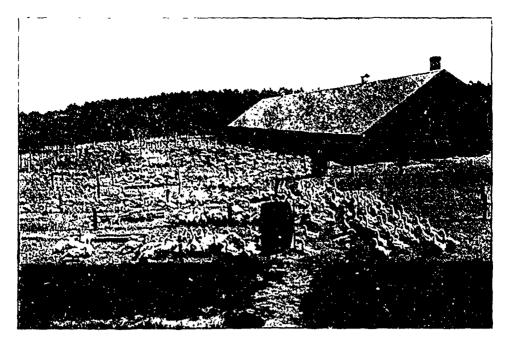
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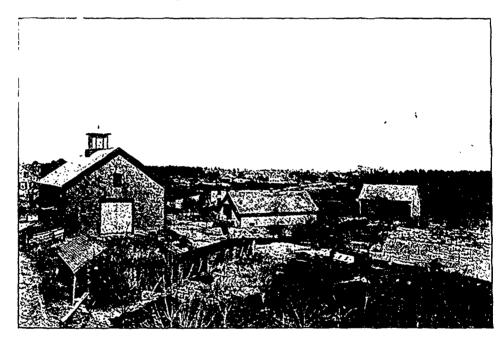
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Mr. Rankin's New Double Brooder House.





Views on Mr. Rankin's Duck Farm, South Easton, Mass.

-CANADIAN POULTRY REVIEW, Toronto, December, 1897.



Pigeons, Gage Birds,|Rabbits 🕸 Pets.

Vol. xx.

124 VICTORIA STREET, TORONTO, DECEMBER, 1897.

No. 12

SHOW DATES.

Guelph, Dec. 8th to 10th, 1897.
Sarnia, Dec. 14th to 17th, 1897.
Ingersoll, Dec. 15th to 17th, 1897.
Toronto, Dec. 16th to 20th, 1897.
Woodstock, Dec. 28th to 31st, 1897.
The Eastern Ontario, (Cornwall) Dec. 28th to 31st, 1897.
The Ontario, (London) Jan. 11th to 15th, 1898.
Brantford, Jan. 18th to 20th, 1898.
Peterboro, Jan. 18th to 20th, 1898.
Owen Sound, Jan. 18th to 21st, 1898.
Goderich, Jan. 25th to 27th, 1898.
Hamilton, Jan. (exact date later).

ENTRIES CLOSE.

Guelph, Dec. 6th, 1897.
Sarnia, Dec. 10th, 1897.
Toronto, Dec. 11th, 1897.
Ingersoll, Dec. 14th, 1897.
The Eastern Ontario, (Cornwall) Dec. 20th, 1897.
Woodstock, Dec. 22nd, 1897.
The Ontario, (London) Jan. 3rd, 1898.
Owen Sound, Jan. 15th, 1898.



SOME THINGS WE DON'T DO.

WE DON'T lend cuts.

WE DON'T report winter shows who fail to use our business columns.
WE DON'T take renewal subscriptions at less than one dollar each.
WE DON'T try to please everybody and
WE DON'T care who knows it.

SOME THINGS WE DO.

We no take two new subscriptions for one dollar.

We no take one old and new subscription when sent together for one dollar.

We no all we can to help the shows.

We no try to treat all fairly.

INGERSOLL POULTRY SHOW.

HE President writes us :- "Everything points to the first winter show under the auspices of the Ingersoll Poultry and Pet Stock Association being a very successful one. The judge who will score the birds is one of the best judges in America, and all birds not disqualified will be scored. That is a feature that should assist in bringing fanciers to it. Arrangements have been completed to hold the show in a new brick carriage room, (just completed) on the ground floor, which will be well heated and lighted with electricity for the nights. Birds will be nicely cooped and fed, and every attention given by the Acsociation to make the exhibitors and their exhibits comfortable. Mr. Abel F. Stevens, of Wellesley, Mass., the judge, will deliver a lecture on 'Poultry' on the second night of the show, December 16th. Mr. Stevens is a clever lecturer, and as he has given his subject a great deal of thought, he will give, no doubt, information that will be valuable to poultry breeders. He has lived for years near the city of Boston, and is thoroughly conversant with the different features of the poultry industry. To the poultry fanciers we would say, "Come and help us and we will do you good."

THE SARNIA SHOW.

Kindly announce to your readers in December Review that we have secured the Boy's Brigade Hall for our show. It is one of the largest and finest and best lighted halls in western Ontario. It is centrally located and could not be better for a poultry show if built for that purpose. We are receiving every encouragement and expect to hold one of the most successful shows of the season. Our premium list is out. We will be very much pleased to send one to anyone interested. Thos. H. Mills, Secretary.

THE TORONTO INCUBATOR CO.

in sending change of ad. inform us during the past season two of their machines have crossed the water, one of two hun-

to the Emerald Isle.

OWEN SOUND TO THE FRONT

with a big list of regular and special premiums. Jarvis is to judge. Everything is running smoothly for a big show and every one will be welcome, Further announcement next month.

INGERSOLL SHOW.

In addition to what the President writes we might add that Mr. Stevens scored the Stratford show just eleven years ago this winter. Mr. "Leghorn "Wixson will remember him well. All arrangements have been completed for a first class exhibition.

THE BUFF CLUES.

The American Buff Plymouth Rock Club have decided to hold their annual meeting at Buffalo during the show. The American Buff Leghorn Club will also meet at the same place.

MR. F. KILIAI',

Budapesth, Hungary, admired the Review so much that we had to make him up a complete set for two years past. is now one of our regular readers.

THE REVIEW LISTS

we are glad to state are now going ahead by leaps and bounds, the combination of two new subscriptions for one dollar proving most popular. The new names we are putting on average eleven per day for the past month, and we hope and expect this to greatly increase during the next three months. Our thanks are due those readers who are taking a personal interest-and they are numbered by the scorein swelling our already large lists of subscribers.

A PARTICULARLY PLEASANT FEATURE

to us is the number of French speaking fanciers in the province of Quebec who are now beginning to take this journal regularly, and we feel glad that our efforts to give prominence to the fancy in the east is so much appreciated.

MR. R. C. FERGUSON, STRATFORD,

who has been instrumental in sending us several subscriptions writes: "The new subscribers are all satisfied with

dred capacity going to England and a one hundred machine the Review and I think I can get some more." We appreciate such interest.

THE SARNIA SHOW.

From the copy of list sent us we note that all varieties are amply provided for with prizes of \$1 for first and 50c. for second, and a vhc card for third. There must be at least three entries in a class to draw first money and all fowls must wear a suitable numbered band. This is imperative. Entries must be in the hands of the Secretary by December 11th at the latest. Exhibitors in Lambton county must furnish their own coops, uniform in size i.e., 2½ x 2 :: 2 ft. A long list of specials is offered. Mr. Jarvis will judge all classes.

ARE YOU GOING TO GUELPH?

Guelph has got down to a two days show this year so should have a rousing entry. The show will open Dec. 9th and close the following day at 10 p.m. Birds must be delivered at the show room on the 8th before 6 p.m., as the judge Mr. Jarvis, will begin his duties at 9 a.m., the following morning. One dollar is offered for first and 50c. for second in a very full list, including all the new popular breeds. Write Mr. J. B. Collins, the Secretary for copy of

THE BRANTFORD ASSCCIATION

has grown to such proportions that it has now decided to hold a winter show at which liberal cash prizes will be oftered. The dates are January 18th, 19th and 20th next, and a fuller announcement will appear in next month's Re-

MR. F. R. WEBBER, GUELPH,

has added another poultry house to his plant, in size 34 x 18 feet.

