ALL ABOUT INDIAN RUNNER DUCKS

BY

MRS. D. O. TEASLEY

Monarch Publishing Company,

MIDDLETOWN, INDIANA.

All About

Indian Runner Ducks

A treatise on all varieties of the Indian Runner Duck, including their Origin, History and Culture

BY

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State Secretary National White Indian Runner Duck Club for Indiana, and
Member American White Orpington Club.

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PREFACE.

The need of a reliable work on the Indian Runner duck is so obvious to poultrymen that no apology is necessary for the appearance of this book.

In addition to what I have learned from experience, I have consulted the best books extant on the Indian Runner, and have endeavored to reduce the knowledge thus gained by experience and research to a condensed, unified and practical form.

I am not sanguine enough to think that I know everything there is to know about the Indian Runner duck, but I have the honor to have associated with me in Part II of this book three other prominent breeders—Mrs. Geo. R. Simpson, Mrs. Andrew Brooks, and Mrs. U. R. Fishel, who have each contributed a chapter on the particular variety in which she is especially interested. I think, therefore, that I am justified in giving this book the title, All about Indian Runner Ducks.

MRS. D. O. TEASLEY,

Anderson, Ind.,
January, 1912.

PART I.

A TREATISE ON

THE INDIAN RUNNER DUCK

By

Mrs. D. O. Teasley

Fancier and Breeder

Anderson, Ind.

All About Indian Runner Ducks.

CHAPTER I

Origin and History

The Indian Runner duck came originally from India; hence the name "Indian." The term "Runner" is supposed to have been taken from the fact that they literally run instead of waddle, as do other ducks. The origin of the Indian Runner duck, like the origin of many other good things, was little thought of until she became popular. It is singular that money will make even a duck popular. So long as we were ignorant of her money-making abilities, we were no more interested in the origin of the Indian Runner than in that of the puddle duck, but as soon as she was found to be a money-maker, the whole country became interested in this wonderful fowl, and we naturally inquire, where did she come from?

Whether it is due to the fact that we are inclined to think, as many other people are inclined to think of their country, that nothing good could originate very far from America, or whether it was a mistake, somehow the story got out that the Indian Runner duck came originally from the West India Islands. Some believe that it was due to a printer's accident that changed the letter "E" in East to "W." After this error it was easy, by supplying "e" for "a," to upset the whole geography of the earth and bring the original home of our beloved duck twelve thousand miles westward. In whatever way the story got started, it is now disproved, and no well-informed breeder believes the West Indies tale.

The most plausible story has it that the Indian Runner is a native of India. They were discovered, it is said, by an English sea-captain who, attracted by their lively movements, upright carriage, and by the stories of their wonderful egg production, captured them and took them to England. Mr. C. S. Valentine quotes an English breeder as saying: "The earliest history of the fowl (the Indian Runner) that can be gathered is that they

were closely associated with the ancient Hindus of India 1000 years B. C. The bird appealed to them through its fighting qualities. Thus it was that the fowl was first domesticated, not for its food value so much as for its sporting qualities. It was principally located in the Punjab, Northern India; its culture spread over India, then distributed through the islands of the Indian Ocean and into China, and as civilization increased and commerce and colonization commenced it gradually worked its way through the Malay archipelago into Persia, and thence into the European countries." Mr. Valentine does not give the foregoing as absolute facts, but he says himself: "The peculiar running gait, it is thought, seems proof of the Indian Runners being survivors of the fittest, long ago, in a barren region lacking in vegetation and abundant in insect life, where the usual type of waddling duck would have perished from want of sufficient sustenance, through sheer inability to forage so fast and so far." Though both of these stories sound considerable like fables of the East, there may be, after all, some truth in them. At any rate, it seems conclusive that the Indian Runner is a native of India and not of the West India Islands.

The history of the Indian Runner in England has been traced back, with more or less distinctness, for a period of eighty years. After going back about forty years, however, the history becomes somewhat hazy. About the only definite knowledge we have is that they were first known to Britain in County Cumberland in the north of England. They are now bred extensively in the British Isles. Mr. J. W. Walton, Secretary of The Indian Runner Duck Club of England, is probably the most extensive English breeder well known to Americans.

About fifteen years ago the Indian Runner was imported from England to this country. Here it was bred by but few until about 1904 or 1905; since which time it has been constantly growing in favor. At present there are in America no less than three distinct varieties or colors. The latest American Standard of Perfection calls for a light fawn and white color. Those known as the English standard ducks are a darker brown with a light brown penciling. More recently the pure white variety has made its appearance. This, in a brief way, brings the history of

the Indian Runner down to the present time. In part second of this book will be found some further notes on the history of the Indian Runner duck.

CHAPTER II

Varieties of the Indian Runner Duck

There are three varieties of the Indian Runner—the English penciled, the American Standard or light fawn and white, and the pure white. Each variety has its friends as well as its foes. "All the ways of a man are right in his own eyes," especially if he is after the dollar. The breeder of the penciled duck would have us believe that his variety is the only Indian Runner worthy the name; that all others are worthless mongrels. The breeder of the light fawn and white duck tells us that his is the only true Indian Runner and that the old unimproved penciled variety will soon be a thing of the past. Breeders of the white Indian Runner have not been in business long enough to tell us much about their ducks, but among the first phrases we hear from them is, "Best of all." The reason why most breeders think their ducks "the only pebbles on the beach" is too obvious to the most of us to need comment—they have "an axe to grind."

Since the history of the Indian Runner is lost in the dim spectre of the past, and since we can not trace them distinctly even for one hundred years, probably no reliable breeder would care to say upon his oath that any one of the three varieties has never consorted with any other breed of ducks. It is commonly conceded, I believe, that until twenty-five or thirty years ago the Indian Runner duck in England, its first western home, was not very carefully bred. For fifty years or more, therefore, the original stock brought from India had abundant opportunity to mix with other ducks; and since the Indian Runner duck is not a very strict monogamist, it may be, after all, that even the English penciled duck is somewhat of a mongrel. At the Madison Square Garden Show, Dec., 1911, was exhibited an Indian Runner said to be imported direct from India. I saw the duck, or rather, the drake, but I am unable to say from positive evidence whether it came from India or not, or if it did come from India whether it was a pure Runner or a cross with some wild breed. We do not

have to argue long to convince a reasonable man that the American Standard light fawn and white varity possesses some blood foreign to the original Indian Runner, and, could the White Pekin duck speak for her family, she would doubtless tell us something about where the white Indian Runner got her frock. Some of the white Runners, however, are sports from the light fawn and white, but since water can not rise above its own level, the white variety can hardly claim purer blood than the light fawn and white from which it came. It is highly probable, then, that all three varieties of the Indian Runners, with the possible exception of ducks recently brought direct from India, are in a degree mongrels. Since we all live in glass houses, then, would it not be good advice to quit "slinging mud" and "throwing stones" and admit that every fowl that can produce food and give us pleasure has a right to live?

In deciding which of the three varieties of Indian Runner ducks is best, two things must be held in mind: utility value, and fancy qualities. Of these, the former is certainly more important. We can live without fancy stock, but we must have food. In fact, utility value is the supreme test for any fowl. So far as quality of flesh and size are concerned there is no difference in the three varieties. In meat production, therefore, they stand equal. In egg production we must consider color and quantity of eggs. In quantity, each breeder sanguinely believes that the particular variety that he breeds lays more than any other. Who is right, we shall have to wait and see. I have bred all three varieties, and I find them all great layers, but which lays most, I am not able to say. In color the evident demand is for a white shelled egg and not for a green one. Just here is where the hottest fight is on between the breeders of the penciled duck and the breeders of the light fawn and white duck. Breeders of the penciled duck say that she always lays a pure white egg, and that all the fawn and white ducks will lay some green eggs. On the other hand, the breeders of the fawn and white say that the penciled ducks lay as many green eggs as do the fawn and white. Not knowing who to believe, I recently asked one of the best water fowl judges in the country for a frank statement on the subject. He said: "I have yet to see my first breeder of any variety of the Indian Runner who does not occasionally get a tinted egg." Reliable

breeders, however, are fast developing a pure white egg strain, and the time is not far distant when all thoroughbred Indian Runners of whatever variety will lay a white egg exclusively.

Fancy quality is only relative. What is most fancy depends upon who is the fancier. At present only the light fawn and white variety is admitted to the American Standard of Perfection, but, in my opinion, all three varieties of the Indian Runner type of ducks should be admitted to the standard. Several different colors of the same variety of chickens are admitted to the standard, why not the same with ducks? The black, the white, and the buff Orpingtons are all true Orpingtons. Why, then, are not the penciled, the fawn and white, and the white Indian Runners in a sense all true Indian Runners? To admit all three varieties to the standard is the only reasonable solution of this problem, and the American Poultry Association will, I believe, finally come to it.

The English Penciled Indian Runner Duck.

Indian Runner Duck according to the English Standard.

The above cut was made from a photograph and gives a fair idea of the English penciled Indian Runner. In Part II will be found a more complete description of this variety together with the requirements of the English Standard.

Light Fawn and White

American Standard Indian Runner Duck.

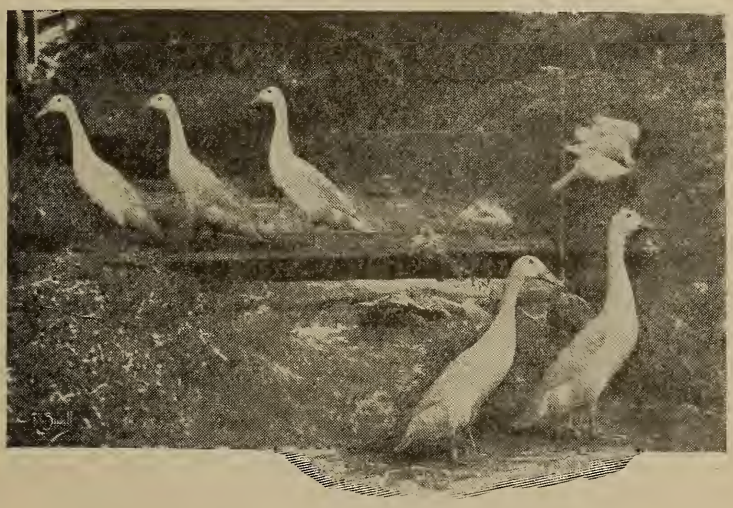
Ideal American Standard Indian Runner.

"The standard-bred Indian Runner has a long, flat, finely formed head of a light fawn and white color. The head should be adorned with cap and cheek markings of light fawn or gray, the cap being divided from the cheek markings by a narrow white line, and the base of the bill from the head markings by a line of white about one-eighth of an inch wide. The bill is of unusual length, fairly broad and strong at the base, extending down from the skull in an almost straight line. In the ducklings the bill is of a yellow color, spotted with green. When fully matured, the bill of the duck should be dark green in color; the drake, yellow with a black bean. The eyes are dark brown in color and set high in the head. The neck is unusually long and slender and white in color from head to the beginning of the breast markings. The back is long and narrow and of a light fawn color. The breast is round and of a light fawn color, evenly divided about halfway between the point of the breastbone and the legs. The

body is long, narrow, and carried erect, with no indication of keel, somewhat resembling that of the Penguin in shape, and is of a light fawn color. The wings are of medium length and carried close to the body, the shoulders and top part of the wings being of the same color as the breast. The tail is composed of hard, stiff feathers, the sex feathers of the drake being well curled. The color of the tail is light fawn. The legs should be of medium length and set well apart; the toes straight and connected by web. Color of shanks and toes should be a deep orange yellow." The standard weight of the drake is four and one-half pounds a of the duck four pounds.

The tail of the drake, according to the new standard, should be a bronze-green. All good breeders and poultry judges, however, are of the opinion that this is a mistake, and that the tail should be fawn.

White Indian Runner Duck



The white Indian Runner is making rapid progress, and it is believed by some that this variety will soon be the leading Indian Runner. They are said to lay a pure white egg and to possess extraordinary hardiness. As to origin, it is believed that the white Indian Runner is the result of a cross of the fawn and white variety with the white Pekin duck. Some affirm, however, that they are sports from the fawn and white Runner, and therefore that they are pure Indian Runners.

The white Indian Runner does not differ materially from the other varieties, except in color. When their white is sufficiently fixed so that they will breed true to color, the white Runner will be an advantage, for since they are white all over and have no markings, it will be easy to breed true to the standard. I speak of their standard prospectively, for they will undoubtedly be admitted to the standard in course of time. Yet fanciers, like other human beings, glory in achieving that which is difficult. It may be, after all, therefore, that the more-difficult-to-produce light fawn and white duck will hold the leading place among the Indian Runners. Some admire the white duck, and others the penciled, but since the present standard calls for the light fawn and white, those who wish to breed for exhibition must breed the light fawn and white duck, until a place in the show room can be made for all. It is believed that the time is not far distant when the standard will admit both the penciled and the white Runners, and even now classes are being made in some of the large shows for the non-standard birds.

In Part II of this book one of the leading breeders of the white Indian Runner will tell you his experience and what he thinks about them.

CHAPTER III

Claims for the Indian Runner

Being a small bird, the Indian Runner has no superior claim to the production of feathers. She is too valuable for meat and egg production to be raised for anything else.

As a meat producer, the Indian Runner is a quality bird. The standard weight being four and four and one-half pounds, the grown ducks are not very large, but as broilers they mature quickly into the finest of fowl meat. It is claimed that their meat is sweeter than any other duck and much superior to any chicken both in toothsomeness and in nutritive value. They possess much less fat and the meat when roasted and served lacks the undesirable fat of other roast ducks. It is also claimed that they are easier to dress than other ducks, which quality is no mean thing to the housewife or the cook.

The chief claim for the Indian Runner, however, is egg production. No other fowl, so far as I know, has ever approached the egg record of these marvelous layers. In an egg-laying contest held in New Zealand one Indian Runner duck layed 320 eggs in 365 days: and, though in heavy moult at the close of the contest, she was laying an egg every day. Breeders in the United States claim records from 200 to 250 eggs a year from ducks kept in small flocks. That it is not at all uncommon for an Indian Runner duck to lay an egg every day for one hundred successive days can be substantiated by almost any breeder who has any knowledge of the Indian Runner.

Their eggs, moreover, are the same price as hen eggs in most markets, and more in some. The only thing that could be urged as against the Indian Runner duck egg is that some of the shells are a greenish tint, but this is by no means true of all their eggs. Breeders are working hard to eliminate the green-shelled egg, and no little progress has already been made. Those who contemplate raising the Indian Runner for market eggs should be careful to start with ducks that lay only white-shelled eggs. A man who wishes to produce eggs for market, however, can not do better than start with Indian Runners. Once started with these veritable

egg machines, one would not think of raising chickens for egg production. Best of all, the Indian Runner lays when aggs are highest in price—through the winter months. When the old hen is shivering with the cold and nursing a frozen comb, the Indian Runner is wrapped in her coat of down and laying an egg every day. Another great advantage of the Indian Runner is that you do not have to build expensive houses for her. All she asks is a rough shed for a shelter and windbreak, and a dry place for her feet—no roosts, no nests, no furniture of any kind. Furthermore, she is never troubled with lice, mites, or roup. In a word, she asks but little and gives much.

