



FIG. 13.
SINGLE CHRYSANTHEMUM,
"DISTINCTION."
(Colour, full deep yellow.)



FIG. 14.
"YELLOW CHIEFTAIN."
(Colour, yellow with
brown centre.)

PROFITABLE DUCK-KEEPING.

By T. WILSON-WILSON.

PART I.

THERE has never been a time when so much attention has been given by thinking people to questions affecting *petit* culture, and I may safely say that the pursuit of duck-keeping and duckling-rearing is one of the most important of this class of enterprise.

It is, perhaps, hardly within the range of these columns to discuss how the British farmer is to make both ends meet, but it is certainly not out of place for us to discuss the possibilities of the farmer's daughter, or the home-girl with a very small allowance, being able to wrest a small sum for her own benefit from the public, without either hurting herself or some other poor competitor for daily bread.

The purely intellectual and scholastic markets are alas! quite overstocked with eager applicants, and it behoves us to seek out those employments in which, to a large extent, we supply a demand which we ourselves create.

One cannot take up any poultry journal or book without being more or less struck with the marvellous fortunes which await the enterprising poultry-keeper.

Now there is not the least doubt that, with time, care, experience, and especially plenty of room, money can be made out of poultry and chicken-rearing, but what I should like par-

ticularly to say is, that whereas chicken-rearing on a large scale requires a very generous amount of space, and a considerable degree of almost professional attention, ducklings may be reared on much smaller spaces, and are much easier to manage. Therefore, under certain circumstances, beginners are likely to make more money quickly out of duck-rearing than out of chicken-rearing, though of course, in the country it is well to have both forms of stock.

At once the difficulty will be raised that ducks cannot be kept unless there is a large pond or river near at hand.

Stock ducks are supposed to produce more fertile eggs when they have free access to a pond, but we have found that if ducks are properly fed, and have a field to range about in and plenty of water to wash themselves in, they will lay just as well, and will produce good healthy stock.

In fact, when ducks are kept on rivers, or on large ponds, there is a constant risk of the loss of the eggs, as, unless they are most carefully looked after and shut up at night, they will lay the eggs in the water or on some stolen nest, or even just haphazard on the ground, as these birds are particularly casual in the way in which they leave their eggs about.

The perfection of circumstances for stock ducks seems to me to be a good field, with a small stream running through it. Running water is the best, as the ducks are liable to foul water which is left for cattle, and then those interested in the cattle more than in the ducks are inclined to remonstrate.

When, however, the stream cannot be had, the water must be supplied by some sort of improvised pond. A large tub sunk in the ground is often quite sufficient; or galvanised duck-ponds may be bought ready made, with an outlet for the water below, and I like these even better than concrete ponds, as they are so easily cleaned.

It will be seen, therefore, that though we do not think a large pond is necessary, it is well in considering the undertaking to be in the neighbourhood of water, so as to spare carrying, as, practically, water-carrying is far from pleasant.

Sometimes the pond may be placed in such a position that the drainage from the field fills it, or it may be put close to some out-house, where it gets all the roof-droppings, but of course the better the water-supply the less labour, and it will be found that it is not time wasted at the beginning of any undertaking to consult seriously the labour question. When ducks are kept in confinement, near a house,

the water-supply is simple, and it can generally be laid on, even if a small additional rate has to be paid.

Let us, however, first of all consider the question of stock ducks in a good-sized field. The first thing to provide them with after the water, is a good warm house. If ducks are allowed their own way, they will invariably try to sleep out in the open air; they infinitely prefer it; they must however on no account be allowed to do this if profit be an object. Let me give my reasons first. In the laying season, the ducks will lay astray early in the morning, and although ducks never eat their own eggs, human beings are not so considerate, and eggs lying about in a field are to say the least of it a little unsafe. Then besides human beings there are rats, crows, etc., which are very partial to duck eggs, and they will go for them long before our most energetic readers are awake.

Ducks finish laying before nine o'clock in the morning, and generally all are laid before six, but it is not safe to let them out until the later hour.

This habit of laying astray is rather tiresome from the duck-keeper's point of view, as the early morning is just the time when the ducks would be so happy, roaming about and fattening themselves on the unfortunate early worm.

However, we cannot have everything, and certainly at all costs the eggs must be secured, for I could tell painful stories of eggs eaten by crows and eggs found in the bottom of ponds, quite sufficient to make my readers decide on keeping a strong guard over their birds.

Again, it is quite as essential that the ducks should have a good house when they are not laying, though at this time they may be let out earlier. In the autumn specially, the ducks are moulting, that is losing their feathers, and resting after the season's labours. Just at this time the whole object of the successful duck-breeder is to get the birds well through the moult as quickly as possible, so that they may come on to lay very early the next season. Many ducks are left to do anything and any way they like at this time. They are not bringing in any eggs, and so the owners do not think them worth much trouble. This is the reason that ducks' eggs are so very valuable early in the season because there are comparatively so few of them. Let it therefore be an essential point to provide warm, well-ventilated accommodation for the birds.

There need be nothing elaborate about a duck-house. A small stone or brick building answers the best, especially if it has a good concrete floor, kept fresh and clean with straw or peat moss-litter. Ducks are as we know rather messy creatures, and the house-floor must be hard, so that it can be constantly cleaned. If a concrete or brick floor be out of the question, then the earth must be trodden hard, and a layer of peat moss four inches to six inches deep must be put down, and the peat moss be turned over constantly, and removed altogether when damp and foul. Wooden floors must on no account be used. A few nests must be put in the corner, large and shallow, I prefer all nests, both for hens and ducks made of galvanised iron, and then there is perfect cleanliness.

Small wooden duck-houses may be made four feet by two feet eight inches, according to the accompanying drawing; the window is merely wire-netting, and the roof is on hinges, so that it can be raised like a lid for cleaning purposes.

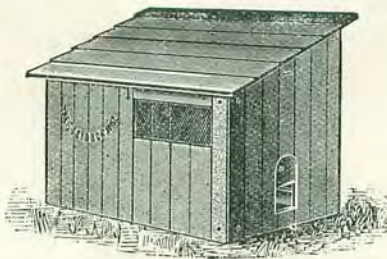
This sized house would take three or four

ducks and a drake, that is one breeding pen; but if such a small house were provided, it would be best to place the same under a wall, and run out a small shed alongside, well wired in, into which the ducks could go early in the morning.

Duck-houses can be made on this same design in larger sizes, but then it is best to have a door at the side, in place of the opening roof. Where ducks have a field to range about in, this house is all that they need, but where the ducks are to be kept in a small yard, the run must be attended to.

How often we see the most miserable-looking objects straying about with dragged wings and muddy feet, slopping about on a piece of ground which is neither fit for them, nor for the unfortunate attendant to walk on. Ducks have the capability of fouling a small piece of ground as quickly or quicker than any other form of stock, when kept confined.