A SHOW IN PETERBOROUGH.

Last winter we organized an association called the Peterborough Central Poultry and Pet Stock Association. We have now 100 members and have decided to hold a show in Peterborough, on Tuesday, Wednesday, and Thursday, the 18th, 19th and 20th Jan., 1898, when we will give prizes for poultry, pigeons, etc., also a bench show of dogs at the same time. Wm. Collins, Sec. Treas.

THE WELLAND ASSOCIATION.

A meeting of the Welland Fancier's Club, was held recently, when the following officers were appointed: - President, J. F. Hill; vice-president, Dr. Howell; secretarytreasurer, H. A. Rose, Jr.; executive committee, J. E. Cohoc, W. H. Gainer, S. M. Clemo, F. Pew, and H. Dawdy. A long talk was indulged in as to the advisability of holding a winter show. It was finally decided to adjourn and in the meantime those present were to get all the information possible and see if the undertaking is practicable.

POULTRY FOR ENGLAND.

Mr. A. J. King, the Toronto produce merchant, is making enormous shipments of poultry to the English market for the Christmas trade. Five thousand geese, 1000 ducks, 1000 chickens and 15,000 turkeys, in all about\$20,000 worth of Canadian poultry, will be placed on the English market by Mr. King. For the last few days over 100 geese a day have been killed, plucked and chilled at the warehouse of the Toronto Cold Storage Company, and an enormous number of turkeys have been treated in the same way. The preparation of the birds for shipment is interesting. Two men are kept busy killing them, an expeditious operation, and then they are passed on to a room where 30 men, standing waist deep in feathers, pluck them with astonishing quickness. Then they are hung in a room at a temperature of 45 above zero for 24 hours until the animal heat is lost; next day the temperature is reduced to 40 and the day following to 35. The day after that it is reduced to 32 and is kept there until the time of shipment, Then each bird is wrapped in a bag of parchment paper, similar to that in which dairy butter is wrapped, and they are ready to go to the uttermost ends of the earth and defy all other geese in the world. These will be sent in cold storage by the Vancouver and Gallia. They will not be frozen, but merely chilled by the dry cold air process which preserves them in perfect condition and does not impair their quality.

WHAT THE EASTERN ONTARIO IS DOING.

Mr. Francis H. Gisborne kindly supplies us with the following news of this show to be held in Cornwall:—"I have not got the lists yet but expect them every mail, they are being printed at Cornwall. There will be a public meeting during the exhibition week at which addresses will be delivered upon practical subjects connected with poultry raising. Mr. Gilbert, the Poultry Superintendent of the Central Experimental Farm, will give an address, as will also it is hoped,

poultry from the Central Experimental Farm showing how poultry should be dressed and packed for the English market and Mr. Gilbert will be there to explain the matter practically. There will also be prizes offered for the best "tarme rs birds," that is owned by farmers, prizes being given for heavy birds and also for lighter birds of the egg-raising breeds. We anticipate a first class exhibition, the Cornwall fanciers being hard at work to make it success. The Governor-General has very generously offered a silver cup which will be competed for by pens consisting of a cock, cockerel, two hens and two pullets owned by a member resident in that portion of Ontario assigned to the Eartern Ontario Poultry Association. The breeds selected this year are barred Plymouth Rocks and silver and golden Wyandottes. One of the Cornwall members has offered a special prize for dressed poultry for which entries will be for all members of the Association."

THE GREATEST OF THE GREAT-THE "ONTARIO" OF ON-TARIO'S -LONDON OUTDOES ITSELF -OVER SEVEN HUN-DRED DOLLARS IN SPECIAL PRIZES-SOME NOVEL FEATURES-A FREE SHOW AND BIG BANQUET.

London has evidently made up its mind to set the pace for all future shows held under the auspices of the Poultry Association of Ontario, judging by the efforts put forth to draw a record entry and to provide a pleasant time for visiting fanciers. Pretty nearly the whole city has joined the association and if "Rome" doesn't "howl" it won't be the fault of the Romans. Mr. Thos. A. Browne is of course well known in his dual position as Manager of the Western Fair and permanent Secretary of the Poultry Association of Ontario, the premier poultry organization of the Dominion. forms us the special lists are not yet ready but they may be expected soon after the first of December. In case any breeder does not receive one he has but to drop a card to Mr. Browne and get one by return. And now to digest what Mr. Browne says. Under date of November 25th he writes:

"Yesterday afternoon I received from the Secretary of the London Association a rough draft of the special prizes and a list of subscribers, and last night and to day I am getting it into shape for the printer. The total amount of the specials has reached the handsome sum of seven hundred and twenty-one dollars. The local association members have been, as you must know from this amount, very active and untiring in their canvas, and they have been equally intent upon placing the prizes where they would do the most good and be satisfactory to all. The London Poultry and Professor Robertson. There will be an exhibit of dressed Pet Stock Association are giving from their funds twelve

silver cups, each valued at \$10 best collection of national varieties such as Asiatics, English, American, etc., turkeys, geese and ducks and two for pigeons. The goods and cash they have divided equally, giving \$3 to the best collection in every variety of fowls, turkeys, geese and ducks on the list, and \$2 for the best specimen in each variety. Eight others to the pigeons and three for rabbits, one each to birds and several interesting of a miscellaneous character, viz:-largest and best collection by member of local association (barring McNeil, McCormick, Bogue & Oke). Best collection by an amatour (an amateur to be understood as one never having won a prize prior to this show); largest and best collection exhibited by any one person; the youngest exhibitor in the poultry classes; the most popular member of the Ontario Poultry Association, \$40 gold watch, decided by ballot on Thursday 13th, 5c a ballot. \$10 and \$5 are offered for 1st and 2nd prizes for essays of about 1,800 words on any subject pertaining to the poultry industry of Canada. So you see they have covered the ground very well indeed, and we fully expect the largest entry ever collected together at one time in Canada, and at a time too when the poultry are at their best.

The municipal council of the City of London have given them 100 dollars towards defraying expenses, and they have therefore decided to open the exhibition free to all; thus they expect to have a large attendance at all times and make it more far reaching and instructive and also more profitable to exhibitors.

They have also let themselves loose on the banquet. Free admission to all members of the Ontario Association (J. S. barred? We anxiously await a reply—Ed.) Many of the prominent statesmen of this province and others will be present to address the meeting, and several have signified their intention of writing essays, some on competition and others not. The Hon. John Dryden has consented to be present, also Mr. A. G. Gilbert of Ottawa. Everything points to the most successful and instructive annual meeting in the history of the association."

It fairly takes ones breath away. Mr. "Barnum" Browne is "a good un." All Mr. Browne now wants is entries and he wants them early. Those who have been bitten will not need a second lesson, but let us say here that positively no entries will be received after the advertised date of closing.

THE ESSAYS.

We shall be happy to repeat our offer of last year, that is, if handed their cards to the committee, which will report for the manuscripts of essays intended for the annual meeting the association's action the relative merits of each compet-

These are given for the are sent us we shall be pleased to put them in shape, have rieties such as Asiatics, them put in type and send printed copies to the authors. geese and ducks and two But they must reach us early.

