



PHEASANTS, TURKEYS,
AND GEESE:

*THEIR MANAGEMENT FOR PLEASURE
AND PROFIT.*

W. COOK.

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WILLIAM COOK.

Third Edition.

PHEASANTS, TURKEYS

AND

GEESE :

THEIR

Management for Pleasure and Profit,

BY

WILLIAM COOK,

Author of "The Practical Poultry Breeder and Feeder: or, how to make Poultry pay;" "The Book on Ducks, and how to make them pay;" "The Horse: its keep and management." Editor and Proprietor of "The Poultry Journal;" Conductor of Poultry Department "Farm, Field and Fireside;" Weekly Contributor to "Poultry," &c., &c.

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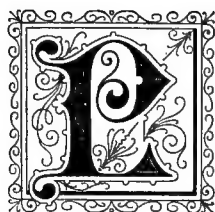
ORPINGTON HOUSE, ST. MARY CRAY KENT.

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PREFACE.



PERHAPS, in sending out my book on Pheasants, Turkeys, and Geese, it would be well to give a few of the reasons that have led me to undertake its publication. For some years past many persons have written me, asking for more full and detailed information respecting Turkeys and Geese than the necessarily limited chapters contained in my "Poultry Breeder and Feeder" could possibly give them. I have noted these applications, and now having found time amid all my other calls to devote to this subject, I have put into printed form the results of many experiments, much observation, and a long and wide experience of the birds I speak of, and the persons for whose information I am writing.

Pheasant breeding and rearing is an industry carried on very largely in some parts of our country, but on going over some of the Pheasantries, I was sorry to find much that seemed to me mismanagement, and many things that needed speedy reformation, so I have combined in this little work some chapters upon this subject, it being one in which I am deeply interested, and upon which I have spent a good deal of time in patient observation. All the information

PREFACE.

contained in the book is practical, and if any readers should find it differ from some work that has come under their notice prior to its appearance, let me ask them to compare results, and then give their verdict as to which system—the one I advocate, or the one they had previously believed in—is that which is likely to make their birds healthy, and themselves more wealthy ; as in stock breeding and rearing, that *desideratum* is only to be achieved by the most careful attention to little things, and the avoidance of any conditions which are likely to hinder the well-being of the stock.

My thanks are due to the public for the kind way in which they have received all my books and articles, and I trust this further contribution may add to my readers' benefit, and better still, to my readers' fund of knowledge, which shall help them the better to manage their stock, so that much profit may be gained. I would still re-echo my old watchword, and show "How to make Poultry Pay," and, in this case, Pheasants too.

W. COOK.



INTRODUCTORY REMARKS.



THE book of Pheasants, Turkeys, and Geese has now assumed a definite form, and the Author is sending it forth to enlighten, and win its way among, the many Poultry-Keeper and others, who have long struggled on amid many disadvantages which have come to them in consequence of a lack of that knowledge which is of the first importance with regard to matters which affect living animals of any kind. The book has been written—as have been all the Author's works—as the result of practical experience ; the Author making it always a rule to investigate the habits of any bird or animal upon which he writes, so as to give to the public the results of patient observation and actual contact with that which he speaks of. Thus, many things not to be learned in any other way are found in the pages of his books, detailed in simple language, so that young and old may learn those conditions, the observance of which lead to success and consequently to pleasure and profit. The portion of the book which deals with pheasant rearing will be found valuable by those who, in the past, have lost many young birds and had many a disastrous failure, the result of

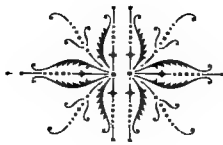
mismanagement in breeding and feeding; and the Chapters on Turkeys and Geese will show many how to rear those larger birds to good advantage, and make the best prices by having their birds ready at times, when high prices are realised and also how to manage them, so that the corn bill is reduced to the *minimum* by killing at the most advantageous time, and so avoid keeping them to no purpose. Diseases, their prevention and cure, are dealt with fully, the symptoms being shown, and the proper precautions in cases of infectious diseases being given, so that the danger might be reduced to the lowest point and many birds saved, which, if no care were taken, would be lost.

The question of sharp grit for poultry—always an important matter—is fully dealt with, and as many people do not think how important the proper supply of this most necessary article is, the book will prove a further warning even in this matter.

The Author's other publications, viz:—"Practical Poultry Breeder and Feeder: or, how to make Poultry pay;" "The Book on Ducks, and how to make them pay;" "The Horse: its keep and management;" have proved very useful to the public, and he indulges the hope that this further contribution to his works will meet the great need and necessity it is written to deal with. He is willing, if any reader should desire further information, to give it, if application is made by letter, enclosing a stamped and addressed envelope for reply, to Orpington House St. Mary Cray, Kent.

SECTION I.

❧ PHEASANTS. ❧





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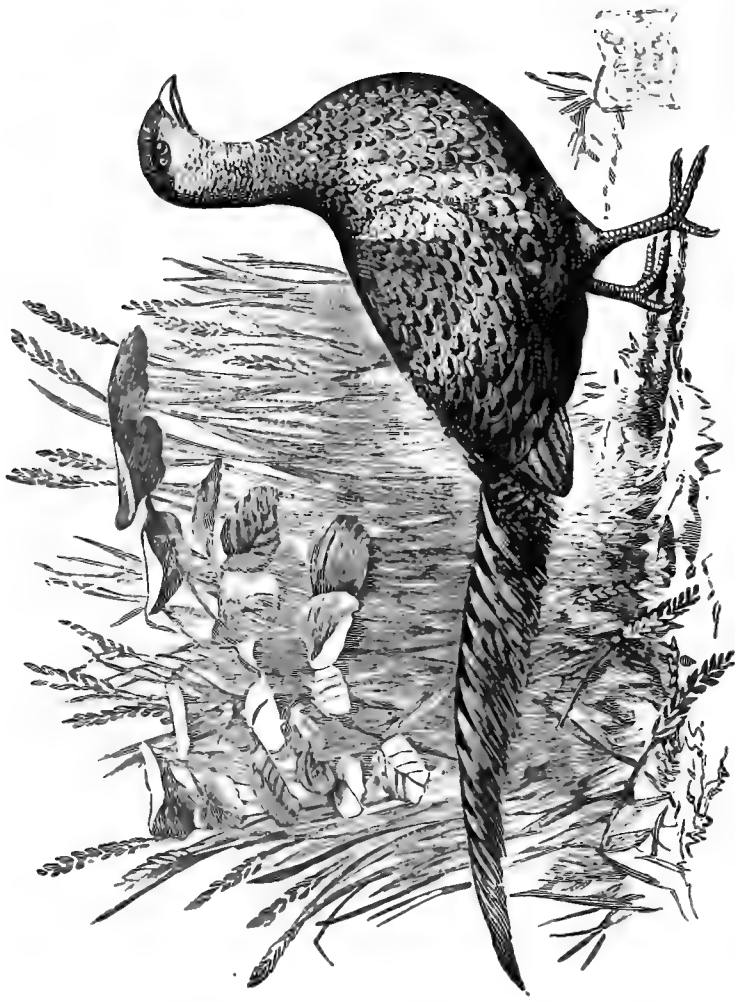
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COCK PHEASANT.



PHEASANTS.

STOCK PHEASANTS FOR BREEDING PURPOSES.

Pheasants in enclosed runs: how to avoid weakening influences of confinement—Grass for stock Pheasants—Pheasants in their wild state, how they look after their young—White pheasants and their crosses—Mating stock Pheasants.

IT is said by people of experience who keep pheasants enclosed for the purpose of breeding, that the young pheasants become weaker every year. That is, if the stock birds are always enclosed and never have their liberty. Of course, it depends a great deal upon the circumstances under which they are kept. Some breeders will keep their birds in very small pens where all the grass is worn down.

Pheasants, above all other birds, should be penned so that they can get plenty of grass.

I lately called upon a pheasant breeder, who kept some hundreds of stock birds, and they were in pens about three yards by six, with one cock and six hens in each pen. To my idea, it is unnatural to keep pheasants in this way for breeding purposes. When these birds are shut up in confined runs it is unnatural to them, though they may be kept in that way and bred from successfully, only under these circumstances they require a great deal more care.

Pheasants to a certain extent are more of a wild nature than poultry, as the latter have been domesticated for many years, and consequently are more tame and docile. It is natural for pheasants to run and fly about more than fowls, they ought therefore to be treated accordingly.

I do not mean to condemn keeping pheasants in confined runs, as long as they have proper management.

Pheasants, in their natural state, eat a great deal of green-stuff and take a large amount of exercise. The more of the latter we can allow them, and the greater facility they have for getting herbage, the stronger will the young ones be which are produced from such stock birds. If we take any live stock from their natural course of living and partly domesticate them, we must copy nature as near as possible, both as regards feeding and the arrangements of their dwelling places.

It is an old saying, when pheasants are at large and breed as they like, they are much stronger than those which are kept shut up. Yet they interbreed without fresh blood being introduced.

There is a great deal in this, but it must be borne in mind when pheasants have their liberty, the male birds will often go miles in search of other hens. In this way fresh blood is obtained or partly so, then again, as a rule, it is only the strongest of the young pheasants survive.

Cock pheasants will fight a great deal, and if there is a weakly one, the strongest are sure to kill him or drive him away, so that he has no opportunity to have any intercourse with the hens. Should there be any weakly young ones hatched out when they are all running at liberty, what becomes of them? They die off before they are ten days old, it is only the strongest which survive.

If a hen pheasant hatches fifteen or eighteen young ones, there is seldom more than from six to nine reared, and they are just the strongest which can follow the hen.

A hen pheasant is not so careful of her young as an ordinary hen, or even a partridge. The latter is far more intelligent than a pheasant. If a hen partridge misses a young one or two, she will go back and brood them when they are weakly and have been dabbling through the wet grass, and the strong ones she will call to her, or in many cases the cock bird takes charge of them and broods them.

A hen pheasant will walk alone and the strong ones have to follow her, while the weaker ones are left behind to die. Partridges are particularly intelligent as regards rearing their young, the latter are under great control. The hen will not allow the little ones to go from her in

wet weather, unless she gets frightened or upset in any way. In that case the old birds just give a call, and the little things are underneath the grass hidden away directly.

A cock partridge will attend to the young just the same as an old hen, not only that, but in wet weather he will take the food to them, and the old hen will take great care they do not go far in the wet grass. Pheasants are quite different to this.

When pheasants are enclosed for the purpose of breeding from them, care should always be taken to mate them together as much unrelated as possible. The young birds always grow out so much stronger and there are less deaths among them, which is more satisfactory both to the owner and the seller.

Though I rear pheasants I always take care to breed from unrelated birds, and as I have two farms I have little difficulty in keeping the birds distinct.

There is often a discussion amongst pheasant breeders as to which are the best breeds to keep, as there are so many various sorts. Our old English pheasants were originally very handsome dark birds, but for many years they have been crossed. Principally the Chinese have been used for this purpose. They have a white ring round the neck and are rather larger than our English pheasants. The hens also are paler in colour, and the cocks are not such a dark brilliant brown colour. At the same time they are very handsome.

When hens have a great deal of Chinese blood in them, sometimes the progeny will come pied, and

occasionally a few white ones will crop up. As a rule, however, the hen will kill the white ones, as they are a different colour.

There is no doubt many of the pheasants have the Bohemian blood in them, as a large number of breeders use that blood on account of the size. The hens are a kind of creamy mottled colour, and the body of the cock is of the same colour only a little more mottled. The male has usually a black or green head. It is by crossing these birds with the old English pheasants, or in some cases the Chinese, we get the pied and white specimens.

I know one breeder in Bedfordshire, who rears a number of white pheasants, but these usually originate from the Bohemians, as he crosses a cock of that breed with the ordinary pheasant hens to obtain the white birds.

It is never well to turn pied or white birds down for shooting purposes, as they are seen so easily from a distance by the poachers. They can be seen when on the ground a long way off, but when they are brown, that is a pheasant's natural colour, as a rule they are not noticed till they fly up.

When the hen pheasants are rather light in colour, it is best to use cocks with a dark neck without a ring round them, it brings the progeny darker, but this is only a matter of fancy.

The principal thing in keeping stock birds in confined runs is to have fresh blood, and always breed from very strong male birds. They should have as much room as possible, so that they can take exercise. A pheasant pen

should always be rather longer than wide. No matter how long the pen is, the pheasants keep walking up and down from end to end. This will be more fully explained in the chapter on pheasant runs. The question is often asked, "How is it best to keep pheasants?" Do they do best divided into small pens, say one cock and from four to seven hens, or let run altogether in one large pen of about fifty, so that they can have a good range. Now, I have tried this experiment myself, and have also seen many pheasant breeders do the same, so I will give my experience. I do not find they lay quite as many eggs in proportion where there is a large number running together, but in the latter case they seem to be happier, the eggs are more fertile as a rule, and the young ones from the stock birds are strong and vigorous, at any rate they are in most cases.

Some years ago, pheasant breeders used to think three or four hens was the largest number anyone should put with one male bird. Experience teaches differently, for the eggs are as fertile from a strong cock with seven hens, in fact more so, than where there are only three hens.

I do not consider it safe to let one cock run with less than four hens, especially if he is active, as he cuts the hens about so much and the eggs are not so fertile. This is easily accounted for by the fact that the hen pheasant is afraid of him.

In a few instances, I have met with cases where a pheasant cock has died, and the owner has let two pens run together and made one large pen. In several cases

twelve and fourteen hens have run with one cock, and as a rule, eighteen eggs out of every twenty have been fertile, so that amateur pheasant breeders need not be afraid of putting six or eight hens with one male bird. Some breeders put eight or ten fowls with one cock, and it is possible for one male bird to run with twenty or twenty-five hens and yet all the eggs turn out fertile, but of course that is an exception and not the rule.

Many pheasant breeders make a custom of pinioning their birds. This I think is wrong, because should one get out of the pens and a dog, fox, or poacher go after it, the poor thing is bound to get captured. If the pheasants have their wings cut the feathers grow again. Only one wing should be clipped fairly short.

Some people cut both wings a little, in this case they will run up the wire, as they can balance themselves, but if one wing is cut fairly short and the other left, when they attempt to climb they over-balance and fall down.

Stock pheasants always lay better, and as a rule a few days earlier if the pens are situated towards the south and sheltered from the north-east winds. When they are in their natural state they always get along by the side of a nice sunny bank, wood, or hedge-row. In this we should copy nature and shelter the birds from the winds, letting them have as much sun as possible.

It used to be thought if pheasants laid from fifteen to twenty-five eggs in the year that was a very fair number, but they have been improved upon very much in this respect during the last few years, and they will now lay from thirty-five up to sixty-five.

Of course, the eggs laid during April are more valuable than those produced at any other time, and my readers must understand also there is a great difference in the laying qualities of pheasants, just the same as there is in fowls. When the Chinese blood is introduced, it brings larger eggs and a greater number of them.

Pheasant-keeping has become quite an industry during the last few years. Many hundreds of Cottagers keep them for the purpose of selling their eggs in the season.

There is always a great demand for stock pheasants during January and February, and the hens make long prices, seldom realising less than 10/6 and 21/-; cocks can be bought a trifle cheaper. There is also a deal of disappointment in buying pheasants, as some breeders buy up a lot of two-year-old birds, and sell them as young ones, and it these happen to have been fed on maize, not more than three out of twenty live to the next August.

After hen pheasants have laid for two years they are not of much value, unless they have been brought up with a good range, then they are as likely to lay as well as they did in their second year, but when they have been kept in close confinement they are bound to fall off in condition after the first two years. I always think two-year-old hens produce rather stronger young pheasants than young hens, because the eggs are a trifle larger and the germ is stronger.

I usually mate those with young cocks and the young hens I mate with two-year-old cocks, that strengthens the germs. I do not mean to imply that the young pheasants the first year will not breed together, they will,

and it is possible to get some fine birds. Some breeders will have nothing else. I mention mating the old hens with the young cocks, and the old cocks with the young hens, especially when they are kept in close confinement, because in that way the germs are stronger, and as young pheasants are always rather delicate it is best to breed the way they come strongest.







FEEDING PHEASANTS.

**Pheasants being wild birds should be treated accordingly—Maize :
injurious effects following excessive use of it—Weakly Pheasants
and their susceptibility to all diseases—Grain meal and mangel
wurzel for Pheasants—Dust and Poultry Powder for Pheasants
bring good results and good profits.**

PHEASANTS in their natural state get their own living, but of course, where they are kept too thick upon the ground they do not get on so well unless they are fed a little by hand. Pheasants, properly speaking, are wild birds, and it comes natural for them to get their own living. When the young birds are first hatched they search for their food quite differently to young chickens.

As a rule there is more meat upon the breast than there is on most birds, that is, according to size.

This is often a mystery to many people, as they wonder why they should have so much meat upon the breast when they are not fed upon grain.

Pheasants will go a long way in search of food. They are out first thing in the morning, as soon as it is daylight, searching for worms, slugs, grubs, &c. Then again, pheasants eat a great deal of green stuff. In the winter time they will frequently visit turnip fields. They will do this in the summer, but more especially in the winter, they are particularly fond of turnip tops and chickweed. People often wonder how pheasants get on in the very hard winter weather, when there is no possibility of them getting worms and grubs.

I have watched them very carefully and find they turn the leaves over in the wood, especially with their beak. There is always a certain amount of insect life in a wood, under the dead foliage, but small acorns are their principal food in the severe weather.

They also eat the large acorns, but those they usually peck to pieces. The small ones they swallow whole.

Then again, when the weather is very sharp the keepers often feed them on grain. Of course, there are pheasants kept at different parts of the country, where there is no keeper, but in such cases the pheasants are nothing like so thick upon the ground, perhaps in such an instance as the latter there would not be more than one or two hen pheasants in a large wood for the breeding season, and that only means two or three broods of young ones. As pheasants are naturally wild birds, insect life is their principal food, and it is rather unnatural for them to be kept in confinement and fed upon grain. What I want more particularly to refer to is the use of Indian corn.

Seventeen people out of every twenty, especially in some districts, who rear pheasants and shut them up for breeding purposes, feed them principally on Indian corn all the winter. This is a most unnatural grain to give these birds, as it is very fattening, and does not make just what is wanted. Barley is far superior, buckwheat is better still, but pheasants in their natural state are accustomed to a variety of things. There are two reasons why people usually feed on Indian corn. First, because it is cheap, and secondly, it is very warming, and of course when pheasants are confined they have nothing like the exercise in flying and running about as when they have their liberty. When they are fed upon Indian corn in the winter, and they have their liberty and can get insects, herbs, and all kinds of green-stuff, the corn does not have such an injurious effect upon them. It is when they are kept in confinement during the winter months and fed principally upon the Indian corn the mischief is done, in that case the birds seldom last more than two years. This grain is too stimulating and heats the blood and brings on liver disease.

In some cases, where there have been twenty pheasants kept in one pen, I have known only three to be left out of that number at the end of the breeding season of the third year. They have died with ulcerated stomachs, spleen and kidney, as well as a tuberculous liver. When pheasants are enclosed they should be fed on less Indian corn than any other grain.

As a large poultry breeder, I have found too much maize or Indian corn very injurious to fowls when they

are kept in confinement, but it affects pheasants far more than fowls.

Then again it not only affects the old stock birds, but also the young ones very materially. For instance, if a person buys 100 eggs from a pheasant breeder, where the stock birds have been fed on buckwheat and barley, and 100 eggs from another place, where the stock birds have been fed chiefly on Indian corn, he will find the eggs from the former produce considerably stronger and healthier young birds than the latter. The strong youngsters too will grow much faster, and there will be fewer deaths amongst the stock birds which have been fed on French buckwheat, wheat and barley (I mention French buckwheat because it is so much better than the English or German for feeding).

In many cases, where a pheasant breeder has been rearing young ones, they have not brought up more than twenty-five out of 100 when the eggs have come from stock birds which have been fed largely on Indian corn. This I have proved to be a fact over and over again. Yet strange to say people often wonder why it is their young pheasants die.

I have tried the experiment myself, and have also visited many pheasantries during my travels, that is over 30,000 miles a year, lecturing and giving advice on the subject, so that I speak from experience in this respect. Again, when young pheasants are weakly they are more susceptible to gapes, cold, roup, and congestion of the lungs.

I believe there are more young pheasants die from the latter cause than any other, but there are many lost with

cold and roup. They get a cold and sore throat, and the nostrils get stuffed up, and they open their little mouth, as they have to breathe out of it instead of their nostrils. Many people when they see them doing this put it down to gapes, but it is merely a cold or roup. Pheasants are often sent to me for post-mortem examination, the owners saying they believe it to be a case of "gapes," when there has not even been a sign of gapes, it has more often been roup, brought on through the bird taking cold. This will be dealt with more fully in a later chapter.

When stock pheasants are confined in small pens their treatment in the way of diet should be as near nature as possible, not only in the breeding season, but all through the winter. What I mean to say is, that when these birds are kept in confinement they should have something in the place of insect life during the winter.

A little granulated meat or crissel mixed in their soft food during the winter is a good thing.

It is quite unnatural to feed them upon all grain and nothing else, as when they have their liberty their principal food is soft insect life, and as a rule, when they are fed on all grain it shortens their lives. It is not necessary to give pheasants warm soft food in the morning, the same as we give fowls during the cold weather, but if they have it given them warm after March comes in, it often brings them on to lay a little earlier than they otherwise would do.

There is nothing like changing the grain for pheasants as much as possible when they are kept in confinement. French buckwheat, barley, wheat and occasionally a few

oats are all good grains for them, and a little Indian corn, say once a week, will not hurt them.