When there is only a small space it is quite impossible to keep up the grass run idea. A grass run in a field is all very well, but a grass run in confinement is worse than a disease trap, as the grass gets so foul, and the birds still continue to eat it. The best way of managing, therefore, is to lay the run down in concrete from the very first, the run sloping in such a manner that the water can get away. It is not a very expensive matter, and when done at first saves a great deal of trouble later. Ducks are not like hens, that must have loose material to dust in. All they want is



water and grit and other food essentials which we will presently discuss.

The advantage of a concrete floor will be seen at once. There is nothing to go sour and disagreeable, and the floor can be swilled down daily and kept in such a manner that the ducks may be quite close to the neighbours without their being anything in the way of a nuisance at all. People with such small back gardens that they could not even keep hens can in this way manage a few ducks.

If it be quite impossible to have concrete, then the earth run should be well drained. This is best accomplished by digging deep down, under the run, and forming a trench into which large stones, cinders, etc., are put, so as to draw away the water from the surface of the run.

Then the earth must be beaten down hard, and whenever the top gets sour it must be removed and fresh earth put down; but this is a good deal more labour than the concrete floor.

Having provided the ducks with a house and run, I will go on to the question of food. Here I shall have to combat some well-worn notions. First, let us take the case of the ducks in the large field. I am now speaking entirely of adult ducks, as I shall discuss ducklings in another article. In August, or earlier, the ducks stop laying, and begin to shed their feathers. They therefore need special attention, but this does not mean that they are to be overfed. If the ducks are too

fat they will not lay well at all. Overfeeding is a great vice amongst hen-keepers, and duck-keepers are inclined to the same failure.

First thing in the morning the ducks need a good hot meal, consisting of some sort of soft food. This meal must be mixed crumbly moist, not floury, as that is wasteful, but on the other hand not sticky.

The most economic thing to do is to get all the house-scrap the day before, and have them well boiled, and then mix them dry with a mixture of barley-meal and sharps, or barley-meal and whole ground oats and sharps. All house-scrap are valuable—potato-peelings, bread, pudding, vegetables, etc., and if there be any meat all the better. For quantity, the ducks should have as much as they eat eagerly with some fresh clean drinking-water.

To this ordinary meal, about twice a week, a little bonemeal should be added, and a very little flowers of sulphur to strengthen the egg organs, and help forward the feathering. The ducks need nothing more for the day, but at night they should be called in, and have a handful of corn each, before they are shut in for the night.

Wheat is the best as a general rule, but a change may be rung by giving barley, oats, buckwheat, and a very little maize. The latter we hardly dare mention, as it is such a favourite cheap food, and is as a regular diet far too fattening.

The ducks in confinement need an addition to what we have mentioned, plenty of fresh cut grass, or failing that, fresh green food of some sort, and a very little meat in the middle of the day to make up for the worms which their more fortunate brothers and sisters are finding out in the open.

No ducks, whether in close confinement or in the open, should ever be left without a good dish of sharp grit and oyster shell, as the digestion is terribly impaired unless a regular supply be provided. Ducks cannot live in health without grinding material, and this is a thing which is very much neglected, and then people wonder that their ducks look sickly and mope, and decline to lay.

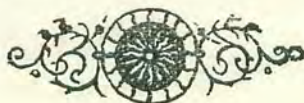
From August to October the ducks must just have plain unstimulating food, and must not on any account be allowed to get fat, as if they get fat internally the eggs are stopped, and the whole winter may pass before there is an egg. And the worst of it is, that the fewer eggs there are, the more people will go on feeding and feeding the ducks, hoping that by this generous treatment they will get what they want.

In October and November, however, though the quantity of food should remain about the same, there should be a good deal more meat given, and plenty of oyster-shell. Meat is a great help to the ducks, and it pays well to provide it, when duck eggs for setting are selling at 5s. to 7s. 6d. per setting. In the duckling countries very high prices are paid for duck eggs, and I may say from my own experience, that nothing is more aggravating than to have to return nice little cheques and postal orders for eggs which are not forthcoming.

I remember last winter that a working-man wrote for some duck eggs in November, and to discourage him I asked 7s. 6d. per dozen, having only a very few eggs on hand. What was my dismay to receive the money for seven dozen by return of post.

You see, if that price can be got for early duck eggs, it pays to give the ducks a few extra luxuries.

(To be continued.)



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By T. WILSON-WILSON.



PART II.

Care of Breeding-Ducks.—In considering the care of stock ducks, the one pitfall to be avoided is that of over-feeding.

Early in November the ducks ought to be preparing for laying, if they have not already begun.

As we said in our last paper, there is no advantage, but rather a disadvantage in fattening up the ducks at this particularly critical period.

Therefore all the adult ducks, and the ducklings coming on from the early spring, should be helped forward by a regular supply of meat, and plenty of sharp grit, and oyster-shell.

Fresh green food should be supplied daily, such as cabbage and cauliflower leaves, and failing green food of this description, carrots and turnips well boiled should be mixed in the soft food.

The supply of food we need hardly say should be regulated by the number of ducks, and we should like to add here, that it is no economy to overfeed one day, because there happen to be a more plentiful supply of house scraps than usual!

Ducks are excellent for the way in which they can eat up house scraps, and where there is a large family, there is always a good deal of scrap of every variety, and it is far better to rear a few ducklings, and turn the scrap into money than to give it all away to the first person that cares to call for it, or worse than that to throw it aside altogether. Where ducks are kept, every bit of scrap, cabbage, pudding, meat, etc., should be prized, as if it were bought food. A duck pan should be kept into which all waste must be put. When there is anything uncooked, such as potato peelings, the pan should be put on the kitchen fire to boil during the evening when the cooking for the day is over. Next morning the food will merely need warming up, and then mixing dry with meal.

Where the eggs are merely required for table purposes, there is no need to trouble about keeping a drake at all. Where, however it is intended to rear early ducklings, a drake should be allowed to every three or four ducks in the larger varieties, and to every six or eight in the smaller and more active breeds.

October is not too soon to sort out the birds, and decide on the breeding pens.

The best results are obtained in the large varieties, when each breeding pen can be kept separately, but this is often difficult to manage.

Two drakes and six ducks generally give satisfactory results, but there is not so good an average of fertile eggs if more than that number be allowed to run together.

There are exceptions to this rule, which we shall speak of when we discuss the varieties separately.

The question of the fertility of the eggs is a very important one. Over and over again we find in inquiring as to eggs for setting early in the season, that there has been no preparation whatever for ensuring, or at any rate assisting the fertility of the eggs.