TORONTO'S BIG SHOW,

and everything promises most favorably for a big one, will be held on December 16th to 20th. The list is a liberal one; three prizes of \$1, 50 cents and 25 cents being offered for live fowls, both young and old, in all sections, while turkeys, ducks and geese are even better served. Selling classes are a novelty in Canada and should fill well. A special effort has been made to satisfy the desire of the "utility" man, as the following prizes for dressed poultry will show. In turkeys the largest prizes naturally occur. Six turkevs of 1897 \$25, pair of turkeys of 1897 \$10, turkey of 1897 \$5. turkey of 1896 \$5. The other classes are-pair of geese 1896 \$6, pair of geese of 1897 \$4, pair of ducks of 1897 \$5, pair of ducks of 1897 \$3, pair of ducks of 1897 \$2, six chickens \$6, six chickens \$4, pair of chickens \$2 Refrigerators for this class will be provided. Arrangements have been made whereby all non winning stock may be disposed of at remunerative prices. Separate specimens and entries, must be given in separate sections. Prizes will be awarded in every case on the heaviest and best dressed exhibits. Exhibits winning prizes will become the property of the donor. Eggs also are not forgotten. Five dozen eggs \$5. five dozen eggs \$3, five dozen eggs \$2. Any color may compete. Double yolked eggs barred. Among the specials contained in a long list may be mentioned a sketch by Mr. Sewell, of best bird in the show (by the way-the winner can arrange for publication of this picture in Review); a challenge cup for best male or female in the show; silver cup for buff Leghorns; medal for best cock, hen, cockerel and pullet of one variety, etc. Entries close on Dec. 11th. but there is no need to leave them till that late date. Get them in early and receive the Secretary's blessing.

The judging competition on Thanksgiving day was a unique feature introduced by the Toronto Association. It took place in the poultry building of the Toronto Exhibition. The detail of the day was: Mr Jarvis, the poultry expert of the Ontario Agrigultural College, began scoring the birds at 11 o'clock a. m. His cards were handed to a committee consisting of Messrs H. B. Donovan, R. H. Essex and J. Dilworth. Five competitors, members of the association, then judged and scored the birds, and at the conclusion handed their cards to the committee, which will report for the association's action the relative merits of each compet-

next regular meeting.

TORONTO JUDGES.

Mr. L. G. Jarvis together with the winner of the above competition, will officiate as judges at the Toronto show. We regret we are unable to announce who the lucky contestant is and what sections he will take.

THE HAMILTON ASSOCIATION

will hold an open show some time in January, the exact date not yet being fixed. A splendid hall on King St. has been secured, the ground floor only will be used. Mr. Ino. Cole is Secretary. Full particulars will be given in January REVIEW.

MR. SID. SAUNDERS, GUELPH.

popular breed. He informs us Mr. R. H. Essex paid him a visit on November 13th and "diminished his flock" as he says.

MR. JARVIS,

has had to decline several judging appointments this season, his list of dates being particularly full.

AT GODERICH.

the Huron Association will hold its second annual show this winter. The dates are January 25, 25 and 27 and of course a professional judge will be employed though his name is not yet announced. The show is open to the county of Huron only, and enquiries should go to Mr. Jas. Mitchell, Secretary, Goderich.

HE HAS TROUBLES OF HIS OWN.

were not half as fresh as the editor. Our offer of 25c per from some of its readers. Who will be the first?

itor in comparison with Mr. Jarvis to the association at its dozen for all eggs the product f cleanly fed and kept hens during the month of December next still holds good." There is much meat in the above egg shell.

MR. C. F. WAGNER.

has sold several prize winning buff Leghorns, including the Toronto Medal cockerel to Mr. Goldsack, who recently arrived in Canada from England, by way of the United States, which country by the way he is not enamoured of. Mr. Goldsack has in his yards several English white Wyandottes which we trust soon to have the pleasure of examining. If we were humorous we might add the wish that his goldsacks might be further augmented by the breeding of these popular favorites, but then we never hardly ever-joke.

MR. C. T. THROOP

intends giving up all else but buff Plymouth Rocks, the is wondering why we located him at Port Credit when his address is Port Hope. We are wondering also, but his advertisement, with proper location, may this month be found under the head of "Minorcas."

MR. JAMES FULLERTON,

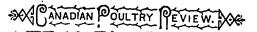
of Orange, Cal., several years ago the efficient editor of this paper, we notice, has entirely "gone to the dogs," judging by the two very nice photographs of his Fox Terriers which he sent us. Not a case of "off with the (very) old love and on with the new" is it?

WE ARE INDESTED

to seven Review readers for supplying our wants with last February issue. We appreciate their kindness.

DR. T. SHANNON MCGILLIVRAY, OF HAMILTON,

The Editor of the New Brunswick Co-operative Farmer is going extensively in the breeding of aviary pheasants, writes:-When will our farmers learn that fresh eggs mean and has now no less than eight varieties in his pens, in all eggs lately laid, or that fresh butter means butter that has a total of fifty-three birds. These beautiful and extremely not being staled by hours of exposure to the air? The hardy birds are worthy of a more extensive patronage, and other day the editor of the Farmer bought four dozen eggs we are glad to notice the increasing interest which they are called by the lady who supplied them "fresh," but-they calling out. The Review has room for pheasant articles



AMONG THE DUCKLINGS.

R. Samuel Cushman, etc. whose writings we have before now commented on so favourably, has been writing an account of a recent visit to a large duck farm, and sends us an article he is supplying to the Country Gentleman.

Visiting the Weber Bros., duck farm in Norfolk County, Mass., near Boston, April 7th, the writer found them busily engaged in caring for over 6,300 ducklings, as well as 5,500 fertile eges in incubators. Every other day a machine would hatch from 240 to 300 ducklings. None had been killed for market at that time, but the oldest, a lot of 110, nine weeks old, were to be dressed the following week.

In one machine in the larger incubator cellar, were over 300 newly hatched ducklings. They had been beneath the trays for 24 hours without food or water. On opening the outer door each downy bit of life eagerly crowded toward the light and up against the inner or glass door, and when it was opened were ready to tumble down the glass incline into the box, in which they were to be transported to the nursery.

In the nursery house 3,000 ducklings under 12 days of age occupied the 28 stall-like pens. This brooder house, being shingled, is the warmer of the two heated houses and the hot water pipes under the hovers are but six inches from the ground. The pens and hovers are bedded with pine sawdust and the air in the house did not seem close or foul. Each pen, 4 by 12 feet, is intended to take 150 ducklings.

Every other day, to make room for the newly-hatched ducklings, two pens of the oldest are removed from the nursery to the second house. The soiled bedding is then removed from the pens and under hovers and is replaced with fresh sawdust. The ducklings are then brought from the incubators in a box having a handle and covers similar to those of a market basket. As they are immediately watered and placed on a feed board covered with food, they learn what to eat before they have a chance to try to eat sawdust. They are not put in pens near the heater and then moved along from one pen to another as they grow older, but remain in the same pen for 12 days and then are removed to the second house

For the first five days they are kept near the hover and away from the window by a temporary partition placed across the pen two or three feet from the window. After that time they are allowed the run of the whole pen inside the house, but are not allowed outside until they are eight days old. After this they are let into the out-door yards

every dry pleasant day. These nursery brooder yards, made of boards 12 feet long, shield them from the wind. As these are built before the frost is out of the ground, when stakes cannot be driven, they are tacked together at the ends and a strip is nailed across from one to the other at the top to hold them firmly in place.