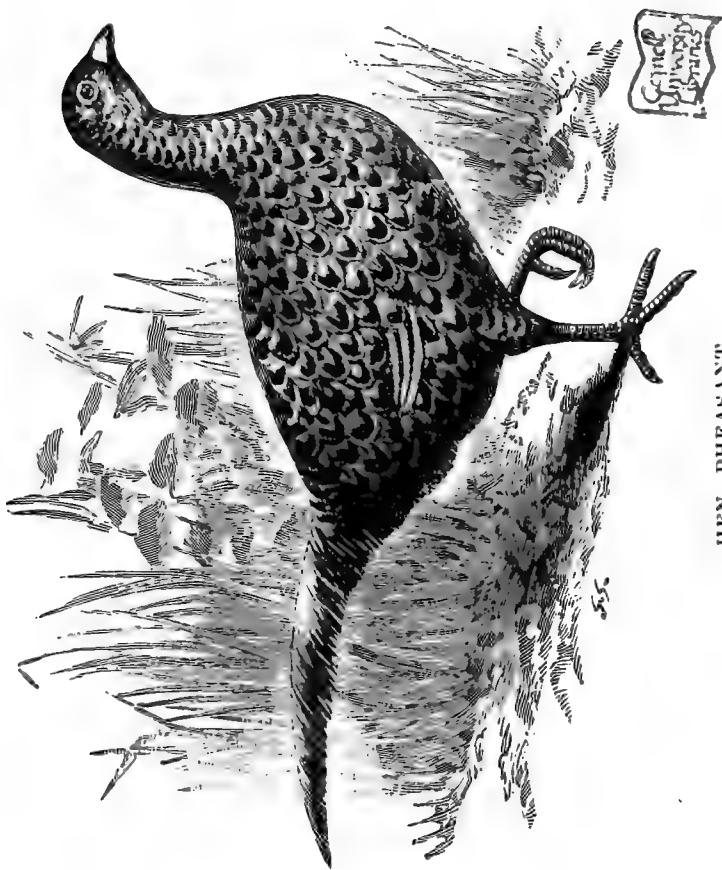
Plenty of green-stuff should be provided for these birds through the winter, as when they have that they do not require so much grain.

Pheasants should have a grass run, if possible, if not, they will require a great deal more attention, and either turnips or small pieces of mangel-wurzel cut up and thrown in to them occasionally.

When pheasants are looking a little drooping, water-cresses cut up fine and thrown into the run, are very beneficial. Where a large number of these birds are kept, and there is a stream running near the house, it is well to have a water-cress bed. If this can be managed it does them so much good and keeps them in prime condition, and at the same time they are very fond of them.

In all cases where stock pheasants are kept in confinement they should have a good supply of grit to help them masticate their food. Road scrapings, put in a little heap in the run, not only does for grit but makes a nice dust heap for them to dust themselves in.

Pheasant breeders are using the Poultry Powders largely through March and April, to bring the stock birds on to lay a little earlier, and where this is done they lay far more eggs during the first months. It is a stimulant and tonic which does not injure the birds.



HEN PHEASANT



SITTING AND HATCHING.

**Hatching Pheasants under hens—"Silkies" for hatching Pheasants—
Lice on sitting hens : how to destroy—Pheasants turn their eggs.**

THOSE who hatch young pheasants, as a rule use ordinary hens, as they make far better mothers than pheasant hens do. The latter do not do well confined in a coop, as they are too restless, therefore, those who hatch a lot of young pheasants should always be prepared with a good class of hens for sitting

Experienced pheasant keepers usually look out and get a hen which has only four toes on each foot, as when a hen has five she often crushes the young birds when hatched out, a great deal more than those which have four.

Fowls with a lot of feathers on the legs, such as Brahmas and Cochins, should be avoided as much as possible.

Half bred Dorkings, make splendid sitters and mothers for pheasants, especially those which come with four toes.

Of course, early in the season all those who hatch pheasants are wise to get any broody hens they can lay hands on, but where they are bred especially for sitting purposes, I like Orpington Game, Plymouth Rock Game, Game-Cochin and Game-Brahma.

Why I mention these breeds is because they usually take care of the pheasants for a long time.

When any variety is crossed with a Minorca, Leghorn, or some other non-sitting variety, they will often commence laying at from eighteen to twenty-one days, and they are liable to peck their young family instead of protecting and taking care of them.

It is always well to get game blood if possible in a broody hen, as they are such splendid birds to keep to their young ones, and do not come on to lay as a rule so soon as other breeds after the period of incubation.

Some people do not like heavy hens for hatching pheasant eggs, but it is not weight so much as the breed. Cochins and Brahmas in their pure state are big, heavy, clumsy birds, but when they are crossed with other breeds, especially game, they are very careful in going on the nest. It is not always the heaviest birds which break the eggs or kill the chickens. The best hens to use for sitting on pheasants' and partridges' eggs are "Silkies." They are small hens and are very careful, both with the eggs and young ones. These birds are very valuable for sitting purposes, in fact,

where partridges are reared these hens should always be kept.

If a good sized "Silkie" cock can be obtained, and crossed with small Indian Game hens or Black Breasted Red Game hens, the pullets they produce are the best sitters of any breed I know of, but there are so few people who will take the trouble to breed them.

The next thing is the number of eggs which should be put under the hen. Opinions differ in this respect, but as a rule I never put less than twenty under a fair sized hen. Fifteen or seventeen under a small hen is quite sufficient, but in case of an extra large hen, she should never have more than twenty or twenty-three at most. Of course, the hen might cover more, but the eggs are more liable to roll on the top of each other, more so than the hens' eggs, and they are liable to get crushed.

A hen should always be dusted well with insect powder when sitting, and at the same time should be allowed a dust bath, but no lime should be put in the dust. During the hatching season there should always be slack-lime put in the bottom of the nest and fine hay on the top of that before a hen is set, as vermin breed very fast while the hen is sitting, then the little things get on the young birds, and that is the cause of one third of our pheasants dying.

If more care were bestowed on the hens while sitting, it would save breeders a great deal of trouble. When the vermin once get on the young pheasants it weakens them so much that they will often die in from three to ten days.

These small lice are the same colour as the skin of the pheasant, so it is only those who are experienced and know where to look for them are able to find them, as they run very fast.

When setting pheasant eggs it is always best to make the nest with soil, then a thin coat of lime and some fine hay on the top of that. The pheasants usually hatch out much better if the nests are made with damp soil.

When these birds make their own nests it is in almost every case on the ground. The warmth from the pheasant's body draws the moisture from the ground, which softens the inner membrane of the egg. If there is not a good thickness of soil when the hen is sitting upon the pheasant eggs, it is well to sprinkle a little water on the eggs the last four days, so that the water runs to the bottom of the nest, then the warmth from the hen's body draws the moisture round the eggs, making it warm by the heat which comes from her body. As a rule, pheasant eggs are very fertile and hatch out better than hens' eggs. When they are once chipped they soon hatch out.

Pheasants' eggs take twenty-four days to hatch, occasionally they will come out on the 23rd day, and in a few cases I have known them go twenty-six days, but that is unusual.

It is often a mystery to people when pheasants lay from fifteen to nineteen eggs in a nest, as a rule they hatch out well, because it is always thought the eggs require turning. That is quite right, and both pheasants

and partridges turn their eggs over when they go to lay an egg in the nest. This can easily be told by marking the eggs.

When pheasants' eggs have to be kept any length of time, it is best to keep them on the small end. They will keep from fifteen to twenty-eight days and hatch out well, but of course it is much better to set them as fresh as possible.







FEEDING AND MANAGEMENT OF YOUNG PHEASANTS.

Young Pheasants : the care of them after hatching—The care of hens when sitting—The feeding of young pheasants—Runs, etc., for young pheasants—How to place young pheasants in the best positions to fit them for sport.

WHEN young pheasants are first hatched, they are very small. This is easily accounted for, because the eggs are so small in proportion to the size of the birds. The young pheasants have not much stamina in them the first few days of their existence, therefore they want dealing with very carefully.

A novice often makes great mistakes in hatching pheasants.

To begin with, they take them and set them in the open with the hen in a coop before they are one day old, the result is they find several missing and wonder where they have got to. When first hatched it is their nature to be shy and timid. When a hen is cooped up, if they once get out

of the sound of her call, they get lost and have no idea of the way back. In some cases they will go in search of flies and insects before they are three days old and often get lost. It is not so much their being frightened away as losing their way, and when they are unable to find the way back they get very frightened.

When there are several hens sitting on pheasant eggs at the same time, one or two may be quieter than the others, especially if they are very docile. Here a little discretion is needed. The quietest hen should be taken off the nest first, and the pheasants which are hatched out first should be given to her; then the next quietest, and so on; then the wildest hen will be left till last, and in the meantime those first hatched will be getting strong and should be given to the hen which came off last.

Some hens when they are put in a coop are restless and walk about, but a good mother will settle down quietly and the young pheasants will take protection under her wings. Such hens should always be used as nurses, then when the young birds get strong they can be given to a more restless hen and other young ones can be put under the quiet hen for a time while they require more care. If more attention were bestowed upon the young pheasants when first hatched a great deal of trouble would be saved, as the little things often get trampled upon when they are very young. As soon as the pheasants are hatched out they should have a little frame made of small quartering and then boards put before the coop from 3ft. to 4ft. long, the same width as the coop, to fit close up, half-inch mesh wire should be put over the top, boards from 12 to 18 inches high will do. These

protect them from the cold winds when they are very young and also prevent them from straying away until they get strong. It is a good plan to leave the end of the frame open and wire it over just the same as the top with half-inch mesh wire. This gives the young birds an opportunity of seeing outside, and they get more accustomed to the place, though there are a good many frames used with no wire at the end, only boards.

It is best to keep young pheasants from four to seven days in these frames, moving them every day or every other day, so that they are on fresh ground. Here a difficulty presents itself in wet weather or when the grass is very damp. Though it is natural for young pheasants to sleep on the bare ground with the old ones protecting them, it is much better to have boarded bottoms to the coops and peat moss about two inches thick, this is both warm and dry to their little feet, and when the moss peat is used the ground does not get stale. (Refer to chapter on Pheasant Runs.)

Young pheasants when first hatched should be fed very carefully, that is to say, they should have good nutritious food, a little at a time. When a lot of food is put down and turned sour by the sun it is sure to upset them, nothing relaxes the bowels of young pheasants quicker than sour food or anything which is stale. Everything should be perfectly fresh. Hard-boiled egg chopped up and mixed with a little of Spratts' biscuit meal, just damped, and young grown mustard (that which is used with cress) are good things. A young pheasant when first hatched has scarcely any warmth in it, therefore it wants something of a warming nature, and the green mustard is the finest thing possible.

The egg should be chopped up fine and mixed with the biscuit meal, and just soaked a little, and not mixed sloppy. The young mustard should be cut up very fine and rubbed in between the palms of the hands so that it all mixes. This should be done twice a day, so that it is perfectly fresh.

It is surprising how young pheasants will grow if treated in this way. When about two days old they may have a few groats, but they should always be split, or oats with the husks taken off, split up in small pieces, similar to coarse oatmeal, may be given. Where a person has none of these, it is well to buy some coarse oatmeal, sift it, and give the pheasants the siftings.

The attendant should always test the groats or oatmeal to see they are not stale. There will be a sharp hot taste with them if they are stale, if fresh, the taste is sweet. When young pheasants are noticed to be relaxed in the bowels, give a little broken dry rice the first few days, that will stop it quicker than anything else. After they are three days old they may have a little hemp seed once a day, just a few kernels, they are stimulating. The first three weeks is where the greatest danger lies of young pheasants going wrong, but if they are attended to carefully very few die.

When young pheasants are running in their natural state, they live principally upon slugs, grubs, maggots, wire-worms, and a great number of green flies, some of which are so minute they cannot be seen with the naked eye. When therefore they are brought up in large numbers and thickly on the ground they should have a substitute for these. Gentles, which most people call maggots, are the best to give them for this purpose.

Many people hang up a dead fowl, rabbit, piece of horse-flesh, or piece of dead sheep, and the young pheasants are allowed to go underneath and pick up the maggots as they fall.

This is altogether wrong for two reasons, first of all it makes the young pheasants dainty, they get so fond of them that they will not eat their food. Secondly, there is a nasty slime upon the maggots when they first leave the meat, and that brings on diarrhoea in the young birds. Then again, the meat, or whatever it may be, must hang up a certain time until it smells, in hot weather it smells very badly, which is most unpleasant. Now it is much better to bury the meat in the ground and put half or three-quarters of an inch of soil or chaff on the top and some sawdust, just to make it light, then the maggots in working through to the top of this cleanse themselves. It is well to lay a thin bag over the place, so that it is kept dark and the maggots will always come to the top when they are full. The old sack or bag answers two purposes, in the first place it makes it dark for them, secondly, it is a protection against all kinds of birds fetching the maggots away, which sparrows and other birds are always ready to do if they once find out where they are. The maggots can then be gathered up and put under a box or pail. This should be done in the evening, so that the pheasants can have two good feeds before it becomes dark. If managed in this way it does not make the birds dainty, but when they have too many maggots given them they turn against their other food. When young pheasants are not doing well or drooping a little, they should have a few given them three or four times

a day, they will often eat them when they will not touch anything else. When the young birds are fed in this way they appear to grow even faster than chickens, and feather very quickly. After they get fourteen days old they may have a little French buckwheat, not English or German, as the skin upon both those grains is much thicker, and the kernel inside is not so large as the French. Putting it plainly, the English and German buckwheat is too tough to grind or masticate. If young pheasants get over the first month or six weeks, they are as hardy as any others of the feathered tribe, that is, after they once get their feathers, especially when the second tail begins to shoot out about two inches long. I use a little roup powder to mix in the soft food for my young pheasants, and many other breeders have done the same these last few years, and where it has been used I have not known one breeder out of ten to have a single attack of gapes.

I provide a special meal for young pheasants after they get a fortnight old, one which will not stick. Pheasants do not like anything which will stick to the beak.

It is very disappointing when so many young pheasants die off, but this cannot always be avoided. There seem to be more die with congested lungs than from any other cause, that is when they are from two to seven days old.

This complaint is chiefly brought on through the sudden changes in the weather. The little things are under the hen all night, and are very warm, and if they are allowed to run in the damp grass they soon go wrong, as it is very cold before the sun rises

I have many young pheasants sent to me for post-mortem examination from different parts of the country, and I find there are more die between the age of two and fourteen days from congested lungs than from any other cause. They appear to be in good health, only failing for a few hours before death.

Early hatched pheasants should always be protected by small covered runs, which will be found more fully described in the chapter on coops. The small runs protect them from the wet as well as the cold weather.

Several good pheasant meals have been advertised during the last few years. Spratts' Patent have brought out an excellent game meal for this purpose, which I can strongly recommend, but very little meal of any kind should be given till the birds are at least seven days old. Crissel, or granulated meat, mixed with the meals is splendid for young pheasants, but it should never be put in the pheasant meal by the manufacturer, as these birds are brought up under such different circumstances. So much depends upon whether they are kept thick upon the ground or have a large range. Then again, some ground is so much fuller of grub and insect life than others, therefore it would not do to lay down any hard and fast rule as to the quantity of 'Crissel' which should be given, or whether any should be given at all, it must be left to the attendant's judgment.

The 'Crissel' answers well for grub and insect life. In all cases it should be scalded, that is, have boiling water poured upon it, then the meal mixed with it. Some people put a lot of water on, then squeeze it out, but this is wrong, as it takes a great deal of nutriment from the meat, not only that, but

there is also a quantity of salt which gets drawn from the meat. The salt is very good for young pheasants and chickens, and acts as a medicine, but care must be taken not to give them too much, if so, it makes them thirsty, which brings on diarrhœa. Whenever this occurs give dry rice, that is the best thing they can have.

Young pheasants should not have any water the first two days, then it should be given quite fresh and not stagnant from a pool.

The water should always be tipped over at night, not left till the morning, so that they can run to it directly they come from the hen, if so, it will do them a great deal of injury, as the water is very cold right up to the middle of June, and is almost sure to upset the young pheasants when they are allowed to have it very early. They ought always to be fed well before they are allowed to drink. Dari, which is a splendid grain for young pheasants, can be given them after they are two days old.

When rearing these birds care must be taken not to have some three weeks and some three days old in coops near each other, if so, they are almost sure to go to the wrong coop. When they do that it usually means death, as the hens will peck either smaller or larger young ones than their own, therefore it is advisable, where it can be managed, to have them all as near one age as possible.

Strict observation has taught me there are hundreds of young pheasants lost every year simply through the coops standing within a few yards of each other.

It is well to have a match-board about 18 in. wide and 2 ft. long, planed, nailed on to two small pieces of

quartering, so that it lies almost close to the ground, and if the food is put on it there is nothing wasted. Should the young pheasants not peck it off clean it can be swept off at once. Why I say the board should be planed is, so that it can be washed occasionally, whereas if the board is rough it soon begins to smell on account of the food getting into the crevices and growing stale and consequently offensive.

After the young pheasants get a month or five weeks old such great care is not always necessary. Their food can then be thrown on the grass, but I do not advise such a method, even in that case, especially the last thing at night, because if it is thrown on the ground it cannot be got up, whereas when it is put on the boards it can be taken away. Then again, if the food is allowed to lie on the ground, rats are almost certain to get to it and it is a great waste; and even supposing it does not entice the rats, the birds are sure to get it.

Whenever the morning is cold and wet young pheasants should always have a little stimulant put in their soft food, roup powder is the best I know of for this purpose, as it is a stimulant and acts as a tonic as well.

As soon as the young pheasants begin to grow, feed them on barley and French buckwheat, and for a change give wheat and dari. Maize should be avoided till the cold weather comes, and then the finest maize which can be bought should be used.

During the cold winter weather, when the young pheasants are not turned down for shooting purposes, it is well to sweep up a lot of leaves and put in one corner of their run, and sprinkle a little grain amongst the leaves. This will give

them employment searching for it. Young pheasants which are intended for sport for the coming autumn should be placed near a wood, when they are about three months old, so that they can get accustomed to it, and it is a good thing to keep the old hens in the coops as long as possible. In fact, they are often kept in over three months, as they are a great protection for the young ones. It is well to put the coops right in the middle of the wood, as the birds become much wilder than if they are put in the open. Of course the wilder they are kept the better, as it makes more sport when the final time comes for shooting.





DISEASES.

Pheasants not subject to so many diseases as some think—Young Pheasants delicate—Cold, roup, congested lungs and liver disease.

PHEASANTS are not subject to so many diseases as some varieties of the feathered tribes, especially fowls. Their principal diseases as young ones are gapes, congested lungs and diphtheric roup. Many people make a mistake about gapes. If the pheasants open their little mouths, the owner or attendant often puts it down as gapes. These young birds will often take a slight cold, the nostrils become stopped up and they breathe through the mouth instead of the nostrils, but these are not signs of gapes. The latter, however, is a very bad thing when it once sets in, and we cannot always tell what it comes from. Nothing will bring it on quicker than stagnant water.

Young pheasants should never be allowed to drink water which has been exposed to the sun, such as would come from a ditch or pond, it should always be got fresh from the pump or spring daily.

These birds nearly always do well in the natural state where there is a running stream, so that the old parents can take them down to drink. Strange to say, however, a great many young pheasants in their natural state never have anything to drink till they are half-grown, unless it rains, and there are puddles standing about, except the dew drops in the morning which they take off the grass as soon as it is daylight. Many pheasants are reared on chalk hills, where there is not a drop of water for miles. To prevent gapes, it is best to give some roup powder about three times a week in the soft food in the morning. I have never known a single case of gapes amongst pheasants where the roup powder has been used.

As young pheasants are very delicate, it is well to rear them on fresh ground as much as possible, this too will often prevent gapes, and a preventative is always better than a cure. The best cure I know of for this disease in pheasants is to put about four of the birds at a time in a small box, and a little slack lime, then shake the box up and the pheasants inhale the lime down the windpipe and that kills the worms. If the young birds are not too weak, they will throw up the worms in coughing, but, as a rule, there are very few cured, whatever measures are used. With great care the worms may be got out of the windpipe with a feather from the pheasant's wings. One of the flight feathers should be put down the wind pipe, about two-and-a-half inches, and twisted round three or four times quickly. If this is done, it will often bring from two to six of the worms up and a few young pheasants may be saved, but I repeat again, it is much

better to look for a preventative, as these birds cannot stand much handling when they are not well.

Cold or roup is usually brought on through the birds being kept too warm at night, then allowed out in the wet grass in the morning. When young pheasants are drooping their wings or opening their mouth they should always be noticed particularly, and if there is any discharge from the nostrils it should be removed or it may accumulate, but if the roup powders are given it is very seldom anything of this occurs. Should it turn to diphtheric roup the birds are usually dead in two or three days. That is, when there are white spots on the tongue and fungus matter corrodes round the windpipe and chokes them.

Congestion of the lungs is brought on much in the same way as roup, in fact, the pheasants are more subject to congested lungs than they are roup, it is through shutting them up too warm at night, and allowing them out first thing in the morning before sunrise, while the dew is on the grass. (The greatest preventative of this is the little covered run mentioned in the chapter on coops and runs).

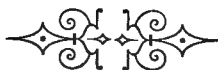
As a rule, when pheasants' lungs become congested they do not live more than two or three hours. I never noticed these birds dying from this complaint so particularly till the last few years. I have had many sent to me for post-mortem examination. If more care were taken, a great many more pheasants might be reared than there are. Adult pheasants are very hardy, nothing seems to ail them except liver disease. That is a tuberculous

liver. They suffer from that more than anything else, or rather die through it.

When once pheasants get the liver disease there is no cure for them, the liver becomes from four to six times the size it ought to be. The symptoms of liver disease in pheasants are: the birds eat a great deal of food, and the flesh on the breast wastes away. When pheasants are seen moping and yet eat well, it is always best to kill them at once, as it is a sure sign of liver disease coming on. Occasionally, it prolongs life to turn them out and let them have their liberty, but pheasants should never be shut up in a pen for more than two years.

As soon as the breeding season is over, they should be turned out and have their liberty, but those who have a good number of pheasants, it is more profitable to turn them out for shooting purposes every year; when that is done, there is not much fear of liver disease creeping in amongst the birds, unless they are fed on too much Indian corn.

If stock pheasants are a little drooping, three or five doses of roup powder will soon bring them round and give them an appetite.





COOPS AND RUNS FOR YOUNG PHEASANTS.

**Pheasant coops : their use and how to make them—Covered runs :
their value and use—Tarring and lime-washing.**

PHEASANT coops are usually about 20 in. square, made light, with no bottoms, so that they can be easily moved about. This is very well where the soil is light and dry and there is no wet, but it is well to have some of both sorts, so that all the young pheasants which are hatched out first can be put into coops with bottoms to them, with about an inch to two inches of moss peat on the bottom, that is both warm and dry, so that if the young pheasants get their legs and feet damp by running through the wet grass, they get dry and warm at once directly they

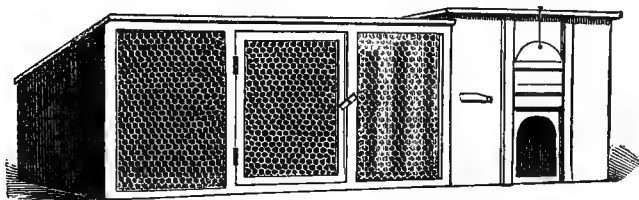
get under the hen. If they only run under the coop and the ground is damp they often get chilled, even while they are under the hen. I am quite aware it is natural for young pheasants in their wild state to sit upon the ground when the hen broods them, but it must be remembered that in wet weather pheasants will go into a wood to brood their young, at the foot of a tree, or in a hedgerow, or under a high bank, anywhere for shelter.