When our market has shown quite a goodly number of duck eggs early in January, we have been urgently wanting duck eggs for setting, and would have been willing to give a good price for eggs out of which there was a fair prospect of ducklings. Yet the market women from the neighbouring farms have talked to me as if I were somewhat mad, giving as their reason that it was "over sune" to think of setting eggs, and that they had not "bothered" with the ducks yet. And then the same people will grumble that farming does not pay!

Over and over again you would find if you visited an ordinary farmstead that there was only one drake to, say, ten ducks, and he perhaps an old bird that had been on the premises for years.

Such happy-go-lucky ways of proceeding mean that the breeding is thrown late in the season, as the eggs can only be set in April or even later; and the farmer is comfortably satisfied if he gets eight ducklings out of the setting. The chance is that quite late in the spring the eggs will be fertile without so much trouble, but then the stock is reared far too late for profitable purposes.

We would therefore strongly urge on our readers that they should definitely decide on their plans, not later than October, and properly mate up the birds in the manner we have described, so that when the eggs do come there will be a chance of their having ducklings in them.

It is most aggravating after all the trouble of bringing the ducks on to lay, and setting the eggs, to find that there is no result. Where the eggs are sold for setting purposes unfertility is even more tiresome. It is usual to guarantee a certain number of the eggs, and not only has the money to be returned for the clear eggs, but the customer is naturally very disappointed at the poor results, as even if he gets the money returned, he has wasted the time of the hen, which is very valuable early in the season, and what is more the weeks have gone by, never to return, and he is put back in the season.

If it be found on observation that the drake is not working, he should be changed after a fair trial.

Natural Duckling Rearing.—As a rule, ducks are not kept merely for their laying qualities. Certain breeds of ducks will pay well for themselves even if every egg be used for food; but the majority of duck keepers, look to the rearing of ducklings for the main profit.

I should say that there is positively nothing easier than to rear the ducklings when once they are hatched, as with a minimum of care and attention they go ahead from the day they are out of the shell. To hatch the eggs, a certain amount of skill is required, as the little creatures find some difficulty in getting out of the shell, especially those whose bills lie in a slanting direction in the egg. The bill seems to slip along under the shell without breaking it. Where a very large number of ducklings are reared, the easiest plan is to use incubators, but just now we will confine our attention to the ordinary method.

Ducklings are in the majority of cases hatched under hens. Ducks do not sit until too late in the season, and they are not as a rule good mothers. They hatch the ducklings out well enough, but they are too careless with the young ones afterwards, and will always endeavour to take them for a swim at the earliest opportunity.

Therefore as soon as the eggs are laid, a broody hen must be obtained. It is often a great puzzle to know where to go for a broody hen early in the season, and in the duck counties, round Aylesbury, large prices are given for really reliable ones.

Some people keep on this account a number of hens of the setting varieties, such as Brahmas, Cochins and Dorkings, and crosses from these breeds, so that they may always have a broody hen available. I should say however, that as with the proverbial horse and the water, if a hen won't, she won't, and all the nicest plans in the world are peacefully upset by her.

How often, early in the season, I have gone night after night into a hen house, hoping that I should find a hen on the nest.

During the day, perhaps one heavy-looking creature sits closely and my spirits have risen, and the ducklings have floated like dreams before my calculating brain, but the next time I come, she flies indignantly off the nest into my very face, and I know that hope has dwindled away to despair, if she can do such a wondrous feat.

However, a good deal may be done by an energetic person, taking advantage of the slackness of the neighbours, and booking the broody hens as they come on, and many are quite glad to be rid of them.

A broody hen may be told by the way in which she fluffs out her feathers while setting on the nest, and especially by a peculiar growling—a kind of audible scowl, so to speak, which she gives forth. Some hens do this when merely laying an egg, but the difference can very soon be told.

Never take a hen for setting purposes, unless she has kept to her nest for three days at least. After that the chances are that she will be ready to settle down permanently to her duties. When the eggs are ready, and the hen has been found, the next thing is to make the nest.

Carelessness in nest-making is accountable for many a bad hatch. There are many ways of managing, but the general principles to be laid hold of are somewhat as follows:—Make the nest in some secluded position, away from the other hens, and away from the chance of being disturbed, either by people, horses, cows or dogs; and put it in a rather damp position. Make it in such a manner that it will not come to pieces, and in such a shape that the eggs will neither roll out, nor roll on the top of each other. Of all methods, I think I

prefer that of setting the hens in nest or setting boxes.

These boxes may be made quite simply, fourteen inches square, and about the same in height. There should be no front and no bottom. A piece of wire netting should be nailed to the bottom of the nest box, and the front should be boarded up four inches at the bottom, and there should be a few removable upright bars, so that the hen may be shut in and let out as required. A handle should be fixed to the top, so that the nest box is easily carried about.

In preparing the nest, all that is required is to fill the bottom thickly with hay (hay being better than the usual straw), and beat it well down into the shape of a shallow nest, stuffing it well into the corner so that the eggs do not roll away.

This nest box should then be put in some damp position, either under a shed or shelter on the ground, or if very frosty, into some out-house where the ground can be damped occasionally.

It is generally a mistake, and in all cases a great anxiety, to set the hens in the ordinary hen house, as they are always more or less disturbed; but if such a thing has to be done, for want of space, a nest-box such as I have described will be found to be a great comfort. Nests can be made in corners on the ground apart from the others, and when this is the method adopted, the earth should be scooped away according to the shape of the nest, not too deeply as we have said before. Then the earth must be well beaten down, quite hard, and if obtainable, a piece of grass sod should be beaten into the nest, and completed with plenty of hay on the top.

When nests are made on the ground, it is well to have a few bricks to put round the nest to keep all firm. When nests are made in the corners of ordinary hen coops, during the spring months, we have found a few bricks a great help, especially as they are so easily removable when the hatch is accomplished. No nest is quite complete without having a good sprinkling of insect powder, as more bad hatches occur through want of attention to vermin in the setters than perhaps from any other cause.

The nest being ready, the next thing is to put therein a couple of china eggs, and then prepare the hen. She has been setting a few days, and is generally very nervous. If she be examined, it will probably be found that she is more or less troubled either with fleas or with hen lice. The latter lie close to the skin, especially on the back, and in the region of the tail. No hen should ever be set without being thoroughly examined. If she be allowed to set, the vermin increase during

the period, and she will grow restless and spoil the eggs, or will bring out the chickens or ducklings covered with the tiny pests.

Cure is very simple. A large sheet of brown paper must be brought, and she should be laid down on it, and thoroughly drenched with insect powder under all her feathers, and especially under the wings, and under the tail. Never mind her struggles, she would thank you later on if she could. Do not let her shake off the powder immediately if you can help it, but carefully hold her wings to her side, and take her to the nest. Put her down quietly, and immediately turn the nest box to the wall, or cover the front over with a sack, so that she may be in darkness. If this be properly done, you will have killed anything that is upon her, and the loose powder will get shaken into the nest, where it will continue its good offices through the setting.