CHAPTER IV

Hatching the Indian Runner

Hatching the Indian Runner is in general the same as hatching chickens. The duck egg, however, requires twenty-eight days to hatch, whereas the chicken egg requires only twenty-one. There are two ways of hatching: the natural and the artificial. For those who wish to hatch only a few eggs, nothing is better or surer than the old hen, but where hundreds or thousands of eggs are to be hatched, as in modern poultry raising, she is too limited in capacity.

Just a few suggestions to those who wish to hatch with a hen. Having selected a faithful, motherly hen, you must make her a comfortable nest, and keep her free from lice. The latter you can do by dusting her every three or four days with some good insect powder. Persian insect powder, napthaline and flour make an excellent powder for chickens. Sprinkle the nest of eggs once or twice during the hatch with powdered sulphur or lime; it will help destroy the lice. I mention lice killer here because it is imperative that the setting hen be kept free from vermin.

Feed and water should be kept before the setting hen at all times so that she may get off the nest and eat and drink whenever she will. Hens have been known to starve to death on the nest. Some hens, however, are inclined to leave the nest too long and allow the eggs to chill. I have known a hen to sit all right for a few days and then all of a sudden and seemingly without cause

to leave the nest so long that every egg would chill. The result is a bad hatch if you have any hatch at all. I have had better success by shutting the hens on the nest and letting them off once a day to feed, water and have a dust bath. When they have been off about fifteen or twenty minutes, I put them back on their eggs.

The membrane that lines a duck egg shell is much tougher than that in the hen egg. It is, therefore, necessary, in order to obtain the best results, to supply moisture. Otherwise the ducks are liable to die in the shell on account of being unable to pierce the tough membrane. The extra moisture rots the shell and the membrane, allowing the duckling to escape. No fixed amount of moisture can be given, for much depends upon the season of the year and the amount of moisture in the atmosphere. I have had good results as follows: Wet the egg with half pint of lukewarm water once a week for the first three weeks, and every two days for the last week. Or sprinkle the eggs with warm water every day for the last eight or ten days. Always sprinkle or wet the eggs at night, for the hen is then less likely to raise up off the eggs and allow them to chill. Care should be exercised not to put too many eggs under a hen.

Ten or eleven duck eggs is about the right number in early spring, and not more than thirteen should be given a hen at any time.

Those who go into the business of duck raising extensively will sooner or later need to turn out ducks faster than the old hen can hatch them; hence the need for artificial incubation. Many people suppose that incubators and artificial incubation is a modern invention, but such is not the case. "Articial incubation, or hatching by machinery, is known to be an old idea, and yet very little information upon original processes is to be found in our libraries. Eggs were hatched by articial means centuries ago. Machines were invented and used successfully for this purpose by the Egyptians long before the Christian era. Very recently some of these hatching ovens have been found by explorers. Some of them depended upon the customary fuel for their supply of heat, while others relied upon stones heated in the sun, and some, even, were found that obtained the necessary heat from lamps. Besides the above sources of incubation heat, mention can be made of decomposing animals and vegetable matter

used long ago with unknown success. Not many winters ago the writer had the pleasure of forking out a live and healthy chicken from a heap of compost near the door of his stable. Numerous other instances of accidental incubation have been related, and man's ingenuity has been exercised to devise machines and methods that will insure the transition of the dormant egg into the living chick."

The first consideration in artificial hatching is the incubator. An inferior incubator will waste more time and money than any other machine I know of; be sure to get a good machine and you will never regret the investment. The country is flooded with cheap, worthless incubators, but there are many good ones. Whatever incubator you use, follow to the letter the directions of its manufacturer and you will obtain the best results. Beware of following everybody's advice and use your common sense. When your machine comes, study carefully the directions before trying to put it together. When you think you fully understand all its parts, read the directions over again, and then set up your machine.

Where to set the machine is the next question. Since an even regular temperature is absolutely necessary to perfect incubation, the chief requiremnt is that the incubator be placed where it will

*Farmers' Bulletin.

be subjected to the least possible variation in temperature. There should be no draughts and the room should have no stove or other artificial heat than the incubator. The room should not be dark. A clean, dry, light cellar is an ideal place, but any dry, clean room will do, provided that the heat does not vary too much and that the draughts of air over or around the machine are avoided. The incubator must have a permanent place, where it will not need to be moved and where it will be absolutely undisturbed. The floor must be level, and, to insure perfect distribution of the heat, the machine should be set perfectly level with a carpenter's spirit level. Plenty of space should be left around the incubator to allow the attendant to work unhindered and without jostling the machine.

Do not be in a hurry to put the eggs in the machine. When you have the machine set up and well located in its permanent place, fill your lamp; and, after looking over the machine again to

be sure that everything is in place, light the lamp and turn the blaze very low. Be very careful not to heat the machine too rapidly. Be sure that your regulator is in working order, then let the egg chamber heat up slowly. As the machine heats up, turn up the blaze in the lamp a little at a time until the mercury in the thermometer begins to raise. When the heat registers 102 degrees, adjust the damper so that it will go no higher. When you have gotten the machine regulated so that you can keep the temperature at 102 degrees, run it that way for twenty-four hours at least, or until you can perfectly control the heat. The blaze must be clean and white. Have your wick trimmed straight, so that you can turn it up or down a little without causing smoke. This is important.

Having set up the machine, having placed it in its permanent location, and having regulated the heat, it is now time to turn your attention to getting the eggs ready for incubation. Eggs, before putting them into the machine, should be kept in a temperature of about sixty degrees Fahrenheit. Now open the door of your incubator and remove the egg trays, being careful not to disturb the regulator. Fill each tray full of eggs, but do not stand them on ends. When they are filled, carefully replace the trays in the machine, and close the door. When the eggs are put in the machine, the temperature may go down, but give them time to heat up slowly and do not turn up the blaze for at least five hours. A close watch should be kept, however, and the machine should not be left for more than an hour at a time until it is running regularly at 102 degrees. For duck eggs keep the heat at about 102 degrees for the first two weeks, then allow it gradually to raise to 103 or 104 degrees the last two weeks. Follow directions carefully, and fill and clean the lamp every evening. Every time you fill the lamp, be sure to look at the thermometer again in fifteen or twenty minutes.

For the first three days the eggs need no other attention than to keep the temperature even and to turn the trays end for end once a day, but bginning on the fourth day, the eggs must be turned and cooled twice a day. On the morning of the fourth day turn every egg about one-third of the way over. When opening the door of the machine and removing the trays, be careful not to jar the eggs or the incubator. If the room is not cold and

there is no draught, let the eggs cool ten to fifteen minutes and then put them back in the machine. While the eggs are cooling, however, the door of the machine should be kept closed. Continue to turn and cool the eggs daily until the twenty-fifth day, or until the ducklings begin to pip the shells. After this they must not be disturbed.

Duck eggs, as a rule, require more moisture than hen eggs. A shallow pan of damp—not wet—sand should be placed under the egg trays. Beginning the sixth day the sand should be kept damp at all times until the twenty-fifth day, when the pipping will begin. Then remove the sand trays and put the cloth trays into the machine. Beginning with the fifteenth day, some sprinkle the eggs with warm water once every day until the end of the hatch. It is best to let the eggs cool a little before sprinkling. As soon as they have been sprinklked, return them at once to the machine. Always keep door of machine shut while eggs are out so that the heat will not run too low.

Open the ventilators of the machine half way on the sixth day and leave them that way until the fifteenth day, when they should be opened wide and left that way until end of hatch. If you do not give plenty of moisture and air, you will have many dead ducklings in the shells.

The eggs should be tested on the tenth and twentieth days and all infertile eggs removed from the machine. Testing is very simple when you have had a little experience. Evening is the best time. Many methods are employed, but all agree in principle. Cut a hole a little smaller than an egg in a pasteboard box. Hold the box up to a lamp so that the light will shine through the hole. Place the egg in the hole between the eye and the light and turn the egg slowly. If a small dark spot or blood veins can be seen the egg is fertile. The egg continues to darken as the hatch progresses. A light place should be seen at one end of the egg, however, for this is the air cell. The air cell in a duck egg is usually larger than that in a hen egg. On the twenty-fifth or twenty-sixth day, the ducklings pip the shell and then make no more effort to get out until the twenty-eighth day. Some people place a towel wet in water heated to about 103 degrees over the eggs on the twenty-fifth day and leave it for several hours. This softens the shell and enables the youngsters to make their escape.

The towel must be removed from the machine quickly, so that the moisture will not escape.

Sometimes the temperature will vary toward the end of the hatch. The egg just before hatching radiates a great deal of heat and the young sponge-like ducklings when hatched absorb heat. Sometimes, therefore, it is necessary to guage the machine a degree higher. You must be careful at this time not to allow the heat to get below 103 degrees. Occasionally there will be a duckling that can not escape from the shell, and by assisting it a little it can be saved. A little experience will teach you when your help is needed. Remove the shells occasionally lest they interfere with the hatching ducklings.

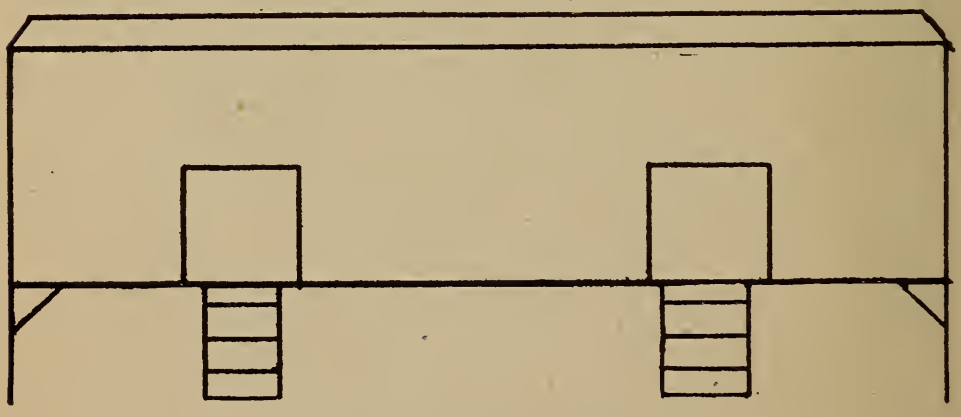
When the ducklings are all out and dried off, the machine will run a degree or two lower. Keep the ducklings in the machine for at least twenty-four hours after they are hatched when they will be dry, and strong enough to remove to the brooder. The heat in the brooder should be started twenty-four hours before the ducklings are ready to take out, so that it will be warm and ready for them when they are taken from the machine. Be careful not to chill the ducklings when taking them from the machine to the brooder.

By following the foregoing instructions and those given with every good incubator, any ordinary person can hatch the Indian Runner. Above all, use your judgment and do not get excited. If the temperature in the machine suddenly runs too high, remove the egg trays, sprinkle the eggs with warm water and replace them in the machine; if the temperature runs low, raise it slowly by turning up the lamp a little at a time. Have a will to conquer difficulties, and never get discouraged.

CHAPTER V

Brooding

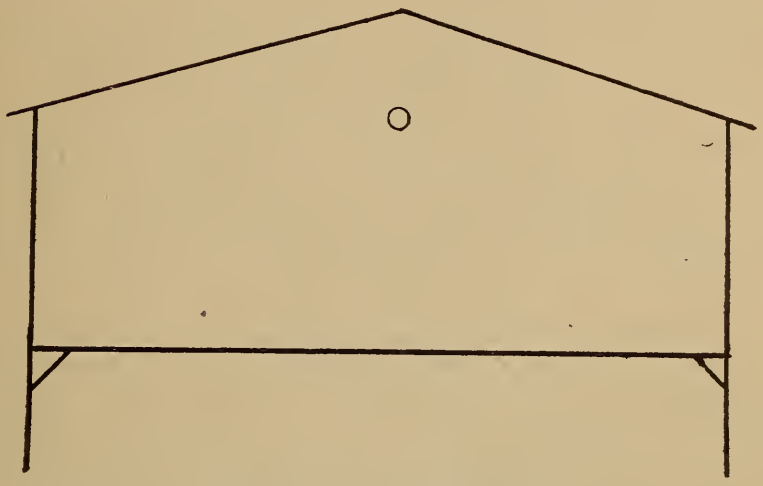
Most breeders consider that brooding is more difficult than hatching. Two things are highly important: the ducklings must not be chilled and they must not get wet. If you have only a few ducklings an old hen will take good care of them, but you must shut her up and not allow her to run around with them until they are four or five weeks old. In cold weather, be careful not to let the youngsters get in a draught. A brooder for raising ducklings with a hen may be made much the same as an ordinary chicken coop. The size can be varied to suit your convenience, but beware of putting too many together. Fifteen is enough for one hen. The front of the coop should be glass and the ends and back should be lined with tar paper. In cold winter weather this brooder or coop will not be warm enough to protect the young ducklings unless it is well sheltered from the wind. The heated brooder is best for cold weather. There are many good heated brooders on the market, and it makes little difference which one you use so long as it keeps the ducklings warm and dry. A very good brooder can be made after the following plan.



Front View of Brooder

Fifty ducklings in a brooder are enough. For this, many make a box of the following dimensions: four feet long, three feet wide, one foot deep in the middle, and nine inches deep at the sides. Bore three holes one and one-half inches in diameter, one in the

bottom of the box exactly in the center, the others, one in each end eight inches from the bottom and exactly in the center of the box, measuring from side to side. Now have a plumber make you a "T" of one and one-half inch gas pipe. The horizontal or cross pipe should be about four feet two inches long, or just long



End View of Brooder

enough to reach across the box from end to end. The vertical pipe should be about nine inches long, or long enough to reach from the cross pipe down through the hole in the bottom of the box. The pipe should be ready to put in before the box is nailed together, or a slot from the top down to the hole may be made in one end so the pipe can be removed. Place an old tin can with a hole in the bottom of it large enough to admit the pipe, around the pipe inside the brooder. This will keep the ducklings from getting against the pipe and from getting too warm. Nail a piece of tin about eighteen inches square with a hole in the center for the pipe on the bottom of the box outside, nail four legs on the box, one on each corner so as to raise it about six inches off the ground, and set a regular brooder lamp immediately under the pipe. The heat passing up through the vertical pipe will keep the brooder warm and the fumes will pass out at the ends of the cross section. Should more heat be needed, partly close the ends of the pipe in the horizontal section so that so much will not escape. This makes a cheap and convenient brooder that will give as good service as a more expensive one.

Whatever kind of brooder you use, you must keep it dry and

scrupulously clean. The ducklings should stay in the brooder until they are about two weeks old, when they may be moved to larger quarters. When they are this old, they do not require so much heat, but if the weather is cold, care should be taken not to change them too suddenly. Some heat should be supplied until warm weather.

Those who wish to raise ducks extensively in cold weather will find it necessary to erect a steam-heated brooder house. When the ducks are taken from the heated brooder house, they should be provided a growing house that is also slightly warmed. In a following chapter on housing the Indian Runner will be found valuable plans and specifications for an extensive and practical brooder plant.