Though hen pheasants are not intelligent, they are sufficiently so to take the young birds as much as possible in a dry place to brood them. It is impossible to coop the hens in a hedgerow or dry spot, they are cooped on the ground, whether wet or dry, that is why I say it is much safer to have some of the coops with boarded bottoms, so that, should it come on a wet summer, the early young ones can be put in them. All young pheasants under ten days should be put in coops with bottoms, and peat moss under their feet, that is of course when it is wet.

I know this is a little more expense, but I often meet with gentlemen who do not rear twenty pheasants out of every hundred they hatch, for the simple reason that not sufficient care has been bestowed upon them, or perhaps I should say, not proper care

It is not so much the shape of the coop, but it is wise to make them with a slide in front. That is to say, the laths should be 2in. or $2\frac{1}{4}$ in. wide in front, and so arranged that they will shut up at night. When the coop is closed

they fit fairly tight, but when open one lath slides behind the other—refer to illustration.



There should be a small handle attached to the movable frame, to pull it to and fro, to shut the coop up at night, and for the purpose of opening it. If the coop is closed in this way, rats and mice cannot get in and yet it is not air tight, there is a little ventilation.

The hole to put the hen in should be at the side of the coop. It is also an easy matter to make a sliding bottom to the coop, so that it can be taken out when required, only of course it comes rather more expensive to make them in this way.

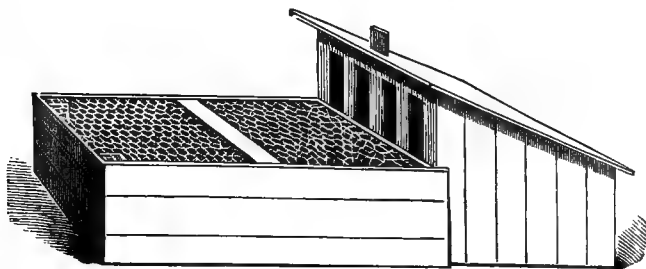
It is not necessary to have high coops for hens as long as the birds can stand upright, but there should always be a good fall, so that the water runs off them quickly. A nice convenient size to make them is, say from 21 to 23 in. high in front, with a six inch slope, and from 20 to 23 in. wide, and 16 or 17 in. high at back. That makes a fair sized coop, but of course they can be made larger or smaller according to the size of the hen.

The coops should never be too small for the young pheasants, as they sleep in them for a long time.

It is a well-known fact, nothing causes these young birds to die so much as running in the long wet

grass, therefore this should be guarded against.

This can only be done by small covered runs being attached to the coop in wet weather, which comes rather expensive. In wet weather the grass should be cut very close, just round where the coop stands. Some of my readers may say it would cost too much to provide these covered runs, but we will suppose a person has five hundred young pheasants and no shelter, except just the ordinary coop, if it happens to come a wet week, at least one hundred and fifty, as a rule, die in less than seven days out of the five hundred. In all probability the eggs, hens, labour, &c., would cost from £12 to £17 to produce one hundred and fifty pheasants, which amount would be lost, whereas, if small covered runs were attached to the coops, the probability is that the birds would be saved. The cost of one coop and run attached would be from 12/6 to 15/6, lasting at least from ten to fifteen years if taken care of and put away when not required. Make them according to drawing. Coops should always



be made the same width, so that they fit, and half inch mesh wire should be used in front, so that the pheasants

cannot get through when they are young. The ends and sides should be boarded up. The covered runs can be made various heights, twenty-three or twenty-four inches in front, and the roof sloping down to fifteen inches behind, made of three-quarter match boarding. It is well to nail German felt on the top, this prevents any wet getting through and will last for many years. I would advise pheasant breeders to try one or two, then they will see the advantage of them. Sometimes during the first and second week in May, when pheasant eggs are hatched, the weather is very chilly, especially first thing in the morning, and in that case the runs are invaluable for the early pheasants. The first few days pheasants are hatched out they should always have something in the front of the coop to prevent them from running away, as they are very timid.

The runs should be made with nine or twelve inch boards on each side, that shelters them from the wind. (Refer to illustration.) The top should be covered over with half mesh wire. In wet weather a sack can be laid over the top so as not to quite cover the whole of the wire, then it gives them light. All coops and runs should be stowed away in some old building or open shed for the winter, to keep them dry, but it is well to give a coat of tar mixed with paraffin or paint, while they are dry, before stowing them away. As a rule, when tarring anything people heat the tar, but when paraffin is used there is no need for this. When tarring, the operator should keep on adding paraffin to the tar, a little at a time, that will make it dry so much quicker, and it will not stick to the hands. The

coops should be lime-washed inside, that does away with any germs of disease which there may have been among the birds.





PHEASANT RUNS.

The peculiarities of Pheasants and their preference for the open—
Pheasant runs, how to make and arrange—Dust for Pheasants
and weather boards for pens.

PHEASANTS are quite different in one respect from fowls, as they usually prefer sitting out in the open air. Indeed, if a nice house or shed is provided for them they will seldom go into it. If it happens to be raining and there is an open shed handy, they will occasionally use it during the daytime. When pheasants arrive at the age of two months they are like turkeys, very hardy.

There is really no stated size for a pheasant run. Many people have them made square, and in the midland counties there are what they call pheasant hurdles, which are made with battens about two inches wide and half-inch thick, sawn out of half-inch boards. They should be about six or seven feet high. The bottom of the hurdles and battens are nailed close to each other, that is

to say, take two battens, one 6ft. long and one 3ft. long, and nail them together uprightly, so that the bottom of the hurdle is quite close, and at the top there is one batten and then miss one, making 48 battens in one hurdle.

Of course, there should be a frame for them to be nailed on. These hurdles are very good for the pheasants, because they shelter them from the wind and prevent persons from frightening them as they walk past.

Many breeders have no top to the runs, but merely cut the pheasants' wings to prevent them flying, and a number of pens are usually put side by side in blocks of from twenty to one hundred pens.

Sometimes they are ten deep each way, and the birds in the centre pens cannot be seen as one walks round the outside. I know one large breeder who has tried different experiments these last few years and finds it answer well to have the pens arranged side by side as I have described. He has the hurdles all round the outsides of the pens. The latter are partitioned off from each other with wire netting two-inch mesh, and this answers well, as the birds can see each other right along.

Suppose, for instance, there are ten pens square, that is, ten pens each way, this makes a large block and it costs as a rule one third less in price to have wire in between the pens instead of the hurdles. Still there are advantages in using the wire and there are also disadvantages. Some people have a square block, that is, they take eight hurdles to make a pen, and if they are all joined together it takes a less number of hurdles. The disadvantage in using the wire to separate them in the middle is, the pheasants get into the

way of running up the wire, as they can get foothold so much better than they can if there were straight battens, but the great advantage is in the cocks being able to see each other right through the pens. When the male birds can see each other with the hens the eggs are in almost every case more fertile, as it stimulates them when they can see each other with their hens. I prefer the pens being long and not square, then they can be covered over the top so much easier.

If the runs are only 6ft. wide they are easily covered, whereas if they are square the top is such a long way across, and there has to be something in the way of a post and quartering right across the pen to keep the netting up. One advantage in having the hurdles is they can be shifted from one place to the other.

When the pens are going to be made permanent, as some people have them, and only used in the breeding season, that is between February and June, it is best to have 6ft. wire, two-inch mesh, then nail boards round the outside of the pens, up to the wire, two or three feet high. One plank sawn through eight times, which makes nine boards (this must be done by a steam saw), will do nicely in 12 or 14ft. lengths. It not only comes inexpensive but makes a good shelter for the birds. It is best to use string netting to go over the top, as when wire netting is used the pheasants cut themselves when they fly up, but the string does not hurt them.

If pheasant breeders make their runs long instead of square, say about 4ft. to 6ft. wide, it is much better, as the netting is not so liable to get broken

down by the snow, that is, of course supposing the birds are kept in the run altogether.

When the pens are only used in the breeding season, the string netting should be taken off and put by in the dry during the winter months.

Those young pheasants which are kept altogether in one large pen until it is time to mate them should be provided with two long pens side by side, one for the cocks and the other for the hens. If they are not separated the young cocks begin to pull the hens about very much in December and January. Of course the length of the pen should usually depend upon the number of birds it is required to put in them. If a pen is two yards wide and 50 yards long, fifty pheasants could be put in very easily and they will get plenty of exercise to keep them healthy and vigorous.

One of these pens the size I have mentioned will do well for thirty hens and five cocks for breeding purposes, and if there are any shrubs and little trees in the run the male birds will not fight to hurt as they can get out of each other's way.

Where such pens are provided there should always be a gate at each end for the attendant to go in to collect the eggs, if not he will have to pass the birds twice. By having a gate at each end he can collect the eggs at one end, then walk round the outside of the pen and collect them from the other end. The birds will then gradually draw off to the end opposite to which the eggs are being collected from, and do not become frightened at all.

Pheasants are birds which keep themselves wonderfully clean, and when running about in their natural state they dust themselves on sunny banks in dry earth.

There are thousands of breeders who never think of providing dust of any kind for their birds to dust themselves in. Now this is wrong. At the end of the pens facing south there should always be two or three weather boards. It does not matter if they are only two feet from the ground, if that height so much the better. Some loose earth should be put under the boards, that will usually keep the earth dry, and the pheasants will dust themselves in that. If something in this way is not arranged for them they are almost sure to pick and scratch holes in the ground all round the outside of the runs and they very often get out underneath.

Strangers should never be allowed to go near pheasants in the breeding season, if so, it makes them timid, but in all pheasant runs there should be faggots leaning towards each other. They will keep upright themselves.

Some people put two posts in the ground and nail a pole across them, then lean the faggots against the pole. This affords shelter for them from the hot sun and also some protection from the rain.

It is well to provide a perch or two in the run, say two feet from the ground, as it is natural for pheasants to sleep on something, if there are faggots or bavins they will usually roost on them. Many pheasant breeders do not give them anything to roost upon, but merely let them sit upon the ground at night.

This, of course is unnatural. There should always be a little rough stuff of some kind for them to hide under, as when strangers go past it is natural for the birds to get out of sight.

If ferns or nettles are grown in the run so much the better. I have planted gooseberry trees in some of my runs, which give them shelter in the summer. Shrubs are the best because they are evergreens. Greenstuff should always be provided for pheasants, especially if they wear the grass down in the runs.

A few turnips ought to be set in their runs, as pheasants are particularly fond of turnip tops.

If the turnips are grown elsewhere, and transplanted in February or March into the runs with just a few bushes laid over them slightly they will begin to sprout out, and after they begin to get green the bushes should be taken off, and the pheasants will keep pecking the tops as they grow. White turnips are better than swedes as they have more tops.

A little piece of rape can be sown the last week in March or the first week in April, and just protected with a few thin bushes till it gets well up. Turnip seed can be sown in just the same way only later. Where pheasants are kept in large numbers during the winter, swede turnips should be cut in two and put into the runs, then they will peck the middle out.

In all cases, pheasants should have sharp grit laid in their runs for them to help themselves. Some breeders never think of supplying them with this necessary material. Road scrapings will do very well if it is from a flint or gravel road, but I always provide mine with flint grit and they keep in splendid condition.

During the breeding season dummy eggs should always be laid about the pens, if not, the cocks are liable to begin

eating the eggs and when they once begin that practice it is difficult to break them off, it also teaches the hens to do it as well.

It is always well to throw a few cinder ashes and some oyster shells in the breeding pens, as this helps to form the hard shell upon the eggs.

In my travels I occasionally come across those who keep four or five hen pheasants and one male bird closed up in one small yard, say two yards by three, where they have not a particle of green-stuff on the ground. In this case they should have cabbage leaves cut up and thrown into them, lettuce also can be thrown into them whole, as they are tender, and the birds can pick them to pieces. Pheasants eat more green-stuff in proportion to the size than ordinary laying hens do.

Where a large number of pens of pheasants are kept in the way I have described in the earlier part of this chapter, there is sure to be one or two get out occasionally. To be ready for this, it is well to form a little shed at one corner of the run outside, which can be done by leaning one of the six feet hurdles against the other, then stop it up at one end. The pheasants will then run round the outside of the pen, and if the attendant walks round very steadily they will go in the open shed.

Some breeders use string netting outside for them to go in which is very convenient, but it is far better not to hurry the birds or hunt them round, if so, they are liable to run away, but they seldom go far, if they do they will come back unless they are frightened or shot at.



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TURKEYS & GEESE.



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TURKEY COCK.

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BLACK NORFOLK TURKEYS.

Black Norfolk Turkeys : their points and peculiarities. Crosses with the Black Norfolk—The value of fresh blood.



HIS variety of Turkeys is best known in Norfolk. They are kept very largely in that district. They are much the same shape as the Cambridge Bronze, only their plumage is black. As a rule the Black Norfolk Turkeys do not sell so well in the London markets as the Cambridge Bronze, neither do they grow quite so large unless crossed with another variety. I find many Norfolk farmers who breed a large number of this variety cross them with Cambridge Bronze. This is noticed more particularly in the turkey pullets than in the cocks, as a few of the feathers show a white edging, and a pure Norfolk turkey is quite black. The legs are of a dark colour, not so pinky as the

legs of a Cambridge Bronze. The advantage in crossing these two varieties is that fresh blood is introduced, which increases the size of the birds, and improves the laying qualities. One great objection to this cross is if there should be any fine large turkey cocks, people do not care about using them for stock purposes, as they are of a mixed colour, of course, not being pure. My own experience is it is better to keep them pure, and procure fresh blood every year.





THE WHITE TURKEY.

White Turkeys—Crossing for Buff Birds—White Turkeys, difficult to rear.

THIS variety came in the first place from a sport of nature and were bred from. When the Cambridge Bronze is crossed with the white variety they often produce a buff bird. It is not an uncommon thing to see two or three perfectly buff specimens in a flock of fifty. Some people have an idea that the flesh and skin of these turkeys are whiter than those of the coloured turkeys, but I do not find such to be the case. The white variety are far more trouble to rear than either the Cambridge Bronze or Black Norfolk in their pure state ; that is on account of the difficulty there is in procuring fresh blood.





NEST MAKING FOR TURKEYS.

Turkey hens steal their nests—The nest, its size and position—How to make a Turkey nest—Food for sitting Turkeys—Testing Turkey Eggs.

TURKEY hens very often steal their nests, or I ought to say lay away, and it is often a difficult matter to find the eggs, especially when they are kept on a farm. Wherever they have a large range, a big nest should always be provided for a turkey, from 20 to 24 inches square, if not they often injure their tails, and the feathers do not get straight again before they moult. A large tub or barrel laid on one side and some soil put in, which should be well shaped in the form of a nest, made perfectly round, will do well.

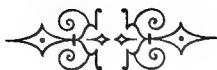
The proper way is to put a little damp soil in the nest, beat it down well, so that it is quite firm, then shake a little slack lime all over it. This causes the inside of the nest to

become firm. It should then be lined with fine hay. A turkey hen can be set on from seventeen to twenty eggs easily if set carefully. A larger number can be put under her, but it is always better to put one or two less than too many. The first batch of turkey eggs should be put under ordinary hens. A good-sized hen can take nine or eleven turkey eggs very well. Hens will take great care of them. If a turkey hen is put up in a large coop with bars to it, as soon as she becomes broody, and is fed liberally, she will soon come on to lay again. Then when she comes on broody the second time, if the owner has a sufficient number of eggs, set the turkey, but if not, set the hens, and the former will lay another batch of eggs the same as before. While sitting, a turkey hen should always be covered or put in a dark place, and if she does not come off in the morning to feed, she should be lifted off steadily, and have proper food given her. Maize, barley, and dry rice are the best grains for turkeys while they are sitting.

If they are fed well they will sit two months if allowed.

After a turkey hen has been sitting nine days the eggs should be tested before a candle or lamp in the evening. The best way is to hold the large end of the egg between the thumb and finger and turn steadily round before the light. If the eggs are fertile they will be very cloudy, and a dark speck will be seen rather nearer the large end, but if they are unfertile, the eggs will be quite clear. They are very easy to test on the ninth day. Turkey eggs as a rule take 27 or 28 days to hatch out, but they should be left till the morning of the 29th day, because they may be a little late in hatching out.

If an egg is not chipped by the 29th day, an incision should be made in the end, just at the top, and if the skin is white, it is a sign the young turkey is alive, but if it is dark the youngster is dead. If alive the egg should be held up carefully, the small end to the light, and just tapped lightly with the finger, and the position of the beak will be seen at once. As an egg is oval, unless the beak lies perfectly straight, it slips, and the youngsters cannot break the shell. Numbers of young turkeys die in the shell every year for want of a helping hand. If a little care is bestowed hundreds can be saved.







MANAGEMENT OF YOUNG TURKEYS.

Young Turkeys hatched and growing rapidly—Risks attending their early growth—Food for young Turkeys—Young Turkeys must be kept dry.

YOUNG turkeys when hatched are very small in proportion to the size of the adult birds. This is accounted for by the fact that turkeys lay considerably smaller eggs for their size than any other variety of the feathered tribes, and it is impossible to get a large turkey chick out of a small egg.

That is not the worst, however. These birds when young are very weakly and their systems altogether are very delicate ; they are very different from young chickens, and should therefore be treated differently. The first six weeks

with young turkeys means either success or failure. Let me say here, at the very commencement of this chapter, sharp flint grit should always be given them, even from the first two days of their existence. This is where a great many fail in rearing turkeys.

Of course they are likely to die at any time, just the same as chickens, however they are managed. There is always a certain risk in rearing chickens, goslings, ducklings, young pheasants, young turkeys, or any live stock, but those who have anything to do with hatching and rearing turkeys know what delicate little things they are when young, so they guard against anything which is likely to throw them back. Young turkeys also differ very much from chickens, as they seldom droop their wings or look as if there was anything the matter with them, and the owner or attendant is often surprised to find one or two lying dead on his return after being absent perhaps only an hour or two.

A person who is accustomed to the rearing and management of these birds can tell when anything is wrong with them, but a novice finds great difficulty in this respect, except that they do not appear to eat very much.

Some of my readers may think I am drawing a very dark picture, but I am simply putting it plainly, so that a novice who goes in for rearing turkeys may know just what to expect.

I am pleased to say I have known many people commence keeping turkeys these last few years, and as a rule, 18 out of every 20 have been successful, for the simple reason they give attention to them when they most need it. Women are the most successful in rearing turkeys and have more patience than men.

As soon as young turkeys are hatched, and when they get fairly strong on their legs, they should have a little hard-boiled chopped egg, with a few dry bread crumbs and a sprinkling of mustard and ground ginger in it.

Young turkeys seem to have but little heat or warmth in themselves, and therefore some of their food the first six weeks ought to have something hot mixed in it after they are two days old.

They may have a little boiled rice to tempt them and Spratt's biscuit meal. The latter should be just soaked a little in warm water.

After they are four days old, onions should be chopped up to mix with their soft food, which should be made of oatmeal, Spratt's biscuit meal, and a little rice. Nothing is better than the Roup powder to mix with this food, as it is very warmth-giving and acts as a tonic at the same time.

Where milk is plentiful it should be boiled and after it has stood about ten minutes, it should be used to mix up the food, but it must not be too wet.

Young turkeys should not have anything wet or sloppy.

Never give scalded bread under any circumstances, if so, it brings on diarrhoea. If one meal of dry rice once a day can be given it will usually keep the bowels in order.

Water should only be given once a day when they are very young, if they are allowed to have as much as they like they drink too much.

Should it be a very cold morning it is better to give it warm, as when young turkeys are not very well, they are always thirsty and drink a quantity of cold water, and in that case it usually means death in less than three hours, but when

the water is warmed it rather helps the system than otherwise.

Farmers' wives for many years have used many different things chopped up for the young turkeys, which some of our modern turkey keepers smile at now. nevertheless, our forefathers used some excellent things in the way of herbs for young turkeys, viz., docks, chick weed, dandelions, young nettles, hyssop, etc. It is not everyone who can get these things, but they are all good in their way. I prefer dandelions, as they act as a tonic ; or nettles, they keep the blood right ; and chopped-up onions. They are almost indispensable.

Young lettuce and green mustard mixed together, and chopped up fine, are splendid for young turkeys, the first few weeks of their existence. Of course, the information I am giving here is for those who have a good range for their turkeys. After they get about 5 or 6 weeks old they will pull all the green stuff they need themselves, as they eat an immense quantity of it ; they must be supplied with some green stuff while they are young.

I ought to mention their food for the first meal in the morning should always be warm, if possible, and no more should be mixed in one morning than they can eat, as it is very dangerous to give young turkeys sour food. They are very fond of curds from milk, that is, milk turned in boiling into whey.

They may have a little meat mixed with their food for the first six weeks, viz., "Crissel," or granulated meat, but not much of it. In feeding, care must be taken so that there is no food left ; nothing turns them against their food so much as having too much.

The great secret in rearing young turkeys is keeping them dry. They ought never to be let out when the grass is wet with dew or rain in the morning, that is, the first six weeks of their existence.

The best way to manage is to have a covered run attached to the coop where they sleep at night, and have dry dust of some kind at the bottom. In this way the young turkeys are not only kept dry under foot, but the cover shelters them from the cold winds.

The run should always be set back to the wind.

When the young turkeys are hatched the hen should not be allowed out of the coop till they are a week old, if so, she takes them too far and they usually become exhausted.

When a farmer rears turkeys they should be taken out where sheep are grazing, if possible, after they get fairly strong, as the sheep keep the grass down close, and should it rain, or if they are let out before the dew is well off the grass, it only wets their feet, and not the fluff or feather.

Hemp seed and French buckwheat are the best grains for young turkeys. The former is very stimulating and warmth-giving, and they ought to have a little hemp seed until they are fairly well feathered, that will be when they are about six weeks old, but after that age these grains are not really necessary.

They can, of course, be fed on barley, wheat, and maize, just the same as any other poultry, but in all cases meal should be given them at least twice a day for at least three months, that is, if the owner wishes them to grow fast and do well.

Up till the time they are six weeks old, they cannot be fed too often as long as they clear up all the food : in fact, they ought to have a little given them every hour in the day till they get that age, and from then till they are four months old or more, four times a day will be often enough.