When the hen has been thoroughly settled for a day or two, it will be safe to put the duck eggs under her. In most cases never put more than nine eggs, but a very large hen will take eleven. The eggs should be put under her at night.

With regard to the feeding of a setting hen there is a difference of opinion amongst poultry-keepers. Some say that the hen should be provided with food, water and a dust bath and then left to her own devices. Others maintain that she should be lifted off every day, and seen safely on to the nest again. I should say that it largely depends on the hen as to which course to pursue.

Some hens will not let you touch them, and have regular habits of their own, and in that case, let them go their own way, always seeing that they have the above requisites, food always being understood to mean hard corn.

I have found however that as a rule it is best to take the hens off the nests every morning, and from the first get them into regular habits. Some hens will set away and never come off the nest at all. There are great objections to this, as the nest gets very dirty, and the hen loses strength, and consequently vital energy, without which no hatch can be thoroughly successful, and lastly, the eggs do not get the daily airing which is now found to be so essential. My plan is to go to the hen very quietly every morning, and putting my thumbs on her back, and feeling under her wings for eggs, hold them firmly to her side and lift her on to the ground. She may make some commotion when she gets there, and try to go back to the nest; but if she finds food, water, etc., ready for her, she will generally go for it, and every few days she will give herself a good dusting in the pile of ashes put for her.

Hens are great creatures of habit, and after a day or two they will often come off the nest themselves, as soon as they see the attendant, and will eat what they want, and in all probability the nest will be kept perfectly clean.

During the absence of the hen, the nest should be looked at, and if it is soiled in any way, the hay at that part should be renewed.

Sometimes a hen breaks an egg, and there is a general mess. This is most annoying, and very dangerous to the probable success of the hatch. All the eggs must be removed, and the nest must be refilled with fresh hay, and the eggs if dirty must be washed in water about as hot as what you can bear your hand in.

If the breast of the hen is dirty, it must be cleaned with warm water, as yolk of egg covering the eggs that are hatching is quite fatal to any good result.

We hope of course for fertile eggs, but as there is a chance that some of them are clear, it is well to examine them about the third day and then the clear ones may be removed, and it gives the others a better chance.

It is a convenient plan to set three hens at the same time, and then all the fertile eggs can be put under two hens, and the third hen can be given a new nest.

The fertility of duck eggs is very easy to tell. I can tell them after thirty-six hours, but it is just as well to leave them for three or four days.

When unfertile, or clear, the eggs look quite clear like new laid ones; but when fertile the germ can be distinctly seen, with fine veins stretching out from all around it. It looks the most like a large spider than anything else.

The eggs should be taken into a dark room, and looked at against a strong light through an egg tester. If you have no egg tester, a very simple one can be made by cutting an egg-shaped hole in a piece of card, then placing the eggs against the hole, so that the card hides the light from the eye, and only shines through the egg.

It is just as well to test the eggs again about the eighteenth day. If the duckling is going on all right, about three-quarters of the contents of the egg will be opaque. If thin and watery-looking, the germ has died in the early stages. If there is a dark mark running round the egg long ways, like a black thread, or there is a small black speck which seems glued to the side of the shell, then the egg is bad, i.e., what is called addled. A little experience is needed in testing the eggs during the later stages, and it is better to be on the safe side, and if there is any doubt, put the eggs under the hen again.

(To be continued.)

"CARAMEL AND CRÊMES."

TELLING OF THE POSSIBILITIES OF SUGAR-BOILING.

By the Author of "We Wives."

THERE is no doubt candy-making will always exercise a fascinating influence over young folk. The very idea of "pulling" barley sugar into ringlets with well-oiled fingers makes one's mouth water! But, if once we have started on the enticing path of confectionery, we shall never rest satisfied with such elementary work. Caramel sugar, with its "thready, bubbly, snappy, and smooth stages, is easy enough to manipulate." At least our club found it so. They loved to test the caramel with finger and thumb until the "little thread" had been boiled into its stronger form. Above all, they

liked the sugar "snap" of a properly prepared syrup. I have told you how to prepare this sugar candy in a previous paper. To-day I would fain initiate my readers into the mysteries of fondant or French creams.

Can anything be more delicate than the soft creams one buy at every first-class confectioner's? Fondants pink, fondants white, fondants with a chocolate cap, fondants with green frills. Yet the basis of this large number of sweets is practically the same. Those who can make it can exercise their ingenuity without limit.

Over a clear fire stir together (in an enamelled saucepan) one pound of best loaf sugar and a small cupful of cold water. When melted, mixed, and beginning to boil, leave severely alone for ten minutes. It will not burn. Now dip an ivory bodkin or skewer into the mixture and see what comes from its point. If a drop forms boil a minute or so longer. If a long, silky hair adheres, remove from the fire at once without shaking and leave until cool.

When a finger can be dipped into the mixture without being burnt, turn it into a bowl

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PART III.

REARING THE DUCKLINGS.



IN

my last paper, I left the duckling just at the stage when it was about to emerge from the shell.

During the last day or two of incubation, it is essential to see that the ground around the nest is sufficiently damp, as duck eggs need even more moisture than hen eggs.

I do not mean that the eggs ought to be wet, but there ought to be sufficient moisture about, so that the warmth of the hen's body will draw up a humid atmosphere round the hatching eggs.

This matter must be left to the discretion of the attendant, and the nest does not need so much moisture in cold weather as during the hot season; I generally find that some water poured around the nest each day, for the last four days, is quite sufficient. Some people sprinkle the eggs with warm water, but there is a good deal of risk in doing this, especially if the hen be stupid, and decline to return to the nest immediately.

Many advise that the eggs should be put into a dish of hot water, about as hot as the hand can bear, and left there for a few minutes.

During hot weather there is no harm in this plan, and it may do good. At any rate it is a good plan by which to test the eggs, as those that are alive will bob about in the water, if watched for a few minutes, while the dead ones will remain motionless. Do not try this test until the twenty-seventh day of incubation.

Generally speaking, the ducklings will make their own way out of the shell without this assistance.

By the twenty-eighth day on going to the nest in the morning, there will almost be sure to be some little downy creatures nestling under the mother. If all the eggs are not hatched, it is best to remove the ducklings, and put them in a basket, not too close to the fire, or better still, heat a hot-water bottle, and arrange it so that the ducklings can cuddle around it.

Ducklings do not need too much heat.

Some of the remaining eggs may have chipped, and if so, they may be left to hatch, but those that have not chipped, will either be dead, or may need some extra assistance.

The eggs should be taken, and a sharp pen-knife should be inserted at the large end. If the skin underneath the shell be dark, or there is any smell, or thick yellow matter oozing out, then the egg is bad, and may be discarded.