CHAPTER VI

Feeding

The original food of the duck in its wild state consists of flag, grasses, small fishes, water insects, etc., gathered from brooks and marshes. The domestic duck, raised in confinement, should have an imitation of this food. The duck having no crop, the food passes directly from the throat to the gizzard; therefore, the food should be in a soft, mushy condition. Too much hard foods, such as grain, does not agree with a duck. Some feed a small allowance of grain, but soft foods consisting of vegetables, grasses, and animal foods, is their natural diet, upon which they thrive best. To the breeder of Indian Runner ducks the two most important considerations with respect to the feeding are what to feed the young ducklings, and what to feed the laying ducks.

Feeding the Ducklings

If the ducklings are well fed and properly cared for until they are five weeks old, they may be counted as good as raised. When past that age, they are hardy and require only ordinary care and attention.

The ducklings should not be fed at all until they are thirty-six hours old. After they are thirty-six hours old, feed them hard boiled egg or stale bread moistened with milk. Keep up this diet for five days, then gradually add wheat bran and shorts equal

parts to the bread and milk, making a stiff mash. A little beef scrap should also be added after the fifth day, but the ordinary beef scrap should be sifted and only the finer part given to them. Keep adding more wheat bran and shorts, also a little corn-meal and fine sand, until they are ten days or two weeks old, when they should have a mash made as follows:

4 parts wheat bran
2 parts shorts or middlings
1 part corn meal
1 part rolled oats
2 parts of green stuff cut very fine (lettuce, clover, or alfalfa)
One-half to one part beef scrap
One-fourth part fine sharp sand

Wet the mash with milk to make a heavy mush form. It is well to add a little powdered charcoal once each day. Feed four times a day: at 6 a. m., 10 a. m., 2 p. m., and 6 p. m. Avoid too sudden changes in rations, especially of increasing quantity of beef scrap. Branch off gradually on new formulas. When they are about four weeks old gradually work them on to a little stronger ration like the following:

4 parts bran
2 parts shorts
1 part corn meal
1 to 2 parts beef scrap
1 part green food
One-half part fine sharp sand

Mix with water or milk to a dry crumbly state.

To the surplus drakes you wish to fatten for the market feed the following formula:

1 part wheat bran
1 part middlings
4 parts corn meal
One-third part beef scrap
One-half part sharp sand

Mix with water to a dry crumbly state. Feed three times a day. They will be ready for market when eight to ten weeks old after about a week or ten days on this feed.

Feeding the Laying Ducks

In feeding the laying ducks it is of the utmost importance that the feed have sufficient proportion of protein. This is supplied by animal foods such as beef scrap. Sufficient green food should be fed to make bulk, but care should be taken not to feed too much corn or other fattening foods. A duck that lays an egg every day must have materials from which to make such large quantities of protein, but she does not need a large quantity of fattening food. A good laying ration for winter is made as follows:

4 parts bran
2 parts shorts or middlings
1 part corn meal
1 part oil meal
1 part beef scrap
2 parts alfalfa meal
One-half part fine sharp sand

In the summer months omit the corn meal and add one more part of shorts or middlings.

Mixing the Feed

The feed stuff should be thoroughly mixed while dry, after which it should be moistened with water and mixed to a dry, crumbly state. It should not be too wet or sloppy, for then it is neither so good for the fowls, nor can it be handled and fed conveniently. In very cold weather the mash should be moistened with warm water. Cooked vegetables or raw vegetables cut fine may be mixed with the mash.

How Much to Feed

Young growing ducks require a large amount of feed with which to build their rapidly increasing forms. Their growth averages approximately a half a pound a week, and this increase of weight requires an additional quantity of food as the ducks grow. As in feeding all animals, however, so in feeding the duck, it is better that they have not quite enough than that they have too much. If they are given only what they will eat with relish,

they will be ready for the next meal with an appetite that will greatly assist in digesting and assimilating their foods. It is imperative that the feeding troughs be kept scrupulously clean. If any feed is left it should be removed, and not left to sour. A simple trough made of five- or six-inch boards is the most convenient receptacle in which to give them their feed. The trough should be of sufficient length to avoid crowding.

Water Supply

Though a pond or water in large quantities is not necessary for the Indian Runner, yet an abundant supply for drinking is absolutely essential. The food of the duck is such that it requires them to drink when eating, for the food being comparatively dry, can not be eaten hurriedly like grain. When feeding, therefore, always fill up the water troughs or fountains with a fresh supply of water. A duck when eating will eat a small quantity and then run to the water trough for a drink. She will go from food to water and from water to food several times during a meal. One of the simplest and most convenient methods of supplying water for grown ducks is ordinary five-quart pails. The pail is superior to a shallow trough because within the pail the water is deep enough so that the ducks can immerse their heads. This is necessary in order that the ducks may keep their noses clear of food stuffs and dirt. Smaller ducks should be given their water in a fountain or in some way so that they can not get into it with their feet or get wet.

Oyster Shells and Grit

Grit in some form should be kept before the ducks at all times. Sand or grit in the mash tends to supply a certain amount of grinding material, but if it is constantly before them, the ducks will instinctively take the quantity needed. In addition to the sharp sand or grit, a box of oyster shells should be kept before them at all times.

Fattening Foods

A bulletin issued by the United States Department of Agriculture gives the following excellent instructions for feeding

ducklings intended for the market at ten weeks old.

"From time of hatching to five days old provide the following mixture:

Cracker or bread crumbs and corn meal, equal parts by measure
Hard boiled eggs, 15 per cent of the total bulk of crackers and meal
Sand, 5 per cent of the total of crackers and meal.
Mix with water or milk and feed four times a day.

From five to twenty days old, the following mixture:

Wheat bran, two parts by measure
Corn meal, one part
Rolled oats, 50 per cent of this bulk
Beef scraps, 5 per cent
Sand, 5 per cent
Green food, 10 per cent
Mix with water to a dry, crumbly state and feed four times a day.

From twenty to forty-two days old, the following mixture

Wheat bran, two parts by measure
Corn meal, one part
Rolled oats, 50 per cent of this bulk
Beef scraps, 5 per cent
Sand, 5 per cent
Green food, 10 per cent
Mix with water to a dry, crumbly state and feed four times a day.

From forty-two to seventy days old, the following mixture:

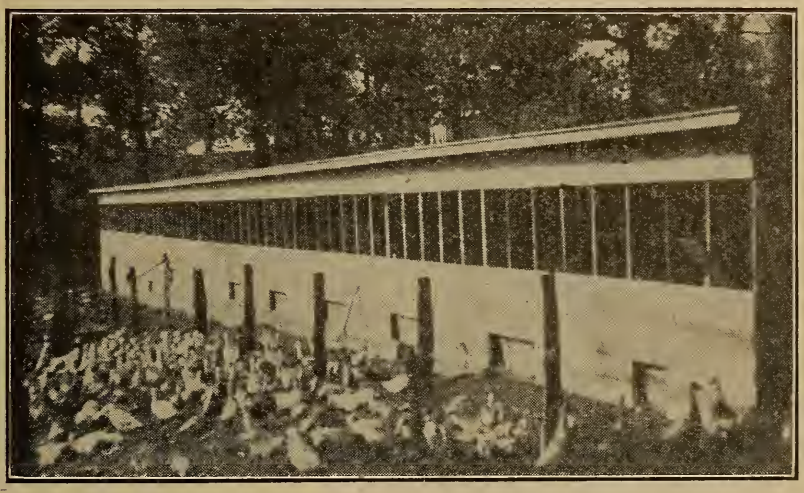
Corn meal, two parts by measure
Wheat bran, one part
Beef scraps, 10 per cent of this bulk
Coarse sand or grit, 5 per cent
Green food, 10 per cent
Mix with water to a dry, crumbly state and feed four times a day.

CHAPTER VII

Housing the Indian Runner Duck

Housing the Indian Runner duck is not so expensive as housing chickens. The main requirements are a shelter and a dry floor. The duck with her coat of down can withstand a great deal more cold than can a chicken, but she sits on the floor, which must be perfectly dry. Dampness will cause rheumatism, which is about the only disease to which the Indian Runner is liable.

A low shed facing the south and closed in on the east, north, and west, is quite sufficient shelter for the Indian Runner in any but a very cold climate. The duck requires in her house no roosting poles, no nests, in a word, no furniture. All she asks is a straw bed on the ground. The bedding should be changed often enough to keep it clean and dry.



Duck house 114 ft. long to accommodate 500 Indian Runners.

The accompanying cut is from a photograph of a duck house on my farm, which was taken when the house was in course of construction. The length is 114 feet, the width, fourteen feet, and the height, four feet at the back and seven feet in front. It is divided into pens, varying in size from 8x14 feet to 14x14 feet.

It will accommodate 300 to 500 ducks. The opening in the front is to be closed by means of sliding canvas windows, which may be opened and closed to control temperature and ventilation. A house after this plan may be built of any length. I use this house for my laying or breeding ducks.

Brooder Houses*

The general construction of a brooder house is similar to that of the breeding house and differs only in interior arrangements. The latter has no interior arrangements whatever, while the brooder house has the system of heating and covers necessary for giving warmth to the young stock. In fig. 15 is shown a design of a single brooder house and ground plan that is generally used by duck raisers. This house should be built upon a good foundation and be entirely proof against rats. A good plan is to sink half-inch wire mesh about 2 feet in the ground and around the entire inside of the building; this will make it perfectly secure against rats and mice.

The accepted plan of a brooder house makes it 15 feet wide and as long as desired. The building is 4 feet high in front and

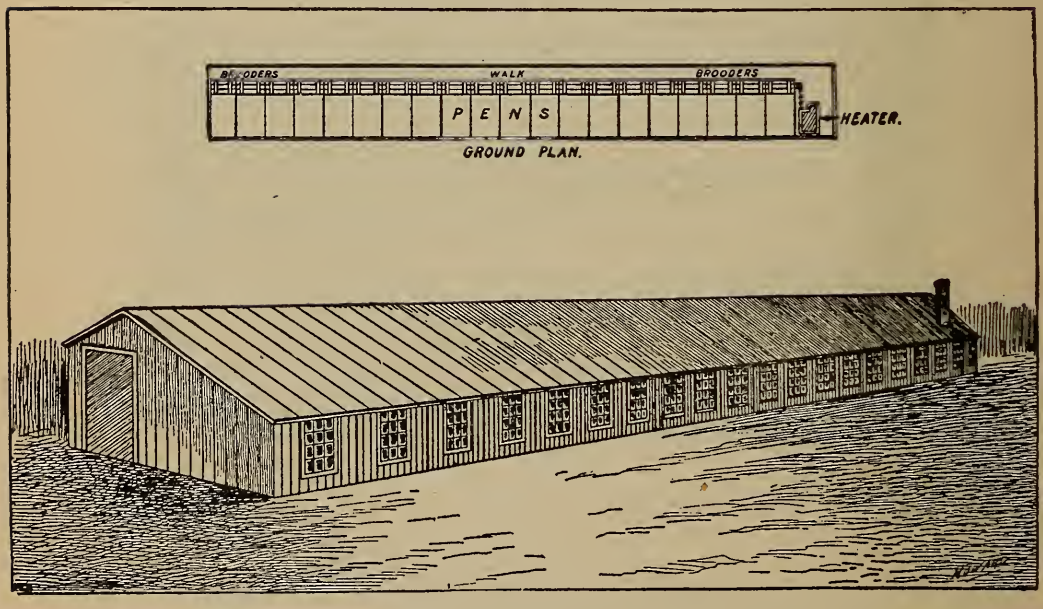


Fig. 15.—Single brooder house and ground plan.

5 feet in rear. It is divided into pens 12 feet long and 6 feet wide, and has a 3-foot passageway extending the entire length of the

building. The ground plan (fig. 15) shows the general arrangement of the interior and location of the brooders.

The brooder box is next to the passageway or walk, and runs the entire length of the building. This box is 30 inches wide and 8 inches high; the sides are 7 inches high and nailed securely; the top of the cover is nailed across with cleats to make it substantial, and the cover has an inch strip nailed underneath in front and back to keep it in position. These strips rest against the 7-inch sides and make the brooder snug and tight when closed. The heating pipes are directly beneath the cover and are 2-inch pipes, flow and return. Some prefer 1-inch pipes, using two flows and two returns. When three pipes are used, they

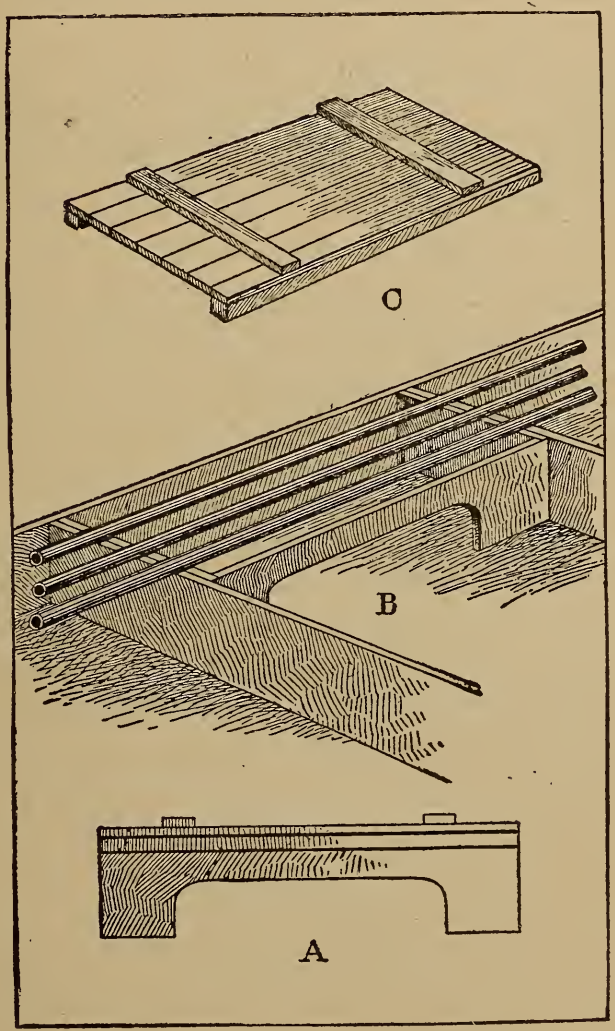


Fig. 16—Plans of brooder box.

should be about 8 inches apart from center to center. These pipes rest on the partition boards of the pens. The front of the brooder leading into the pens is cut out in the center about 4 inches deep and 4 feet long (fig. 16, A), while the ends and the other side are solid, being 7 inches high. The construction of the brooder is clearly shown in fig. 16, B, with cover removed; while fig 16, C, shows cover. The heater is located at the end of the building.

Another plan of brooder house is that shown in fig. 17. This house is known as a double brooder house, with walk in the center and pens on either side, and with heater at the end. Many prefer this plan to the single brooder house, as the care and attention required for the youngsters is much less and the cost of heating is reduced, one heater being sufficient for both lines of pipes. Then, again, this latter plan shortens the length of the building by one-half and makes the work more concentrated. The arrangement of the interior is the same as that of the single brooder house.

*Farmers' Bulletin.

The plans of brooder houses, as given above, are for ducklings from the time they are taken from the machines until they are ready for the cold brooder house, or growing house. The young ducklings, when taken from the nest or incubator, are very delicate and susceptible to the changes of the atmosphere; they must be kept very warm and free from chilling. The first three weeks of a duckling's life are the most critical period, and after that time the liabilities of loss are reduced to a very low rate—hardly five to the hundred. The front of brooders for young ducklings should be hung with strips of woolen cloth to keep in the warmth of the brooder. The greatest care should be given them at this period; the duck raisers really consider it the most important part of their work, and after a bird has passed the 'critical age" it may be counted on for the market.