The meal used for mixing up in their soft food should be pea or bean meal, barley meal and sharps, with a little of Spratts' biscuit meal to make it light without sticking. It should be mixed so that it is not too dry and will cling nicely together so that there is no waste.

As soon as young turkeys leave the hen, they should have a covered shed to go into, open in front, and a flat perch inside, not less than three inches wide, as so many of them are liable to crooked breast-bones through going to perch too soon on round narrow perches.

Nothing is so detrimental to the sale of turkeys, either alive or dead, as crooked breast-bones.

Many people make a great mistake in allowing hens, when they have their liberty, to take the young turkeys into fowls' houses, as they get accustomed to sleeping with the hens and become too hot at night. When this is the case they never grow so fast, and very often roup will break out amongst them.

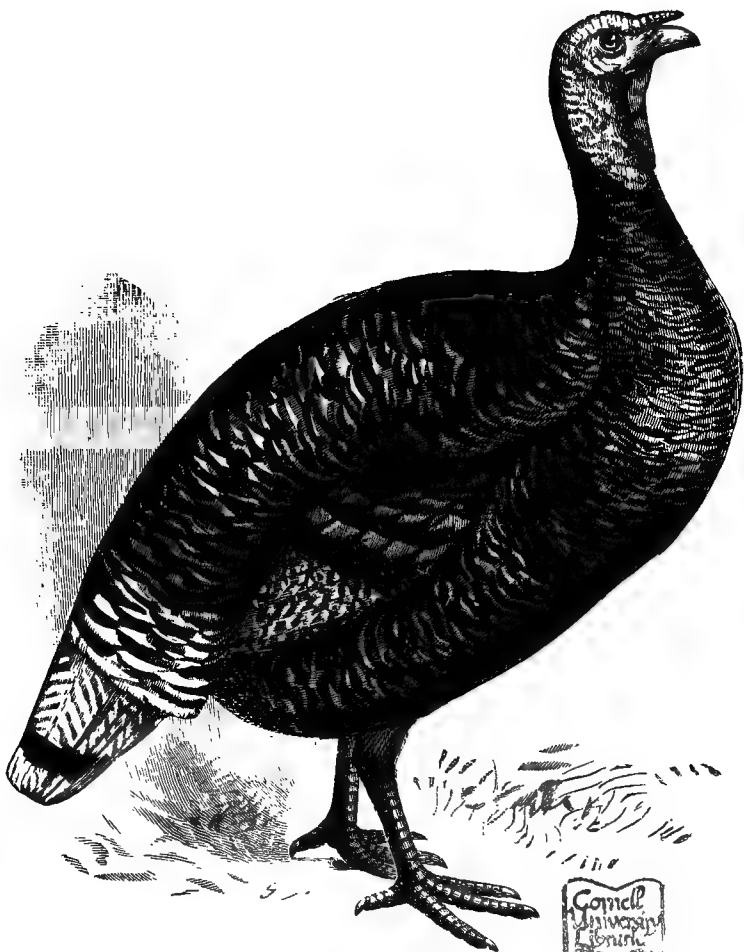
Turkeys should never be shut up in a warm place. I always keep my turkeys in a house with a wire front, then they keep hardy. I ought rather to say, I provide such a house for them, but they usually prefer sitting outside, as I have a large perch out in the run for them to sun themselves, but they like sleeping upon the perch better than in the houses.

During the severe winter of 1891 my young turkeys sat out in the open with no shelter whatever, and not one of them took any harm. I just mention this to show that the delicacy of turkeys all passes away as they grow up.

When once they get their feathers they are one of the hardiest of the feathered tribes, but in no case should they sleep in the house one night, and outside the next, if so they are sure to take cold.







TURKEY HEN.



REARING TURKEYS IN TOWNS AND THE MANAGEMENT OF THEM IN CONFINED RUNS.

Turkeys do not need so much space as is popularly believed—Turkeys in confined Runs—Meat for Turkeys—Green stuff: its value and production—Boiled Corn and Grit for Turkeys.

TURKEYS at the present day form a great part of our bill of fare in England. Some ten years ago there were very few turkeys bred in this country in comparison to the number produced now.

People used to have an idea that young turkeys could not be reared unless a person had an immense plot of land, or in other words, unless they could be moved to fresh ground each year, as it got stale if they were reared on the same place two years running.

This is only theory. It may have happened that a person has reared a few turkeys in one place for two or three years, and some of them have died off, and it has been put down that turkeys have been reared there before, so naturally they would not do well.

Ten years ago if a person had mentioned rearing these birds in a back yard in London, or a town, he would have been put down as being half mad.

I am pleased to say however that I have known turkeys reared successfully in back yards in London. Many of them have turned the scale at 16 lbs. at Christmas, which had not been hatched till the first week in July, in fact, I may say I have seen them larger when reared in his way than those which have had a farm to run over. I do not wish my readers to think that I condemn large runs for turkeys, there is no doubt they like plenty of space when they can get it, and they do well, but what I wish to make plain is, they will grow well, healthy and strong in towns as well as when they have a large range.

I have known them to be reared in runs two yards wide and 15 yards long, but I do not recommend rearing stock turkeys in such a small space. Those who only want a nice young turkey or two at Christmas need not hesitate for one moment to bring them up in a confined run without any grass, but stock turkeys are different and must have space.

When turkeys are hatched early in the season they usually grow quite as heavy when reared on gravel or where there is no grass, as when they have a large grass field to run over.

I will just mention why this is. In the first place where a person has only a limited space of ground in towns it is an impossibility to rear many turkeys, and as a rule the owner only attempts to hatch one brood. If there are from four to seven young ones, that is quite as many as may be expected out of an early brood, and of course there is not such a large number running together while they are young, and as they are close to the house they can be fed several times in the day and attended to properly with but little trouble.

Those who understand this business well as regards rearing turkeys in such small places always have a covered run for them, so that, should it come on to rain, and the little things are running about in the open, they can be placed under shelter at once.

It is quite different on a farm. One often has to go a quarter-of-a-mile before he can get to them, and when he does, they are wet to the skin, which often causes death when they are very young. Young turkeys cannot stand the wet.

Then again, when there are only a few they get looked after better, and they come in for many bits from the table, that is another advantage the townsman gets.

This is not all however, there is still another advantage which people do not often think of, that is, when the little things are let out to have a run in a small place there is no wet grass. As soon as it has done raining, and the sun comes out, they can run about.

A good turkey is expensive at Christmas, and that is the time when English people want them. There is a certain

amount of pleasure when one can rear his own turkey for the table, besides having one or two to give away to a friend, and should it be a poor man, who cannot afford to give it away, a nice fat turkey will always sell well at Christmas.

They cost but very little to keep; be a man ever so poor he can always manage to find a few coppers each week for their food, besides people living in towns come in for so many scraps from the neighbours, who are often only too pleased to get rid of all the refuse.

In all cases it is better to have the run long and narrow, rather than wide and short, and the turkeys can walk from end to end fly catching during the Summer.

Young turkeys which are reared in confined runs are wonderfully tame, and those who are experienced in the management of them know how easy it is to drive them about.

They can be driven through a town like a flock of sheep, especially when they have been reared on a small space of ground, so that if the owner has another piece of garden or path where they can get a little exercise, he need not be at all frightened of them running away, and turkeys are not like fowls, they do not scratch.

When turkeys are brought up in confinement they have to be fed in a little different way if size is an object, because when they have a large range they are able to pick up an immense quantity of green-stuff, especially dandelions, and a substitute for these must be given when they have only a small run.

They should be fed the first few weeks exactly in the way laid down in the chapter on "feeding," and after they are

five or six weeks old, the owner or attendant should look out and see they have meat of some kind, such as "Crissel," or granulated meat soaked and mixed with ordinary meat.

I may say here that cottagers, and those who have time to prepare cooked meat, viz., a sheep's paunch, or any offal in the way of outside cuts from the butcher's shop, which can usually be had for 1½d. and 2d. per lb., will do well to give this to their young turkeys. The meat should be boiled and chopped up fine.

Where a person gets a number of good table scraps, it is not necessary to look after such sweet morsels of meat for the young turkeys. I wish my readers to distinctly understand that when turkeys are reared in confinement, unless they are given flesh food as well as corn, they will not grow anything like so fast, besides looking very rough in their plumage. It is also very important that green-stuff should be chopped up for them.

Some people imagine they have a difficulty in getting green-stuff in towns, especially during the winter, but I find it is much easier, as a rule, than in the country, as greengrocers always have a lot of refuse leaves. Those who are unable to get these should cut some grass off the bank every day and some dandelions, which should be laid on a board and cut up into pieces of a quarter-of-an-inch in length. Lettuce leaves are another splendid food, but it must be remembered when turkeys are reared it is usually Summer, and though green-stuff can be easily obtained it soon withers, while in cold weather it lasts for days.

To overcome this difficulty it is best to sow a little wheat, barley, or oats in small boxes and let them grow from $1\frac{1}{2}$ in. to 3 in. If there is a scarcity of ground, these boxes can be placed in any little out-buildings, or even up the garden path.

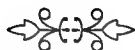
When corn is sown in the Summer it comes up in two or three days, and if it is well watered is about $3\frac{1}{2}$ in. long in three or four days. One box should be given to the turkeys each day, the size of the box being according to the number of turkeys. It is a good thing to sow lettuce seeds in this way, but the best food of all for young turkeys is mustard seed, that grows wonderfully fast, and if put in the sun is up in a couple of days at most. It should be allowed to grow rather long, as it gets much otter, which makes it excellent for young turkeys. There is nothing they do so well on in the way of green food as young mustard, and the birds are very fond of it at the same time.

Turkeys which are kept in confinement should have a good deal of their corn boiled and given to them hot. It should be put in cold water in a saucepan by the fire, and when it comes to the boil it should be stood on one side at once, then it will soak the water up and not burst.

If young turkeys hatched in April are fed and managed in the way I have described, and the eggs come from large stock birds, they can be got up to between 18 and 26 lbs. by Christmas.

If the run gets dirty in any way it should be swept up in dry weather, but if it is wet the top should be just skimmed off, and some fresh soil and cinder ashes laid down.

It is most important that turkeys should have a good supply of sharp grit when kept in confinement, for digesting their food ; where there is a scarcity of that, glass and old crockery-ware can be broken up for them. Turkeys need a good supply of sharp grit, more even than other domestic poultry, as the gizzard is so small in proportion to the size of their body.







THE CAMBRIDGE BRONZE, OR AMERICAN MAMMOTH TURKEY.

The name of the Variety—How it was made—Comparative merits of Black, White, and Bronze Varieties—Turkey cocks: their characteristics, and management so as to produce fertile eggs—The selection of Breeding Turkeys—Young Turkeys: their Feeding and General Management.

THIS may appear rather a peculiar heading, and some of my readers may be somewhat puzzled to know which is right, Cambridge Bronze or American Mammoth. First of all, then I will just explain how they came to be called by either or both of these names. Whichever name they are advertised under they are one and the same thing. The Cambridge Bronze has been an old standing breed for years, but has been considerably improved by crossing it with the American Mammoth.

I cannot find the breed distinct by itself in any part of the country, they all have more or less American Mammoth blood in them.

In the first place they were only called the Cambridge Bronze, but when the American Mammoth was introduced it produced a better gloss upon the plumage. It also increased the size of the birds considerably.

It was a good thing for England when the American Mammoth was introduced, because the Cambridge Bronze was getting very small for want of fresh blood. Some of my readers may say: "But were not the American Mammoth turkeys when they were first imported different from those we have now?" There is so little difference between the two that if they were put side by side it would take a very experienced judge to detect which was which. I fancy I can hear some people say, "Oh, they must be cross-bred then." No, they cannot be called cross-bred turkeys because they breed true, and anything which is cross-bred will not breed the same as the parent. People usually go in for size in turkeys more than purity of blood. I call the American Mammoth or Cambridge Bronze a distinct variety because they breed true. When turkey hens come a little light in the lacing it shows there is a little more of the "Cambridge Bronze" blood than the "American Mammoth" in them. When people are ordering turkey eggs it does not matter which of these two names they call them.

The Norfolk turkeys are quite a different variety, they are black but are kept very little outside the county of Norfolk. There is also a white variety of turkeys. Many noblemen in England will have nothing but the white

colour. These are rather more delicate than the other varieties, as it is so difficult to get fresh blood. They do not grow anything like the size of the other varieties.

I find nineteen people go in for Cambridge or American Mammoth turkeys, where only one keeps any other breed. They are certainly the leading variety in England as well as the most profitable. They are very handsome. The feathers of a turkey differ very much from those of any other of the domestic feathered tribe as well as the shape of the bird. The ends of the feathers are wide at the top, just as though they had been cut across. This is noticeable in both cocks and hens. The male birds are very massive, I have had them weigh considerably over 40lbs. each, and I believe there are several in England weighing 44 and 46lbs. each at the present time. They seldom reach 46lbs until their third year. This weight is too heavy for general purposes, though it answers well when the birds are required for exhibition. In that case it is necessary to have huge birds. In the show pen size in a turkey counts more than all other points put together, because they are kept more particularly for eating purposes than for fancy.

A turkey cock weighing 40lbs. or nearly that weight is very dangerous to the hens. I have had as many as four out of eight killed in one year through the male bird being too heavy. They tear the skin from the backbone, right down to the middle of the thigh. Those who have anything to do with turkeys know that the male birds are exceedingly rough in paying their attentions to the hens. Where the cock weighs over 35lbs. it should not be allowed to go with the hens all the time. There should be wire in between

them, and he should only be let in to them occasionally. The attendant can easily tell when it is time to put the male birds with the hens, as the latter lie down on the ground in quite a different way to any other variety of the feathered tribe, and if they co-habit once that is sufficient for a batch of eggs. A good strong turkey cock when treated in this way, if only put with the hens when required will manage thirty hens just as well as he will eight. In country districts, where a person only keeps three or four hens, they do not keep a male bird, but take them to a neighbour who keeps one. This sort of thing is often done. Some people charge 1/-, and others 2/6 for each hen which is put with the male bird, but there are many neighbouring farmers who do not charge anything; they merely oblige their neighbours.

After a turkey hen has laid her batch of eggs and comes on broody the operation should be repeated. I would rather put a turkey cock weighing from 23 to 28lbs. with hens their first year than I would a two year old bird weighing 35lbs., because the eggs as a rule are more fertile when the younger and lighter cock is used.

Many turkey breeders force young birds on with stimulating food to get them to a greater weight, but when this is done the progeny of these birds are no larger than those at the same age which were bred from birds that had not been fed up.

Suppose for instance a man has two turkey cocks-hatched about the same time, and equal in weight at three months old, he commences to feed one on stimulating food to get it up to a good size, say 34lbs. the first season, while the

other only weighs about 23lbs. or 25lbs. Both these birds may be bred from the same stock, though one may be 10lbs. heavier than the other, but the larger bird will not produce any larger young stock the following season than the other bird, and in some cases the eggs will not be anything like so fertile. I mention this to show that people who want such immense turkeys can only get them to such an extraordinary weight by forcing them and feeding them up with stimulating food.

I find by practical experience that when birds are forced to such a weight, no matter whether they are cocks, drakes, ganders or turkey cocks, the eggs from them will not turn out so reliable for breeding purposes. A lot of surplus fat is no good for breeding stock as it is rather detrimental as regards the fertility of eggs than otherwise.

No other variety of birds lose weight so quickly, when sent on a journey, as turkeys.

A bird weighing 25lbs. is sent on a journey, and perhaps has not been on the road 24 hours before reaching its destination, and has lost from 1 to 2½lbs. in weight. This may appear to many people almost an impossibility, but I have many times proved it to be a fact. I have myself sent off turkeys weighing so many pounds, and they have been weighed at the other end of the journey and found not to be so heavy by 1 to 2½lbs. I may say also I have bought in turkeys and of course have had the same disappointment in the weight myself.

Some people when they weigh turkeys tie a string upon the legs and allow the bird to hang head downwards ; but this is a very dangerous practice, nothing is so injurious to turkeys

as holding them up by the legs with their head downwards. When they are weighed they should either be put in a bag or laid on one side on the scale. A stock turkey cock should have a nice straight breast, but when young should not be allowed to roost on a perch, as such a thing may urn the breast bone or make a dent in the middle of it. The latter would not be detrimental to the breeding stock in any way unless the breast bone is curved, but they look so much better on the table with a nice straight breast. Should both ends of the breast be quite straight, with only a dent in the middle, the turkey cocks may be bred from, but to make sure of this the bird should be laid on its back and a rule put up the breast. If a male bird with a curved breast is used for breeding, more than one third of the stock will be spoiled for market purposes. I am always careful when mating my birds to see their breasts are quite straight and introduce fresh blood every year, and by this means I find the young turkeys grow wonderfully strong and healthy. A few of my best young turkey hens have turned the scale at 19lbs. at 9 months old, and several of them have weighed 17 and 18lbs. at that age.

I do not wish my readers to misunderstand me. All turkey hens do not come up to the weights I have named when they reach the age of eight months old. It is a good turkey hen which will weigh from 12½ up to 16½lbs., unless it is fattened up for the purpose. I do not mind breeding from hens if they are a little light in colour as long as they have large frames. When purchasing a hen for stock purposes a big boned bird should always be sought

after rather than weight. It is an easy matter to put fat on turkeys, but those which are fattened up to such an immense size seldom lay anything like so many eggs. The male bird represented here is a good specimen.

The breast and shoulders should have a brilliant gloss of a bronze shade, the edge of the feathers just showing a little dark rim, but the feathers lying on the top of the back leading to the tail should be just tipped with white, or as some people call it stone or drab colour, and the tail feathers themselves brown, edged with the same colour at the ends. When the turkey cock puts up his tail the long feathers upon the back stand up and help to form a fan edged with white. After January comes in a healthy turkey cock has his tail out nine hours out of fifteen right up to the autumn. The legs should be rather a pale colour, between a white and pink, and the larger the frame the better. A hen should be the same shape, and the breast and shoulders the same colour as the cock, only not quite such a brilliant gloss. A few of the feathers may show a slight edging of white or drab, but not too much. Some show every feather tipped with this colour right through the body. This is rather an objection in the show pen, but it makes no difference whatever when one only requires the birds for breeding from. Very few people exhibit turkeys, as the carriage to and fro runs so heavy in comparison to the prizes given.

The tail of a turkey hen is the same colour as that of the male bird, only a trifle lighter. The cocks can easily be distinguished from the hens, as they have a larger head and a great deal more red round the head and neck. The

piece of skin on the top of the beak comes down over the beak, while in the hen it sticks up like a little horn. The male birds have power either to let it down over the beak from 2 to 3 inches, or draw it up in the shape of a horn. It also has power to change the colour of its head and neck, sometimes the latter is quite blue, another time perfectly white, but as a rule it is red.

A turkey cock is very amusing to look at, especially where one has a nice place for him to strut about. It is very seldom a hen spreads her tail out in the same way as the cock, though they do occasionally, but when they do the tail is a little on one side.

One or two large nests should always be provided for turkey hens, they should not be less than 2 or 2½ ft. square, if so the tails get rubbed so much. The nest should have a top to it. A large tub or barrel makes a very good nest for them, and it should be made as dark as possible, if not, when the birds have their liberty they are likely to go and lay away, as turkeys are very shy when laying. There is a great difference in the laying strains of these birds. I have had them lay not more than fifteen eggs before coming broody, and I have had them lay as many as 45 before wanting to sit.





FEEDING STOCK TURKEYS.

Food for stock Turkeys : what to give and when—Laying Turkeys : how to hinder or help—Confined runs for Turkeys—Mangold Wurtzel for Turkeys.

I AM often asked how stock turkeys should be fed. When they are only required for breeding purposes, after they have done growing, say up till Christmas, they should be fed on grain, such as wheat, barley or maize, all mixed together or separate. After Christmas no meal should be given until the beginning of February. After that time they may have soft warm meal in the morning for the first meal. This should consist of barley meal, sharps, and pea or bean meal, if convenient, but the latter is not really necessary.

If the weather is very cold, a little granulated meat or "Crissel," and Spratt's biscuit meal is a good thing for them.

When turkeys are fed in this way at the beginning of February they usually commence laying by the end of that month, sometimes in the middle of the month, but if they commence to lay the last week in February, or the first week in March, that is quite early enough. If young turkeys are hatched too early, the cold chilly mornings are liable to check them very much.

When turkeys commence laying or are about to lay they should always have a good supply of cinders and oyster shells for making the egg shell, plenty of sharp grit must be given also; flint grit is the best, as it is harder and lasts longer in the gizzard. If turkeys have a large range, they may have a good deal of maize given them. When they commence laying, maize, wheat, barley, and French buckwheat are the best grains for them.

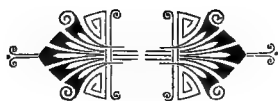
Turkeys should be fed much in the same way as laying hens, with a good supply of fresh water. The latter is very necessary when they are in full lay.

Good laying turkeys will sometimes lay 20 eggs in 21 days, in fact, if the laying qualities of these birds were studied more we should get a far larger number of eggs than we do at the present time. I know some now which lay right up in the autumn. A turkey egg is very rich for eating purposes, as the yolk is very large for the size of the egg.

When stock turkeys are kept in confined runs, if they have no grass to range over they should have plenty of cabbage leaves or other green stuff cut up for them. Mangel wurzels are good for them to pick up. They should always be supplied with a certain amount of flesh food in the lay-

ing season, because when they have their liberty it is natural for them to take a very large range in the field, where they get plenty of slugs, worms, etc., therefore they should have a substitute for that when closed up in wire pens.







GRIT FOR TURKEYS.

Grit for Turkeys when cooped—Grit should be provided for Turkeys of all ages—Grit the mainspring of health in Turkeys.

MANY people keep turkeys who do not think it is necessary to provide them with sharp grit to masticate or grind their food. In many cases when they are kept without it, it is simply an oversight on the part of the owners ; while other people again think they are bound to get sufficient for themselves while they are running about the farmyard. I may mention here old turkeys do not suffer for want of sharp grit so much as young ones. The latter are, as a rule, cooped up in meadows where there is scarcely a particle of grit, and, as a natural consequence, some of them begin to die off, and the owner or attendant has but very little idea of the cause.

It will be noticed, however, that where there is a sufficiency of sharp grit only the strongest survive.

Young turkeys can be supplied with sharp material for masticating their food at two days old. Turkeys are birds which require a great deal of sharp grit, on account of the gizzard being so small in proportion to the size of the body:

The best they can have is flint grit, broken up by hand, that is by hammers, not that which passes through a machine, as by that means many of the sharp edges are broken off, and a great part of it does not do its work properly.