The temperature under the nursery hover is reduced to about 75 degrees by the time the ducklings are five days old and lowered to 60 degrees by the tenth day. At night it may be run a little higher. The bedding under the hovers is cleaned out and replaced with clean, dry sawdust every day. The indoor pens are not cleaned but once in two weeks; a little green sawdust is, however, thrown into them daily. This makes them smell good, acts as an absorbent and disinfectant. The Webers use about three wagonloads of pine sawdust per week, or 100 cords during the season.

After being kept in the nursery house for 12 days, the ducklings are removed to the second brooder house, where the hovers are higher, the hot water pipes being one foot from the ground, instead of six inches, and the pens wider (six feet instead of four), and where they are quartered for two weeks. In this house the pipes were not then heated during the day. Here I saw 1,100 ducklings from 12 to 26 days old, about 120 in each of the 18 pens.

When the weather is suitable the ducklings in this house have the liberty of long out-door yards. These are made of rolls of netting $1\frac{1}{2}$ feet wide fastened to stakes $2\frac{1}{2}$ feet high. When the season is over, the netting is rolled up and the stakes removed and stored. The land is then planted with rye.

When 26 days old, the ducklings are removed from this house and quartered in an unheated house, where I saw 450 ducklings that were from four to six weeks old, in four separate pens. From here they are put in the fattening yards and are killed at ten weeks of age. A lot of 450 that were seven and nine weeks old were inspected in these yards. Just before large numbers are daily shipped to market they are crowded for room, and the older ducklings are given the houses of the laying ducks, the latter being put out to pasture with nothing but a shed for shelter. As the season advances, the ducklings require less artificial heat and shelter and during the dry, warm months quite small ones are yarded out doors, day and night, and given shelter from the sun only, which, by the way, is always necessary to avoid sunstroke or serious injury.

the house, but are not allowed outside until they are eight | The flocks were an interesting sight at feeding time. They days old. After this they are let into the out-door yards | are fed five times daily until 26 days old, and after that but

four times in 24 hours. Regularity in feeding is of the greatest importance. If they are not fed promptly, they make a great clamor, tire themselves out and lose flesh. The deafening peeping made by 3,000 ducklings in a 130 foot brooder house upon the approach of the feeder can better be imagined than described. Their activity, and the rapidity with which they shovel down the food is a surprise to the novice.

The feeder goes through the house twice or three times distributing food, that is, serves them more than once at others a chance after the strongest are satisfied. The surplus food left after they are through eating is removed until the next feeding time. Two feedboards are provided in each of the out-door ya ds, and to cover the food instead of removing it, one is turned over the other, when there is not much danger of it souring. This cannot be done in the hottest weather, however. As the season advances, more of the feeding is done in the yards. At the time of my visit 75 pails of the prepared food were required each d: v by the 6,000, the majority of which were under seven weeks of age.

They drink an astonishing quantity of water, and it is amusing to see them hurry back and forth between the feed boards and the water dishes when eating. Without water at hand in which to dip their bills, clear their nostrils and wash down their food, ducklings cannot eat. Their nostrils will get stopped, their throats filled, and they may choke. They must be able to take a mouthful of food and then one of water, another of food and then more water. After they are through teeding they want to fill up with water. An abundant supply is necessary to their best welfare. There fore the fountains are filled both before and after feeding, or ten times each day. The water pines which lead to each pen save much labor, and the watering is less apt to be neglected. The attendant, as he passes along, turns the cocks on and off in pairs, letting the water into two fountains at a time; or they may be turned one after another as fast as possible half way down the house, after which the attendant runs back to the first one turned on and quickly turns them off again in the same order. Care must be taken that the water is not allowed to overflow the dishes and flood the pens. This seems to be the only objection to this plan.

a cutter. This rye patch will be repeatedly mowed, at least which one can appeal, but judging from analogy, the black

three times, before the land is needed for yarding the older Jucklings. Wheat has been tried as a winter crop for this purpose and gave great satisfaction one season, but was a failure the next, and they were forced to buy waste lettuce and cabbage. Rye is now depended upon for the winter and early spring supply. An acre will yield them what green stuff is required during the first six weeks in spring. They use oats and corn fodder also, but prefer clover to any other green food when it can be had.

Where so many ducklings are put together and confined each meal. This is done to prevent waste and to give the to small yards, they learn the vice of feather pulling. To prevent this they may be put on grass, or be given ntore green fodder.

> They believe grit is essential not only to success in life, but to aid the digestion of growing ducks, and they had bought a car load in two sizes, or 20 tons for use this season. A supply of oyster shells, 15 tons, was also laid in.

> They were then collecting each day about 425 eggs from the laying ducks and will continue to hatch at their full capacity until July 1st, after which time the number of eggs put in the incumbators will gradually be less. They had not at that time had a breeding duck that had wanted to sit. Of their large nur iber their average loss was about 12 ducklings per day, and only among those less than one week old.

> Much of the success attained by the Webers is no doubt due to the fact that each of the brothers gives his constant and careful attention to a special department. The great care of running such a plant is divided up among several interested parties. If one man should undertake to ranchis plant with hired help only, the results would probably be somewhat different.

> Postscript, May 11.-The Webers report that on May 8th they had got out over 10,000 dncklings, had already killed and marketed 1,000, had 2,000 fit to kill, and expected to have four pickers at work the coming week.

THE WHITE HOLLAND TURKEY.

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

HE white Holland Turkey is so called because some The Webers consider green stuft a very important part of | June 1 years ago specimens of extra size were imported into the food. They were then feeding daily about four hishels this country from Holland. It is, however, nothing more of green rye, mixed with the dough. This was pulled by or less than the albino of the turkey tribe, the white "sport" hand from an acre plot sown last fall, and was run through from its darker colored relations. There is no record to turkey was probably its ancestor. White birds spring from black ones more frequently than from those of any other color, and it is quite probable that the white Holland turkey originated in this manner.

It is the smallest of the varieties, the standard weight for adult toms being but 26 lbs., for young toms 16 lbs., for hens the same as young toms, and for pullets but 10 lbs. It is but fair to state, however, that these weights are often exceeded and sometimes a close approximation in size to the bronze is reached.

In shape it is the same as other varieties, having the curved neck, the gracefully curved back, the broad breast, and the deep and well rounded body.

The plumage of both sexes is a snowy white and a flock of them is very beautiful.

The white Holland turkey is especially prized for two qualities. It is more quiet and domestic in its habits than other varieties. It does not wander so far afield and seems more attached to the haunts of men. While other varieties are but about half domesticated, this one seems almost wholly domesticated. And its flesh is peculiarly white, making It very attractive when offered in the market. During the season of 1895 the Anowan Farm sold all its turkeys-all white Hollands-in the New York markets at thirty-five cents per pound, which was considerably above the average price. This variety, whether deserved or not, has the reputation of being rather delicate. This reputation may be in part due to the fact that all white fowls share in such a reputation, and it may be due in part to well founded observation. At any rate this reputation ha. prevented the white Holland turkey from achieving anything like the popularity of the bronze, despite the acknowledged excellence of its market qualities.

DOMINION EXPERIMENTAL FARM.

REPORT OF THE POULTRY MANAGER, MR. A. G. GILBERT.

(Continued.)