Usually the care of the ducklings at this age is given to the women. They are more careful of the wants of the youngsters and attend to the detail work religiously. A case is known of a single attendant living, as it were, in the brooder house with the ducklings. She began her work with the morning feed at 6 a. m., and until sundown, when the night's meal was given, she was

with her charges. The cleanliness of the brooder and pen was carefully attended to and everything was done to promote the health and comfort of the youngsters. At night they were all in their brooders and as snug as it was possible for them to be. A single neglect in the starting of a duckling will result in loss to the raisers. System is the key to the situation, and there should be no deviation from it whatever.

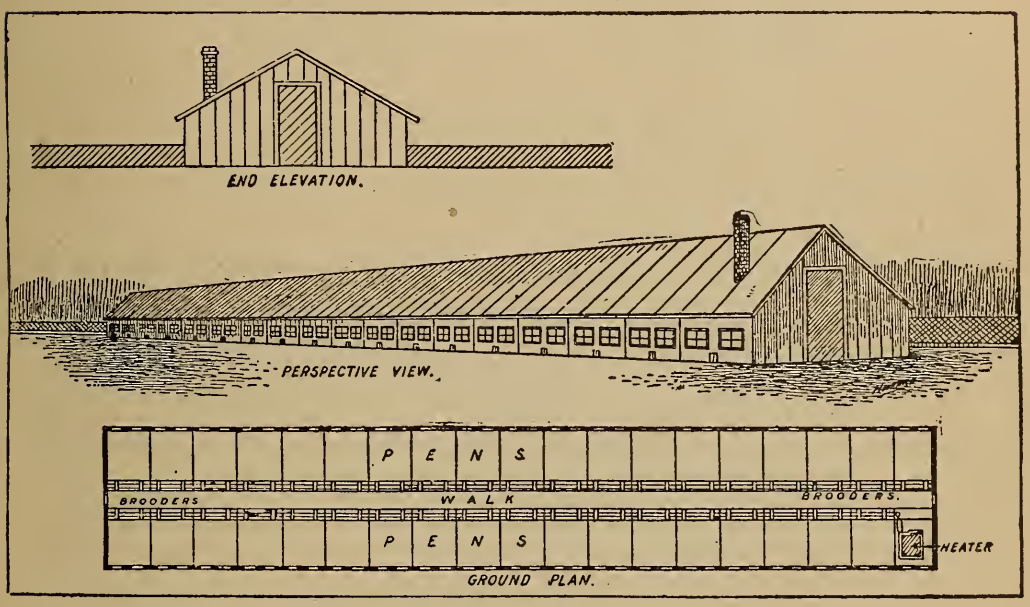


Fig. 17—Plans of a double brooder house.

The duckling goes from the warm brooder house to the cold brooder house. The latter house is planned in a way similar to the former, with the exception of the 30-inch brooders. When the birds are taken from the warm brooder house they are three weeks old and of sufficient age to withstand a cooler temperature. They do not need the extra heat of the warm house, and in it would not grow nearly so well. The size of pens in the growing house is larger, and the ducklings are now crowded so many in a pen. If the birds are to be raised in colonies of one hundred each, the accommodations should be ample for them. It has never been proved to be good policy to crowd the growing stock; it retards their growth and encourages disease.

The cold brooder house should have a system of heating if the birds are to be raised for an early market. The same system

of pipes used in the warm brooders should be run around the sides of the building, about 2 or 3 feet from the floor. This will give sufficient heat for the house and keep the birds comfortable. These pipes may be connected with the same heater used for running the warm brooder pipes. In the Northern States, raisers equip brooder houses with both sets of pipes, so as to be prepared for extremely cold weather.

An excellent plan is shown in fig. 18 for the arrangements of

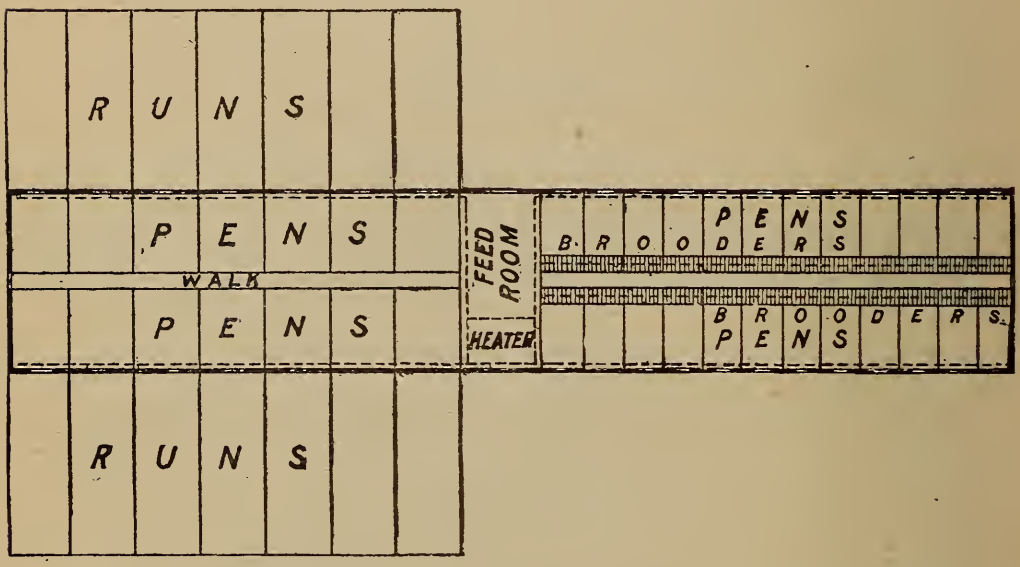


Fig. 18—Plan of a double brooder, showing arrangement of heating pipes.

the heater for connecting the pipes in the warm and cold double brooder house. It will be seen that the heater is placed in the center of the building; the warm brooder house is shown on the right and the cold brooder house with runs attached is shown on the left, and pipes, indicated by dotted lines, run in both directions. This is the most economical house to build and lessens the work in attending the stock. The room in the center of the building will be found very useful and is generally used as the feed room. The heater is in the cellar beneath this room. This plan is used by one of the largest and most successful raisers of ducks on Long Island, and it has his highest indorsement.

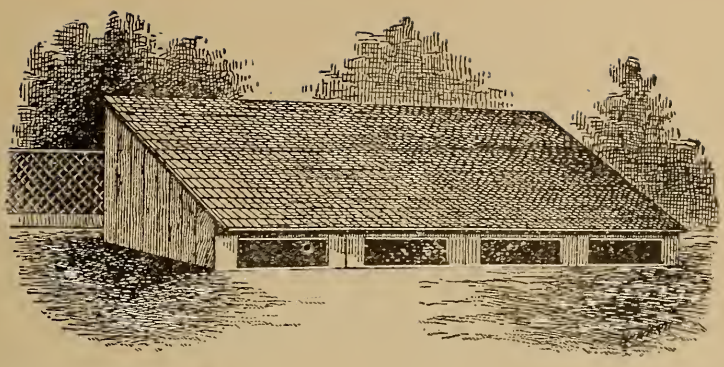


Fig. 19—House for growing ducks.

The building may be of any size, the plan being as successfully carried out on a large scale as on a small one. If a small building is used at first, it may be enlarged on either end to suit the growing business and extended upward of 100 feet in either direction, thus making the building more than 200 feet in length. The heater must be considered, when put in, with this object in view. A heater capable of heating the 200-foot house can easily b regulated to heat one of 50 feet, but a heater that will heat properly only a 50-foot or 100-foot house would be insufficient to heat the larger one.

Another difference between the cold brooder house and the warm brooder house is that the former has outside runs attached.

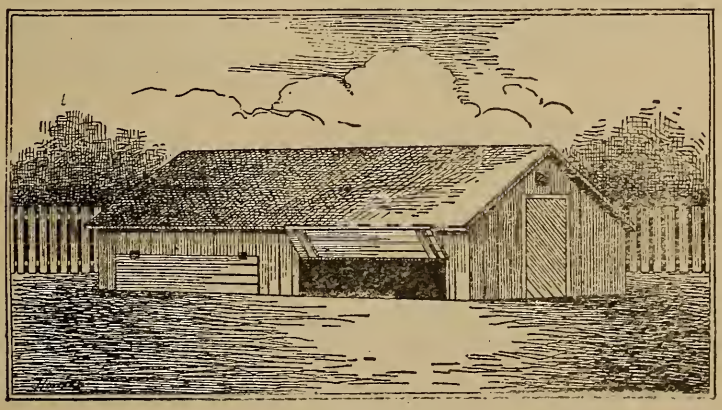


Fig. 20—Two-pen house for growing ducks.

These runs are used for feeding and watering when the weather permits, instead of the feeding troughs inside the house. The

ducks should be allowed the freedom of the outside runs as soon as the weather is suitable. Ducks like a life in the outer world, and they will grow more rapidly there than when they are confined to the house.

Ducklings are kept in the cold brooder house until they are 6 or 7 weeks old, when they are transferred to larger "growing houses." It is here that they are pushed for the market until they are 10 weeks old, when they are salable. There is no heat in the growing houses, which are used only as a means of shelter during the early spring months. When the weather is well advanced, the ducks seldom take to the houses at night; they prefer the outside and spend their nights on the ground. The growing houses should be abundantly ventilated, as too close an atmosphere will do more harm in a single night than if they had not been housed at all.

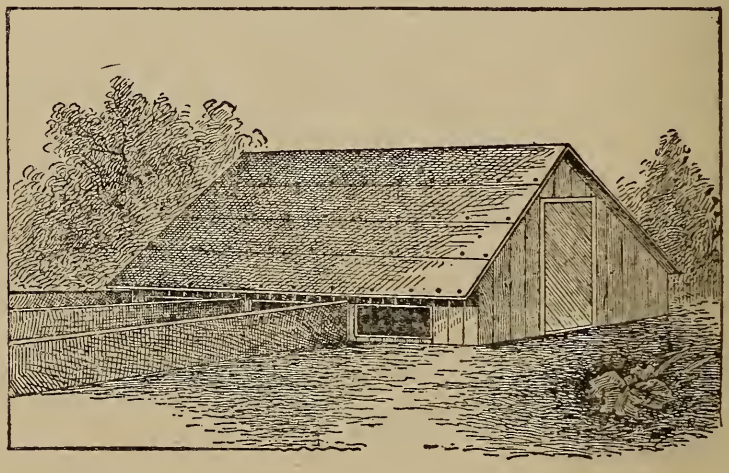


Fig. 21—Three-pen house for growing ducks.

A Pekin duck at 10 weeks is quite large, weighing close to 4 pounds. It is quite as large as a full-grown duck of some of the other varities. In the space of two or three weeks from the time the ducklings are placed in the growing houses they will be marketed at the weight of four to five and one-half pounds each. This weight is easily obtained, and when reached the profitable time to sell has arrived, as they then command the best prices. Often a bird kept after this time loses in weight and becomes unprofitable. The growing houses are built after the plan of the

breeding houses, only much smaller. They need not be more tha 4 or 5 feet high in rear and 1 or 2 feet high in front. Such a house is shown in fig. 19. This and other houses shown in figs. 20 and 21 may be built singly or in rows, with 12-inch boards separating the runs.

CAPTER VIII

Marketing Indian Runner Ducks and Eggs

The first thing is to find a market. It is sometimes easier to produce a commodity than to find a buyer. The poultry raiser, however, finds but little difficulty in the sale of his product. The man who produces a work of art, invents a machine, or manufactures a delicacy, may find sale for his product, and he may not; for people can live without works of art, machines, and delicacies. But the man who produces a necessity of life, a food, is almost certain to find a market for what he produces, for even if men do not live to eat, they must eat to live. The poultry-raiser, therefore, has a business practically free from speculation.

Finding a market is somewhat dependent upon the nature of your product, or what you have for sale. For convenience we may divide the products of the poultryman into four classes: market fowls, fancy fowls, commercial eggs, and eggs for hatching. The producer of market fowls and commercial eggs will experience little difficulty in finding a market. Almost every grocery store in every small town is a market for commercial poultry and eggs. One may often get a higher price, however, by contracting to supply hotels, restaurants, or private homes with fresh fowls and eggs. Then one may ship both fowls and eggs to the commission merchants in large cities.

Ducks usually demand a higher price when dressed. There are two methods of dressing ducks for the market: by dry picking and by scalding. Some have preference for the one method, and others for the other. A duck when dressed for market should have left on it the feathers on the wing, the tail feathers, and the feathers on the head and neck. The legs are left on and generally the entrails are not removed. The birds are killed by making a cut across the roof of the mouth just below the eyes with a

sharp knife, and then striking their heads against a post or some hard substance. After the birds are picked, they should be hardened or plumped by placing them in a tank or barrel of ice water for several hours. For shipping, pack them in barrels or boxes. The first or bottom ones are packed with backs down, a layer of ice is then placed over them, and all other layers are packed with the breasts down, a layer of ice being between the layers of ducks.

Strictly fresh eggs are always in demand, especially in the large cities. Eggs wrapped in tissue paper, packed in neat pasteboard boxes, and labeled "guaranteed not more than forty-eight hours old," bring fancy prices. Restaurants, hotels, and especially bakeries will often pay a higher price for a duck egg than for a hen egg. Two duck eggs are said to be equal to three hen eggs for culinary purposes. The ingenious poultryman will usually find some way to get more than the ordinary market price for his produce. More failures are made in the poultry business through lack of business management than through an inability to raise poultry, but anyone who will think and hustle a little can find market for commercial eggs.

Selling fancy poultry is somewhat different from selling commercial poultry. In the first place, you must have the blood lines; in the second place, you must take good care of your stock; and in the third place, you must let people who know the value of blooded stock know that you have it. Among other things that you must do if you are going to sell fancy stock, you must win the blue in the exhibition room. Even though, for reasons too obvious to mention, the blue ribbon does not always go to the best fowl, yet to win the prize has its weight and bearing upon the public mind. Usually the man who thinks all the poultry judges a set of grafters is the man who has not spent sufficient time and money in the production of his stock. The show room, after all, is the test of fancy qualities, and the man who would sell fancy stock must stand the test.

Eggs for hatching are in great demand. More people every year are becoming awakened to the value of blooded stock. The breeder who has thoroughbred Indian Runner ducks will experience but little trouble in disposing of his eggs for hatching.

A few classified advertisements in good poultry journals will often sell thousands of these eggs.