If the skin be white, the duckling is alive. If the blood comes, then the egg had better be gently put back under the hen, as it is not quite ready. If no blood follows, then the duckling is ready to come out, and the

probability is that its bill is laid in a slanting direction against the shell.

With care the end of the bill can be found, either at this large end, which is most usual, or at the small end.

The shell should be carefully broken away near and around the bill, and the egg should meanwhile be held in hot water, all except the point of the bill. This softens the skin, and the egg may be returned to the nest; the duckling will probably finish the matter itself.

No written description can exactly make up for practical experiment and experience, but where it would be dangerous to take chickens from the shell, it is comparatively safe to assist ducklings a little.

Where only new laid eggs have been set, the ducklings are generally well out by the twenty-eighth day, and often a day earlier.

When all are safely hatched, the hen should be cooped out, under a large warm coop. I think that the ordinary coops are often too small for the hen, as she ought to have a little room to walk about, even though it be advisable to confine her.

We must now remember that the hen has been without proper food for a month, and is naturally a little worn.

She should therefore have a good meal of nice soft food, with a little meat, and have plenty of water, and be allowed to give herself a good dusting.

After that she will be willing to pay attention to the ducklings when given to her.

There is no hurry whatever about feeding the ducklings. They do not need food for fully thirty-six hours after they are hatched, and seem to actually continue to increase in size during that time. The fact is that the last thing they do before coming out of the shell, is to absorb the yolk of the egg into their bodies, and this serves as food for the first thirty-six hours. In fact it is positively better that a good part of this yolk should be properly digested, before anything more is forced on the digestive organs.

From this time forward the ducklings should never be allowed to stop growing, as if they are brought forward early on, they will always be better framed birds, than if even for a day they stand still.

The first thing they will go for will be water, or milk. This should be supplied them in guarded troughs, so that they cannot get into them and wet themselves.

A little oatmeal should be sprinkled on the top of the water, and they will very soon find out their own eating capacity.

For the first week food should always be left near them, and they should have access to clean water. The food should consist of biscuit-meal, varied by oatmeal porridge mixed crumbly with dry oatmeal, chopped egg mixed with bread crumbs, a little meat chopped fine, or granulated meat well soaked with hot water, and they greatly relish some of the family rice pudding mixed dry with meal. For hard food, groats should be given twice daily during the first week, and for another week they may have broken wheat, buckwheat, and after that a variety of whole grain.

It is a great mistake to think that ducklings require their food wet and sticky. They should always have their soft food mixed crumbly moist, so that if a lump were thrown to the ground it would break. They will thrive better and grow far quicker if their food be given to them in an appetising manner.

After the first week they should have their regular meals, every hour for the next week, and the water should only be given them after the meal, as if they are always going

for water they do not grow so large. As they grow, the meals may be given at longer intervals, but whatever is done, there must be absolute regularity for success. It is not the least use to give some meals quite close together, and then to leave the ducklings without food for many hours. It is steady, regular feeding which puts on the flesh, and brings the ducklings on for the market at the earliest possible date.

One great element in successful duckling rearing is to see that they have plenty of sharp grit.

This grit must be put in the water, or it may be sprinkled on the food, or put in some shallow dish, to which the ducklings have access.

Also, it is economical and very beneficial to boil cabbage leaves and other vegetables to mix up with the soft food.

After a fortnight it will be found that oatmeal and biscuit-meal are rather too expensive for a regular diet, so an equal mixture of barley meal and sharps may be used instead. Once daily add to this a little oatmeal, maize meal, and ground bone-meal.

The egg should be discontinued after the first ten days, but a little meat must be given daily, up till the time the ducklings are killed. You will notice that I have not given any definite quantities, nor very definite directions as to what should be given at each meal. This is not necessary. It is far safer to throw down general principles, and allow the intelligent reader to work the thing out practically for herself.

Feed early, and feed late at night. After the first week take away the unfinished food after each meal. Be on the stingy side as to supplying water, but be guided by the heat or otherwise of the weather. Give plenty of fresh green food, chopped grass, or lettuce, or onion.

Let the last meal at night be of grain. Bear in mind that grit and oyster shell are as essential as food.

Let the ducklings have a moderate amount of liberty, and the more worms you can dig up for them the better. Keep their runs and sleeping place clean, and remove the hen after about three weeks, or earlier if the weather be fine.

Ducklings are very comical, and cause great fun. They will race about at an astonishing rate, and will follow a gardener from point to point in the greatest anxiety for worms or insects.

In fact, ducklings, far from doing harm in a garden, do good until they grow too large, as they eat all sorts of garden pests, and as they do not scratch like chickens there is practically no objection to them.

So far I have only considered duckling-rearing in detail, and in a simple case, and before going into duckling-rearing on a larger scale, and giving some particulars of artificial rearing, and killing and dressing for the market, I should like to give you a little idea of the breeds of ducks, and the various advantages connected with each.

If you go to a large poultry show, you will see that there are several classes set aside for ducks.

Not, however, as many as there ought to be; but probably ducks will never reach the infinite variety of the fowl.

However, at a show like the London Dairy Show, you would find classes for Aylesburys, Pekins, Rouens, Cayugas, and a class called the Any Other Variety class, in which you would see various kinds of fancy ornamental ducks.

There is not the least doubt that for utility purposes the Aylesbury takes the lead.

The Aylesbury is a large white duck, which takes its name from the Aylesbury district, which is the far-famed home of the breed, and is in fact, the place where the duck is more largely reared than in any other district.

There are several reasons why this bird is so popular for the market. It is white all over, and white feathers are a great deal more valuable than coloured ones, which is a great consideration where large quantities of birds are reared and killed.

Then it has the capacity for fattening readily, and maturing very quickly, so that the ducklings are ready for the market at from eight to ten weeks old.

In colour a pure bred Aylesbury ought to be of the snowiest white, without any straw or yellow tint.

The legs should be yellow, but the bill should be flesh-coloured.

The bill is a great point, and it is one of the ways by which the pure-bred bird can be told.

There are large numbers of so-called Aylesburys—white indeed with yellow bills—which are merely broken bred ducks or Aylesburys crossed with the Pekin. In choosing pure Aylesburys, always therefore look out for the flesh-coloured bill. While saying this I should add, that towards the end of the season, the flesh-colour does go somewhat yellow with the sun, but the colour is still different from a regular yellow bill.

Another very distinguishing point in the Aylesbury is the carriage of the body.

The bird is altogether square-looking, long, and deep-breasted, and the keel almost touches the ground when the bird is full grown.

In weight a good average duck will weigh six pounds, and a drake seven, while those specially fattened or bred from large exhibition stock will weigh as much as nine and ten pounds each.