	Hens	Pullets
Barred Plymouth Rocks	S	3
White do		5
Silver laced Wyandottes	12	12
White do		6
Light Brahmas	10	3
Langshans	11	_
Coloured Dorkings	6	_
White Leghorns	11	11
Black Minorcas	11	6

White do		4
Andalusians	5	3
White Javas		_
P. Rock Dorkings cross	14	
	5	
Golden Polands	4	
Mixed	. 27	_
	151	53

AN EXPERIMENT WITH FIFTY HENS.

On the 10th of March, 1896, the writer was requested by the Agricultural Committee of the House of Commons, to set apart 50 hens of different kinds and see what could be made out of them in a year. The experiment was commenced on the 1st of April following, and is yet going on Careful record of cost and revenue is being kept, and it is hoped to make a creditable showing at the end of the year.

MATING THE WILD GEESE.

Early in the season the wild geese were mated. Later on tame geese of the Toulouse cross were procured and mated with the wild ones—a tame gander with a wild goose, and a wild gander with a tame goose. The birds did not agree, and the eggs of the cross proved unfertile.

HEALTH OF THE STOCK.

During the year the birds suffered little from ailment of any kind. The shortened rations were not only productive of greater laying on the part of the hens, but also proved more healthful. Inquiry as to the remedies for diseases of poultry, in different parts of the country, was several times made and all necessary information given. There is no doubt that over feeding in winter, in many cases, is the cause of most of the ailments reported.

REQUIREMENTS OF THE MONTREAL POULTRY FARM.

On 25th September I went to Montreal and saw the leading dealers in poultry and eggs. My object was to find out the demand; what was best suited to meet that demand and the prices offered.

I found that there was a market of almost unlimited dimensions, for early chickens, called in poultry parlance "early broilers," for which one dollar, and as high as one dollar and a half per pair was paid. To supply this demand, artificial incubation would have to be used.

A poultry dealer at Belleville, Ontario, sent a limited supply of broilers every spring to Brown Bros., but the supply was only limited. This breeder understood and regularly used incubators and brooders. Later artificially hatched poultry brought 20 cents per pound. until the poultry hatched out by farmers and reared on the farm came in late in August and September for which an average price of 6 cents

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per pound was paid. The complaint made by the dealers, as to the farmer raised poultry, was that it did not meet the requirements of their city customers.

A SUPERIOR ARTICLE WANTED.

What is wanted, the dealers said, is a superior class of birds, for table use. One dealer said to me "We have any amount of such birds as these," pointing to two large tables on which were a great number of chickens, called "culls' or barn yard chicks," by the breeder of throughbreds. These chicks weighed from 3½ to 4 pounds per pair, and no effort had apparently been made to fatten, or dress them, so as to present an inviting appearance.

"Would you call a pair of chickens, weighing 8 lbs per pair, at the end of four or five months and a half—that is 4 pounds each—a superior article?" I asked a dealer. "Indeed we would" he replied, "but we get no such poultry from the farmers." "Why:" I said, "we put that weight on our Plymouth Rock, Wyandotte, Java and Langshan chickens every season on the Experimental Farm."

"I wish the farmers would do the same" remarked the dealer.

I found that for such poultry the dealers would pay 10 cents per pound to the farmer and would rather do so than pay 6 cents per pound for the inferior article.

I came to the conclusion that what our farmers wanted was a knowledge of the breeds which make quick flesh development. I think to the lack of this knowledge on the part of the farmer, rather than to any unwillingness or want of ability to furnish the demand, is to be attributed the scarcity of the superior article.

I learned that the poultry from the neighborhood of Smith's Falls, Belleville and London, was the best that reach ed the Montreal market, and found most acceptance by the dealers, because of superior quality.

A point made by the dealers was that the poultry bred—that is the chickens reared by the farmers, developed muscle and bone, but not the quality of flesh required.

This has been shown in my reports for years past, to be the result of allowing the chicks to run with the mother hen and to pick up their own living. Chickens should be carefully looked after from their hatching until they are taken to market.

NEW LAID EGGS.

I was informed that new laid eggs were hard to get in winter, and that farmers were paid as 10gh as 40, 45 and 50 cents per dozen, the latter price being frequently paid petween the 15th December and 15th February. A reliable quality of eggs for summer use is also required.

In fact the winter market for eggs is a large one, and the demand for a SUPERIOR QUALITY OF POULTRY for early market is very great.

I also saw some of the newspapers with the view of reaching the farmers through their columns, and so let them know the requirements of the Montreal market

In conclusion permit me to remark that in view of the shipment of poultry and eggs to the English market by the government, the farmers cannot receive too much instruction as to how to get the superior quality of poultry and larger eggs required for export and home consumption.

RE INCUBATOR PRIZES.

Editor Review:

BEG to acknowledge Mr. Dilworth's remarks in November Review with reference to awards on incubators at the last Industrial Exhibition. Considered as an explanation of the matter Mr. Dilworth's communication is by no means a lucid one, I maintain that when a positive announcement is made in the prize list, that announcement should be adhered to rigidly. I desire to correct a statement of Mr. Dilworth's to the effect that I promised to exhibit in 1897, I made no distinct promise to this effect, neither do I think that I should be asked to make such a promise a year ahead of the time, but because I did not exhibit this year Mr. D. says, "Evidently prizes did make a difference."

Just what Mr. D. means by this is not very clear, the only difference it made to me was this, that medals were awarded to those who exhibited, when as a matter of business and a matter of right they should not have been.

If it was the intention to award prizes I claim that I had a right in common with the rest of the public to be notified of that intention. Had the Association announced in their prize list that the medals would be awarded as in 1896, I should certainly have exhibited having won the silver medals in 1895 and 1896. I feel that in a sense I should have been compelled to exhibit in order to prove that my machines are still capable of sailing in the best company; but when it was distinctly announced that no awards would be made I decided not to exhibit as there was no glory to win by doing so, and my business engagements were such that I could ill afford to spare the time necessary for a two weeks exhibit being away from the city on a business trip a distance of from two to three hundred miles.

Personally I care very little whether the Association gives prizes or not, and I wish it distinctly understood that I am not complaining because the Association awarded prizes

this year, but because they announced one thing and carried out another. It is not for me to dictate to them whether they shall give prizes in this department or not, they have a right to do as they please, but I maintain and I think every business man will agree with me, that whichever course is decided upon and whatever announcement is made in the prize list it should be carried out to the letter.

In the July, 1896 REVIEW, page 109, is a letter from Mr. Dilworth, complaining that he had been unable to obtain the views of the incubator men as to how incubators should be exhibited so that the exhibit would not only be satisfactory to the manufacturers but to the visitors. In order that Mr. D. may have no cause for complaint in future on this score as far as I am concerned, I will here publicly state my views of the matter. If it is decided to give no prizes or awards of any discription let the committee stick to this and leave it to the descretion of the exhibitors of machines to show their machines in operation or otherwise as they may see fit.