Advertising

Many questions will arise, such as: In what paper shall I advertise? How much shall I invest? What shall I say? Now, a piece of sound advice to beginners. Choose some dependable poultry journal that has been in business long enough to prove the reliability of its managers; then write the editor or advertising manager a frank letter, telling him what you have to sell and ask his advice about when and how to advertise. Some people would listen to anybody else rather than a publisher. They think he is only after the money. It will probably be no injustice to concede that publishers, like all the rest of us, want money, but it is no advantage to a reputable publisher, or to any publisher for that matter, to take your money and give you nothing in return. It is the publisher's first and most ardent desire that the advertiser receive satisfactory returns from his advertisements. A satisfied customer to the publisher—and you will find that the same is true with the poultryman—is his most valuable asset. The reliable publisher is the producer's best friend. He knows what the people want, and if he knows what you have to sell he can do you good. The amount you should invest is wholly dependent upon how much you have to sell. If a classified advertisement will sell all you have, it is foolish to invest in a page advertisement. Better begin small and increase than begin large and decrease. People would rather patronize a growing man than a dying man. As a matter of fact, every poultryman is not a literary man or an advertising manager. Here, again, the publisher can serve you. Tell him in plain, "homespun" English just what you have to sell, and he will write your advertisement in an attractive and winning style. When answers come in from your advertisement, reply at once. Everybody is in a hurry today, and you must hustle or lose. Above all, never promise something that you can not live up to. Better do a little more than you promise; put in an egg extra, or, if you are short of one quality, substitute a little better one. The mail order business is the order of the day, and there are unlimited possibilities for the man who will do honest advertising and then live up to his word.

CHAPTER IX

Mating

In mating three questions should be asked: (1) How to mate for the fertility of the eggs. (2) Are the males and females related? (3) Shall I mate for egg production or for exhibition stock?

Mating ducks for fertility is much easier than in mating some other fowls. If your stock is strong and healthy, mate one male to seven females. It is supposed that the sex of the offspring is influenced somewhat by the number of ducks mated to a drake. The supposition is that the more ducks you mate to one drake the more females will hatch from the eggs, and that the fewer ducks you mate to one drake the more males you will hatch. Any number from five to eight females with one male should produce fertile eggs. When eggs are wanted for market or for packing, it is not necessary to have the drakes with the ducks. In fact, infertile eggs keep better.

The question of relation is one of the most important questions in breeding. Breeding brothers and sisters, or ducks hatched from the same breeding pen, commonly called inbreeding, is destructive to the health and vitality of your flock. Great care should be exercised, therefore, in mating to breed together unrelated stock only. Exhibition stock or a good layng strain can not be built up by careless inbreeding, for all good qualities are founded on health and vitality. Most careful breeders procure new drakes for their breeding pens every year, unless they are line breeding.

What is known as line breeding is in a sense inbreeding, but it is not careless, haphazard inbreeding. It is a scientific method whereby the good qualities of the parent stock are stamped again and again upon the progeny. One method of line breeding is to mate your original pair or foundation stock and then mate the

best females hatched from them back to their father and the males back to their mother; thus making for the second year two pens or flocks, "A" and "B." The third year take the best females from pen "A" and mate them to the best males from pen "B," and the best females from pen "B" and mate them to the best males from pen "A," thus making for this year two more pens, "C" and "D." By continuing in this way you can develop or at least perpetuate the good qualties of the parent stock.

It would be ideal, of course, to breed in the same birds fancy qualities and great layers, but this is not always possible. The best show birds are not always the best layers. Sometimes, therefore, we must decide before mating whether we are going to mate for exhibition stock or for egg production. If for egg production, then choose the best laying females and mate them to the drake whose offspring has layed the most eggs; if for exhibition stock, choose the males and females that come nearest to the standard of perfection and breed them together. In mating for egg production, especially, one should remember that the drake is half the flock. It is not good policy to mate your good laying females to a drake that has never produced good laying ducks.

CHAPTER X

A Friendly Warning

Every business, as a rule, has its share of fakes and fakers. To this rule the Indian Runner duck business is no exception. In sounding this friendly warning, however, it is not my intention to personate, or to run down any particular breeder, but to inform those who have not already learned it by experience that they must be careful in purchasing both stock and eggs.

It is not uncommon, with some breeders, to buy eggs at wholesale from anybody and everybody and then to sell them as eggs from their own advertised breeding pens. If you want eggs from thoroughbred stock from which to hatch breeders, you should buy from a careful breeder, not from a huckster. It is cheaper, if you want ordinary eggs, to go to the market and buy them. I know of some prominent breeders of Indian Runners who bought last year thousands of eggs from others and sold them for breeding purposes. They then advertised how many thousands of eggs they had sold from their breeding pens.

A prominent breeder of Indian Runners wrote me that people were buying his white Runner drakes to breed with fawn and white ducks, and thus attempting to raise white Indian Runners. Others, in order to supply the popular demand for the white variety of Indian Runners, are crossing the fawn and white Indian Runners with the white Pekin duck.

In view of these and many other similar circumstances, the buyer can readily perceive the necessity of exercising the greatest care in the purchase of Indian Runner duck eggs for hatching.

For one cause or another a great deal of unreliable information concerning the Indian Runner duck has been given out to the uninformed public. As a consequence, only those who have spent time and effort to adequately inform themselves have any-

thing like a definite conception of the origin, history, and salient characteristics of the true Indian Runner duck. Breeders of the American Standard duck have published the statement that the English penciled Runner is a worthless mongrel, and that she lays a great many green or tinted shelled eggs. Breeders of the English penciled variety, on the other hand, have not been slow to characterize the American Standard birds as mongrels unworthy the name, Indian Runner. The latter have claimed for the penciled variety that they lay only a pure white egg, and have accused the American Standard duck of laying the tinted egg.

By one or the other of these conflicting statements many are misled and misinformed, and many more are confused. The letters I have received from different parts of the country indicate that a great number of people have anything but a clear conception of what the Indian Runner duck is or should be.

At the present time there is absolutely but one way to be safe in buying either stock or eggs of the Indian Runner duck—buy from a breeder whose knowledge, experience, and honesty you can rely upon. Many young breeders and some old ones have been discouraged with raising Indian Runners on account of having purchased inferior stock. By studying carefully the descriptions given in other chapters of this book, and by exercising due care and caution, any breeder should be able to purchase birds possessing all the characteristics of the most popular and valuable bird of the duck family—the Indian Runner.

CHAPTER XI

Advice to Beginners

The first and best advice for a beginner in the Indian Runner duck business is, start right. By starting right I mean get good stock and learn how to handle it. Since the Indian Runner has become so popular, hundreds of careless breeders have offered stock and eggs for sale that are unworthy the name Indian Runner. Since it is not my aim to expose and harrangue imposters, however, I will content myself by giving the beginner a few simple rules by whch he can tell the spurious from the genuine.

Frst, get clearly in your mind that there are three varieties of the Indian Runner: the American Standard light fawn and white, the English penciled, and the pure white. Decide which variety you want and ask the man you buy from for just what you want in words that he can not misunderstand. When you write to a breeder ask him what varieties he breeds and if each variety is carefully and separately bred. To make a success one must breed each variety in its purity. If you want standard bred stock you do not want them pencled, for penciling is condemned by the American standard. If you want the English penciled duck get it in its purity. If you want pure white Runners you do not want off colored specimens, but birds with crystal white plumage. If you want birds for commercial eggs the dark fawn penciled ducks are just as good as the light fawn and white or pure white ducks and the utility birds are just as good layers as the fancy birds. But do not send only $1.00 to a breeder for a setting of eggs and then expect to raise high class exhibition birds. If you do you will be disappointed. Sometimes good, first class birds are raised from common breeders, but "like begets like" is a law full of meaning in the poultry business. If you want to raise exhibition stock, buy eggs from good birds. A setting of eggs may cost you a considerable sum, but at the end

of the season, having raised some fine specimens you can look upon your summer's work with delight and satisfaction. Of course, all the eggs from exhibition stock will not bring show birds, but you will generally get a large percentage of good birds for breeders and some for exhibition, thus giving you a good foundation for another year. Now, whether you want eggs for commercial purposes or for breeding purposes you want white eggs. Possibly you know that some Indian Runners lay a green or tinted egg. No duck breeder should allow in his breeding pens a duck that lays a green egg. If every duck breeder will cull out the ducks that lay the green eggs and cut off their heads, Indian Runners that lay tinted eggs will soon be a thing of the past.

How much you pay for your stock should depend upon your aim. If you want to raise ducks for market any of the Indian Runners will do, but if you want fancy or exhibition stock, you should get only the Standard light fawn and white variety from a reliable breeder that has good matings. Utility stock, as it is called, or common stock can be bought cheap, but well marked standard stock is more expensive.

Get interested in your poultry keeping, read poultry books, and a good poultry journal, economize in your production, manage carefully your marketing, and you may hope for success.

CHAPTER XII

Indian Runner Questions

Question. What is the Indian Runner duck?

Answer. A medium sized duck, slender in shape, erect in carriage, and noted for egg production. They came originally from India, and, unlike other ducks, they do not waddle, but literally run; hence their name, "Indian Runner."

Q. What color are they?

A. The American Standard variety is marked with a beautiful light fawn in contrast to pure white. The English Standard calls for dark fawn penciling in contrast to pure white. Still another variety is pure white.

Q. Which variety is best?

A. Since only the light fawn and white variety is admitted to the American Standard, they are best for exhibition purposes, but the penciled and the pure white are equally as good for laying.

Q. Are they profitable as egg producers?

A. Yes, very profitable. With proper care they will lay from eight to ten months in the year.

Q. Are they hard to care for?

A. No, they require only ordinary care.

Q. Do they all lay equally well?

A. They all lay well, but the laying qualities of some strains have been improved by careful breeding.

Q. Where can I get good stock and eggs?

A. From the author of this book or from any breeders whose advertisement appears herein.

Q. How long does it take a duck egg to hatch?

A. About 28 days.

Q. How should the ducklings be fed and cared for?

A. See instructions in chapter VI of this book.

Q. How many ducks should be mated to a drake?

A. From six to eight.

Q. At what age do Indian Runner ducks begin to lay?

A. At about five months.

Q. Do they lay all winter in the South?

A. Yes; with good care they will also lay in cold climates during the winter months.

Q. Can the eggs for hatching be shipped without injuring fertility?

A. Yes, if properly packed they can be safely shipped for a long distance.

Q. Can live ducks be shipped?

A. Yes, they are being shipped across the continent and even from Europe to America.

Q. Which is better to start with, ducks or eggs?

A. That depends upon your circumstances. Eggs are cheaper, but stock is quicker.

Q. How do you ship?

A. By express, at purchaser's expense.

Q. When is the best time of the year to ship eggs?

A. From January to July.

Q. Is it necessary to have a pond or running water for Indian Runners?

A. No, it is necessary to have water only for drinking.

Q. Will they lay if their feathers are plucked?

A. No, if you wish them to lay pluck the feathers during moulting time only, July and August.

Q. How can you tell the ducks from the drakes?

A. By their voices, their shapes, and their feathers. The ducks have a coarse quack, the drakes a fine voice. The drake is usually a little longer than the duck. The drake also has a stiff curl of feathers on his tail.

Q. When should I mate my breeding pen?

A. Any time from October to January.

Q. How many ducks can be kept together successfully.

A. For best results not more than from twenty to thirty.

CHAPTER XIII

Duck Don'ts

Don't begin with inferior stock.

Don't begin too big.

Don't put all your money into stock; save some for feed and housing.

Don't listen to everybody's advice; ask a reliable breeder.

Don't get discouraged if you have a few failures; we all have them.

Don't trust to "luck," it is poor policy. Roll up your sleeves and make things go.

Don't worry if somebody else gets ahead of you; keep plodding and you will reach the goal of success by and by.

Don't expect to breed fine stock, prize winners, and good layers without work.

Don't keep too many drakes in your breeding pens; one drake to six or eight ducks is about right.

Don't try to breed all varieties from one mating; classify your stock and breed only the best.

Don't forget the requirements of the standard when mating if you want to raise show birds.

Don't expect to breed winners from scrub stock.

Don't forget to take care of the sitting hen.

Don't buy a cheap incubator.

Don't forget to take care of the incubator lamp and to turn the eggs.

Don't leave rotten eggs in the nest or in the machine.

Don't expect a lousy hen to set good.

Don't put too many duck eggs under a hen; eleven is about the right number.

Don't keep your duck eggs too long and then expect them to hatch.

Don't hatch more ducklings than you can care for.

Don't expect ducklings, like weeds, to grow up without your care.

Don't allow your ducklings to chill.

Don't shut ducklings in a brooder with no air, but avoid draughts.

Don't neglect to provide shade during the hot months.

Don't give up in despair if a few ducklings die; find out what is the matter and remove the cause.

Don't allow growing ducks too large a run; they run off almost as much flesh as you can put on.

Don't omit beef scrap from the mash and expect your ducks to lay an egg every day; they must have somethng to make eggs from.

Don't forget to give your ducks plenty of oyster shells and grit.

Don't allow your young ducks, after being deprived of water for a long time, to drink too much.

Don't keep changing your feed.

Don't change suddenly when you do have to change.

Don't make too many changes in your attendants; no two people feed just alike and your ducks will suffer.

Don't omit beef scrap from the feed of your growing ducks; they will get weak in the back and die.

Don't fail to feed regularly.

Don't keep your growing ducks too long in small quarters.

Don't allow laying ducks to stay out in cold, stormy weather and expect them to lay.

Don't allow laying ducks to be unhoused at night and expect winter eggs.

Don't keep ducks in a damp place.

Don't keep too many ducks together; not more than twenty-five or thirty in a pen.

Don't keep changing ducks from one place to another; they love home and do better if allowed to remain in the same pen or house.

Don't expect your business to run itself.

Don't be afraid to say what you have and what you will take for it.

Don't promise more than you can live up to.

Don't take more advertising space than you need, but take enough to let people know what you have.

Don't neglect to answer inquiries promptly.

Don't advertise one thing and send your customers something else "just as good."

Don't sell for just any price.

Don't allow anything to go out that is under value.

Don't ship eggs poorly packed or ducks poorly dressed.

Don't forget the golden rule.

PART II.

Personal Experiences and
Valuable Advice of Five
Leading Breeders of

THE INDIAN RUNNER DUCKS.

THE STORY OF MY EXPERIENCE

With

ALL THE INDIAN RUNNERS.

By Mrs. D. O. Teasley,

Mgr. Monarch Poultry Farm, and Author of this book.

Having been for some years a victim of chronic dyspepsia, I was compelled to discontinue not only my professional work as an evangelist, but also my work of every nature. I studied Food Chemistry, Scientific Dietetics, and everything else within my reach that held out a hope of health. Finally, by mere accident, there fell into my hands a poultry magazine. I read it and reread it until I was full of poultry enthusiasm. I bought poultry, sold poultry, and for one whole summer took a tent and literally lived out of doors with the poultry and did nothing else but raise Indian Runner ducks and White Orpingtons. Since the time when that poultry journal came into my hands, I have admired, read about, studied, experimented with, invested in, and bred fancy poultry to my heart's delight and to my physical upbuilding.

Among my first poultry purchases was a pair of Indian Runner ducks. I cared for them as diligently as I could, and to say that the old duck astonished me is putting it mildly. She began to lay early in February, a few days after I had purchased her, and kept it up till she died. Having only the one duck and nothing to do but watch her, I kept a strict record of her eggs. She laid an egg every day for ninety days and missed only one day. How much longer she laid at this rate I do not know, for by that time I had purchased more ducks and Polly was turned into the pen with the rest, and her further egg record lost.

My next purchase of Indian Runners was a flock of fifty, bought of a breeder who, on account of hindering circumstances, was going out of business. Though it was now quite late in the season, I began work in earnest. Orders for eggs soon began

to come in and I sold for hatching almost every egg I could spare. I also purchased an incubator, and then another, and then still another, and began to hatch pretty little Runners by the hundreds. Besides my incubators I had as many as twenty hens setting at one time.