Young turkeys up to a month old have but little energy to find grit for themselves, therefore fine grit should be mixed with the soft meal, then they are bound to get it. When it is put down for them the weaker ones seldom eat it, but the stronger ones usually take sufficient.

Old stock turkeys should always be provided with sharp grit, though they are very active in searching for it when there is any to find. In some cases they have been known to walk a mile in search of grit, especially on a road.

One teaspoonful of flint grit once a week is quite sufficient for a turkey, as it lies in the gizzard from ten to sixteen days, but when they pick up round material or anything which has no sharp edges, the greater part of it will pass through the gizzard in 24 hours.

Some of my readers may perhaps think I am too particular over this question, but sharp material for masticating the food is the mainspring of life and health to all domestic varieties of the feathered tribes.



DISEASES.

Popular opinions regarding the delicacy of Turkeys—Colds among Turkeys, their causes and avoidance—Roup, how to relieve in case of—Liver Disease—Over-crowding, the cause of weakness and disease.

TURKEYS are looked upon by many people as being very delicate, but I am pleased to say that these birds are not subject to half as many ordinary ailments as most other domestic poultry are.

It is very seldom anything happens to turkeys after they are six or eight weeks old except roup, but they are just as subject to that complaint as hens, because they are much larger than ordinary poultry, and when there are a number in one house it becomes very hot, especially if there is not much ventilation. If young turkeys or even old stock birds are put in close, ill-ventilated houses, and are allowed to run out in the cold air on a sharp frosty morning, they are almost sure to take cold, and then if they are not seen to at

once roup follows, which of course stops the growth of young turkeys very much. They soon begin to look rough in feather and as a rule they become very small and stunted birds. I always believe that "prevention is better than cure," though it is not thought so much of.

It is very seldom indeed that turkeys will have roup unless, of course, they are mismanaged in some way. For instance, when there is a large flock of turkeys running together and there is an extra hen or two put down, the original birds always commence to fight. In some cases the head will get the skin off, which causes a great loss of blood, and roup follows, which is not always easy to cure.

When a strange turkey is put down with another flock and they commence fighting, the owner or attendant should give them a good knock on one side of the head with the hand or an old cloth, this usually checks them and they soon settle down.

Properly speaking, turkeys should always be put together not later than January, if possible in December. They are not nearly so likely to fight then as they are in the Spring. When they are put together later it upsets them for the laying season. Early turkey eggs are a matter of great importance.

Roup usually shows itself in the first instance by a swelling under the eye, and if this is not attended to the latter closes up entirely. My readers know there is a large vacant space underneath the turkey's eye, and when it is swollen it hangs like a little bag at the side of the head. When this is noticed it should be fomented with water that has had camomile flowers boiled in it. After being bathed the

place should be wiped dry, and a little spirits of arnica rubbed on ; that prevents the birds taking cold after the hot fomentations.

If the swelling does not go down with this treatment, an incision should be made under the eye with a large penknife and the liquid squeezed out, the forefinger should be put in the roof of the mouth at the same time, as there will be a lot come from the nostrils.

If the incision is not made the liquid forms a hard cheesy matter, and when that is the case the incision should be made exactly in the same way, only larger, and the cheesy matter will usually come out in one piece, sometimes weighing as much as half-an-ounce.

The Roup Powders should be given whenever turkeys show the least signs of a cold or roup. If they are put in an open shed, and not kept too warm, they do not feel the sudden changes so much and it is very seldom they will have either a cold or roup.

Occasionally turkeys will suffer with liver disease, this is often the case when the parents have been fed largely on Indian Corn or have been in-bred. When a turkey hen or cock gets very thin and is wasting away, the bird should always be killed at once, as it is only waste of time to keep them. The symptoms are usually a stiffness in walking, as though there was a pin pricking them inside the stomach. I wish to make myself quite plain here, because during the breeding season turkey hens often get injured by the male bird and are apt to walk stiff or lame on one leg, so the owner or attendant must be very careful and make sure the birds have liver disease before killing them.

If people would only guard against over-crowding their turkeys a great deal of trouble and disappointment would be saved.





GEESE.

GENERAL REMARKS.

Common superstitions with regard to antipathy existing among cattle for geese—Feather plucking—Geese as watchers—Geese for stubble fields—Geese for market—Old Geese and how they are disposed of.

THERE is a common saying amongst English farmers that no cattle will eat after geese, but I am pleased to state this is only a saying, and not a true one. Either sheep, horses, or cows will eat after geese if there is any grass left for them to eat. I think it would be much nearer the mark if it were said cattle have a difficulty in eating after geese, especially when kept in large numbers, as they usually eat nearly all the grass. It is nonsense to suppose cattle will not eat grass after geese.

I have penned geese on the grass so that their excrements have covered the ground and the following year, when the grass has grown again, I found my cattle ate it as close as any other part, if anything closer.

There is another old adage which says geese will not pay to eat unless they are plucked three or four times a year for their feathers. This practice is believed in and carried on very largely in Lincolnshire because goose feathers are valuable.

Some people have an idea that it is very cruel to deprive them of their feathers. I used to think so myself, but it was before I saw it done. It is not a practice I would recommend to anyone. Though there is a certain amount of down left upon the birds' bodies to keep them warm it must hurt them a little when the feathers are pulled from their bodies, but the farmers tell me they do not think it does. I cannot have any hair pulled from my head without I feel it. I am quite aware feathers are different to hair and come out much easier, still it leaves a larger hole in the skin. The quill of a feather goes right through the skin. No matter how fine the quill is it must be six times the size of an ordinary hair, so that though I do not recommend this system the Lincolnshire farmers tell me I must not condemn it.

I am pleased to say geese are kept much more than they were years ago, in some parts of the country there are ten times the number of geese reared for the markets in comparison to what there used to be a few years ago.

Geese are very useful birds, they are almost as good as a yard dog and in some cases better.

I have known geese when they have been running about with poultry to keep foxes away in the day-time. I have often heard of geese driving foxes away, but have never known a fox to kill a goose though I have *heard* of foxes fetching them away.

The ganders will detect a strange walk, even though they may not see anyone; if shut up in a building and a stranger walked past they could tell at once.

No poultry farm should be without one pen of geese, as they will soon give the warning, both at night and in the daytime, when strangers approach.

Geese differ very much from any other variety of domestic poultry, as they live upon grass. After the old-birds have done laying in the middle of the summer they will keep in grand condition if they are allowed to run about on a grass field till the next Christmas. After that time they should be fed upon a little grain of some kind to bring them on to lay early. They are very useful to farmers, more so than pigs, to go in the stubble fields to pick up the waste corn. If farmers would breed a large flock of geese they would pay them far better than having so many pigs for the stubble fields, as they want no boy to mind them. They not only eat the loose corn, but a great many weeds also, besides slugs, grubs, and wire-worms. They are about the most useful things a farmer can have for this purpose, as they help to purify the ground so much.

All early goslings which are not intended for stock purposes should be killed at the end of the summer, about September, or earlier if possible. That is to say, they should all be killed at from ten to thirteen weeks old, as

after that time they begin to shed their feathers, but they should be fed well on meal the last three weeks of their existence. I have had them weigh 13 lbs. at 12 weeks old. Stock geese I have had to turn the scale at 15½ lbs. at 12 weeks old, but if they can be got to weigh 9½ or 10 lbs. at 13 weeks old, that is very fair.

I know many farmers make 9d. and 10d. per lb. of their goslings and they are less trouble to rear than any other variety of the feathered tribe I know of. After they are two days old they will eat anything which is given them. I have known geese to be turned out at four days old and never have anything given them except the grass they eat, but, of course, when they are reared in that way they never turn out to be very large. If size is required they must be fed on good nutritious food as well as grass.

There is nothing so disappointing when one goes to market to buy dead geese as to find they have purchased a tough old bird. Geese live to an immense age, and in many cases old ones get killed in mistake for young ones and are sent to market; those who buy them find out their error when it is too late.

A gentleman I knew went once to a country town market a few days before Christmas to buy a fine goose, at a little place called Coleford, in Gloucestershire, and seeing a young girl who had two splendid geese at the market, he enquired the price: "ten shillings each" was the reply. My friend said he only wanted one, he would give more for that, but the girl said she could not separate them.

The gentleman, seeing a friend of his in the market, asked him if he could do with a goose and he said "by all means,

just what I want." My friend then went back to the girl and said "I will take the two geese my girl, here is the pound (which she took), but now tell me why you would not separate them." "Well, sir," was the unexpected reply, "my father said I was not to part them, as they had been running together 19 years before the speech-house, so it would be a pity to part them." My readers can judge the feelings of my friend. He sold the geese again, as he knew better than to take them home to his wife, and a fine joke the gentleman had with the friends he sold them to. It is really a fact, geese will live to be 50 years old.

The advice I would give to all those who buy geese is, see that you get them first-hand from the breeders if possible.

Those who have every convenience for keeping geese should rear a few for their own table, then they will be quite sure they are young.

Geese are very easy to rear after they are two days old, they require scarcely any attention, and they can be brought up where there is no water for them to swim in equally as well as if they have a pond.

The first batch of eggs should always be set, if possible, under large hens, four or five can be placed under her according to the size of the hen and eggs. Some geese eggs are much larger than others, especially when the stock birds are old.

When the goslings are first hatched out they should always be put away if possible from the old ganders and not allowed to run in the same place, because the ganders are so proud of them and take such care of the young ones that in

many cases they neglect the geese, and the eggs are not fertile.

When the hen has sat upon them, after the young ones are hatched out, the goslings need only run with her for about a week or ten days, after that time they will take care of themselves.

Should they be hatched out early in the season they want putting in a warm place, but after May comes in no matter if they stay out all night, as long as they are well protected from thieves and vermin.

When the old stock geese have finished sitting and the young ones are hatched out, the old ganders become very spiteful, in fact, they are really dangerous, especially where there are children running about. They will seize a child with their bill, and striking it with their wings, which are very strong, are liable to break its arm or leg, so that it is important that children should be kept out of the way while ganders are running about during the breeding season. They do not usually take much notice in any other part of the year.

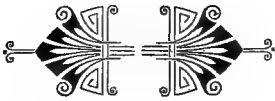
If a gander is noticed to be very spiteful, a good plan is to give it a blow on the head with a wisp of straw or something soft that would not injure it. I usually give mine a blow with my open hand on the side of the head. This frightens them, but if the first punishment is not effectual, it should be repeated, and the desired result will be obtained.

A goose should be allowed a large nest or box, a hole scooped out of the ground with some hay or straw (the former is best) will do well, geese will make their own nests,

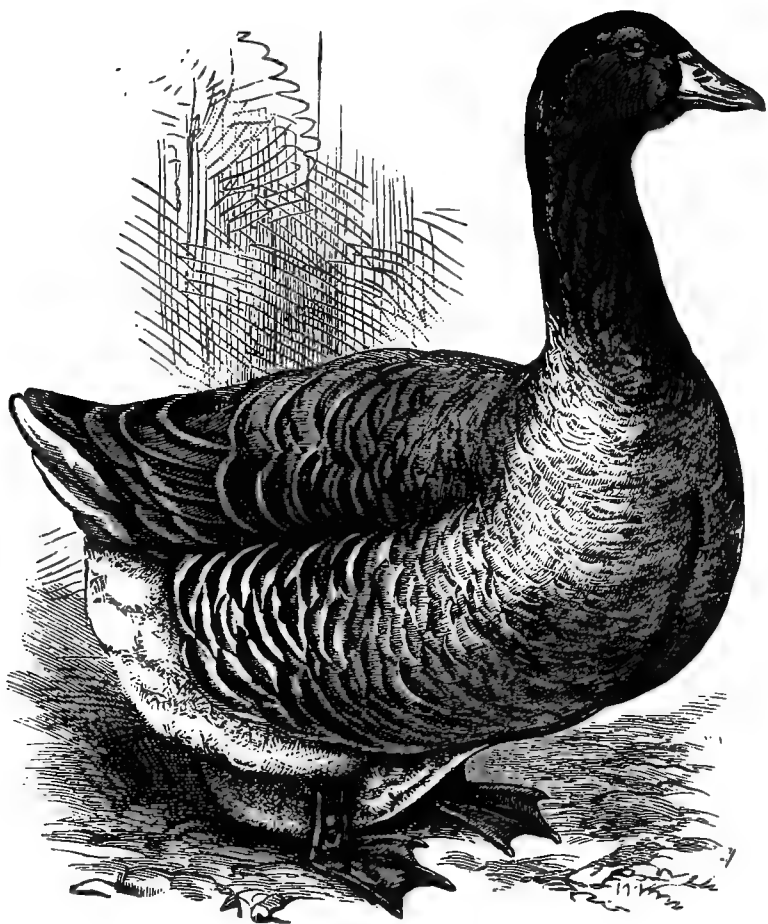
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but it is always best to scoop a hole in the ground. They should, if possible, be taken off in the morning and fed because some geese sit so close they will not come off for three days. Geese are different from hens, they seldom go wrong while sitting, even if they do not come off to get their food.









TOULOUSE GOOSE.



TOULOUSE GEESE.

The comparative advantages of pure and cross-bred Geese—White and Brown Geese : the value of their feathers—Toulouse Geese : their points and peculiarities—Geese for breeding : their condition and weight.

I am often asked which are the best geese to keep, pure or cross-breds. This depends a great deal upon what they are required for, or perhaps it is better to say whether they are required for stock or eating purposes.

If they are wanted for stock, pure breeds pay the best, a large number of people like to have their stock pure. To such I would say by all means go in for pure geese.

To those who want to turn them into money as quickly as possible for eating purposes, I would say, go in for cross-breds.

The feathers of white geese are worth considerably more when the birds are killed than those from brown birds. This is, of course, a consideration where people keep a large flock, as goose feathers always sell well.

Toulouse geese grow to an immense size, the illustration will give my readers an idea what they are like. The underneath part of a Toulouse goose when pure is very close to the ground, and some poulterers do not like them for the table so well as other breeds, as they say there is a great deal of offal or surplus fat, especially at the end of the breast and round the abdomen. Notwithstanding this they are very large birds. The colour of them is grey and they are good layers, usually commencing about the end of January or the beginning of February, if they are seen to properly. Sometimes they are a little later, it depends a great deal upon the season. The Toulouse have the largest frame of any geese we have in England, and being good layers as well, form one of the best varieties for crossing with other geese. This will be referred to more fully in the chapter on crossing.

A well-bred Toulouse goose or gander is pencilled with a dark and light brown shade all over the back and breast, on the wings and down to the thigh. The fluff underneath is almost white.

A pure Toulouse can easily be detected because there is an opening between the end of the breast-bone, giving the appearance of two ridges between the legs, while in other geese the breast-bone comes down level. The abdomen is much nearer the ground than that of any other variety, and when they get two or three years old there is usually a long piece of skin hanging down underneath the throat. The colour of the bill and legs is orange, and should there be white on the bill it denotes either careless breeding or a touch of some other blood.

When these geese are old the bills will sometimes turn almost white.

If this variety are fed well and attended to properly while young they grow to an immense size. I once had two ganders at 15 weeks old weighing 19 lbs. each.

Prize-bred ganders which are shown will often weigh from 25 lbs. to 30 lbs., but I do not advise such immense birds for breeding from, as they themselves do not breed well and their progeny are even worse in this respect. Geese which are kept in just stock condition are much better for breeding from.







ITALIAN.

Italian geese: their origin and plumage—Difficulties in breeding Italian Geese—Italians crossed: peculiarities and difficulties—The laying qualities of Italian geese.

ITALIAN Geese have not been in England very long, but they made a great start when they first came over on account of their splendid laying qualities. I must admit that as far as I am concerned I tried to push them as much as possible, and endeavoured to get people to breed them all through the country.

Ever since they first came out they have continued to give satisfaction as being good layers, and they also mature very quickly.

The birds of this variety are not so large as some, but they are very profitable.

Those people who want plenty of eggs cannot do better than keep Italian. I am often asked what is the proper colour of this variety.

When they first came over, years ago, I saw nothing but a white goose with a grey head and a grey mark upon the thighs and middle of the back. The marking was quite even as though they had been painted. A few years after quite white geese were imported into England, but I could not say they were pure, and as I have never been to Italy to see how they were bred, I am obliged to go by what are produced in England.

I find many breeders have bred from coloured geese and have produced many white ones, but I have an idea that the Italian are not pure because they do not all breed the same colour, and it would be very difficult to detect pure Italian.

For instance, very often a cross between the Embden and Toulouse are exactly the same stamp and colour as the Italian, only larger, while others come with grey heads and just a patch on the thighs and middle of the back. This makes me think Italian geese are merely a cross and cannot be depended upon for breeding true.

As geese are bred more for domestic purposes than for exhibition, it matters but little even if they are not pure, as long as they produce a good number of eggs and breed fine healthy stock.

I recommend those who keep Italians to use an Embden or Toulouse gander, then they get a good number of eggs and the goslings come to a larger size and are better for market.

Italian, or rather geese which go by that name, are not so large as Embden, in fact the largest of the Italian are about the size of the smallest Embden, when they are put together

it would take a clever person to tell the difference. If the Italians were really pure they would breed true to colour the same as Embden and all other varieties. The fact is, they get crossed to produce size, and the first crosses come like the pure parents on one side and get sold as pure.

Suppose an Embden is crossed with a Toulouse, in many cases some of the offspring will come quite white and represent a pure Embden, and in many cases they are sold as such, but if they are bred from again they throw goslings with dark or grey feathers, which proves at once that there is other blood in them besides Embden.

My Italian are, I believe, about as pure as they are bred, but I feel sure they have two breeds in them. I am inclined to think, however, that the original colour of the Italian is white, though I am not quite certain, and then the Italians have had grey geese over from England to cross with them to increase size, so that there is a mixture of colour.

I mention these facts so that those who go in for Italian geese will not expect them all to come one colour or evenly marked, but I will admit that any breed which has Italian blood in it always makes good layers.







CHINESE GEESE.

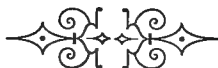
Chinese geese breed true to type—The popularity of Chinese—The laying qualities—Chinese geese for crossing and market.

CHINESE Geese breed truer to type than any other variety I know of in England. They are not large, but are certainly by far the handsomest geese which have ever been bred for domestic purposes in this country. They are an ornament to any place. They have a long and graceful neck, very thin and curved, much the same as that of a swan. The bill is black, with a kind of a horn or peak right at the top between the eyes, and a beautiful grey pencilled body.

I have every reason to believe this variety will become very popular in England. I am breeding a large number of them now as there is a great demand for them. The eggs are very fertile, and one reason people like them so much in their pure state is, they breed so true to colour and look such an ornament to any place.

They are the smallest variety we have in England, but they are tight in feather and are much heavier than they look. Those who only keep geese for their own domestic purposes I would recommend to try the Chinese, as they are the best layers. They will lay right up in the autumn. The late hatched ones can be got up for Christmas, and the early ones can be killed off. Ordinary geese do not lay at the end of the summer, so the Chinese just fill up the gap. A Chinese gander can be told much better than any other variety, as the horn on the head is considerably larger, and the neck is a trifle thicker and longer and more curved than in the geese, though it is possible to make a mistake even in this variety.

I recommend those who want geese for practical purposes, that is to breed for market, to use Chinese geese, and a Toulouse or Embden gander, then they can hatch right up in the autumn, and the goslings will come up well at Christmas. This would save from 25 per cent. to 35 per cent., as when young geese have to be kept from the middle of the summer right up to Christmas it comes expensive, but if they are hatched in the autumn, and get grown by Christmas, there is neither time nor food wasted.





EMBDEN GEESE.

Embdengeese: their size and points—The bad laying qualities of Embden geese—How to cross to develop laying qualities—Results of Embden and Italian cross.

EMBDEN Geese are pure white, with pale light grey eyes and pink bill and legs.

For many years I have found the Embden better layers than the Toulouse in their pure state, but the last few years the latter have gone right before the Embden, both in their laying qualities and also weight, though I believe that when the Embden have been bred for show they have beaten the Toulouse in weight.

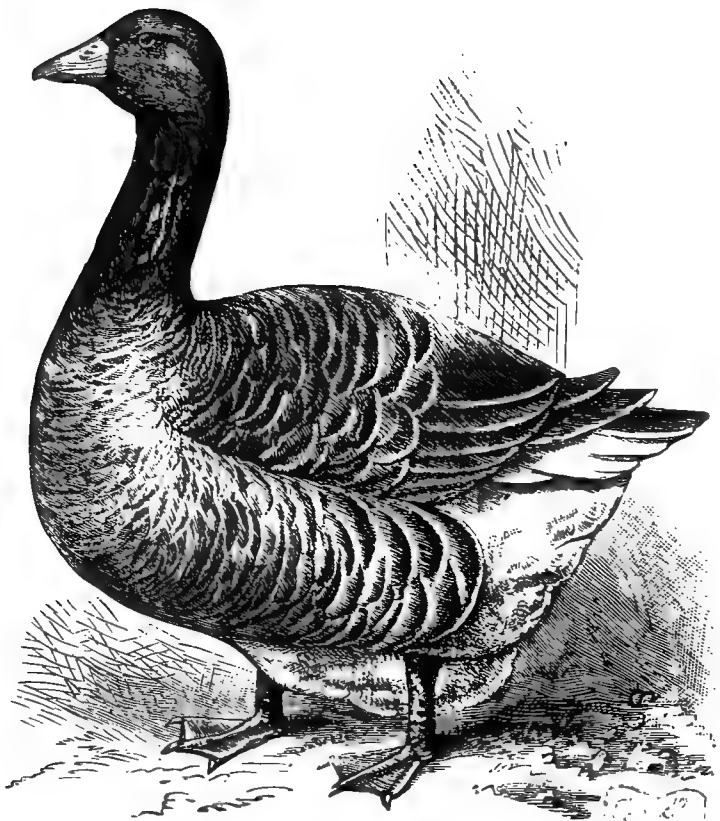
Just with ordinary feeding my Toulouse outstrip the Embden altogether in weight, but I must say the latter are the best geese for the table, as there is no offal about them and they are much heavier than they look. Poulterers usually prefer them because of their white feathers, as they are more valuable.

Many farmers, however, who have kept them the last few years, have been crying out about them being such bad layers, and that is one reason why they are not more generally kept. They are quite as easy to rear as any other geese.

Those who have already got Embden geese and are not satisfied with the laying qualities, but want to keep them white, should get some Italian, as there are some of that variety which come quite white, and they improve the laying qualities of the Embden very much, but for weight they are best crossed with the Toulouse.