In choosing birds for breeding purposes, it is not well to buy birds that have been to shows, as these have been fed up specially, and their merit as stock birds has therefore greatly diminished.

In any case, choose birds of a large average size, but not abnormally so.

Stock Aylesburys are very hardy, if kept under proper conditions, but they must be hatched early, that is in December or January, if they are to lay eggs in November and December.

Fresh blood must be imported into the stock every three or four years, and the drake ought not to be related to the ducks nor over two years old. As to the age of the ducks, opinions differ, but I have found that ducks three years old lay very well, and some people keep them longer than that. It rather depends on the duck, and as in other kinds of stock, the selection of the "fittest" must be critically carried out.

It is always best to have some young birds

coming on, as the old ducks do not as a rule commence laying soon enough for the very early duckling season.

Pekin.—This is the other breed of large white ducks, which is so often mixed up with the Aylesbury.

The Pekin is also a white bird, of snowy plumage, but here the bill is bright yellow.

Our readers must not, however, thereby conclude that every yellow-billed duck is a Pekin.

The great distinguishing point is in the carriage of the body. Whereas the Aylesbury is square, and the breast line runs practically parallel with the ground, the Pekin stands right up with the keel off the ground. The legs are placed rather more backward, the tail is also carried curiously, that is, it is more turned up than the Aylesbury, and the neck is longer.

This breed is very hardy and grows fast, and one point is that the breed is very prolific. The weight is about the same as the Aylesbury.

Rouen.—Those who do not care about white ducks, and yet want large size, cannot do better than go in for the beautiful breed of Rouens. They breed to as great a size as Aylesburys, but do not mature quite as rapidly.

No written description will quite give the beautiful colouring of the birds.

Let us take the drake first, as he differs a good deal from his mate.

The bill is yellowish or with a greenish tinge. The head and upper part of the neck the most brilliant green, then comes a ring of white, quite slender, and the neck colour below is deep claret, right to the keel, and the under-breast and right under the body is a delicate French grey. There must be no white under the body.

For further description we are indebted to Mr. Lewis Wright.

The back is rich greenish black, the curls in the tail being a dark green. The wings are a greyish brown, with a "ribbon" mark across them, which must be a very bright and distinct blue, edged on both sides with white. The flights are grey and brown; white in a flight feather being highly objectionable. The legs are a rich orange.

The whole appearance of the drake should be noble and commanding, and nothing can exceed the beauty of a moderately perfect bird.

The bill of the duck is not quite so long as that of the drake, and is of an orange colour, with a splash of dark colour, nearly black, upon it; say two-thirds down from the head, but not reaching the tip or side. This colour changes during the laying season to a dirty brown, and sometimes it becomes almost black all over. The head is brown, with two distinct shaded lines on each side running from the eye down to the darker part of the neck—this is very essential to perfection. The breast and back are pencilled brown, and the wing has the blue bar across.

Altogether the birds are very lovely, and as beauty and utility go hand in hand, we give the above description, but would advise our readers to see for themselves the birds at the next show they have a chance of attending.

The Cayugas we mentioned are large and very handsome black ducks. A good specimen ought to be black all over with a wonderful green sheen, but this breed comes more under the heading of fancy than of utility ducks, though they are excellent for the table.

We must not, however, omit to mention one breed of ducks which is coming well to the front just now, on account of its very active habits and wonderful laying powers. We refer to the India Runner.

I will not go into the origin of the breed, as at present it is a vexed question, and even the right standard of shape and colour has not yet been definitely fixed by fanciers, but we hope to do this at the Water Fowl Club Meeting at the Palace this year, and those who have the chance of going to that show will see some specimens of the breed. In shape the duck is small and slender, with a long neck, upright carriage and a wedged-shaped head.

In colour, in the fawn variety, they ought to be a light fawn free from white, except on the neck, flights and back.

In the grey variety, the drake should have a pure French grey breast free from claret-coloured shading, with green on the head, and dark-brownish back, and green in the tail. Blue in the wing is a disqualification. The ducks are a brown colour.

India Runners, when at liberty in a field, will almost find their own living, and they are very hardy, and one drake will take six to eight ducks. Besides this the ducklings come on early, and can therefore be hatched rather later than the heavier breeds, and for table purposes though the ducklings are small, they have small bones, and so there is more meat than there appears to be, and the flavour is particularly fine, more like that of a wild duck than anything else.

A flock of twenty-two ducks and three drakes can easily be kept in one field, and with good housing they will pay well, and do no harm to the field. They will range for miles if allowed to do so, but will return home safely, but if their eggs are to be kept, they must be shut up every night without fail.

We have now gone through most of the really useful breeds, and I will only mention the names of some of the fancy ducks which require more or less special attention.

Those of my readers who have ponds in their grounds would find it most interesting to study the various breeds of fancy ducks; some of them are wonderfully ornamental.

There is the Muscovy duck; the East India black duck; the comical little Mandarin, and the charmingly coloured Carolina, beside several others more uncommon.

(To be continued.)



DUCK-BREEDING FOR PLEASURE AND PROFIT.

By T. WILSON-WILSON.

PART IV.

IN my concluding paper, my readers will naturally expect that I shall give them some definite ideas as to the profit which may reasonably be expected to arise from duck-breeding carried on systematically. It is most difficult to avoid misleading statements, as profit is so often a question of management, chance of market, and happy surroundings. Some have every opportunity of rearing the ducklings, but find that marketing expenses run away with all profit. Others find that they have the market, but that the land is too expensive, or they are so situated that they have to pay a great deal for labour, housing or other things. There is certainly profit in duck-breeding, but that profit is perhaps rather secured through good management than obtained merely in a "fit of absence of mind."

Books on duck-keeping are sometimes misleading, and one of the greatest faults I have to find with the ordinary table of profit and loss is the want of realisation of the necessity for novices to establish their own market before they can command the prices which, no doubt, their stock may be worth, but which they can on no account get. In fact, in order to get any price above the mere market value, it is certainly necessary to serve an apprenticeship of advertising, which, for the first year or two, runs away with a good deal of extra profit.

I was reading one profit and loss table in which a breeder estimates that, out of 300 ducklings, he will average 3s. 6d. each for 200, lose 30 by casualties, and sell 70 selected ones at £1 each. Now that may be possible, but we should say that the beginner will certainly not get rid of even very excellent stock birds at such a high price unless he has been successful to a great extent in the show-pen or has spent a good sum on advertisement.

It seems to me that we ought to be able to show a reasonable chance of profit without having to rely on fancy prices, though, if pure varieties are kept and bred with judgment, it will be certain that the receipt of fancy prices will merely be a question of time.