Soon the lot of about an acre where I lived was too small; but having moved to another place, I had more room and so I continued to buy and to hatch ducks until I had it as full as my former place had been. By this time it required two and three hands to care for my flock.

About this time my husband, who is a business man, fearing that I would go bankrupt, advised me to call a halt in my progress for a while. My confidence in the money-making qualities of the Indian Runner was so strong, however, and my enthusiasm was now so high, that I persuaded him to consent to my going ahead. And go ahead I did. I raised a nice flock that summer in spite of rats and bad luck of about six hundred fine Runners. Having purchased some of the best stock in the country at a fancy price, you may be assured that I had some fine birds.

My first ducks were the penciled variety, but my second and most of my subsequent purchases were the American Standard light fawn and white. About eighty per cent of all the ducks I raised were the light fawn and white standard ducks. Fearing, however, that popular opinion might finally turn in favor of the English penciled duck, I raised some fine English Walton penciled birds. Later I purchased also some eggs of the pure white Runner, and still later sent to California for a shipment of white Runners direct from the original flock of that variety. Thus with the best blood I could find in the light fawn variety, with the English Waltons in their purity, and with white Runners from the original California flock, I had an excellent foundation for my now large breeding pens.

Having outgrown my second place and having purchased my present Monarch Poultry Farm, I moved ducks by the hundreds and Kellerstrass Orpingtons not a few to their new quarters, where I now have plenty of room to expand. Here I have had erected large new buildings and have employed proficient help. These enable me to care for my beloved flock in a manner befitting the royal Indian Runner of the "Best blood lines in the world."

I am a believer in the maxim, "What is worth doing at all is worth doing well." Accordingly, when the time came to mate my flocks for the next year, I determined to employ the best judge in the country to classify, score, and mate my stock. My husband, having met Mr. H. A. Pickett, a poultry judge, at the poultry department of the Indiana State Fair, I resolved to watch the announcements of the poultry shows and see whether he was employed as judge at any of the prominent exhibitions. I did not have to look far until I saw his name as one of the judges at several such places as Chicago, Ill., St. Louis, Mo., and Indianapolis, Ind. Being now convinced of his superior ability, I determined to have him at any cost to classify my stock and mate my breeding pens. I did not know how my stock might look to a stern and critical judge who was accustomed to dealing with the best stock the country affords, but I had confidence in his ability, was anxious to know the truth, and willing that my stock should stand on its merits as viewed by one who knows.

It was a joyful day for me when the judge came, but a more joyful one when he departed. Do not understand me to mean that there was anything about Judge Pickett personally that made his departure a time of rejoicing, to the contrary, he is a very agreeable gentleman. It was the news that he left me that made me glad.

I will now step out and let the judge himself tell you what he found in my breeding pens. You will notice from the following letter, written me after he went home, that I also breed Kellerstrass' White Orpingtons. I would omit what he says about Orpingtons, and also the prices of eggs, but I would rather leave his letter just as he wrote it.

Greentown, Ind., Nov. 7, 1911.

To whom it may concern:

Having just returned from a trip to Anderson, Ind., where I had the pleasure of mating some fine pens of Crystal White Orpingtons and Indian Runner ducks for Mrs. D. O. Teasley, I take the opportunity of writing this letter in the interests of poultry raisers.

It affords me great pleasure to recommend Mrs. Teasley's stock to the purchasing public. I especially recommend her higher grade pens. Many breeders expect just as good results from

their common stock as from their higher grade fowls, but this is not the case with Mrs. Teasley. Her stock is carefully classified and bred to produce the best.

Her first pen of Crystal White Orpingtons is headed by one of the best male birds I ever saw. He is a cockerel from a $750 pen of Kellerstrass' best birds. It is evident that the pen was a high class one or Mr. Kellerstrass would never have gotten such a high price for the birds. It is certainly a producing pen even if it throws no more good birds than this one fine cockerel which heads Mrs. Teasley's high class pen; but, to back up its breeding, the original pen has thrown several more fine cockerels. I have visited several yards this season and have failed oftener than I have succeeded in getting good breeding cockerels. A pen of White Orpingtons that one can depend on is certainly something to be proud of, for there are not more than five per cent of the breeding pens of White Orpingtons in the United States that can be depended upon to bring anything near like satisfactory results. So much for the head of this pen.

The females are pullets with good white plumage, nice low combs, and every one of them beautiful red eyes. They have also that blocky Orpington type sought after by all, but attained by a very few. Mrs. Teasley sells eggs from this choice pen at $8 per fifteen.

Her pen two will be headed by a full brother to male heading pen one. Therefore, you are certain to get your money's worth from this pen also. Eggs $5 per fifteen.

Her pen three should bring some good birds, for they have good blood lines behind them. Eggs $3 per fifteen. You ought to get your money's worth even from this pen.

Indian Runner Ducks.

Mrs. Teasley has certainly gone to the limit in Indian Runners I really believe she is the only person in the state prepared to furnish customers just what they want in Indian Runners. Some are breeding the fawn and white, and some the penciled Runners; others are breeding the white Runners, and still others are trying to breed penciled, fawn and white, and even white Runners all from the same mating. Such breeders do not know which they would rather have, and yet they are willing to sell anything

that the public will buy. This is not the case with Mrs. Teasley; she stands for the best in all the Runners, separately and carefully bred.

On entering her fine one hundred and fourteen foot breeding house, the first two pens you come to are two pens of magnificent white Runners. The first of these two pens is headed by a racy drake of excellent type and carriage, and pure white plumage. Mated to him are six white females of excellent quality. This pen should breed some fine exhibition birds. Mrs. Teasley offers eggs from this grand mating at $8 per thirteen. The second pen also contains a fine drake and six good females. Eggs $6 per thirteen. Most of the birds in these pens are direct from the original flock of white Runners in California, so you can rely on getting as good as there is when you purchase their eggs.

Next is a pen of pure fawn and white Runners, which Mrs. Teasley has called her Gilt Edge Pen. These are certainly magnificent to look upon, and fit to grace the show room of any of our large national exhibitions. The next she calls her Special White Egged Strain Pen. In fact, when any duck from the best to the poorest in any pen lays a tinted or green egg, it gets its head across the chopping block. But this special white egged strain pen has a wonderful white egg strain pedigree back of it. The eggs from the two latter pens she is offering at $8 per thirteen. They are certainly a bargain to any one wanting high class fawn and white Runner eggs.

The next pen contains twenty-one excellent fawn and white females and three very fine drakes. Eggs $3 per thirteen, $20 per one hundred. The next pen, or pen two, as she calls it, contains twenty extra fine fawn and white ducks and three very fine fawn and white drakes, same strain as her special mating. Eggs $2 per thirteen, $14 per one hundred. The next, or pen three, has fifty nice fawn and white ducks and ten fawn and white drakes. Eggs $2 per thirteen, $12 per one hundred.

The next is the pen that is going to help make Mrs. Teasley famous as an Indian Runner duck breeder. This pen contains one very fine drake and five magnificent ducks of the English Walton Runners in their purity. They have that beautiful soft penciling so much admired by the English breeders. Wake up, penciled breeders and advocates, take off your hats to Mrs.

Teasley just long enough to show respect, and then if they are what you want, roll up your sleeves and jump right in and help boom the penciled duck. They will be just as nice, just as catchy, and just as popular as any other Runners if they are properly bred, so that we can see some of the old partridge cochin penciling. The trouble with the penciled duck in this country is that every breeder has been trying to get both penciled and fawn and white from the same mating. Penciled Indian Runner admirers, try a setting of eggs from this mating. Mrs. Teasley is certainly loyal to the penciled variety when she offers eggs from this grand mating at $3 per thirteen straight.

Then she has a pen of about fifty very nice American penciled Runners that are very catchy. Eggs $1 per thirteen or $5 per one hundred. She also has a pen of about sixty light fawn and white utility birds from which she sells eggs at $1 per thirteen or $7 per one hundred.

Who can beat Mrs. Teasley for variety in Runners with each breed in its purity? I can heartily recommend Mrs. Teasley as a true and loyal fancier and breeder.

H. A. PICKETT,
Poultry Judge.

ENGLISH PENCILED INDIAN RUNNERS

By Mrs. Andrew Brooks, Auburn, N. Y.

The English penciled Indian Runners are the original Indian Runners as introduced into this country from England about fifteen years ago, or, as some writers claim, only ten or twelve years ago. The other varieties of Runners owe their origin, or were developed from the old type recognized by the English Standard as a distinct and established breed. The English Standard and the standard of the English Indian Runner Duck Club require and describe the preferred style of penciling.

For the benefit of the many who breed to the English Standard or for those who contemplate a start in English Runners, I will give a brief description from the standard of the English Indian Runner Duck Club, which is the accepted standard in England and used by judges there.

The head is flattened over the skull and the eyes are close up to the top. The bill is strong, broad at the base where it fits into the skull, and comes as nearly as possible straight down to the tip, giving it a wedge-shaped appearance. When viewed in profile the bill appears rather broad and heavy and not pointed. The neck should be long, thin, and fine, with a funnel-shaped expansion at the base of the neck. This funnel-shaped expansion should gradually fit into the upper part of the body so as to appear almost a part of it. The head and neck should be carried high and slightly forward. The cap and cheek markings should be near the color of the body and should be of a dull bronze-green shade in the drake. In most specimens a line of white from one-eighth to a quarter of an inch separates the bill from the head markings by a projection of the white from the neck extending up to the eye in a narrow line more or less encircling the eyes. The neck should be white to near where the expansion begins. The bills, light orange-yellow in the young, but, when the bird is over a year old, green spots show and extend over the entire mandible, be-

coming a dull cucumber shade in duck and a greenish-yellow in the drake. Body color should be uniform throughout, a soft warm or ginger fawn shade being most desirable. This depends to some extent upon the amount of bleaching and fading by exposure and sunshine. The rump of the drake is of a hue similar to his head markings, while his body feathers show a soft fawn color finely peppered or penciled with a warmer shade. Breast feathers of the duck are fawn with centers slightly darker than the lacing or penciling. The outer edges only of these feathers are visible, thus the breast and flanks appear to be an almost solid fawn of even hue. The feathers on shoulders and back usually show the penciling more distinctly, but when viewed at a distance of a few yards the two shades appear blended in one solid shade of true fawn. The fawn of the breast extends to a point about one-half way between the point of the breastbone and legs and should be evenly cut across the body to meet the white portion of the body plumage. The fawn of the neck, top part of wings, back, and tail should be as nearly as possible the same color as the breast, and from the fawn on back the color extends on each side downwards and backwards behind the thighs. It is desirable that the primary and secondary flight feathers be white; if colored, they must be of the same color as the back and breast. At early stages of growth both sexes are similar in appearance, are of a dull brownish color, and moult at the age of about twelve weeks. Then they gradually attain full plumage and correct color. Adults of both sexes molt into dusky brown color in the autumn and regain the fawn color about two months after. The legs must be placed well back to maintain the distinctive Indian Runner carriage and to allow the rapid gait from which the bird derived the latter part of its name—Runners.

The English Standard mentions that Indian Runners are layers of a great number of white eggs, that constitution is needed to produce them, and that the breeding of small sized and bulky keely specimens is discouraged, as these are less able foragers. The ability to forage depends upon proper structure, and as it is the most valuable characteristic of the breed, foraging ability must be preserved. A medium size is advised, with good length. Appearance and activity are a better guide than weight or measurement.

Ducks should weigh from three and one-half to four and one-half pounds. Drakes, from four to five pounds. Ducks should measure 25 to 30 inches; drakes, from 28 to 36 inches. The above are fairly good weights and lengths, but must count for nothing unless accompanied by type in well balanced proportions. It is often best for a judge to see a bird on the run before he places the award. Above all, type should occuply first place and receive chief attention, and on no account must type be sacrificed for evenness of color and markings. Only 25 points out of the 100 are allotted to color markings and condition. This is as it should be.

If every shape and type made a breed, this rule holds in the case of the Indian Runner, it is plainly to be seen that penciling belongs to the breed, and the English Standard closes the door on an unpenciled duck or drake minus the dark head and rump markings. The American Standard for Indian Runners requires a solid shade of fawn with no penciling; hence, English Indian Runners have been awarded no prizes when in competition with the American Standard show type. Nevertheless, the Engli[illegible] birds have made an astounding increase in numbers. Large shows like Chicago and New York have made classes for them, so it may be confidently expected that small shows all over the country wi[illegible] do likewise if breeders request it. The popularity of the penciled Runners will continually increase. They are the greatest acquisition of the age to our poultry resources, for they are especially adapted to the warmer parts of our country, where, it is said, they know no difference in seasons, but lay every month in the year.

Penciled Runners are heard from in many countries, an have won fame for themselves in the Australian Egg-Laying Competitions. Secretary Dunnicliffe of Hawksbury Agricultural College says that the ducks that made the greatest records were straight English Standard Runners; that they countenance no others in shows or in laying competitions; that some breeders had bred in Rouen blood to get size, but that it at once lowered egg production. In the eighth annual competition (Hawksbury) two pens of Indian Runners made an average of about 200 eggs for each duck. A notable incident in connection with this test was the fact that, no meat being obtainable for both hens and ducks,

the ducks made this record without meat food in the mash such as was fed to the hens. In the ninth annual competition the best record for hens was won by White Leghorne—1324 eggs in twelve months from six hens. The two years' competition was also won by White Leghorns with 2369 eggs from six hens in two years.

Duck competition was won by Indian Runners with 1,278 eggs in twelve months, and 2,464 in two years. Thus the winning pen of ducks laid 105 more eggs than did the winning pen of White Leghorns in the same length of time, making the grand record of four hundred five and two-thirds eggs average for the six ducks in two years. The record was made by English type and color—the pure Indian Runner. While this is a pleasing record of which we may be proud, the statement was made that very likely it would have been surpassed by a pen in which every duck was killed by a fox after it had been in the competition one week less than nine months. The six ducks in that pen had laid 1,195 eggs, an unsurpassed record for that length of time. These records need no comment, for it is well known here that well-bred penciled Indian Runners rightly managed and housed are capable of producing great numbers of eggs.

The great economic value of the breed will be better appreciated when it is understood that they are natural foragers, well able to cover a great deal of territory in a day in their search for food, and that only one full meal a day is needed on the free range of the farms during the warmer months of the year.

There is a special demand for duck eggs in New York City for a month or more before Easter. At that time I have sold to commission dealers Indian Runner duck eggs for about twice the price of hen eggs. After Easter prices drop, but the duck eggs sell for ten to fifteen cents in advance of the hen eggs during the remainder of spring and summer. The prices received for duck eggs throughout the year should average, it is plain to be seen, considerably more than the prices for hen eggs. Early hatched, many ducks and yearlings will outlay hens in autumn. Reports from California and southern portions of our country go to show that a sixty per cent yield average for the autumn is not an uncommon record. It is the small flocks, at least in this country,

that make records above 200 eggs each, and I would not advise the keeping of more than 35 ducks in a flock, or better yet, 20 ducks, if best averages are wanted.