Some will come quite white, while others will come brown and white, that cross (Embden and Italian) are often sold for pure Italian and sometimes for pure Embden. That is why some people say Embden geese are splendid layers. In most cases where they get this character they are in reality a cross between the Italian and Embden or Toulouse and Embden.





TOULOUSE GANDER.



CROSSING GEESE.



Crossing Geese—The best Crosses and how to obtain them—The utility of crossing Geese—Geese for waste land—Goose Eggs, fertile and otherwise : how to examine.

I am often asked which are the best geese to keep as cross breds. If a person is just about to start keeping geese and has no stock by him, I would say procure Italian or Chinese geese and cross them with either an Embden or Toulouse gander, and the results will be very satisfactory.

If they are bred from Chinese they are a better shape and there is not more than from $\frac{1}{2}$ lb. to $1\frac{1}{2}$ lbs. difference in weight. When crossed with an Italian they are rather larger, but not so tight in feather.

I will give my reasons why the Chinese or Italian geese are the best to use for crossing. To begin with both varieties are splendid layers, especially the Chinese, and these also lay later in the season, so that more young geese can be hatched. This is a very important feature. If they are crossed the other way, viz., with a Chinese or Italian gander, I should recommend Toulouse geese in preference to Embden.

Some people may ask the question, "Why cross geese at all, as they are very hardy in their pure state?"

Why I recommend crossing geese occasionally is, because it often comes cheaper to buy in a stock for crossing. Then again they mature quickly and are ready for the table at an earlier age, and the eggs are more fertile. Not only that, the goslings hatch out better when there is entirely fresh blood.

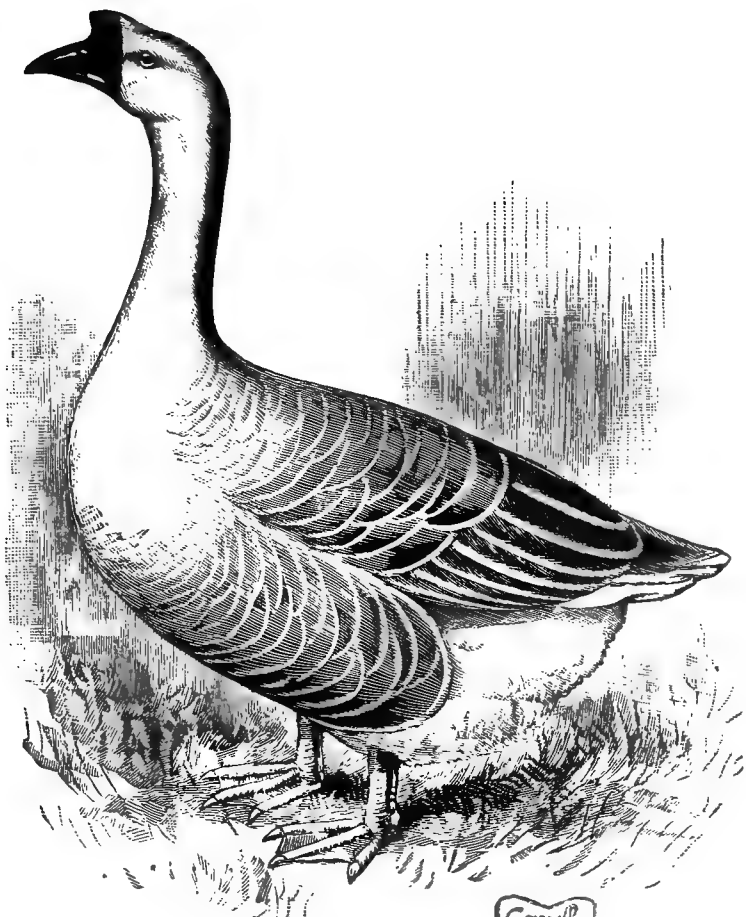
When the young ones are not hatching out well it is always better to get another gander.

The eggs from young geese are not quite so fertile as from birds over a year old; at the same time it is better for people to start with young geese, then they know the age of them, but if they start with old ones they cannot tell whether they are two years old or twenty.

When a person has a nice piece of cheap land for their geese to run over, there is a great deal of profit obtained from rearing geese for the markets.

Goose eggs take 27 or 28 days to hatch out, but it is always better to test them after they have been sat upon eight or ten days.

This should be done with a lamp or candle. If they are unfertile they are quite clear.



CHINESE GANDER.



When they are fertile a large dark speck will be seen rather nearer the large end than the small, and as the egg is gently turned round before the light a dark speck is noticed to move about.

That is the eye of the gosling. If the eggs are tested in this way it saves a great deal of time.







GRIT FOR GEESE.

Geese need grit—No grit : bad digestion—Grit and no grit : nothing compensates for loss of this necessary article.

GEESE are domestic birds, and are a variety which range a long way in search of all kinds of grit to digest their food. If they cannot get it on the surface of the ground, they will put their bill or beak in the banks, ditches or anywhere where it is to be found. Grit is as necessary for geese as it is for any other variety of the feathered tribes, though many people never give this subject a thought. As geese feed principally upon grass they usually consider it is not necessary.

This is altogether a wrong idea. Where a number of geese have been penned out in a grass field, where there is scarcely any grit to be found, I have often noticed the grass passed through the geese undigested as well as the grain, especially oats. It is just as necessary for geese as it is for turkeys, pheasants and fowls. I find when

young geese are supplied with sharp grit, to masticate or grind their food, they grow to a much heavier weight in a shorter time than when they are kept without sharp grit.

It must be remembered geese do not chew their food, but swallow it just as they take it into their mouth. As I have mentioned before, if there is a possibility of them finding any grit they will do so, as they know by instinct they require it.

When young or old geese are penned off, as they are occasionally in grass fields, they are deprived of this necessity. I always consider grit to the feathered tribes is the mainspring of life.

If a number of geese were penned in a lovely meadow, with good grass to peck at, and another batch were let run on a common, not more than half-a-mile away, where there was but very little grass, the latter would do better than the former, which had the good pasture.

Some of my readers may ask the question, "Why is this?" Simply because those which run on the common have a good supply of grit from the roads or pathways, whilst those in the grass-field do not get an opportunity of supplying themselves with this necessary material.

Where a number of geese are kept and they have no opportunity of getting on the roads where waggons or carts pass along, they should have some flint grit put at the bottom of a trough with water in it, a little grain, viz:—barley, buckwheat, oats, or something of that kind should also be put in the trough. The geese will put their bill into the water and forage after the grain, then

they find the grit and will afterwards help themselves when they feel they require it. Ordinary fowl-grit is quite large enough for geese. Goslings should have it very fine and sharp, such as is used for chickens. It is well to mix some about once a week in their meal for the first month of their existence, which helps their growth very much. Grit is a very simple thing and yet necessary for geese. It is only by observation and experience one finds these things out.



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W. COOK'S SPECIALITIES.

I have not mentioned my Specialities in the body of this book except by simply referring once or twice to the Poultry and Roup Powders, of which I am the sole manufacturer. The Poultry Powder is prepared especially for strengthening the organs of the body, and acts more particularly on the laying hens in the egg organs. It is a stimulant, and at the same time does not injure the bird in any way. The Powders can be discontinued at any time, and will leave the birds stronger and better for their having been given. They are used very largely in the autumn to bring young pullets on to lay, and to assist the old birds through the moult. There is no doubt but what the Poultry and Roup Powders have been one of the causes of my success in Poultry keeping as I always use them during the autumn and winter, and have about 40,000 customers for them. There are tonics sold which will make hens lay, but in many cases they only leave the birds weak and injure the egg organs, but there is not the least fear of this with my Poultry Powder. Some people use these Powders the whole year round, they say they get 1/- worth of eggs for every 4d. they spend on the Powder, so that it pays them very well, but I do not advise anyone to use it during the whole of the summer for the stock birds.

If the birds stop laying or get a little out of condition in the summer time, then a little of the Powder will bring them on to lay again, but when they always have it, it does not have such effect upon the bird's system because they get used to it. Poultry Keepers who use the Powder during the autumn and winter are seldom without eggs. This Powder is also used very largely for rearing Chickens the first three months of their existence, as it prevents gapes and cramp, besides assisting them to feather quickly. It is also used a great deal in rearing young Turkeys and Pheasants, but I prefer the Roup Powder for that purpose as it acts more upon the liver, and is at the same time a very strengthening tonic. It prevents Fowls, Turkeys and Pheasants from taking cold in wet weather, in fact, it is used very largely for this purpose, both in summer and winter. Exhibitors also use it for getting their birds into prime condition, as it makes them healthy and vigorous and brings a splendid gloss upon their plumage, but it does not act so much upon the egg organs as the Poultry Powders. Fowls before being sent to a Show should always have a pill made up of Roup Powder and again when they come back. I may say the Roup Powder was the first remedy in England introduced for curing Roup, and it has cured thousands of birds these last few years. I receive testimonials

from all classes of breeders almost every week in the year. I usually give my fowls Poultry Powder all through the winter about four times a week, but should it be a bitterly cold morning I give them the Roup Powder as that is a stronger tonic, and acts a great deal upon the liver. It also helps digestion rather quicker than the Poultry Powder, but I do not advise giving it regularly to laying hens. I also manufacture Roup Pills: these are always handy for a Poultry Keeper to have by him in case a bird gets out of sorts.

One shilling's worth of the Powder is worth eighteenpenny worth of Pills, only there is the trouble of making the latter up. In case of Diphtheric Roup, I have prepared a lotion which will take all the mucus from the mouth and throat. Some fowls are subject to scales or scurf upon the legs, and I have brought out an ointment which is used very largely at the present time amongst Poultry Keepers for clearing the scales off the legs.

I have also prepared an Insect Powder especially for Poultry, Pigeons, Cagebirds and Rabbits, so that it will not injure the birds or animals, but will destroy all the vermin in a few minutes if the birds are dusted with it, but it must be rubbed well into the feathers so that the skin becomes covered. In cases where there are nits round the head of the fowl the Powder will not kill them, but I have brought out an Ointment specially for destroying these pests. Some fowls have cramp in the legs, and to cure this I have prepared an Embrocation which usually puts the birds right after two or three times dressing.

Many Poultry Keepers have a difficulty in fattening their birds, and to make this easier I have brought out a fattening powder for the purpose. One shilling tin is sufficient for 10 or 15 birds while they are in the coop. It sharpens the appetite and helps them to digest their food. Most Poultry Keepers are troubled more or less with rats, and I have prepared a Rat Destroyer which is non-poisonous, and one which will poison and kill quickly. The first named will answer well where there are no dwelling houses near, and is splendid for poultry houses, but should the rats get in the house and under the floor they go in and die, which of course makes things rather unpleasant; but the poison kills them quickly and does away with that unpleasantness. I found by experience some years ago it was very necessary that fowls should have sharp grit, but it was a long time before I could pitch upon which was the best kind to give them. I tried glass and crockery ware broken up, pebble stones and oyster shells, but by opening the gizzards of the birds I found the edges of these materials were worn as smooth as marble, the glass lasting longer in the gizzard than the crockery ware, but it occurred to me flint stones might answer well, so I set to work to smash some in small pieces, and since then have kept my birds regularly supplied with this sharp flint grit for many years. This has also been one of the secrets of my success in poultry farming.

I had more eggs from 30 birds during the winter than those who kept 60 or 100 fowls. Then it began to get known about that I used flint grit, and for some time I used to give a little away, but at last it came to knocking up a large quantity, and as it was a slow process I used to employ men when they were out of work in the winter. When I first started the grit three men in a whole day would not knock up one cwt. Those who know what flint is, know it is nearly as hard as steel and it is a very difficult matter to break it up. When fowls have the advantage of this, however, as it lasts so long in the gizzard before it is worn smooth, therefore, everything in the way of grain, Crissel, &c., which goes in the gizzard gets masticated properly. Liver disease comes on very frequently through the lack of proper grit. At the present time I send the flint grit to almost all parts of the world for poultry, turkeys, geese, ducks, pigeons, and pheasants, when the latter are kept in confinement. My flint grit is all broken up by hand, and I shall never alter my course.

Since I started many other manufacturers have commenced smashing grit by machinery, and are able to put it in the market at a much lower price, but many of the sharp edges become broken in the grinding of the rollers, which lessens the value of it very materially. One cwt. of sharp flint grit would last 150 fowls twelve months, so that it only costs a trifle over 1d. per head to use the flint grit for one year, if it is broken by hand and is not thrown down to waste. It should be put in a little vessel so that they can help themselves. Occasionally I put a little piece in the soft food in case there may be a bird or two rather idle as regards picking it up, but the best layers are almost sure to eat it. It is necessary that chickens should have sharp grit the first two days they are hatched.

Some of my readers may be surprised to see so many specialities at the end of my book, but there is a use for every one of them. Those which I first brought out I offered to give away for the public benefit, but none of my friends would take them up. Knowing they were all useful and necessary for poultry I sell them, and they have proved a great boon to the poultry world. There was no book on Poultry to give anyone practical advice, until the Poultry Breeder and Feeder appeared. There was nothing brought out to cure Roup and Colds, till I introduced the Roup Powder. Grit was never once thought of as long as there was plenty of gravel till I commenced using it. There was nothing out to my knowledge to induce hens to lay without leaving them weak till the Poultry Powders appeared. The other little specialities I have mentioned were not known till I brought them out myself, viz. :—The Ointment for Scaly Legs, Embrocation, Insect Powder, Nit Ointment, &c. Not only have I brought these out, but it has been my greatest pleasure to help people in all matters concerning Poultry. I have given my whole time for many years, usually from 14 to 18 hours a day to travelling about 35,000 miles a year giving advice where I have been able to do so. My readers must not think I have said this for an apology for bringing out so many specialities for Poultry, but merely to state why I did it.

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He gives information free to all poultry-keepers on the management of poultry, also answers any questions on receipt of stamped and addressed envelope. All communications concerning this should be addressed to Orpington House, St. Mary Cray, Kent. He also travels to all parts of the United Kingdom for the purpose of planning-out poultry farms and runs, mating breeding birds, &c., for the nominal sum of 21s. and travelling expenses.

NOTICE TO VISITORS.

—:0:—

The Breeding Pens and Stock Birds are open for inspection every week day. W. COOK is at home on Wednesdays and Saturdays from 1.30 p.m. till evening, to supply every necessary information concerning the birds and give advice. For the benefit of the working classes the place is open for inspection on Bank Holidays. Orpington House, St. Mary Cray, is 3 miles from Orpington Station on the South-Eastern Railway, a little over a mile and a half from St. Mary Cray Station on the L. C. & D. Railway, and 2 miles from Swanley Junction on the same line. Anyone who cannot conveniently walk can be met by a conveyance at either station by appointment. Address all telegrams:—"Cook, St. Mary Cray." The portorage on each telegram is 6d., and this should be prepaid.

THE

POULTRY JOURNAL :

How to make Poultry Pay.

EDITED BY WILLIAM COOK.

PUBLISHED BY

E. W. ALLEN, 4, Ave Maria Lane, E.C.

THIS is the only monthly journal in England which is devoted entirely to the interests of Poultry. It has been said that a paper which did not include other pets (such as Rabbits, Pigeons and Cage Birds) would not pay. The first number appeared in June, 1886. In each issue there is a chapter of hints for the current month, according to the season of the year, showing how to manage both the old and young stock, &c. There are short chapters on Ducks, Turkeys, Geese, and Pheasants and their management, &c. Questions are answered through the columns of this paper, and also free by post if a stamped addressed envelope is enclosed. *Post mortem* Examinations are made on all kinds of Poultry, for the nominal sum of 1s. each. All specimens for examination to be sent, carriage paid, to 105, Borough, London, S.E. The reports appear in the Monthly Journal, and in cases of urgency, if a stamped addressed envelope is enclosed, they are answered by post. In cases of contagious diseases, a letter of instruction is sent free of any other charge. Specimen copy of the journal sent post free upon application.

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THE BOOK ON DUCKS,

AND

HOW TO MAKE THEM PAY,

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Duck rearing being an industry largely on the increase, W. COOK felt that those engaging in it would do better if they treated their birds more intelligently in many instances.

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Can supply Pheasant Eggs during April at
12/- per Dozen.

From the middle of May to the middle of
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After 14th June, 4 - per Dozen.

ALL EGGS GUARANTEED FROM UNRELATED STOCK.

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During January, February and March for
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Unrelated Cocks, 8/6 and 10/6 each.

It is well for people to lodge their orders
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BELGIAN HARES, SILVER GREYS,
And a cross between those two breeds.

They are bred just the same as wild ones, and are bred especially to turn down for fresh blood for those who go in for breeding wild rabbits. They not only increase the size of the wild rabbits, but there are less deaths among them when they are used. When wild rabbits are allowed to in-breed year after year they become too small without fresh blood, and many of the young ones die off between the age of three and six weeks with enlarged livers.

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Cross-Breds between Silver Greys & Belgian Hares, 4/6 each.

If a number is ordered before they are full-grown a reduction will be made.

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They are excellent to turn down with the wild ones where a person has an enclosed warren. They cross well, are very hardy, and breed wonderfully fast with wild rabbits.

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During September and October, 2/- each; November and December, 2/3 each. January—Does, 2/9; Bucks—2/3 each. The warren they are bred in is an extensive enclosure nearly two miles round.

Any gentlemen wishing to view W. Cook's Rabbit Farm must apply to him for that purpose, as he does not throw his large Farm open to the public the same as he does his Poultry Farm at Orpington House. It is only ladies and gentlemen who will be allowed to visit the Farm by special appointment with W. Cook, as it is between six and seven miles from Orpington House.

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THIS Coop will be found very useful by poultry-keepers, as timid hens often refuse to take to a nest when it is placed in a strange house.

The Coop can be placed in the house, close to the position in which the original nest was situated, and the hen will scarcely notice the difference. After the hen has taken to the nest, it can be removed to any convenient spot.

It is made so that it can be closed up to prevent rats or other vermin getting at the eggs, and will be found most convenient for sending broody hens by rail. It is also arranged so that, although the hen cannot get off the nest, sufficient light and air are admitted by means of a sliding door.

Strongly and Substantially Made, 6s. 6d. each.

W. COOK'S IMPROVED POULTRY HOUSES.

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Put together with Bolts; and free on rail.

LONG.		SIZES.		HIGH.		PRICES.	
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0 ft. 0 in.	×	5 ft. 6 in.	×	6 ft. 0 in.	...	3	10 0
0 ft. 8 in.	×	5 ft. 3 in.	×	6 ft. 0 in.	...	3	5 0
0 ft. 4 in.	×	5 ft. 3 in.	×	6 ft. 0 in.	...	3	3 0
0 ft. 6 in.	×	4 ft. 6 in.	×	6 ft. 0 in.	...	2	19 0
0 ft. 6 in.	×	3 ft. 6 in.	×	4 ft. 8 in.	...	2	5 0

Broody Coops for Six Hens, Price 13/6.

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W. COOK'S EMBROICATION FOR HORSES.

Safe and Simple Remedy for Sprains and Rheumatism.

There are several good embroications for horses manufactured. I have tried most of them, and some I have found to answer the purpose very well. The embroication I am offering to the Public I find is a great boon and should be kept in every stable. It is splendid for sprains and bruises, both in the legs and shoulders of horses. When they have been on a long journey, or running on the hard road, the sinews are often strained, but when this occurs, if they are rubbed with this embroication it prevents them from getting puffy and stiff in the legs. It will also be found a great boon when a horse goes lame, or stiff anywhere in the joints or round the gullet. Many horses suffer a great deal with rheumatism and by rubbing a little of the embroication well in, it will ease the pain and in many cases entirely relieve them. I do not say in every case, because what will cure one horse will not always relieve another; it is a matter of impossibility to bring about a complete cure in every case but I have found it to be the very best embroication I have ever used for horses suffering from any of the complaints I have mentioned. It will be found also a splendid thing for rheumatism: the horsekeepers, themselves, might use it and find it very efficacious in case of aching legs or shoulders, as if it is well rubbed in, it alleviates the pain in less than ten minutes. When using it for horses, rub it in very hard against the hair, then it works into the skin better. It is well to bandage the animal afterwards. The horse's legs may smart a little and the animal may get a little fidgety, but it does not take the hair off the horse's legs unless it is used very often, especially if the animal is bandaged after. Those who want to blister their horses should get something more powerful, but this is a simple and safe remedy. It is also very good for a horse with a sore throat. They will often swell round the gullet and between the jaws, the glands becoming enlarged. When a horse coughs or runs a little at the nostrils it is well to rub a little of this round the throat, as they are almost sure to have a sore throat. Sometimes when a horse comes in hot it may be a little tender on the shoulders, but if it is sponged down first with water, and then a little of the embroication rubbed in, it will prevent the shoulders from becoming sore.

Price, 2/6 and 5/- per bottle. Post free, 3/- and 5/-.

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AND

ORPLINGTON HOUSE, ST. MARY CRAY, KENT.

W. COOK'S HORSE POWDERS.

This Powder is a good thing to give a horse when in low condition. It acts as a tonic when the animal has been on a long journey. The animal can be worked the following day. It makes the coat look like a piece of silk. This tonic is a good thing to give a horse when it is changing its coat in the Spring and Autumn. The powder will be found all I have represented it to be by those who use it. It should be given in bran and a little chaff mixed with it, just moistened with water, not quite so soft as a bran mash. If the horse is only a little out of sorts he will not require it more than two or three times. Two dessert spoonfuls at a time is sufficient for a horse from 14 to 15 hands high. A cart horse should have two table spoonfuls. It is sold in tins, 1/-, 2/-, and 5/-. Special quotations for larger quantities. Post free 1/3, 2/4½, and 5/- carriage paid.

W. COOK'S OINTMENT

FOR

Chipped Knees or any kind of Sores.

Horses are very subject to accidents, perhaps more so than any other animal. The greatest misfortune which befalls them is falling down and cutting their knees, which of course lessens the value of an animal greatly, especially when the knees are cut deeply. It is said by experienced people when the hair is once cut off it does not grow smooth again like that which is remaining on the leg. I have tried many experiments for this, and have at last found an ointment which causes the hair to grow smooth, so that it is not noticed. The hair does not grow very strong and long when the knees are cut deeply and pieces taken out of them. In that case nothing will cause the hair to grow properly. I have dressed horse's knees which have been cut very much and the hair has grown again. The ointment can be used for any sores on horses, which may be caused by friction of the harness. It can also be used for cuts or bruises in any other animal. Full directions sent with the ointment. Sold in 2/- and 5/- pots, post free 2/4½, or 5/- worth carriage paid.