We should like to give some idea as to the nett cost of rearing ducklings and of the keeping of stock ducks. We will not take any notice of labour and capital, expense of houses, runs, ponds, conveying to market, etc. These latter must depend on circumstances which vary considerably; and readers will soon find out in their neighbourhood the average prices obtainable for the ducklings, also the amount of rent and other expenses they will by necessity of their individual surroundings incur, and then they can see better than any one else whether they will have a chance of success.

We should like to give what we consider a fair sum as depreciation of stock and houses every year in the estimate, and would further add that it does not invariably follow that if large profits are made out of a local retail trade that the same profits in proportion will be made if the wholesale market has to be dealt with.

Whatever I do or do not impress upon my readers I should like to impress these essentials to success. Begin in a small way. Oversee everything yourself.

We have said before that profit-making in duck-breeding consists in finding out the art of getting, first duck eggs and next of all ducklings, just at the season when the highest prices are obtainable.

The grand truth must be borne in mind that ducklings cost no more to feed one time than another, and that therefore we might as well

have them at the time at which they will pay best.

Let us suppose that we see our way to keeping two breeding pens of Aylesbury ducks. We have bought the ducks at one place and the drakes at another to be quite sure that they are unrelated, and we are sure that they are young birds. We have not grudged the price for good stock birds, and have paid ten shillings each all round, eight birds in all.

These are not exhibition stock, but good birds that have some slight faults bought from some reliable breeder of exhibition stock. It is always the best to start well at first.

It is generally considered that stock birds cost about twopence-halfpenny per week, and if they cost more there is some waste, and this price ought to pay for the cost of bedding also. Their cost is therefore £4 6s. 8d. in keep.

We may here remark that care should be taken to get the food as far as possible wholesale, or at any rate in hundredweight lots, as it is in these little ways that the profit is saved.

The ducks ought to lay 80 eggs each, some will lay more, others less. This will make 480 eggs in the year. All these eggs ought to be turned into ducklings, if profit be an object. We will say that 80 of them are laid at a time when it is inconvenient to set, or very late in the season, and are sold at one penny each, which is a low price. We have 400 eggs to be set. Out of these we will reckon that 50 are unfertile, and are worthless except as food for the ducklings. This leaves us 350 possible eggs.

Whether hens or incubators be used, it is certainly not too much to say that another 50 ought to be reckoned as lost. We always reckon ourselves in calculation that it costs two eggs to make one duckling. After the ducklings are "made," there is practically no loss. We hardly ever lose one, unless it might be through rats, cats or other predators. However, to be on the safe side, we will say that we bring to the killing point 250 ducklings. Of these we keep ten of the best for stock next year, and their food will cost for ten months, say, £4 3s. 4d. The other 240 ducklings cost for ten weeks, say, 2s. each. That is £24. We see how the food adds up and how necessary it is to get all at the cheapest. Besides this we must add the cost of incubation. Whether hens or incubators be used, we ought to add another twopence per duckling to be on the safe side. So the cost is now £26.

We now come to the vital question of what can be obtained for the ducklings, as upon this depends the profit or loss of the undertaking. Aylesbury ducklings, if bred from good stock, ought always to fetch the top of the market price, whatever it is. In January and February, in the large towns, it is not uncommon to get 14s. to 18s. per pair; but in that case it is necessary to be in communication with some good London dealer, such as Mr. Brooke, Central Market, London. The prices in February, March and April run high, gradually, however, going down until May, when they get very low, unless the birds can be sent to the seaside towns during July and August, when fancy prices lead again.

For a young, fat, well-fed duckling, ready dressed for table, we should say, however, that the very lowest price ever obtainable would be 2s. 6d., and often 3s. would be nearer the mark, especially if a trade can be established amongst private customers. We should therefore say that 3s. 6d. all the year round would be a fair average price upon which we could rely. And we should reckon

to get £42 for our ducklings. We will give a little balance-sheet to see where we are in our first year.

We do not give the original cost of stock or houses, but we reckon the stock loses twenty-five per cent., and therefore £1 must be calculated off. We reckon that 10s. is all that ought to be paid for rent, 10s. as interest on, say, £10 capital spent in houses, pond, etc. If more money than this has to be spent a proportion of interest must be added; if less, then deducted. We put £1 down as deterioration of the plant. This table is not on the bright side, but is meant to be really helpful and not misleading.

The profit on eight stock ducks might be increased if a higher price could be got for the ducklings, or if the eggs could be sold right off at high prices for setting, or if more ducklings were obtained from the number of eggs. But one year's experience will do more than all the article-writing in the world to show what can and what cannot be done. Some would say also that the food cost is high, but we reckon that this includes cost of grit, oyster shell, and bedding. If straw bedding be used it can be piled up and stacked for manure, as can also peat moss, and often a fair price may be obtained, or better still, it can be used in the home garden or farm. This must be put to the credit of the ducks. The feathers of the ducklings also are worth a good sum. If the ducks are sold alive, then the feathers are lost; but if they are plucked and dressed then the feathers come in to pay for the extra labour involved, besides which, as a rule, a few pence more per bird is obtained when they are ready dressed.

	£	s.	d.
Cost of feeding stock birds	4	6	8
10 ducklings, 10 months	4	3	4
240 ducklings, 9 weeks, at 1s. 11d.	23	0	0
Cost of incubation	2	0	0
Depreciation of stock	1	0	0
Depreciation of plant	1	0	0
Rent!	0	10	0
	36	0	0

	£	s.	d.
240 ducklings, 3s. 6d.	42	0	0
Value of 10 young birds	5	0	0
Eggs sold	0	6	8
Feathers, manure, say	2	0	0
	49	6	8

We have therefore a sum of £13 6s. 8d. left for the trouble taken. It is a great deal more trouble to rear all the ducklings, but it pays really better than selling eggs for setting, but if one has not sufficient ground for so much duckling rearing, and were able to sell off all their eggs at an average price of 5s. per setting, then they might keep, say, twice or three times the number of stock ducks on the same ground, and make a fair profit that way.

Again, where there is unlimited space, up and down the fields, and there is a good market for the eggs, there is nothing easier than to keep flocks of Indian runners merely for the eggs alone, as they pay well, considering how much of their own living they find.

We have been speaking about preparing the birds for table. Many of my readers will know that the great objection of householders to buying ducklings and chickens from private sources is that they are delivered alive, or killed and not plucked, or plucked but not drawn. Now, mistresses may have no objection to purchasing such birds from their friends, but cooks do not share the same

feelings, and nowadays it is only a first-class cook who is willing or able to prepare a bird either for roasting or boiling.

In order, therefore, to get hold of the retail direct trade, it is necessary for the duck-raiser to be able to kill, pluck, and dress the duckling up to first-class standard. At first the business is a little tedious, but after a while all can be done in a very short time. We have often seen at the Royal and Dairy Shows the experts kill and pluck a chicken in about five minutes, and dress it in about three minutes. A quick girl would soon learn to do the work in twenty minutes when the birds are in prime plucking condition.