But if I had to make a choice between "prizes" or "no prizes," I would decide in favor of prizes under proper regulations. I would respectfully suggest that the machines be shown in actual operation and under the supervision of a committee for the entire three weeks of the hatch, each exhibitor to be allowed half an hour every morning and the same time every evening to attend to his machines. could apply to local exhibitors only. Ed.) At all other times during the period of incubation he shall be excluded from the room which shall be locked and sealed in a manner to be hereafter agreed upon, and no person, either committeeman or anybody else shall be permitted to enter except at the times stated when machines are being attended to; each exhibitor may furnish his own eggs but he shall not be permitted to use all of them, for the reason that he might have better eggs than his competitors, we will suppose there are six competitors and six lots of eggs, each lot shall be equally divided between the six competitors, so that each competitor gets an equal share of each lot.

not be handicapped by any other exhibitor each exhibitor's machine should be partitioned off from those of his next neighbor, principally for the following reason, in some inas pure air is of vital importance in hatching.

prove conclusively which was the best hatcher.

Give a first, second, and third prize for the largest percentage of chickens hatched from the fertile eggs in machine, all eggs to be tested on the seventh day, and all eggs not removed on the seventh day to be counted as fertile whether they are or not.

If the three best hatches are made by the machines of one exhibitor he shall be awarded the first, second and third prizes. In such a contest every man would stand on his own merits, all I ask is a fair field and no favors.

T. A. WILLITTS.

Toronto, Nov. 22, 1897.

Mr. Willitts plan is eminently fair to local exhibitors, of course it puts outside manufacturers at a disadvantage unless all are entirely debarred from the working of machines. Mr. Dilworth's reply—if he cares to do so—will end this discussion. Ed.

OTTAWA SHOW REPORT.

RED CAPS, WHITE JAVAS, AND TEN FOOT LADDERS.

Editor Review:

NOTICE what our friend Benjamin says of the Red Caps at that show as follows: - "Red Caps an unusually large number of entries were of good size, but" -and I draw the line on the but -" the combs have be come almost, I might say, a deformity."

From the above, your readers will conclude that the remarks applied to the winners, whereas I don't think one of those birds received a mention. For my part for the past seven or eight years I have been breeding away from the American Standard and have been breeding for smaller The Standard says: "Comb rose, large, the larger the better, not over-hanging the eyes, square in front," and so on. Now I would like to know how you can have the "larger the better," and not have the comb "overhanging the eyes." I think I have got my birds down to the point where there is no obstruction to the eyes. Our judges might In order that each exhibitor may have fair play and may cut my birds for small comb but I can't help it, I shall still breed for smaller combs. When I first started in Red Caps some twelve years ago I imported a cockerel from England and had to cut his comb off it had grown over the bird's cubator lamps the combustion is so imperfect that they poil beak so that it could not eat and the bird was starving to son the atmosphere with the fumes from the burner, I for death, as soon as comb was off, it commenced to eat and one should object to run my machine in such an atmosphere, pick up and was the best breeding bird I ever owned, that como weighed 41/4 oz. The Red Cap will stand any amount I think that a contest as above roughly outlined would of cold, I have never had a frozen bird yet, they are getting very popular in our N. W. Territory.

I would like to say a word about white Javas, now I am at it. Our, or I had better say, some of cur Ottawa friends have a prejudice against this variety and tell us they are only mongrel white Rocks. What I wish to say is I have white Java pullets that were hatched out June 1st, 1897. Commenced to lay Nov. 9th and weigh 63/4 lbs. Can our blue blooded white Rocks beat that? My black Leghorns have always carried off the banner for early laying but Miss Java is away ahead this season.

We would like to hear from our eastern friends oftener, by that means we will get an exchange of ideas beneficial no doubt to both east and west. We will try and climb up to the 2000 mark with entries next year but our friend Benjamin must see to it that we have not got to use a ten foot step ladder to see our birds at Ottawa's big show in 1898.

C. J. DANIELS.

Toronto.

TORONTO POULTRY, PIGFON, AND PET STOCK ASSOCIATION.

HE regular menthly meeting of the above association was held in Temperance Hall, on Thursday, Nov. 11th, at 8 o'clock with the President, Mr. Essex in the chair. The minutes of previous meeting were read and confirmed.

The following gentlemen were proposed for membership and accepted:—Messrs. H. C. Williams, R. Thompson, C. Coulter, Mr. Schlenker, F. Powell, P. Goldsack, C. McDonald, E. J. Otter and Mr. Webb.

The judging competition is to be held on Thanksgiving Day, at Exhibition Building, Mr. L. G. Jarvis, the popular judge is to judge all specimens, after which any member making entry can compete. A committee of three, Messrs. Donovan, Essex and Dilworth have been appointed to compare the competitors cards with Mr. Jarvis' and bring in a report at the annual meeting which will be held Dec. 9th.

The following members were nominated for officers for the ensuing year.—Hon. President, Mayor Shaw, acclamation; President, C. Bonnick, acclamation, 1st Vice-President, J. Chambers, C. Grimsley and Mr. Barker, 2nd Vice-President, E. W. Gill and C. Mick; Secretary, R. Durston, acclamation, Treasurer, E. J. Dewey, acclamation, Auditors, J. Dilworth and J. R. Wilson, acclamation; Executive Committee, W. H. Chambers, F. Spry, F. Coulter, C. Mick, J. Dorst, C. J. Daniels, E. J. Dewey, W. Barber, Dr. Bell, R. Durston, J. Dilworth and W. J. Watson; Delegates to

Industrial Exhibition, J. Dundas, R. H. Essex, J. Brown, Wm. Fox, and J. Barker, Delegates to Western Fair, Wm. Barber and C. J. Daniels.

It was moved by Mr. Grimsley and seconded by Mr. Mick that this association make application for the Ontario Show next year. Carried.

Moved by Mr. Barker, seconded by Mr. Spry. that Mr. Essex be nominated as President of the Ontario Poultry Association. Carried.

The meeting adjourned at 10.15.

R. Durston, Secretary.

WOODSTOCK SHOW.

HE Secretary writes:—The show promises to be a very large one. In addition to the large number of coops we built last year we have added a lot more, also a number of fine Bantam coops. By the large number of inquiries as well as those who have intimated their intention of making a big entry I expect we will need all our coops, but we have a good big reserve to draw on should we need them. You see the secret of our success is in the fact that we did all we promised last year and every exhibitor that came to Woodstock, went away pleased." A large list is promised and that is what tells. Entries close on Dec. 22, and those wanting a list have but to drop a postal card to the Secretary.

NEW HAVEN, CONN., POULTRY ASSOCIATION.

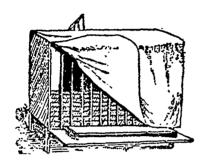
ILL you kindly allow me to announce that our society has decided not to give a show this season. Of course those of us who have raised several hundred prize winners, more or less, as the deeds of our farming lands put it in mentioning acreage, do not take kindly to this state of things, but there are others—other shows—ten of them at least booked for the same dates as those we had chosen, so no one ought to suffer, the choice is large. We are very sorry to disappoint those who have exhibited with us in past years and wish them all the suc cess elsewhere which they are justly entitled to, which we feel sure will be considerable.

N. D. FORBES,

Secretary.

A FATTENING COOP.

of facilitate the fattening of fowls when the number is small it is often desirable to have a small space in which to confine the birds under as favorable circumstances as possible. At almost any time of the year it may be con



COOP FOR FATTENING FOWLS.

venient to have a place for fattening one fowl at a time. Such a coop is illustrated herewith. The bottom is composed of laths, set edgewise, ¼ in apart. This secures cleanliness. If the strips are too thick they will retain a portion of the filth. If the openings are too wide the fowls will perch instead of squatting on the floor, the latter being desirable. Let the feed trough be outside, that the feed may be kept clean. A piece of cloth should be used to keep the coop dark when the birds are not eating or drinking. A door in the rear (ajar in the illustration) is of obvious use.