W COOK,

QUEEN'S HEAD YARD, 105, BOROUGH, LONDON, S.E.,

And ORPINGTON HOUSE, ST. MARY CRAY.

DUCK MEAL.

W COOK has brought out a Meal especially for Ducks, but has not offered it to the public till now. He has used it himself for many years, and has every reason to believe that it is the best meal that has been manufactured for Ducks. He does not know anybody who has got Ducks up to the weight of his at the same age, although there may be some. Those who feel inclined to give this Duck Meal a trial will be more than satisfied with the result. It mixes without sticking; there is no waste whatever, and the Ducks are very fond of it. It does either for rearing the young Ducklings or for stock Ducks, but biscuit meal should be used the first fortnight after the young ones are hatched.

THE PRICES OF THIS MEAL ARE AS FOLLOWS :

14s. per cwt. ; 7s. 6d. $\frac{1}{2}$ -cwt. ; 4s. $\frac{1}{4}$ -cwt.

CARRIAGE PAID TO ANY COUNTY IN ENGLAND.

This meal is made up of the most nutritious materials, including a great deal of meat, bonemeal, and oatmeal. It is excellent for its purpose, but it is not to be inferred that there are no other good Duck Meals in the market.

W. COOK,

Queen's Head Yard, 105, Borough, London,

AND

ORPINGTON HOUSE, ST. MARY CRAY.

W. COOK'S

Ointment for Destroying Nits on Fowls.

—:0:—

This is prepared for destroying nits on poultry, which are usually found round the head and under the throat. I have given the recipe in many of my writings for making the ointment, but there are numbers of people who will not go to the trouble of preparing it. I have therefore improved upon the recipe, and produced a preparation which will destroy every nit. It should be rubbed in carefully as far as the nits extend, and at the same time it does not injure the birds in any way. No matter whether the fowls are old or young, they should be well dusted all over with insect powder. DIRECTIONS:—Lay the bird on a large sheet of paper, which should be placed on a table, so that the powder, which rests on the outside feathers, can be shaken off with the hand on the paper, and put back in the box. When chickens, or hens, are very full of vermin twice dressing will do, but if not, once doing will be quite sufficient. This ointment will be found a great boon to poultry keepers, as it not only destroys the little vermin, but also the larger ones, which some people call "ticks," which collect round the head, and destroy thousands of chickens.

SOLD IN 6d. AND 1/- BOTTLES. POST FREE, 8d. AND 1/3.

New Edition.

THE POULTRY KEEPER'S ACCOUNT BOOK,

(W. COOK'S).

THE MOST COMPLETE METHOD PUBLISHED, PRICE 1/- ; POST FREE 1/1½.

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W. COOK, having an extensive Poultry Farm, has every facility for Teaching Practical Poultry Farming in every branch. His former pupils are very successful poultry farmers at the present time. References can be given to them if required. The Fee for Tuition is Ten Guineas, and the pupils can stay from three to six months as they please. They take apartments in the village at their own expense. Everyone wishing to go in for Poultry Farming or Keeping should write to W. COOK.

INSECT POWDER.

W. Cook's Improved Insect Powder will destroy all insects on poultry, pigeons, cage birds, dogs, and cats; also destroys black beetles, and is used largely for household purposes; its use is indispensable in keeping the nest and sitting hen free from insects, is perfectly harmless. Should be freely used just before hatching, both on the hen and in the nest, as it is impossible for chickens to thrive when covered with vermin. Sold in tins, 6d. and 1s.; by post, 8d. and 1s. 3d.; or 5s. tins, carriage paid.

W. COOK'S FATTENING POWDERS.

These powders are very useful in assisting poultry to put on fat and to keep them in health at the same time; they give them a keen appetite, and assist digestion.

For 12 Fowls, one dessert-spoonful three times a week

„ 10 Ducks „ „

„ 6 Turkeys „ „

Sold in Tins, 1s., 5s., and 10s.; by post, 1s. 3d.; carriage paid on the 5s. and 10s. tins.

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Sold in 6d. and 1s. Boxes. Post Free, 7½d. and 1s. 3d.

W. COOK'S EMBROCATION FOR CRAMP IN THE LEGS.

Sold in 6d. and 1s. bottles. Free by post for 8d. and 1s. 3d.

W. COOK, Orpington House, St. Mary Cray, Kent.

W. COOK'S PRICE LIST OF EGGS FOR SITTING.

Eggs of the following breeds supplied from December to June from strong healthy birds, carefully mated. Birds can be inspected on any week day. Broody hens supplied at reasonable prices.

PRICES PER SITTING OF 12 EGGS (PACKING INCLUDED.)

	£	s.	d.
Buff Leghorn	1	1	0
Golden Wyandotte	1	1	0
Rose-Comb Langshan	10	6	6
Plymouth Rock... ..	10	6	6
Black Minorca	10	6	6
White Minorca	10	6	6
Partridge Cochin	10	6	6
Buff Cochin	10	6	6
White Leghorn	10	6	6
Brown Leghorn	10	6	6
Langshan... ..	10	6	6
Silver Wyandotte	10	6	6
Black Breasted Red Game	10	6	6
Indian Game	10	6	6
Silver Grey Dorking	10	6	6
Light Brahma	10	6	6
Dark Brahma	10	0	0
Silver Spangled Hamburg	10	6	6
Golden Pencilled Hamburgs	10	6	6
Black Hamburg	10	6	6
Houdan	10	6	6
Andalusian	10	6	6
Scotch Grey	10	6	6
Redcap	10	6	6
Coloured Dorking	10	6	6
Black Rose-combed Bantam	10	6	6
Silver Sebright Bantam	10	6	6
Golden Sebright Bantam	10	6	6
Pekin Bantam	10	6	6
Black Breasted Red Game Bantam... ..	10	6	6

These are all prize birds, with laying qualities combined. Hundreds of birds have been successfully exhibited, bred from Eggs supplied by W. Cook.

Orpington	10s. 6d. and 21s. 0d. per sitting.
Rose-Combed Black ditto	10s. 6d. and 21s. 0d. ,,
Rose-Combed White ditto	10s. 6d. and 15s. 6d. ,,

This breed, which W. Cook has brought out, combines a handsome appearance with good winter and summer laying, and excellent table qualities. The birds have fine white flesh, and lay brown eggs. All the eggs sold at 21s. are laid by his cup and prize winners.

ADVERTISEMENTS.

The following are Pure Birds, but bred especially for laying qualities :—

								s.	d.
Buff Leghorn	...	...	...	...	...	...	per sitting	6	6
Plymouth Rock	...	...	...	...	...	...	"	6	6
Black Minorca	...	...	...	...	...	...	"	6	6
White Minorca	...	...	...	...	...	...	"	6	6
Partridge Cochin	...	...	...	...	...	...	"	6	6
Buff Cochin	...	...	...	...	...	...	"	6	6
Andalusian	...	...	...	...	...	...	"	6	6
Silver Wyandotte	...	...	...	...	...	...	"	6	6
Langshan	...	...	...	...	...	...	"	6	6
Dark Brahma	...	...	...	...	...	...	"	6	6
Light Brahma	...	...	...	...	...	...	"	6	6
Black Hamburg	...	...	...	...	...	...	"	6	6
Silver-spangled ditto	...	...	...	...	...	...	"	6	6
Golden Pencilled Hamburg	...	...	...	...	...	...	"	6	6
Brown Leghorn	...	...	...	...	...	...	"	6	6
White Leghorn	...	...	...	...	...	...	"	6	6
Redcap	...	...	...	...	...	...	"	6	6
Coloured Dorking	...	...	...	...	...	...	"	6	6
Black-breasted Red Game	...	...	...	...	...	...	"	6	6
Silver-Grey Dorking	...	...	...	...	...	...	"	6	6
Houdan	...	...	...	...	...	...	"	6	6
Indian Game	...	...	...	...	...	...	"	6	6
Scotch Grey	...	...	...	...	...	...	"	6	6
Silver Sebright Bantam	...	...	...	...	...	...	"	6	6
Black Rose-Comb Bantam	...	...	...	...	...	...	"	6	6
White Rose-Comb Bantam	...	...	...	...	...	...	"	6	6
Black Breasted Red Game Bantam	...	...	...	...	...	...	"	6	6

FIRST CROSSES.

								s.	d.
Langshan-Minorca	...	...	...	...	...	...	per sitting	4	6
Houdan-Minorca	...	...	...	...	...	...	"	4	6
Houdan-Dorking	...	...	...	...	...	...	"	4	6
Golden-spangled Poland-Cochin	..	..	...	...	...	...	"	5	0
Hamburg-Cochin	...	...	...	...	...	...	"	5	0
Redcap-Cochin	...	...	...	..	...	...	"	5	0
Houdan-Cochin	...	...	...	..	...	...	"	4	6
Minorca-Brahma	...	...	...	...	...	...	"	4	6
Houdan-Brahma	...	...	...	...	...	...	"	4	6
Indian Game-Dorking	...	...	...	...	...	...	"	4	6
Houdan-Plymouth Rock	...	...	...	...	...	...	"	4	6
Leghorn-Plymouth Rock	...	...	...	...	...	...	"	4	6
Plymouth Rock-Dorking	...	...	...	...	...	...	"	4	6
Langshan-Plymouth Rock	...	...	...	...	...	...	"	4	6
Indian Game-Plymouth Rock	...	...	...	...	...	...	"	4	6
Plymouth Rock-Brahma	...	...	...	...	...	...	"	4	6
Orpington-Brahma	...	...	...	...	...	...	"	4	6
Hondan-Leghorn	...	...	...	...	...	...	"	4	6
Orpington-Minorca	...	...	...	...	...	...	"	4	6
Eggs from selected cross-bred hens mated with Orpington cockerels							"	4	6

ADVERTISEMENTS.

DUCK EGGS.

	PER SITTING OF 11 EGGS.					Up to March 1st.			After that date.		
	£	s.	d.			£	s.	d.	s.	d.	
Prize Aylesbury	1	1	0			15	0				
Aylesbury	7	6				6	6				
Muscovy	7	6				6	6				
Rouen	7	6				6	6				
Pekin	7	6				6	6				
Cayuga	7	6				6	6				
Indian Runner	7	6				6	6				
Rouen-Aylesbury	6	0				5	0				
Muscovy-Aylesbury	6	0				5	0				
Pekin-Aylesbury	6	0				5	0				
Aylesbury Indian Runner	6	0				5	0				

GOOSE EGGS.

						Each.	Per Sitting of 11 Eggs.	
	s.	d.				s.	d.	
Toulouse	1	6				14	6	
Italian	1	6				14	6	
Italian and Toulouse Cross	1	3				11	0	
Emden and Toulouse	1	3				11	0	
Chinese Geese	1	3				11	0	

TURKEY EGGS.

						Each.	Per Sitting of 11 Eggs.	
	s.	d.				s.	d.	
Black Norfolk	1	4				15	0	
Cambridge Bronze from Prize Birds mated with a massive cock	—					21	0	
American Mammoth or Cambridge Bronze	1	6				15	0	

Special quotations for large orders and Incubators. After the 1st of June the price of Eggs is reduced.

Eight Eggs guaranteed fertile in each Sitting up to March 21st, after that date Ten in each Sitting.

Unfertiles under the numbers mentioned replaced if returned per Parcels Post to "Orpington House," St. Mary Cray, Kent.

Name and Address of sender with particulars to be enclosed in each box of returned Eggs.

EGG TESTIMONIALS.

As W. COOK sends out a large number of eggs in a year, and he has been fortunate enough to have a large proportion of them fertile he has received very many letters of thanks for the good results obtained. He appends a few of these, and may here say that he is always glad to hear from those purchasing eggs from him, and if the results are not quite as satisfactory as might be wished, he is anxious to meet his customers in the matter.

DEAR SIR,—I am entirely satisfied with result of the White Leghorn eggs you sent me, every egg having produced a chicken, and they have grown into beautiful youngsters, and are very much admired. I have much pleasure in expressing my entire satisfaction in the way in which you conduct your business, having dealt with you for five years.

I remain, Yours truly, T. H. EVERSLEY.

DEAR SIR, —I am pleased to tell you that the eggs you supplied me with have resulted in eleven fine chickens. The other two were fully developed, but crushed by the hen. Thinking you might like to know the result,

I am, Yours faithfully, JOHN PERRY.

DEAR SIR,—I am very pleased to be able to give such a good account of the hatching from the prize Plymouth Rock eggs, obtained from you on April 8th. There were thirteen fine chicks from the thirteen eggs; but unfortunately one died in the shell, and the hen crushed two. The remaining ten are thriving well, and are well marked with fine legs and beaks.

Yours truly, T. SMALLWOOD.

DEAR SIR,—While renewing my subscription for your "Poultry Journal," I have much pleasure in being able to give you a good report as to the quality of the sitting of Brown Leghorn eggs I purchased from you. I had one dead in shell, one rotten, and I broke one myself when setting the hen, but now at a month old I have 11 as nice healthy chickens as I ever saw. I may say this is the best result I ever had from purchased eggs.

Yours faithfully, GEORGE MACKIE.

DEAR SIR,—Am very pleased with the sitting of Black Minorca eggs purchased of you. Out of 15 eggs, 13 strong and healthy chicks, all doing well. I have also one of your last year's pullets, having proved herself very profitable, having laid at the age of 6 months, and, up to the present, 80 eggs.

I am, yours truly, C. HAWKINS.

EGG TESTMONIALS (*continued*).

SIR,—I am very pleased to tell you that out of the sitting of White Leghorn eggs you sent me I have thirteen fine chicks, now a fortnight old Will you please send me a shilling tin of your Poultry Powder for same by return of post, stamps enclosed.

Yours truly, A. WHETREN.

DEAR SIR,—My five Minorca-Rock chickens, that I hatched from your eggs have grown very nice birds, and have all turned out pullets. I have just purchased your "Poultry Breeder and Feeder," and am highly delighted with it. I think by comparing the photographed heads of your layers some of my above-named pullets will turn out capital layers. I may here state also I very much like your peat moss litter for the house.

Yours respectfully, A. JACKSON.

DEAR SIR,—I thought you would like to hear the results of the two sittings of eggs I had from you in February- From the Plymouth Rocks I had twelve strong chickens, and also twelve from the Minorcas. One has since died, so that I have twenty-three good chickens left.

Yours truly, A. JEFFERSON.

DEAR SIR,—I just drop you a line to inform you of the results of sitting of Brown Leghorn eggs you sent me. I received them three weeks ago to-day, and placed them immediately under a hen I had waiting. I forgot to say one egg was cracked in transit I suppose. Of the remaining twelve I have *eleven* strong chickens, the other egg being unfertile, and I take this opportunity of thanking you.

Yours, &c., W. H. NEWHAM.

DEAR SIR,—I am happy to say that I have had a splendid hatch from the Light Brahma eggs—twelve chicks and one bad egg. Hatching results only very middling with us here. Ducks are the most, mine were just commencing to lay at the end of February, when the severe weather set in and stopped them, and with the exception of one, none have since laid an egg.

Yours truly, WILLIAM McMURRAY.

DEAR SIR,—I am much pleased to let you know that out of the mixed sitting of White Leghorns and Black Minorcas sent me last month, I have this morning eleven fine chicks. This result with the temperature outside at 25 F. during one half the term of sitting, I consider really good.

Yours truly, ROBERT HART.

EGG TESTIMONIALS (*continued*).

DEAR SIR,—Last summer I got from you a sitting of Orpington Eggs. I think it no more than right to let you know that I got from the same eggs a lot of very grand birds. I have killed them all but one pullet, as I find the Orpington has a very good flavour when well cooked. The one pullet that I have yet I have saved until I hear from you, that is if you will be so good as to give me your advice. This same pullet has laid the extraordinary number of 59 eggs in 59 days, fed on plain food night and morning. She is now casting her feathers. You certainly deserve much credit for bringing out the Orpington fowl for they are a first class bird for eggs or table, “the proof of the pudding is in the eating.”

Yours truly, E. W. POULTNEY.

SIR,—Referring to the sittings of Orpingtons I had from you, I am glad to be able to tell you that I hatched eleven chickens from the sitting of Single Combs, and ten from the Rose Combs. I am very pleased with them as they have come so uniformly marked.

Faithfully yours, F. HUGHES.

SIR,—As the result of the sitting of Langshan eggs I had from you, I wish to say that I have been fortunate enough to get eleven strong and healthy chickens. They were somewhat late in hatching, but now that they have come I am more than pleased. My hen did not sit very closely, so perhaps this accounts for the overtime. I shall recommend your eggs to my friends as I have always found them good.

Yours obliged, A. J. MARTINEAU.

SIR,—You asked me at your office to let you know what results I had from the sitting of White Leghorn eggs I had, and I am pleased to do so. I have ten beautiful chickens with which I am more than satisfied. I shall be glad in future to purchase my sittings from you.

Faithfully yours, F. HOLMES.

DEAR SIR,—I had from you in the end of February two sittings of cross-bred eggs, one of Langshan-Minorcas and one of Houdan-Leghorns. Judge of my delight when I found I had ten Langshan-Minorca chickens and ten Houdan-Leghorns. I should have had two more of the latter but they died in shell.

Yours gratefully, T. SIMMONS.

DEAR SIR,—From the sitting of Pure Minorca eggs you sent me I have succeeded in hatching eleven beautiful chickens. My neighbours who sent elsewhere for their eggs have not been half so fortunate, and they all agree with me that your eggs are thoroughly good. I shall let you know in course of time what the laying, etc., results of the brood are.

Yours truly, A. RHODES.

DEAR SIR,—The sitting of Orpington eggs has given me every satisfaction. I have hatched twelve chickens which are all thriving and doing well.

Yours truly, J. FRYER.

EGG TESTIMONIALS (*continued*).

DEAR SIR,—I am happy to inform you that I have hatched out a good brood of Plymouth Rocks from the eggs supplied March 2nd. They travelled 200 miles, and the result is eleven chickens. I consider it capitally good, and it is to me a proof that eggs for sitting will, if properly packed, hatch out all right. I shall buy some more from you shortly.

Truly yours, EDW. LORENZO.

DEAR SIR.—I enclose 6s. 6d. in payment of the sitting of “White Leg-horns” I had from you about three weeks old. I have much pleasure in telling you that the eggs have turned out beautifully. I have ten healthy chicks out of the thirteen eggs—one egg the hen broke herself the third day after sitting.

Yours faithfully, R. GIBB.

SIR,—The results of hatching from three sittings of eggs is as follows: Orpingtons, ten live chickens, one dead in shell; Houdans, nine live chickens, two dead in shell; Langshans, ten chickens, three eggs added. Considering the long railway journey from you up to the North of Scotland I consider the results A1.

Yours truly, ALEXR. MURRAY.

SIR,—I am glad to be able to tell you that I have hatched nineteen chickens from the twenty-four cross-bred eggs which arrived unbroken. The incubator is one of my own making.

Yours faithfully, T. WILLIAMS.

SIR,—I have hatched ten chickens from the Orpington eggs, and they are all free from leg-feathering, I am glad to say, which is an improvement on last year.

Yours, etc. FARQUHAR.

DEAR SIR.—I now write to inform you of result of the sitting of twelve Plymouth Rock eggs which you supplied me with in March last. Every egg was fertile, and I have eleven strong chickens and one crushed in hatching. I need not tell you I am very well pleased. It is the best hatch I have ever had since I started poultry keeping in 1880. My accommodation limits me to one brood per annum, so you see the more in that brood the better for myself. When I require more sittings I shall as usual apply to you.

Yours truly, A. G. SMITH.

SIR,—I am very pleased to tell you that I have eleven strong chicks out of the Orpington eggs to-day, that is, only sitting twenty days, it shows me the freshness of the eggs. I had a sitting of Leghorns from a friend that was 48 hours hatching off—the consequence was I lost three of them.

Yours respectfully, E. HAYWARD.

EGG TESTIMONIALS (*continued*).

DEAR SIR,—The Silver Grey Dorking eggs I received from you on the 1st day of May have hatched very well, having got twelve chickens out of the thirteen eggs, the other being clear. I have some Dorking cockerels, which were hatched from your eggs, that weigh $3\frac{1}{2}$ lbs., being only eleven weeks old. I have also some Brown Leghorns from your eggs, four cockerels and five pullets; the cockerels all weighing over $2\frac{1}{2}$ lbs., the same age.
Yours truly, R. BROWN.

DEAR SIR,—I am glad to tell you I had twelve chickens out of a sitting of White Minorcas I had from you this year (1892).
Yours faithfully, J. HOPWOOD.

SIR,—I have had good results from the Rose-Combed Orpington eggs, viz., eleven chickens.
Yours truly, F. BONNIE.

Mrs. Layden has had very fortunate results with the Minorca eggs supplied by Mr. Cook—twenty-five chickens out of twenty-six eggs.

Mrs. Keeling is happy to inform Mr. Cook that the Plymouth Rock eggs have hatched well—of the eighteen eggs sixteen hatched, and the chickens thriving well.

SIR,—I am very pleased to tell you that the hens I have—which I hatched from eggs procured from you—have laid better than any I have ever had; and I have bred over ninety chickens from them this season.
Yours faithfully, A. GREAVES.

DEAR SIR,—I am sure you will be glad to hear that I have had a most satisfactory result from the sitting of Orpington eggs I bought from you lately. Out of thirteen eggs I had twelve beautiful chicks, all marked in exactly the same way, and no feathers on their legs. I have never had such results from bought eggs before.

Yours truly, AGNES F. HAMILTON.



W. COOK'S POULTRY POWDERS.

These powders are an invaluable composition for poultry under all circumstances. They are prepared especially to act upon every organ of the body, being stimulating, strengthening and warmth giving—in fact, they counteract many diseases poultry are subject to, improve their appearance by imparting a gloss and beauty to the plumage, and keep the fowls in good health by preventing colds and hardening the birds against the severe and constant changes they are subject to in this climate.

They are especially useful to birds while moulting, when there is a great strain upon the system in the growth of the young feathers and they are down in condition and need something to help them. They are also useful in cases where fowls mope about and do not care for their food, being a little out of sorts. The powders will be found most beneficial by acting upon the liver and bringing the birds on to full lay. Those who use them are seldom without eggs all the winter months. They are used very largely and have proved a great boon to poultry keepers. They do not over stimulate the fowls and leave them weak, like most other tonics do; they strengthen every organ of the body and can be discontinued at any time without injury to the fowls. They should be used from August to April, about four or five times a week, and if the weather is severe every day. Many people have used them all through the Summer of the past few years with excellent results; they do not injure the birds in the least, or wear them out sooner, as customers testify. They are invaluable for birds during the breeding season as they help them to produce fertile eggs in abundance. The same powders are used for bringing up young chickens, turkeys, and pheasants, and also with great advantage for young ducks; they have a good effect on all young poultry, assisting them in their growth, getting their feathers, and giving them health and vigour.