There is a time to kill ducklings and a time not to kill them. In order to make profit, the duckling must not be allowed to live one day after it has got its full duckling feathers. After that date it begins to lose flesh and is not worth killing for another three months, and ducklings do not pay to keep so long. Aylesbury ducklings ought to be ready at nine weeks old, and should be caught just before the new feathers appear.

Many girls will probably object to the idea of killing the ducklings themselves. This is a great mistake. True kindness and delicacy would argue that if the deed must be done we ought to do it ourselves with the greatest dispatch and run no risk of *contretemps*. Before I knew how to kill a bird I was often at my wit's end to find someone at the moment I wanted who could do it for me, and I should not like to narrate some rather painful incidents that occurred.

Now, the process learnt at the Royal Show at Darlington is all over in a moment. Take the chicken or duck, hold it firmly by the legs in the left hand, at the same time catching the points of the wings in the same hand to prevent muscular movement after death. Stand up and hold the bird in this position, head downwards, the left hand slightly in front of the body, elbow bent. Now put the right hand on the duck's head, the top of the skull resting in the palm of the hand, the thumb on the cheek, and the neck held between the first and second finger, the elbow pointing outwards. The object is to break the neck right at the head by a small bone at the base of the skull. If skilfully done there is no need for great force. Holding the bird firmly in the left hand, pull it upwards. At the moment pull downwards with the other hand, giving the hand a downward and outward jerk, so that the back of the fingers face the ground, the tops the right, and the back of the wrist the body. If the left hand is well pulled, or really held quite firm, and the weight of the body is put into the pull of the right hand the neck will be out in a moment, and death is instantaneous, as nothing but loose skin is found between the head and the neck. There can be no mistake, as there is absolutely no connection between head and neck but skin, and the end of the bone can be felt.

The great advantage of this mode of killing is that there is no blood to be seen, and yet

the bird bleeds into the broken neck. From the moment of the dislocation of the neck the bird should be laid head downwards, and though there will be muscular movement for a few minutes all will soon be still. The bird is quite dead, and plucking may commence right away, though a beginner had better wait a few minutes to be quite sure that she has caused death. Birds are however plucked twice as fast when warm. After a little practice there is no need to tear the skin, and for the market it is essential not to do so. The flights and tail feathers should be taken out first, then the back down to the neck; the breast down is considered difficult to get off, but if a vessel of water is kept at hand, and the fingers are wetted, this is a great help. In fact, the professionals do not exactly pluck the down, but work it off with a quick movement of the underneath part of the first finger, which they keep wet. As soon as plucked, the bird must be laid on its breast on a flat table, wings to the side, and head downwards, the legs under the body. The bird when cold is then ready to be packed up for market, unless it is to be sold locally.

Careful packing is a great feature for success, and plenty of straw should be used, as the birds should be packed quite close together with a little straw in between each, and despatched in flat hampers. I will now proceed to describe the process of drawing the duckling, but for trussing it would be best if my readers could get hold of a good illustration in a cookery book, or better still, ask a poulterer to show the process.

The following is the process taught by Mr. Brooke at the principal shows. And I may say that it is perfectly easy to learn from the directions, and that it is very important that all should be done quite cleanly, so that the whole of the internal arrangements come away at once. I have taken the wording in part from Mrs. Brown's excellent work on poultry fattening. "(1) Nick the skin of each leg through to the bone, just below the joint; (2) Trim the pinions, cutting off the skin on the outer edges so as to remove all feather pits; (3) Lay the chicken on its breast, with stern towards the operator, and head away from the body; (4) Make a transverse cut in skin of neck about two inches from the back, and lay the skin thus loosened backwards, exposing vertebrae; (5) Cut off neck and head, about two inches in front of previous cut, thus leaving about two inches of neck skin. (6) Now turn the bird sideways breast upwards, and laying back the neck skin to expose the front of breast; (7) Press the thumb firmly down the V-shaped orifice thus exposed, loosen the skin, and insert finger into the body to internal organs from breast bone. N.B. This is not very clear. What is wanted is to thoroughly loosen all the organs from above, so that during a later process they can all be pulled out from below. Therefore the finger must be carefully worked round hard against the inside of the breast-bone and carcase so that everything is loosened. Care must be taken not to

break any organ, especially the gall-bladder. We may say that the bird should have fasted for twenty-eight hours before killing, so that there should be no trouble with a full crop. (8) Carefully cut away the merry-thought. N.B. This is optional, but a great improvement, as good slices can be cut right along the breast. It is easily done; begin from the bottom, severing the joint with the point of the knife and work up each side, and break off by bending backwards at the top. (9) Turn the bird round in the hand, make a transverse cut across the vent immediately below the 'parson's nose,' and an angular cut at each side which prevents the sides cracking when the bird is drawn. (10) Insert the forefinger and find 'trail,' which cut off. Loosen the intestines firmly but gently, and draw through vent, taking care not to break any organ."

N.B. The great thing is not to be afraid, but to work the finger well round inside first, and then firmly pull. It is generally best to firmly grasp the gizzard, to which all is united. Afterwards hold the bird up to the light, and if properly done you ought to see right through the body.

Since the issue of the first of these papers a lady has written to me asking for full particulars as to the seat of the duck-fattening industry. That is a long subject, but certainly as yet there is no district to compare with that round Aylesbury, where duck-rearing is carried on as a great industry. The rearers do not keep the stock birds, but they buy the eggs from the farmers round, and then fatten the ducklings as soon as ever they can, and the ducklings are sent by the ton load to London during the season. There is no reason why other parts of the country should not carry on such a trade. Round Aylesbury the work is carried on by the cottagers, who add considerably to their incomes by the trade.

With a view to profit it seems as though anyone wishing to make a large business in this line should be located where she can have a good enough retail market of her own, which she can fully supply, or else live in a district where there is a regular wholesale trade, so that the marketing expenses are at the very minimum. To give some guide as to prices in London, we might in closing quote those given by Mr. Brooke, as follows: January, 6s. to 10s. per couple; February, 6s. 6d. to 11s.; March, 9s. to 18s.; April, 7s. to 12s.; May, 6s. to 8s.; June, 5s. to 7s.

Whether our readers go in for ducks for pleasure or profit, we think that they will be certain to find that the one pursuit leads them to the other. No one ought to go in for any class of live stock unless they have a keen love for the birds, puppies, kittens, or whatever class it may be. As my poultryman said to-day, "I could fairly be always among 'em." Yes; that is the spirit that succeeds, and no other; and I can only wish that my readers may find the worries of the pursuit grow less and less, and the pleasure grow more and more, as they follow the delightful hobby of which I have been writing.

