering below the hocks.
2. Cap—Extending from the wattle to the back of skull at a clean-cut line, dividing the dark skull plumage from the white of the lower part of head, such line of demarcation to be drawn from the juncture of the mandible straight under the eyes on to the back of the upper part of the head, just fringing but not intruding into the white lining of the crest.
3. Crest—To extend from back of eye to eye, rising about one-quarter of an inch over the cap, showing cup-like cavity, but not resting on or touching the head; the crest should be wholly white, including its inner lining.

4. Wings—All small and large feathers dark below the scapula plumage; this should form a kind of heart-shaped white saddle lying at the top of the shoulder end of the back. Flight feathers long and wide in web.

5. Tail—Wholly white; the larger tail feathers should be rather long and wide in web.

6. Leg and foot feathering—Long and slipper pointed on the feet; the back feathering being long and evenly projecting; towards the vent. No bareness should be visible between the feet or on the legs.

PHYSIQUE.

1. Carriage—Squatty, that is, low on legs and short and rather projecting in the front of the body.

2. Plumage—Abundant and but modestly close in fitting, the flights being carried rather loosely and the tail somewhat wide-spreading.

3. Condition—Very lustrous in the dark shading of the plumage, and free from all soil on the foot and hock feathering.



TORONTO CANARY AND CAGE BIRD SOCIETY.

The monthly meeting of above Society was held in room 16, Forum Hall, July 5th, Mr. Collins in the chair and all officers present.

Minutes of previous meeting were read and adopted. One new member was introduced and another elected.

The exhibition delegate reported that premium lists were ready and could be had for the asking.

A satisfactory financial report from the Secretary-Treasurer was received, also the committee report.

Messrs. Hollingshead, Johnson, Way, W. H. Naylor, Cuthbertson and Long were elected as management committee for next quarter.

It was decided to hold Young Bird Show in room 16 from 2 till 6, July 10th, Mr. Park, judge; Stevens and Hollingshead, stewards; Mr. Naylor, secretary-treasurer.

The Secretary was instructed to communicate with Secretary of Toronto Poultry, Pigeon and Pet Stock Association re their proposal to hold a show during the coming winter. The monthly shows were postponed till October. The Avian Variety Bird was the class for to-night. Mr. Johnston taking

first with a Java Sparrow in magnificent plumage, run hard, however, by Mr. Hollingshead's Weaver Finch, a Cut Throat of Mr. Johnston's being a good third. A Mountain Finch and Japanese Robin were also shown.

The meeting closed at 10.40.

W. S. APPLETON,
Secretary.

The Young Bird Show of the above Society was held in room 16, Forum Hall, Toronto, on Saturday, July 10th, from 2 till 6 p.m.

For number of exhibitors, entries and birds shown it out-classed all previous Young Bird Shows, there being 74 entries and 70 birds shown by 15 exhibitors.

The birds were staged in good time by Messrs. Naylor, secretary, and Stevens and Hollingshead, stewards, and the judge, Mr. Park, was called in to carry out his part of the programme.

Mr. Stevens takes the Society's cup for most points, and the special donated by Mr. Park for best Scotch Fancy shown was awarded to Wm. Dean, but so closely was he run by Mr. Goggins that the judge decided to make it 2 specials.

The following is the full prize list :

Scotch—clear yellow, Goggins, Dean, Way ; yellow marked, Goggins, Brackstone ; clear buff, Dean, Goggins, Dean, Way ; buff marked, Brackstone, Brackstone, Dean, Robertson ; green, Brackstone. Norwich—clear yellow, Collins, Collins, Collins ; yellow marked, Park, Stevens, Collins, F. E. Appleton ; clear buff, James, Stevens, Turp, James ; buff marked, Collins, Turp, Boultsbee, James ; crested, yellow or yellow marked, Way ; crested, buff or buff marked, Way, Dean, Dean. Crest—any other variety, buff or buff marked, Appleton, Appleton. Crest bred Norwich—yellow or yellow marked, Cuthbertson ; Norwich, buff or buff marked, Way, Way, Hollingshead, Park ; hens, Stevens ; any other variety, buff or buff marked, no awards, 4th only, Appleton. Lizard—silver clear cap, Park ; broken cap, Naylor, Park, Naylor. Yorkshire—clear yellow, Appleton, Stevens, Stevens ; yellow marked, Appleton, Stevens, Stevens ; clear buff, 2nd, Stevens ; buff marked, Appleton, Stevens, Stevens ; hens only, Stevens, Stevens. Cinnamon—yellow, Naylor ; buff, Naylor ; marked buff, Way, Stevens. Cinnamon or Cinnamon marked hens, Stevens.

W. S. APPLETON,
Reporter.

THE GOLDFINCH.

BY T. J. AMBROSE.