OTTAWA PRIZE LIST.

A CORRECTION.

OU will kindly correct an error in report of Ottawa prize list:—Duck, Aylesbury, 1st prize; drake, Aylesbury, of '97, 2nd and duck, Aylesbury, of '97 2nd were credited to Mr. McLaughlin. They should have been credited to us, as we showed and owned tnese ducks and not McLaughlin as reported. Kindly rectify and oblige.

Yours truly,

W. STEWART & SON, Menie, Ont.

MR. RANKIN'S DUCK RAISING OPERATIONS.

How a Run-out Farm was Restored and the Farmer made Rich by raising Ducks for Market.

BY SAMUEL CUSHMAN.

R. JAMES RANKIN, the veteran incubator operator and pioneer in artificial duck raising although 65 years old is still extensively engaged in raising ducks. Having lately added a new double brooder house to his plant at South Easton, Mass., he will this season raise considerably more than the 12,000 ducklings usually grown. He no longer raises early roasting chickens, because they are now less profitable. Although his enormous trade in choice breeding ducks and ducks' eggs for hatching, built up during the last 25 years, is the most important part of his business, he continues to make a snug sum every year on ducks grown for market.

The extent of the ducks and the great growth of the business is shown by the fact that although other large and successful duck farms in various parts of the country are now selling quantities of eggs for hatching, Mr. Rankin sold last year 50,000 eggs for this purpose. He states that out of 2200 breeding ducks saved the previous fall, all but 1500 were sold by April and only 1000 remained on May 1. Up to April 30 this year (when he had between 800 and 900 ducks) he had sold 22,000 egg for hatching. Two weeks before the writer's visit he was obliged to cancel an order for 6500 eggs and a week previous had to refuse another for 900. Most of the other well advertised duck breeders are now refusing orders for eggs. Mr. Rankin has filled an order from one man for 25,000 duck eggs and orders for 3000 and 1500 eggs in one shipment are not uncommon. The bulk are, however, sold in small orders at from \$7 to \$8 per 100. For his breeding ducks he receives from \$2 to \$5 each, according to quality and quantity, and ships them at all seasons.

THE PRICE OF EARLY MARKET DUCKS.

Nor has the price of early market ducks declined to what was expected when so many were taking up the business a number of years ago. The popularity of this meat seems to have grown nearly as fast as its production has increased. Now although grain is lower than when few were raised they bring within 7C to 3C per lb as much in the market Mr. Rankin's estimate, that a young duck can be grown to 10 weeks of age at a cost for food of 4C per lb, not including value of eggs, is not questioned by other extensive growers,

and his statement that 6c per lb will cover the cost, including eggs and labor, is probably not very far out of the way. One may see that this leaves a margin for enormous profits on early hatched birds that sell at 35c per pound, for good profits on those sold at 22c in May or 16c in June, and there need be no loss on dressed ducklings at the lowest price received, 13c from August to November.

MR. RANKIN'S METHODS

of growing ducks for market are of interest to practical poultrymen. On April 30 he had hatched over 7000 ducklings, 400 of which had been marketed, the first at 350 per lb and the remainder at 30c. His ducks, some over 800, were laying 500 eggs per day, 100 less than they were before any wanted to set. He was running 13 incubators (600 hen egg size), filling one, and therefore having a hatch to take away every other day. At this time 4000 fertile eggs were in the incubators, 1000 than for some time previous. His nursery brooder, 150 feet long, heated with hot water pipes, was filled with little ducklings, the yards of his new brooder house held thousands of older ones and those nearly ready for market were quartered in unheated houses or yarded out with nothing but open sheds for shelter. Three men were constantly employed in feeding, collecting eggs and in other ways promoting the thrift of this quick growing crop, which instead of impoverishing the soil was rapidly enriching it. At this time 75 bushels of grain was being fed each day, or about 100 buckets prepared food at each feeding time.

THE LAYING DUCKS

were quartered in double-pitched-roof houses about 16 feet wide and of different lengths. One is 200 feet long and others 120, 70 and 60 feet. Three are 30 feet in length and several 12 feet square. They are made of cheap hemlock lumber and covered with standard roofing. The material for one building 120 by 16 feet cost about \$100. The interior of this house is divided into pens 12 by 18 feet, with an aisle along the back wide enough for the passage of an attendant with a wheelbarrow. There are three or four sliding half windows in the front of each pen. The indoor parti. tons are about two feet high. The pens are bedded with meadow hay, and 30 ducks and 6 drakes are quartered in each. A yard 100 feet long and as wide as the pens, made of 30 inch netting, is connected with each. The ducks have access to these both day and night in the summer and during the day, after they have laid, in winter.

When feeding them in winter, the food troughs are placed in the pens near the walk, so as to be reached from the walk, also a box of coarse food and of crushed oyster shells. Prepared grit is mixed with all soft food. Low nests are

arranged along the aisles and the eggs are collected from the walk. These are well bedded with hay, and 90% of the eggs are clean enough to be used without being washed, an important item. About 40% of the ducks want to set after they have laid 75 eggs, but will lay again in three to five days if they are shifted to another yard. The eggs have been unusually fertile this season, and this is usually the case where drakes fight each other, as they have been doing. Medium sized drakes are the best for market production. Mr. Rankin breeds a few of the largest for show purposes, however.

PASTURING AND FEEDING.

The laying ducks are removed from their winter quarters about Aug. 1 and the yards are sown with 1914, to purify the land and to furnish green feed. The birds are pastured on green sward during the summer. They are removed to a fresh place frequently and these plots are readily distinguished the next season by the dark green color and rank growth of the grass which covers them. Young ducks intended for breeders are also pastured out in this way and both are fed lightly through the summer. Their food is composed largely of bran, with but a very slight proportion of corn meal mixed into a soft mess, and is given morning and evening. They are fed lightly, because they should forage.

When housed, about Nov. 15, Mr. Rankin gives them twice a day a soft food made of equal parts corn meal, wheat bran and Quaker oat feed, and 12 or 15% beef scraps. To this is added one-fourth part cooked vegetables, like small potatoes, turnips, etc. They are also given all the green rye and refuse cabbage they will eat. A little whole corn is given them at noon but no more food at one time than they can eat up clean. He finds that under such management they lay in about three weeks after being housed. (A young duck can easily be made to lay at five months old if desired.) At first the fertility of the eggs is low, but soon becomes high. The average yield of a flock, counting ducks and drakes, will be over 100 eggs per head per year, a high average for one duck being 150 eggs in one season.

PROFITS AND INPROVEMENTS.

Early in the eighties, Mr. Rankin published an account of how he made \$42 from each of 30 Pekin ducks in one season, having sold on June 1 one lot of 300 raised from them at 30 c per lb. This statement was received with so much skepticism, so few had any idea of the possibilities of the business, that he now prefers not to make public the number of thousands of dollars his duck business brought him last season.