As we have these little egg-machines at hand ready-made, we may say that we are not living up to our opportunities if we do not make the most of them. To breed true to type and intelligently to handle these ducks we need to know their natural colors, we must understand Indian Runner characteristics and the natural tendencies of the breed. If we wish to preserve type and valuable traits, to breed out defects or at least prevent deterioration, we need to know the history of the breed and, if possible, the origin.

What is their origin? It is very evidently not a made-up breed from common ducks, for none of the common breeds possess even in slightest degree the striking Indian Runner character. That the breed has been long established is proved by their powerful prepotency; by crossing an Indian Runner drake with farm yard ducks it is said "that fully 80 per cent of the progeny will favor the Runners as to soundness of color and markings." They were bred by the English farmers for years for their great numbers of eggs, and no attention was paid to type or markings; yet the distinctive shape was not destroyed. This is proof enough that the breed was not of recent origin. About the first detailed information of the breed in this country was an article which appeared in the July issue of the Reliable Poultry Journal in 1905, from the pen of an Irish writer, who had imported a pair from England. This writer stated that the ducks originated in the West Indies, but later said that an error was made. He meant to say that East India was the native source of the birds.

Last summer a letter was printed in Farm and Firesides from a lady in Virginia, who undertook to tell how the breed came by its name. This woman said her husband, Lancelot Pickering, late of Bongate, Appleby, England, was the namer of the ducks about thirty years ago. She says: "A friend of ours had two ducks and a drake given to her by a friend, a sea captain. Mr. Pickering was visiting in the neighborhood, called to see her, saw the ducks and asked what breed they were. She said she did not know where they came from, but that they were top layers, better than hens. About that time a celebrated runner, an Indian named

Deerfoot, won the world's championship for long-distance running. He said, 'We'll call those ducks Indian Runners,' for they can run (minus the waddle), and she saved me a setting of the eggs. From that setting I sent eggs and the breed all over the world, some very early to Belgium and Holland, France and Germany. There are no Runners in India besides those that were sent from England to a maharajah, sent by Mr. J. H. Wilson, a great poultry enthusiast, a breeder, exhibitor, and judge, who was instrumental in forming the Indian Runner Duck Club."

I possess a letter written in 1908 by Mr. J. W. Wilson, England, who is, most likely, the Mr. Wilson referred to by Mrs. Pickering. Mr. J. W. Wilson was a noted breeder, exhibitor, and judge, and his letter told me that his strain of Runners had not to his knowledge been crossed for fifty years. Mr. Wilson's catalog stated that his son was then the Honorable Secretary of the Indian Runner Duck Club and was the originator of the Club.

The present secretary and treasurer of the English Indian Runner Duck Club is soon to publish a book which I think will show by evidence not heretofore published that the breed is a very ancient one, originating in India many centuries ago. Several interesting little treatises have already been published by English breeders. Two notable ones are the Thomlinson and Donald booklets. The Donald treatise was undated; it bears the marks of age, and I am reliably informed that it was published about twenty years ago. Mr. Donald's home was in Cumberland. In his book he says that the ducks have been known in Cumberland upwards of fifty years. He stated that a ship's captain when ashore in India had his attention attracted to the ducks by their active habits and handsome carriage. This, with the accounts given to him by the natives of their egg-producing capabilities and ability to forage for their living during the greater part of the year, suggested the idea to the captain of making a present of a trio to his farmer friends in West Cumberland, England, which he did. Another consignment was imported some years later. From the two consignments probably all the present day Runners are descended.

The economic value of the ducks impressed the mind of the

Cumberland farmer and they were long in this man's hands exclusively. As their fame extended, the drakes were eagerly sought and used to cross with farm yard ducks, to increase egg capacity. Many so-called Indian Runners were produced by the use of these drakes and distributed. Mr. Donald stated that the ducks were but little known outside of Cumberland until within the last twenty-five or twenty-six years (forty-five or forty-six years it would be now). He remarked that the birds were not so erect as formerly and attributed this result to climatic influences, to the introduction of foreign blood, to inbreeding, or to a combination of all three causes, that many cross breeds had been distributed, that the original type had always been kept in but few hands.

Mr. Donald described head of duck as grayish fawn, and drake as having head markings of bronzy-green. The colored parts of the body of both sexes are a soft shade of fawn, that of the drake being finely penciled, giving a somewhat reddish-brown tint towards upper part of the breast. The tail is of a darker shade. Feathers of duck had a brownish center with buff shade on the margins.

Mr. Thomlinson's recollections do not date back as far as Mr. Donald's or Mr. Digby's, but he treated the subject more fully than either. He said that Mr. Donald alone was responsible for saving so valuable a breed from extinction, and that the Water Fowl Club Standard was the effort of Mr. J. Donald, who wrote the description, and Mr. Henry Digby, who allotted the number of points. In Mr. Thomlinson's opinion, too many points were given to color of body, which led to erratic judging and degeneration of the breed, that points should be given to retain true characteristics, viz: shape, type, carriage, and heal and bill. He says: "To anyone who has studied their habits it is quite apparent that their origin is a tropical one, their habit of dropping their eggs without any or with only very primitive attempts at nest-making proving this. Their non-setting instinct points to the fact that their eggs were incubated in the hot sands on similar lines to the ostrich and emu. This is corroborated by the fact that the tiny ducklings immediately after hatching are as sharp and active as partridges, and further, they have a shrill piping whistle, which, although faint in sound, can be heard at an incred-

ible distant for so faint a call. That instinct remains today in the true Runner, and immediately upon hearing it their heads are erect, and the tiny ducklings run towards each other.

"Nature has endowed this breed with great fecundity in their egg production to allow for the great mortality which must ensue under these adverse conditions. Their peculiar running gait from which they take their name points to the fact that they were the survivors of the fittest' in an arid barren region, sparse in vegetation, conducive to worm, snail, or slug life, where the ordinary waddling duck would have died out of want, not being able to travel over wide areas of country in pursuit of food and sustenance. * * * * By the importation of the original birds to this country, changes would undoubtedly take place on account of climate, and a more plentiful supply of food would conduce to a larger and more robust growth. * * * * Until the native origin of the country whence came the original and subsequent importations, allowing for a taint or cross, which will be difficult to dispose of entirely—until some enterprising fancier comes into contact with a traveler in those distant parts of India or elsewhere and obtains another importaton of originals, we must remain content with the best of the material to hand, and make the most of the situation to maintain that shape and carriage which have been identified as typical of the duck in its native country. This is no mere myth or fancy, for I have evidence to prove that there are ducks in India that bear their peculiar shape, style, and carriage, but there the matter at present rests."

Mr. Thomlinson does not say how long the ducks have been called Indian Runners. He describes the body shape as resembling the old-fashioned soda-water bottle, which tapers at both ends, and describes color markings, etc., as it is given in the English Standard. Making mention of the many and varied poses of the Runners, he says: "It is when the ducks are at perfect liberty and not confined in a training pen that they show off their grandest and most graceful poses. Inherited? Beyond a doubt. And inherited in this particular breed which dispels any doubt as to their originality even to the most hardened unbeliever." The eggs of penciled Runners are large in size and more attrac-

tive in appearance than the eggs of any other breed. They weigh on an average six to the pound. A duck that lays 180 eggs in a year produces seven and one-half times her own weight in eggs. What other fowl can equal this rate?

Managing and Feeding the Layers

First of all, good constitution is needed for the digestive powers that enable the duck to consume the quantities of food needed to produce large numbers of eggs in addition to sustaining healthy condition. The ducks must be well bred, fed, housed, and managed if best results are expected. They are little egg-machines, but, like other machines, the output is regulated by the treatment they receive. If we desire large quantities of eggs, we must provide proper material to produce them, and conditions should conform as nearly as possible to the natural requirements of the birds. This does not imply the need of complicated rations. A wet mash that gives good results with laying hens is good for the laying ducks with possibly the addition of more green stuff and beef scraps. Greens and clovers, or alfalfa, extends the mash and cheapens the cost. Nearly one-half the mash in bulk may consist of green stuff or waste, cooked vegetables, or both. When economy must be considered, remember that beef scraps or plenty of animal food in some form is a necessity for ducks when they can not procure it for themselves in the fields or streams in shape of worms, slugs, frogs, etc. If working for great numbers of eggs regardless of fertility, the ducks can be fed more beef scraps than would otherwise be used, but scraps must not be fed to excess for fear of straining or injuring the birds and throwing them out of condition. The egg flow of yarded ducks can be largely controlled by the amount of beef scraps fed. A mash for the breeders should have at least five per cent of beef scraps and can be fed twice a day with whole grains for noon or night meal. The layers can be given ten per cent more of beef scraps in the mash, but observation and judgment must be exercised, for all flocks can not be fed the same. The quality of food varies, and conditions likewise are never just the same on two places. Care must be used not to feed the yarded ducks too much. Give them only what they will eat up clean and quickly. Better keep them a little hungry than overfeed. A free

range flock is in haste to reach the fields and will eat but little n the morning. They should be given all they will eat of whole grains upon their return at night. I have never seen a free range flock that was overfed. A good ration to use to start the egg flow when ducks reach laying age is the following:

2 parts of bran
1 part middlings
1 part corn meal
2 parts green stuff, cooked vegetables, or alfalfa, or both
5 per cent of grit like wheat grains for size
10 per cent of beef scraps

When eggs come plentifully one part of the bran may be left out, for ducks become thin in flesh after continued heavy laying.

Another laying ration is this: Equal parts by measure in these formulas of corn meal and bran.

20 per cent of white middlings
10 per cent of beef scraps
10 per cent of boiled potatoes, beets, or turnips
15 per cent of cut clover or alfalfa, scalded if in winter, and ground alfalfa is used with 3 to 5 per cent of grit

Give of this mash twice a day all that is cleaned up quickly, or in the course of a few minutes. Best quality of oyster shells and granulated charcoal should be always kept before the ducks as well as plenty of drinking water in buckets, that they may immerse their heads and keep the nostrils from becoming stopped up.

For best fertility of eggs do not force egg production, feed only five per cent of beef scraps with mash twice a day if the ducks are yarded, and grains at night. The breeders should be rather sparingly fed, and if possible given free range, as eggs hatch so much better, especially late in the season. All foods must be of good quality. I insist upon the home ground bran, as the western bran is so poor. Middlings vary in quality, but it is safe to use all the mash will hold without being sticky like dough. Beef scrap must be of good quality, should be of a light brown color, and have no bad odor. Spoiled beef scraps will cause limberneck and great mortality, especially with the young ones. Houses need not be expensive. The front should be warm and tight. Open fronts may be used with curtains to let down when

weather is severe, or during storms. Floor should be well covered with straw or other litter, but should be removed or more strewn on top whenever it becomes damp. During severe weather ducks should be kept indoors.

Rearing Young Runners

The successful rearing of the young stock is an essential of duck culture. As Indian Runners offer such wonderful possibilities, beginners start out often with more enthusiasm than knowledgs, and here is where the trouble begins. If from lack of knowing how to handle the little ones many are lost, the beginner becomes discouraged, maybe gives up and pronounces the breed as "no good." I want to offer a word of caution and ask the inexperienced to study up before trying to raise young ones hatched from expensive eggs. There is a "know how" and it is easily learned if one has the ability and perseverance that is needed to succeed with any kind of poultry. There are sevearl good books published on duck culture; these treat mostly on market ducks. Methods are much the same, except that Runners if wanted for layers and breeders must not be forced to the limit, like the stock for market purposes. Skill in caring for hens may be turned to account with ducks, as the handling of these mostly varies in detail; general principles are much the same, but the details must be learned or success is uncertain. When a few rules are observed it is a great pleasure to raise the ducklings, as they grow so fast and are very interesting at all stages of development. The beginner must learn not to overfeed; better keep them a little hungry. This is one of the secrets of success.

I like best to hatch with hens if small numbers are wanted; otherwise it is necessary to use incubators. The nests should be built on the floor or as near the ground as possible, especially in hot weather. Eggs in hot weather should be sprinkled a few times with warm water during the latter part of incubation and at the pipping stage. Do this when hen is on the nest, or the eggs may be chilled. Eggs should be hatched in a darkened room where other poultry will not molest them. Hens must be well dusted with insect powder or they will not sit quietly. Whether brooded

with hens or brooders ducklings must not be chilled or overheated. More depends upon the brooding and care than upon the season of the year. April, May, and June are the best months for hatching. The ducklings should be placed in small yards which can be changed to fresh ground occasionally. After a few weeks they can be turned on the range. Ducklings may be watered, but not fed, till at least thirty-six hours old. After that bread soaked in sweet milk and sprinkled with a little coarse sand or fine grit may be fed at regular intervals. When ducklings are about six days old begin to mix bran and middlings with the bread. By the time they are a week or ten days old gradually get them on to the following mash:

4 parts bran (all by measure)
1 part white middlings
1 part corn meal
2 parts green stuff cut very fine, lettuce, dandelions, clover, or alfalfa
5 per cent coarse sand or finest size chick grit
Sprinkle in a little powdered charcoal once a day
If milk cannot be spared to wet the mash, 5 per cent of good grade of beef scraps with the coarse part sifted out should be added to the mash

I do not give the full allowance of greens or scraps at first, but gradually increase it. They may be fed four or five times a day at first.

When they are two weeks old three meals a day will do very well; a sharp appetite is the test of condition. Shade must be provided from the hot sun; movable shade is preferable to that of large trees where too much dampness may prevail. Fine cracked corn or the corn and wheat may be given for the night ration when ducks are six or eight weeks old. When fully feathered and on range, the morning mash and whole grains at night will suffice. At maturity they may be gradually gotten on to the laying ration. Water should be given the ducklings in such a way that they may immerse the bills and heads without wetting their bodies. A tomato can makes a good drinking dish for the small ones. Cut a notch in the top of it, fill with water

with the chill taken off if weather is cold, place on top a tin basin, with bottom up, on deep enough and about two inches in diameter larger than the can. Invert the whole and water will run in as fast as ducklings drink it. Brooders must have dry bedding and everything kept in as sanitary a condition as possible.

EXPERIENCE OF MRS. GEO. R. SIMPSON, OWENSVILLE, IND., WITH INDIAN RUNNER DUCKS.

A few years ago I became interested in Indian Runner ducks and bought some 300 eggs. It certainly has proved a wonderful money-making venture. I had great trouble to secure eggs of the best quality, as the demand even then was so great that it was next to impossible to get them. People have been disappointed so much in not being able to get eggs when they desire them that they now sometimes book orders two or three months ahead. My purchase in duck eggs was in accordance with my views in buying anything else, "The best is the cheapest." Finally, I was able to locate some eggs of quality, and ordered them for April 25th of that year. I kept April 25th in mind and after April 15th held in reserve every setting hen—not because I did not need them, but because I wanted to select nice quiet hens to set on my precious duck eggs. I had had considerable experience with incubators and in hatching hen eggs, and had been very successful with them. I was, as many people still are, ignorant of the fact that a machine that hatches hen eggs successfully will not always hatch duck eggs well. April 25th found everything in readiness for my eggs. The hens had been setting quietly and contentedly for a week or ten days, and my incubator was running steadily for three or four days at 103 degrees, never varying more than one-half a degree. The eggs arrived in due time and were cared for according to the following instructions:

How to Treat Eggs for Setting Purposes.