In writing a few notes on the above, I have to go back several years to refresh my memory, when this smart feathered favorite was one of my most popular pets. To my mind, few of our Britishers are so interesting as the Goldie, and few so popular to show-goers, as this sprightly little songster of the large family of finches. There is always something so enchanting in the beautiful and brilliant blaze, the clean, well cut cheeks, bright golden wing-bars, clean, well cut moons, deep coloured chest, and back of rich nutty brown hue, so desirable, and sought for in high-class specimens, and the proud and saucy appearance so enchanting to admirers of cage-birds. The Goldfinch is, with proper coaching, so amenable to the desires of its owner that the interest is unlimited. His bright cheerful song, too, is sweet, and so free from harshness of any kind, that makes his company as a songster most desirable. To get a first-rate specimen of this variety is not always an easy matter, but if you have the chance to choose one from a batch of fresh caught birds, I should say this was by far the best, and by so doing you are likely to get much larger and better coloured specimens. At first it will be necessary to keep him in a small cage until he has got fairly steady, and then to give him every opportunity to develop his beauty. I should place him in a cage 18 inches long, 12 inches wide, and 15 inches high. The cage should, of course, have the usual appendages, such as sliding bottom, which should be covered with a liberal sprinkling of Spratt's or Hyde's shell gravel, also the necessary egg, seed, and water tins. In the matter of food, I believe in feeding on Canary, Luga, maw, and a little hempseed. No doubt, the success of many exhibitors of this charming specimen is due to their endeavour, as far as possible, to trace the bird's natural food by observation in their natural haunts, such as dandelion seed, thistle pods, plantain, and any such seeds that close observation of their habits alone will teach. A little groundsel and watercress will also add to their condition during confinement.

A room both light and airy will suit the Goldie best, and one in close proximity to where people are continually moving about will greatly add to their getting steady. This steadiness is an absolute necessity in a show specimen, and no exhibitor can expect to win with birds that show restless habits, and signal traits of unhappiness. This feature of wildness has often been the means of condemning fanciers, for showing British birds, by those who think that anything

approaching confinement to wild birds is great cruelty, but those who have had the opportunity of seeing some of our noted cracks need never fear that they are not happy; their condition of feather, sprightly habits, and pleasing notes being convincing proof that the Goldfinch can be kept in confinement to the mutual advantage of both exhibitor and exhibit.— *Fur and Feather.*

A PARROT FOR FIVE DOLLARS

is offered this month by the well known dealers Geo. Hope & Son of Toronto. These are young Cubans in fine plumage. We know for we saw them. Other parrots we noticed while on a visit there were double and single yellow head, Maracaibes, etc., as well as dozens of little paroquets, fancy finches, etc. Seed of any kind and cages of all shapes and sizes were also on view.

At the meeting of the Industrial Exhibition Poultry Committee, held July 16, a full report of which will be found elsewhere, it was decided, upon the suggestion of Mr. Collins, to award the six extra medals in the cage bird class as follows: One each for the best Scotch Fancy, Norwich plainhead, crest, any variety, Yorkshire, lizard and cinnamon.

RABBITS & PETS

FEEDING RABBITS.

BY T. J. AMBROSE IN *Fur and Feather.*

(Continued.)

I always find that youngsters that are born fine healthy rabbits grow away so much faster, and are also much less

susceptible to cold than those that are born with loose skins, a true sign that the doe has not been able to feed them during pregnancy, as she should have done. This system of feeding also does away with the necessity of giving water at kindling time, because plenty of nourishing succulent food prevents that intense thirst that causes so many does to eat their young to satisfy it. It also provides the doe with nature's demands, plenty of milk, wherewith she at once commences to induce her youngsters to suckle, for her own comforts sake. This system of feeding also keeps up a bountiful supply of milk until the youngsters are several weeks old, and I would suggest to those who are at home at mid-day to give the bread and milk at that time, and the oats for the evening meal. I feel certain that those who can feed brood does three times a day will do so with advantage, because I find that little and often is an excellent remedy for bad feeders. The latter is a great drawback to a breeding doe, because once they go back in condition whilst suckling they cannot possibly recover the flesh they have lost during the time they are rearing youngsters. One suggestion I would make is to carefully avoid, during the breeding season, any heating foods, such as soaked peas and beans, parsley, groundsel, and the many condiments that contain spice. What is more annoying than when the youngsters are three or four weeks old to see the doe riding them round the hutch; such youngsters will never thrive, because the doe is not thinking of nursing them, and the constant excitement and worry will only tend to dry up her milk. I also advocate keeping brood stock in large, well ventilated hutches, kept scrupulously clean.



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Pigeons.

Hints to Beginners (Pigeons) by F. M. Gilbert, new edition, 1894, revised with additional chapters. A most practical, timely and comprehensive work. Indispensable to the amateur. Price paper 50c. Address, H. B. Donovan, Toronto.

Jacobins—Pair Elegant Blacks—Only \$10. Pair of Whites, grand quality, \$10; 3 white hens \$5 to \$7 each. Black and Red Cocks \$5 to \$7 each, white Fan hens \$5 to \$10 each. Stamp. Chas. Massie, Box 202, Post Hope, Ont. 298

I have the following good birds for sale: 1 pair of Satinets, 1 pair of Red Helmets, 1 pair Starlings, 1 pair crested black Moo-caps, also Barbs, Jacobins, Archangels, Tumblers, Turbits, Owls, Fantails, Drag-ons, etc.—W M Anderson, Palmerston, Ont.

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Cages, Japanned, from 35c.—Cages, brass, from 65c; Cages, breeding, from 75c; Cage appliances nest and nestings, seed &c.; everything in the bird line at Hope's Bird Store, 109 Queen Street West, Toronto.

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