One important result of growing the duck crop for many

vears is the benefit the land receives from feeding such quantities of grain-Mr. Rankin buys seven carloads of bran and oat feed at one time in the fall and cornmeal at the rate of one ton per day during the height of the season. Twentytwo years ago but 6 tons of hay were cut on the place. Of course more land has been cleared since, but lately 125 tons of hay, first and second crop have been secured in one season. Now the land is so rich that the grass all over it is dark green and grows heavy and thick. Mr. Rankin was so reluctant to have the hay that was produced sold off the place that he has made a home market for it by boarding horses. The hay and carrot crop is now fed to from 50 to 60 horses, boarded or kept on the place each winter, and the manure is put on the land. So the farm is fast growing richer every season.

THE ARCHEMEDIAN BONE CUTTER.



HIS machine we are assured by the makers, and this guarantee is borne out by many excellent testimonials, is not put on the market without a thorough test of its capacity to do good work. The system applied is a novel one and it is claimed that ease in cutting is one of this machines most prominent features. Several de signs and sizes are made and at various prices. To those about to buy we nvite their consideration of its merits.

QUESTIONS AND ANSWERS.

QUE -What kind of coops are best for taking poultry to a winter show? Are cotton coops warm enough if they are sent by rail? If they are strong enough to put light matter on top of them can they be sent for merchandise rates.

These questions may be answered in your next issue.

K. F. McKenzie, Paisley, Ont.

Ans.-Cotton coops will do though it is better to use the regulation all wood light coops. Shows get a special rate of double first class and free return, and any kind of coops, seem to meet with the companies approval for show purposes.

· OUE.—I have a couple of birds that best thing I can do for them. Kindly answer at once and oblige. S. A. G.

Ans.-Wash legs well in hot water to soften, and apply a mixture of sulphur and lard once a day. In extra bad cases we have used coal oil put on with a paint brush.



Mr. J. H. Caytord, 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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To any one sending us four new subscribers with \$4 we will send a copy of " Poultry Culture" by I K. Felch, value \$1.50. A book no fancier should be without. We have lots of these books so don't be afraid the supply will run out. Send four new subscribers with four dollars and get a NEW STANDARD

- -The Mammoth Pekin Ducks of Mr. James Rankin have a continental fame. He now offers some for sale through the REVIEW.
- -DENTONIA PARK FARM.-Mr.W. E. H. Massey proprietor offers cockerels of S C brown Leghorns and light Brahmas at very reasonable prices. They are from a 7 stock.
- -The Wagner Incubator Co. present a list have very bad scaly legs, what is the of the medals etc. won by them and want you to write them. Do so.
 - -Mr. J. Bedford has bought winners, and good ones, in buff Leghorns. He has a few birds of various breeds for sale. See his ad.
 - -Mr. F. R. Webber in taking one of our popular "for sale" ads. for a year gives a list of the breeds he handles, of course making a specialty of Javas both white and black.
 - -Mr. F. B. Jones is obliged to leave home and offers all his stock at very reasonable prices. He has had fifteen years' experience.
 - -Mr. Jno. W. Kedwell in renewing his advertisement offers stock of his specialties for sale, and gives a list of some of his recent wins. He offers birds cheap now to make room. He will show largely at Sarnia.
 - -- Rose comb Leghorn bargains are offered by Mr. N. D. Forbes, and eggs may be had in season.
 - -Fortier Poultry Yards give a long list of their successful wins and offer some birds for sale. The list of honors is worth looking at.
 - -Mr. C. J. Daniels, Canada's "universal provider" in the poultry line uses a full page in this issue to announce the wares and stock he has for sale. "If you want anything you don't see, ask for it" and he will get it. The test montals he prints are of recent date and genuine, we have seen and read the originals. Give him a call if in need of anything in supplies or stock.

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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, Roupy diseases, Bad Moulting, Bad Fledging, Weak Young Pigeons, Chickens, Turkey, 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, &c. Canker. Leg-weakness.

Since the introduction into Canada of these Pills, the Agent has received numerous letters from

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WARDSVILLE, Ont., Jan. 1887. 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. YORK.

SEAFORTH, Ont., OCT. 6th, 1886. 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.

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SEPTIC FEVER IN CAGE BIRDS.

Continued

Tuberculosis in cage birds is a very rare disease. I have examined hundreds of dead birds microscopically, and have never met with a case yet. I do not say that it never occurs; tuberculos is is a very wide-spread malady; it has been observed by Koch in fowls, and it would be strange if cage birds were exempt, though they are not exposed to the contagion like poultry, which feed on dung heaps, and pick up all sorts of refuse, but I have neither met with a case myself, nor known of one demonstrated by any competent obsever, and it is certainly very rare. On the other hand, septic fever is one of the commonest of disorders, and if you see a bird with nodules in the spleen, the chances are all Lombard Street to a China orange—in fact a practical cer. tainty, that it is a case of septic fever. Now, as I will presently show you, the diseases are distinct. There is no resemblance between the organism of sentic fever and the tubercle bacillus. No one who is acquainted with the subject and will take the trouble to make a mi croscopical examination, can confound the one with the other, and, consequently, whenever a man calls a case of septic fever, tubercolosis, it shows that he neither knows what tuberculosis is, nor what septic fever is, or else, that he has not taken the trouble to devote half-an-hour to a microscopical examination, and thinks, so long as he gives the malady a name, it does not matter whether it is right or wrong. But I need hardly tell you that this is worse than trifling. That the first steps to. wards the rational treatment or prevention of a disease, is to know what it is, and it is not creditable for so called ex perts, who are either too ignorant to recognise well-known diseases when

they see them, or too lazy to look for them, to go on year after year taking money to give people misleading information.

My purpose to-night is to explain to you shortly, but I hope clearly, the nature of septic fever, to show you how it originates, and it spreads, and if I succeed in this indeavour, you will have no difficulty in seeing for yourselves, how to deal with the disease in a rational and successful manner.

In describing a technical subject to those who have never made any special study of it, there is naturally some difficulty in deciding how much knowledge one may take for granted, and if I assume too much and fail to make my meaning clear, I shall be glad to answer any question at the end of the lecture; and I must ask your indulgence if I err in the other direction and weary you with details which I might have omitted with advantage.

Septic fever, or septicæmia of birds is a parastic disease produced by a microphyte. It was described in 1878 by Koch in Germany, and subsequently by Klein, Dowdeswell, myself, and others in this country. We are familiar now with bacilli, and bacteria, and their connection with various diseases, but I think I shall make what follows clearer, by a few prefatory remarks on the nature of micro-organism generally, and the part they play in the production of

Cage Birds, &c.

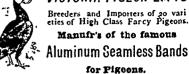
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Fancy Pigeons for sale-Pouters white and black, Barbs, Owls, Jacobins, Antwerps, Fantalls, Turbits and Tumblers. Bert Hicks. Woodstock, Ont

Potters only—Standard colers, winners at the Ontario and Industrial whenever shown, choice birds in Blacks, Flues, Rees, Whites and two yellow hens, for sale at reasonable prices, Stamps. Magill and Glidden, Port Hope, Ont.

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Fantails, Fantails, Fantails-I can supply manusis. manusis, manusis—1 can supply any number required, blues and yellows. In lots I will supply to pairs blues for \$10 co. 10 pairs blues of better quality \$15 co. 37.418 yellows \$3.00 per pair. Write me for pitce and particulars on any quantity, from single birds up, I can please you. Geo. Jeffrey, Box 170, Guelph, Ont.

Jacobins—Al! colors—sure winners; a grand lot of birds which I will offer for the next thirty days at sacrifice prices; am crowded. A sew scellent poins of white Fantails. Stamp. Chas. Massie, Port Hope,

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