When you buy eggs do not set them immediately, but turn

the basket upside down and let them remain perfectly quiet for 18 hours. In the first place, if you buy eggs you should be right on hand when they arrive and take them to your home immediately and let them rest, because if they stay at the depot they have no particular care whatever and you may get a poor hatch. The depot agent is not supposed to give them the turning, etc., you would give them. That is not his line of work. So be ready to look after your part of the business and take care of the eggs. If you can not set them for a few days after they arrive, then do not neglect to turn them twice every day. The quicker you get them to setting after the first 18 hours, the better the hatch you may expect.

Hatching With Hens

It is best to set eggs under a good steady hen. In so doing, be sure your hen is settled down to business and will take good care of your eggs. Be sure to sprinkle your eggs once every week, and three times the last week, with good, clean, warm water. Always do this at night, so that there will be no danger of the hen leaving the eggs and allowing them to chill before the nest is dry. I take a half pint of water to a nest of eggs. Do not be afraid of getting too much. They must have much moisture and the hen will attend to the ventilation. Unless you do as I have instructed you, you may expect dead ducklings in the shell.

When Eggs Begin to Pip

Many people are so restless they can scarcely wait for the ducklings to hatch, so they begin to help them out of the shell. *You must not do that.* If the eggs are under a hen, take a half pint of warm water when the eggs begin to pip and sprinkle liberally over them. Then do not bother the hen again for at least twenty-four hours. Duck eggs often pip twenty-four to thirty-six hours before the ducklings emerge from the shell, so if they are not hatched in twenty-four hours after the first egg is pipped, just sprinkle them lightly again and let the hen alone. Every time you raise the hen to satisfy your curiosity, you let escape the heat and moisture which is absolutely necessary for a successful hatch. You can raise a hen so often that the ducklings will die in the shell even after they have cut the end of the shell and

are ready to come out. My advice is never, under any circumstances pull them from the shell, because they can not get out themselves. Nine times out of ten, if you do, you bring them out prematurely by twelve to twenty-four hours, and they are a loss to you. If a duckling is not strong enough to get out of the shell without being helped, then it is not worth pulling out. By leaving the hen alone you may lose one or two in the nest, but what you save are nice strong ducklings. If hatched in incubators, do not open it constantly, for the result will be the same as in raising the hen—loss of heat and moisture.

Care of Hen During Incubation

Keep the hen free from lice while she sets. If the hen is alive with lice, it stands to reason that the ducklings will be the same, but lice will never find ducklings any other way than by coming from the hen, or a box or coop which is infested with them. Once they are on a duckling they must be treated exactly the same as on chickens. My method used to be a drop of Oil of Pennyroyal, but now I use sweet cream and prefer it to anything I ever used. I sprinkle the eggs twice during incubation with dry sulphur and twice with a little air slacked lime. This helps to keep the hen free from lice.

After the ducklings are hatched do not feed them until they are thirty-six hours old. Then feed them bread soaked in milk and squeezed dry for the first few days. Gradually begin to add wheat bran, corn meal, alfalfa meal, river sand, such as is used in concrete work, and beef scrap. Keep water constantly before them after they are thirty-six hours old. Feed every two hours for the first few days and gradually work them off until only four times a day. *Remember two things*: More ducks are killed by over feed than by under feed. Also that they must have the water to drink. If you keep water away from them very long they will over-gorge their little selves when they do get to it, and will die in two minutes right before your eyes. I have had hundreds of people write me to know the trouble with their ducks and almost invariably they would tell me how they died when they got to the water. The reason was because they were suffering for water and drank too much when they did get it. When

you feed the ducklings measure out what you think is enough, then take one-third or one-half of that amount and feed them, and feed the remainder to chickens or something alse, but *never* keep it over for next feed. Never omit green food and grit from their food. They must also have beef scrap.

When ducks are four weeks old feed them the following formula:

4 measures wheat bran
3 measures shorts
2 measures corn meal
1 measure beef scrap
One-half measure river sand
2 measures cut clover or alfalfa 1 [illegible]

There is still danger of over feed, so do not kill your nice ducklings at this age because of lack of wisdom. There is no set rule as to how much to feed them. Use judgment. From this time on I keep a sharp pearl grit and oyster shell before them and for supper give them cracked corn. To teach them to eat cracked corn I gradually mix it into the mash for the evening meal until at the end of about ten days their supper is nothing but wet cracked corn. In a few more days they will eat it dry and they really like it. It gives them a balanced ration.

Ducks are often bothered by "chiggers" and lumps will swell upon their noses, just like bumps on a person who is suffering with "chigger bites." I rub the head just above the beak with fried meat grease and coal oil. Often times whole flocks will die in a short time from this affliction.

Many people complain of ducks being down in the back. It is not that, it is down in the legs. Their legs are weak. They need beef scrap and exercise. They can only walk a short distance when they drop down to rest. They eat heartily and do well, but are down in the legs. Rheumatism will affect your birds unless their houses are kept perfectly clean and dry. After they are five weeks old I do not put them in a coop at night, but let them roost out of doors. They enjoy it so much. After they are ten weeks old I advise marketing all surplus males and cull females, as they wll "eat their heads off" if you do not.

Remember, to get best results from Indian Runners they *must* have the care I have just told you about, and if you do exactly as I tell you there is no need of losing a duckling.

Feed and Care of Breeders

For good egg production during cold weather, the ducks must be kept in a dry place with plenty of clean, dry bedding, as their feet are very tender. They should also have plenty of clean water to drink, which can easily be provided in common rice buckets. Their feed should consist of:

4 measures wheat bran
3 measures of shorts
1 measure of beef scrap
2 measures of alfalfa meal
1 measure of oil meal
One-half measure of river sand

Mix thoroughly the dry ingredients, then mix up with water or milk what is necessary for one feed to a thick, sticky mass. Give them the mash mornings and noon at regular hours about all they will clean up nicely. It is better to feed sparingly than to overfeed. At night, feed shelled corn, a light feed, and have plenty of crushed oyster shell always before them.

When I entrusted a portion of my duck eggs to the incubator that had very little ventilation, I got only nineteen ducklings from 100 eggs. Most of the remaining eggs had fully formed ducklings in them, but they had died for lack of ventilation just about the time they were ready to pip the shell. We have since very successfully used incubators with plenty of ventilation.

The Indian Runners have proved to be great money winners. Last year I kept fifty females and in eight months' time sold over $500 worth of eggs, and at the end of that time forty per cent of the flock was still laying. Our proceeds were $1,680.08 from stock and eggs combined. I can not give an exact report for this year yet, but some time ago I had gone over the $2,500.00 mark. I have sold over 1,700 ducks within the past eighteen months.

I endeavor to be always on the alert for the demands of a

buying public. I saw some time ago that much attention was being directed toward the pure white Indian Runner, and I at once procured some of them. They lay as many eggs as do the American Standard ducks, and breed absolutely true to color. Their large eggs are pearly white. In shape they should have the same long racy form that characterizes all the Indian Runners. Their color is pure snow whte, without any touch of tan or other foreign color. Being rare, they command high prices, as do also their eggs. I would advise people who want to win to get some of these most wonderful egg machines.

I have endeavored to tell in as brief a way as possible the manner in which you can successfully rear Indian Runner ducks. If you follow the instructions found in this book, I am confident that you will succeed.

WHITE INDIAN RUNNER DUCKS

By Mrs. U. R. Fishel, Hope, Ind.

White Indian Runner ducks, as the name implies, are pure white. This very new and most popular variety of Indian Runner ducks, with the carriage of the Indian Runner, the pure white plumage, and wedge shaped bill and head, makes a very beautiful fowl. It is said that the white Indian Runner is a better egg producer than the colored birds, but actual test alone can substantiate this claim. One thing sure, and that is, the white Indian Runners lay a pure white egg. No one need worry about the color of their eggs.

There is no doubt but what the demand for white fowls has always been and always will be greater than for a parti-colored fowl. Some breeders wonder why this craze for white Runners. It is easily explained. The white birds are easy to breed to color and type, they lay a pure white egg, produce fewer culls in the flock, and bring higher prices. I know of a single white Runner drake that sold for one hundred and fifty dollars, and a duck that sold for one hundred dollars.

Some people think the white Runner just a fad, just as they mistakenly thought about the fawn and whites, but the white Indian Runner has come to stay, and bids fair to become the most popular duck bred. We know of one breeder who raised and sold over two thousand white Runners the past year, the lowest price received for a duck being five dollars. So you can readily see the popularity of this new breed. In type and general make-up the white Runner is the same as the fawn and white or the penciled Runners. It is often noticed at the large poultry exhibitions, however, that the birds best in type are the white ones.

To convince yourself as to which is the best Indian Runner, the white, fawn and white, or penciled, try a few of each.

THE WHITE INDIAN RUNNER

The Greatest of All Ducks

By B. R. Inman, Middletown, Ind.

The white Indian Runner duck is destined, in the very near future, to become one of America's most profitable and popular fowls. It incorporates all the strong features of both the light fawn and white and the English penciled varieties, with the additional salient characteristics of a beautiful snow-white plumage and a graceful, racy carriage.

The white Runners have been raised but a few years. During the last two years, however, a number of duck raisers have discovered their true value and are now the proud owners of fine flocks.

There is one feature about the white Runners that will appeal to all who raise them, viz: the perfect markings of the pure type, as indicated in the pure white plumage. This feature, together with the requisite conformity to a fixed standard, and the characteristic manner in which the breed transmits its markings to its progeny, will result in the development of a type of perfection of standard that can not be obtainable in the parti-colored fowls.

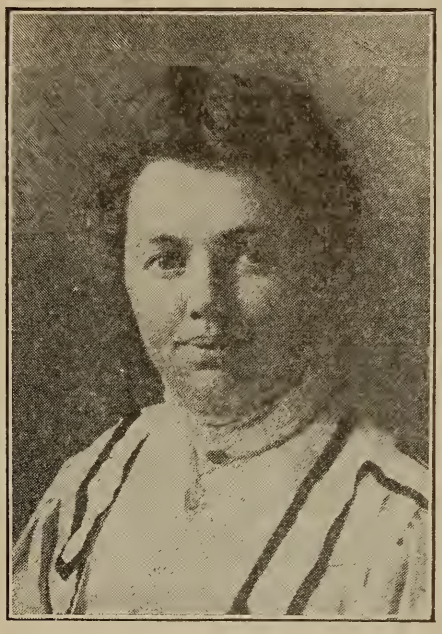
In their eagerness to possess a flock of white Runners, a number of breeders have crossed the fawn and white Runners with the Pekin duck, and are selling the offspring for white Runners. We desire to sound a note of warning against the purchase of these mongrel birds. Those who value pure blood can not be too careful on this point. When the writer decided to start a flock of white Indian Runners he felt that the best was none too good. He therefore sent direct to the original flock in California for his foundation. This was done after inspecting several flocks in which mixed blood was apparent. This mongrel blood is absolutely unfit for breeding purposes where a conformity to a recognized standard is desired. Even if it should be conceded that the

white Runner was originally the product of a cross with other varieties, now that the type of individuality is distinct, the blood must be kept pure.

We believe profoundly in the ultimate triumph of the white Runner over all other varieties, as well as in its ability to prove itself a source of rare pleasure and profit to its owners. The writer has a flock of fine fawn and white, another of English penciled with splendid markings, and therefore feels justfied in saying that while all have their friends, the white Runners have the more salient characteristics which will eventually bring them into universal favor. The question, however, is not so much what variety to adopt, as it is to obtain the very best blood that can be secured in your favorite breed. Much depends on the foundation stock. More failures are made here than at any other point. It is a serious mistake to believe that just so you are setting duck eggs, that is all that is necessary. The best is none too good.

PART III

RELIABLE ADVERTISEMENTS



MRS. GEO. R. SIMPSON

Breeder of Simpson's Wonderful Laying Pure White Egg Strain Light Fawn and White

INDIAN RUNNER DUCKS

Also, Simpson's Snowflake Strain of White Runners.

I have at this writing, July 11, 1911, a flock of standard colored ducks which value at $2,500. I have never known defeat in the show room : have furnished winners for my customers at many shows, among which is the "Madison Square Garden Show" of the South, held at Atlanta, Ga., in January, 1911, Macon, Ga., show in October, 1910, New Orleans, La., held in 1910, Mt. Vernon, Ind., held in February, 1910. Aside from being Blue Ribbon Winners, they are money winners, each bird in my flock 1910 having in 8 months time averaged over $10 per head and 40% of the flock then laying. Stock for sale at all times—$3.50 to $10.00 per head. Eggs from the cream of this immense flock, which consists of one drake and five ducks, which are prize winners and known as **Special Mating, $7.00 per setting of 13 eggs.**

Pen 1—$5 per 13 eggs; $35 per 100. Pen 2—$3 per 13 eggs; $20 per 100
Pen 3—$1.50 per 13 eggs; $10 per 100.

Utilities $1.00 per 13 eggs ; $5.00 per 100.

Simpson's Snowflake Strain White Runners : Single birds $7 to $10, trios, $20 to 25. Eggs, chalk white in color, Pen 1, $7 per 13, Pen 2, $5 per 13.

ADDRESS

MRS. GEO. R. SIMPSON

OWENSVILLE, INDIANA.

All the
Indian Runners

Pure White, American Standard, English Walton.

Heavy Laying Strain

Best Blood Line in the World

I won 13 first prizes, 7 second prizes, many third and fourth prizes and a silver cup for best display—all in one month. There is no guessing at the quality of stock on my farm, for I employ one of the best poultry judges in America to select, classify and mate my birds. Therefore, in buying from me you are sure to get what you pay for. Eggs and stock in season. Send for mating list.

MRS. D. O. TEASLEY

Anderson, Indiana.

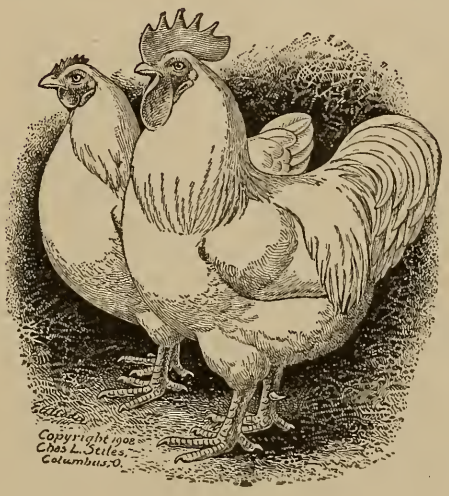
State Secretary of the National White Indian Runner Duck Club.

Kellerstrass

Crystal White Orpingtons

"The Best Blood Lines in the World."

Marvelous Layers



First Prize Winners

The Kellerstrass Orpingtons are the world's most famous chicken. Most of my birds were hatched from a $750 pen. Like my ducks, my chickens are scored and mated by an expert poultry judge, and you will run no risk in buying my stock and eggs. The judge said: "The cockerel heading Mrs. Teasley's first pen is one of the best male birds I ever saw." I am not a huckster—buying eggs from Tom, Dick and Harry, and selling them as blooded stock, but supply eggs from my own breeding pens only, and guarantee to ship them strictly as ordered. Infertiles replaced. Write for my mating list.

MRS. D. O. TEASLEY

Anderson, Indiana.