The quantity to be used is a full teaspoonful for eight full grown fowls and chickens proportionate to age, given from three to five times a week with the morning meal of soft food; it is best to mix the powder in the dry meal previous to adding the water, or it can be mixed in any kind of soft food. When the fowls are in full lay, or the weather mild, the powder may be omitted for a week or so. A change does them good. Early-hatched birds require it oftener than later-hatched, as the former suffer much from cramp, cold, &c., according to the weather. The use of it must depend upon the feeder's judgement.

These powders are sent to all parts of the world. They help the fowls to produce eggs in the coldest weather, and also when kept in close confinement eggs are produced in abundance. Where many did not get an egg for three months together, since using the powders they are never without them.

Sold in 6d., 1s., and 2s. tins, post free, 8½d., 1s. 3d., and 2s. 4½d., or 5s., carriage paid; 12s. tin for 10s., carriage paid; also supplied to larger breeders in linen bags at a reduced rate. Cash to accompany all orders

W. COOK, Orpington House, St. Mary Cray, Kent.

POULTRY POWDER TESTIMONIALS.

W. COOK has received thousands of letters speaking of the wonderful results obtained from the use of his Poultry Powders. A number of these unsolicited testimonials have been published, and he has thousands more. Space can only be found in this book for the following sample letters.

DEAR MR. COOK,—Will you please forward me a shilling tin of Poultry Powder, for which I enclose 15 stamps. I have used it summer and winter for two years, and have never found it fail. I have been receiving eggs all through the two past severe winters, for which the credit is due to you, besides having healthier birds than before. Before I commenced using them I was always losing hens, which was a great loss on the score book. It is my intention to purchase some eggs from you in the coming season as soon as a hen becomes broody.

DEAR SIR,—I was well pleased with the results of your Poultry Powders which I had from you last. I therefore enclose stamps for another tin of them.

Yours, etc., J. A. MILLAR.

SIR,—Enclosing P.O. for 5s., I will be obliged by your sending me five 1s. tins of Poultry Powder, which I have found exceedingly good.

Yours faithfully, E. WOODROFFE.

Sir,—I enclose an order 5s. for a box of your Poultry Powders. I got a shilling box a short time ago, and find them so good that I require a larger quantity. Hoping to have the Powder soon,

I am, Sir, yours truly, A. LASSEN.

DEAR SIR,—Will you send me one tin of Poultry Powder. I have enclosed you a postal order. I find that the Poultry Powder is a good thing. I have never had so many eggs in winter as since using your Powder.

Yours truly, W. HUGHENDEN.

DEAR SIR,—Your powder is a thing no one can do without who requires abundant supply of eggs. I have sixteen young hens fifteen months old, they have averaged 118 each since first January, not bad, thanks to the powder. Please send twelve 1s. tins, carriage paid, for 10s. Postal Order for 10s. Please send off at once and oblige

Yours truly, A. WICKHAM.

POULTRY POWDER TESTIMONIALS (*continued*).

DEAR SIR,—I must tell you that since I have used your Poultry Powder I have literally had double the number of eggs. I wrote to you two months ago, when I was getting only four or five eggs from fourteen laying hens. Now I have had eight, nine, and ten eggs every day for the last month from the same number of hens, and they seem in splendid condition. I had almost made up my mind to give up fowls, as I thought I could not make them pay in my small run.

Yours truly, NORAH SEDGEWICK.

MRS. FRENCH MULLEN is very much pleased with the Poultry Powder she had from Mr. Cook. Her hens commenced to lay four days, after taking it, and they had not laid an egg for five whole months. One hen laid all through her moult, though quite naked for a long time, through her use of the powder.

SIR,—Just a line to thank you for the 5s. tin of Poultry Powder. The results have been marvellous. All my pullets started laying within three weeks of my commencing to use it, although they looked very bad before that. I shall recommend it to all my friends.

I remain, Yours truly, JOHN LANDON-JONES.

DEAR SIR,—I am sure you will be glad to know what a great help your Poultry Powder has been to me during the past bitter winter. I have never been without eggs one day, although I have only twelve fowls. Hundreds of people round me have been without eggs for months, and I attribute my splendid success to the use of your Poultry Powders.

Yours faithfully, A. MERREWEATHER

MRS. GEORGE WARD will feel obliged by Mr. Cook sending her 28lbs. of his Poultry Powder and 14lbs of his Roup Powder. Mrs. Ward has much pleasure in informing Mr. Cook of her thorough approval of both Powders. Since using the former, which she has done for several months, her egg supply has been nearly doubled, and she has found the latter a most efficacious preventive in all cases of threatened diseases. Mr. Cook is at liberty to make any use he pleases of this letter.

DEAR SIR,—Owing to using your Powders, and following the instructions laid down in your book, I had from thirty fowls 240 eggs in December and 185 in January. Yours sincerely, W. DAVENPORT.

DEAR SIR,—Would you kindly forward at your earliest a 5s. tin of Poultry Powder, find enclosed P.O. value 5s. I should not like to be long without it, as I do not think there is anything can equal it, where egg production is the point in view. Yours respectfully, A. MOORE.

POULTRY POWDER TESTIMONIALS (*continued*).

DEAR SIR,—Please forward per first post one tin of your Poultry Powders at 1/3, as I find them very good for making my poultry lay. I have a hen laying now, a thing I never had before in such frosty weather.
Yours truly, E. I. SIDGWICK.

SIR,—Would you oblige in sending one box of Poultry Powders at 5/., and one box of Roup at 1/-. I must say a word in praise of your Powders. A few doses soon began to work wonders. I have twelve laying fowls. The last three weeks I have taken an account of the number of eggs, viz. :—53, 51 and 64. I have not used it all myself. My neighbours have seen the result—my fowls averaging double the number of eggs to theirs—they were induced to borrow, and now they are co-operating with me for more, as it has benefited their fowls as well as mine.
Yours, C. GREEN.

POULTRY MEAL.

LADY ROSE will be obliged if Mr. Cook will send her, to Loudwater Station, one cwt. Special Poultry Meal, and 10s. worth of Poultry Powders. Lady Rose hears from her farm that her hens have never laid so well as they have this winter, and they put it down to Mr. Cook's Food.

INSECT POWDERS.

DEAR SIR,—Many thanks for sending the Insect Powder, and I must say that it is really wonderful how quickly it destroys the insects, and gives the little chicks rest. I really should not have believed the effect, if I had not tried it, and I am sure anyone rearing young chickens should not be without it, and your Poultry Powders too, for mine grow very quickly by the use of it. I remain, yours truly, JAMES RUSSELL.

RAT DESTROYER.

SIR,—I now enclose two postal orders, amount of the account. We have used most of the second supply of Rat Destroyer, and though we do not see any dead rats, we think the number of living ones decidedly diminished. There are still a good many going about outside. They run up the ivy, and would come in at the windows in the old Tower if they could. We have caught several in traps.

Yours faithfully, B. A. HAMILTON.

STOCK BIRDS.

W. COOK

SUPPLIES ALL KINDS OF

Stock Birds for Pure Breeding & Crossing Purposes,

ALSO

BEST QUALITY BIRDS FOR THE SHOW PEN

AT

REASONABLE PRICES.

He Rears over 15,000 Birds Annually, having a Farm of almost 300 Acres for this purpose, in addition to his extensive Poultry Farm at Orpington House, and many smaller runs in different parts of the country. His Birds are well known in the show pen, he having been a successful Exhibitor for many years—combining excellent laying qualities with exhibition points.

Those requiring Fowls for Laying, Showing, or Exporting, should write to W. Cook, as he can always supply Good Birds for all purposes at a Moderate Price. It is impossible to state the exact prices here as they vary according to the season and quality of the Birds.

All Birds are sent on approval to any part of the country, on customer paying carriage both ways if Birds are returned.

CASH WITH ALL ORDERS.

Good Cocks for crossing purposes run from 7s. 6d. to 15s. 6d. each; for breeding pure from 10s. 6d. to 21s. each. Pullets from 7s. 6d. to 15s. 6d. Prize Birds supplied, prices according to quality. Pure stock Drakes from 7s. 6d. to £2 2s. each. Good cross-bred Ducks, 5s. 6d. and 6s. 6d. each, for breeding purposes; these should always have a pure Drake mated with them; Drakes supplied for this purpose at 10s. 6d. and 12s. 6d. each. Cross-bred Pullets from 5s. to 6s. 6d. each. In the middle of the summer he has occasionally a few young hens at 4s. each. Eggs can be obtained at any time at London Office if notice is sent a day or two beforehand to Orpington House. Export orders can always be supplied, and good reliable birds sent to any part of the world.

Address all Letters respecting Birds to—

ORPINGTON HOUSE, ST. MARY CRAY, KENT.

BIRD TESTIMONIALS.

It is utterly impossible to give a full and complete list of letters received by W. Cook speaking of satisfaction and good results with birds supplied by him. He annexes a few selected at random from thousands on hand.

DEAR SIR,—I am more than pleased with the White Leghorn cockerel which you sent me six months ago. Every egg laid by the hens mated to him have been fertile, and the chickens have hatched out remarkably strong and hardy.
Yours truly, W. SHODAY.

DEAR SIR,—I bought a White Leghorn cockerel of you on your recommendation to improve my flock and produce eggs, he is a splendid fellow now and has answered A1. I am perfectly satisfied.
Faithfully yours, BARNES BROWN.

DEAR SIR,—I am very pleased with the Minorcas you sold me in the spring. They have proved themselves excellent layers, and I have bred some splendid young birds this season. I thought it fair to let you know.
Yours truly, J. W. CARTER.

DEAR SIR,—The Dark Brahma cockerel you sent me has arrived and gives me good satisfaction. The Light Brahma cock you sent me with the hens some time since has again swept all before him, winning first in a class of nine imported birds at our last show.
Yours faithfully, J. HUNEBERG.

DEAR SIR,—I received the three pullets on Tuesday, and am very much pleased with their appearance, and I hope they will be good layers. The basket will be sent away to-day. I enclose postal order for 1s. 3d. for you to send me one tin of poultry powder.
Yours truly, JEANNIE A. SWANNOR.

DEAR SIR,—I received the birds safely this afternoon, and glad to say am delighted with them, I think they are splendid birds for the money. Have enclosed P. O. for birds received for which please acknowledge.
I remain, Yours truly, J. H. SILVERSIDES.

DEAR SIR,—The Orpington cockerel arrived safely, except for a slight cold, which your wonderful roup powder soon put right. I beg to thank also you for sending such a fine, good bird, he is very tame and also attentive to the hens. I must also say what a grand thing your poultry powder is for the birds. I have had a larger number of eggs since using it with your special meal.
Yours respectfully, G. CROFT.

BIRD TESTIMONIALS (*continued*).

DEAR SIR,—The Orpington cockerel came safely to hand on Wednesday mid-day in fine condition. I am not only satisfied but very much pleased with him, I must certainly say you selected me a beautiful bird. I have had a few friends call to see him and they all say what a handsome bird he is. I sent the basket back by return, hoping you will receive it all right. I shall send for an Orpington pullet very shortly, and I feel sure you will give me every reason to be satisfied.

Yours faithfully, SERGEANT W. BLACKWELL.

DEAR SIR,—Enclosed is cheque £8 8s. for the four Orpingtons. I am wanting a White Leghorn cockerel to mate with some cross-bred hens, if you have a *good laying strain* you may send it on approval, and please state price. In the Orpingtons I consider you have given me excellent value for money, and should I know of anyone wanting poultry or sitting eggs I shall recommend them to go to you.

Yours truly, ROWLAND SMITH.

DEAR SIR,—I enclose cheque for Brown Leghorn cockerel you sent me, with which I am highly pleased. He has been very much admired by all who have seen him, and it clearly shows that anyone living in the country can safely leave the selection of their birds to you. Put in the run with some of my best pullets, together they make a splendid picture.

Respectfully yours, S. BAILEY

DEAR SIR,—The Plymouth Rock pullets arrived safely. I am exceptionally well pleased with them, and shall certainly introduce your birds to poultry keepers here.

Yours faithfully, J. MALLEY.

DEAR SIR—Birds received. Accept my thanks for the handsome way in which you have treated me. I shall not forget you when I want birds or eggs.

Yours truly, G. T. BASSETT.

DEAR SIR,—I must tell you I am very well satisfied with the way in which you have treated me. I think the four pullets you have sent me are really good Orpingtons. I kept a pen of this breed last year, which I bought from you, and they were some of the best layers I ever had.

Yours truly, W. TWELVES.

DEAR SIR,—I have this day returned your hamper. I am pleased with the Rose-combed Orpington pullet. The last lot of eggs I got of you have turned out all pullets.

W. H. H.

DEAR SIR,—I received the pullets this morning early safely, and am much pleased with them. I have sent the basket back this morning, and have paid the carriage. Hoping to have success with them.

Yours sincerely, THOMAS TAYLOR.

BIRD TESTIMONIALS (*continued*).

DEAR SIR,—I received the cross-bred pullets quite safe on Tuesday morning, and am very pleased with them. The box was returned on Tuesday.
Yours faithfully, THOS. KNAPMAN.

DEAR SIR,—The White Leghorn cock arrived safely Saturday night; am very satisfied with him and hope to have good results. I have returned hamper.
Yours truly, GREVILLE WAY.

DEAR SIR,—The two Orpington cockerels have arrived in safety. I am very pleased with them; they are the best I have ever seen at their age. I'll return the empty basket as early as possible.
Yours faithfully, H. EAST.

SIR,—I am in receipt of the fowls. The Black Hamburg cockerel is a little gem, and I am highly pleased.
Yours truly, JOHN LEE.

DEAR MR. COOK,—I received the Plymouth Rock cock quite safely. He has been much admired, but not any more than he deserved. I am much obliged to you for sending him. I enclose 10/6 in P.O. The basket I have returned.
I am, yours faithfully, TOM BROWN.

DEAR SIR,—I received this morning the Orpington cockerel and three pullets. I am very pleased with them, they are really good birds, and denote good laying qualities by the appearance of their heads, being intelligent looking, and not sleepy headed like some breeds, and they handle like good table birds as well. I congratulate you on making such a good hit in their production.
Remaining, yours faithfully, JAMES WARD.

DEAR SIR,—It gives me great pleasure in writing to you to inform you of my success in showing my Orpingtons, which I hatched from eggs that I had from you. I have taken first with cockerels and second with pullets, which I am very much pleased with, as I know they are the coming birds for working men to keep. I must also say that they are excellent layers.
Yours truly, JACOB BRISTOW.

DEAR SIR,—I am sending back your basket, in which you sent the Minorca Cockerel, and I should like to take this opportunity of thanking you for sending me such a nice bird. He has a splendid comb and head, and I hope will breed me some good stock. I should like to tell you that the Orpington Cockerels I purchased of you, about three weeks ago, are very much admired by all who have seen them.
Yours truly, M. STUART.

BIRD TESTIMONIALS (*continued*).

The Hon. R. W. Coventry will be obliged by Mr. Cook sending two more Hamburgh Cochin pullets for laying by October. One of those supplied last year was the best layer he ever had.

DEAR SIR,—I received fowls safely last Friday, and I returned your basket on Monday last. I am much pleased with birds.

Yours &c., F. E. BOHN.

DEAR SIR,—I received the fifteen Langshan-Minorcas, and am very much pleased with their appearance. They all match well and do you great credit.

Yours truly, M. PEET.

DEAR SIR,—I have received the pen of Langshans, and am quite satisfied with them. They are good value for the money.

Yours truly, J. H. WOODS.

DEAR SIR,—Please send me one box of Roup Pills for poultry. I am pleased to tell you I took first prize at our Show for a Plymouth Rock cockerel and pullet under six months old, and shown with adult birds. These were bred from a cockerel and pullet I bought from you. I have three pullets, the same age as those shown, and they all commenced laying when they were four months and three weeks old, and have continued laying ever since.

Yours truly, T. KITLEY.

GERMAN MOSS PEAT LITTER.

Moss Peat instead of dust, ashes, or lime in the house is the greatest boon to poultry keepers of anything that I know. It saves time, keeps the houses clean, and is in every way a comfort to the fowls themselves. See my remarks on this subject in my book. If the houses are cleaned out three or four times a year it is quite often enough, as the peat does away with all smells, an occasional stir-up being all that is required. When once used a poultry-keeper would not be without it for anything.

Sold in half-hundred-weight bags	...	3/3	} Bag and free delivery per Carter Paterson included.
Three bags	... ..	9/-
Bales, weighing from 2 to 3 cwt.	...	9/-	} Purchasers must pay car- riage on these quantities.
By the ton	... ..	45/-
„ half-ton	... ..	23/-

W. COOK'S ROUP POWDERS.

These powders are used with excellent results for birds affected with Roup. When badly affected they can be cured by the use of it, and it is also invaluable for those fowls which have only a slight cold. The Powder is made into pills for those which have the disease fully developed. Full particulars and directions being given on the tins. For preparing birds for the show pen, and for keeping fowls generally in good condition and plumage, there is nothing to equal these Powders. When the birds have Roup and cannot eat they should have something nourishing, such as bread and milk or stewed linseed given warm. Always let them have as much food as they can digest. When the fowls first show symptoms of Roup they ought to have a tea-spoonful of castor oil given them, and half-a-teaspoonful of glycerine, even when they show signs of a cold they can have this given them. Isolate affected birds, and add camphor to all drinking water. Give the unaffected birds the Roup Powders in the morning meal—one heaped up tea-spoonful to 8 or 10 fowls. This will often stop the malady from going further. On a cold damp day a little of it is most valuable. When fowls are going on a journey a Pill or two will often prevent them from catching cold. A preventive is better than a cure. It has saved the lives of thousands of fowls all over the world. In many cases it has cured them when all other advertised remedies have failed. If fowls are suffering from lowness, or their liver is out of order, it soon puts them right and brings a bright lustre on their plumage, which improves them very much for the show pen. When a fowl has a rattling in her throat and a difficulty in drawing her breath, give a teaspoonful of glycerine, and when convenient stew some linseed and give from six to eight teaspoonfuls warm. Keep the affected birds on straw or moss peat. The latter is much the best. When the birds have swollen eyes, bathe them in milk and water with a little camphor in it. Always wipe the face and eyes dry, if not they catch fresh cold. When a fowl has a thick discharge called mucus, which corrodes round the tongue and throat, the Roup Lotion supplied by W. Cook, at 10½d per bottle, should be used. Directions for the use of same:—Take a feather, which dip in lotion, apply to the bird's mouth and throat, and turn the feather well round the mouth. In this way it will bring much of the thick slime away. In bad cases it requires a second feather to repeat; then it is well to take a feather and dip in glycerine, and also mop out mouth with that. This heals the wound. If this treatment is continued night and morning the reward will be the bird's recovery. Price:—6d. tin, by post 9d.; 1s. tin, by post 1s. 3d.; 2s. tin, by post 2s. 4½d.; 5s. tin, sent post free; 12s. tin, post free 10s.

W. COOK, Orpingto House, St. Mary Cray, Kent.

ROUP POWDER TESTIMONIALS.

The following letters are a sample of those daily received by W. Cook testifying to the efficiency of his Roup Powder.

DEAR SIR,—You will be pleased to hear that your Roup Powder has worked wonders with the hen you advised me to kill five weeks ago. I have to-day weighed her and she is nearly 2 lbs. heavier than she was before, and she has re-commenced laying, having laid five days in succession. This is, indeed, a wonderful cure, as she was almost dead when I adopted your course of treatment with Roup Powder, Lotion, &c.
Yours faithfully, F. J. DAILAY.

DEAR SIR,—Please send us a tin of your Roup Powder. The last we had cured every case, and some of the fowls were nearly dead with roup.
We are, yours respectfully, A. & W. GALLARD.

SIR,—Please send me 5/- worth of your Roup Powders, as I find them excellent for young chickens and hens going light. I will not be without them if I can avoid it.
I remain, yours, &c., A. CROSS.

DEAR SIR,—With reference to your Roup Powders, allow me to testify to their efficiency. To poultry keepers they are indispensable; they are the finest thing out for the cure of this disease. They act like magic, and soon cure the most obstinate cases. For the future I shall never be without it in the house. Please forward me two more 1/- tins, for which I enclose stamps to the amount. You are at liberty to make what use of this note you like.
Yours truly, JOHN MOCKFORD.

DEAR SIR,—Please forward me by return of post another tin of Roup Powder, for which I enclose stamps value 1s. 3d. Also tin of Poultry Powder, same price. I consider your powders the best I have ever used, and would not be without them at any price. I used some last year for turkeys very bad with roup, and the result was a speedy cure.
Yours truly, A. L. ABRAHAM.

DEAR SIR,—Have enclosed Order and Stamps for the amount of Powder sent. I have found great benefit from using your Roup Powders, which cured several seemingly hopeless cases. I have not had a case till last week of roup for weeks, so now I shall operate upon that. Thanking you for so promptly sending the powders. I am very pleased with the Orpington cockerel, and shall recommend the breed to my friends.
Yours truly, M. HARVEY.

Grit for the Feathered Tribes.

Sharp Grit is most essential to the feathered tribes; they cannot thrive without it. Flint Grit is the best. W. Cook supplies Flint Grit for Fowls, Turkeys, Pigeons, Chickens, and Cage Birds at 14/- per cwt., 7/6 per $\frac{1}{2}$ -cwt., and 4/- per $\frac{1}{4}$ -cwt. (State which it is required for when ordering). He pays carriage on not less than $\frac{1}{2}$ cwt. to customers residing in England, and within Carter Paterson's radius, also on $\frac{1}{4}$ cwt. quantities, and half carriage to Ireland, Scotland and Wales.

FLINT DUST,

Which is invaluable for laying Fowls, strengthening the egg organs better even than Bone Meal.—*See Meal and Corn List.*

PHEASANT MEAL.

W. COOK has brought out a Pheasant Meal—one which does not stick when mixed up. The young Pheasants do wonderfully well upon it. Not only is it good for the young birds, but it can be used in March and April to bring on the Stock Pheasants for early laying. Those who use it appreciate it very much, and we feel sure it is one of the best which has ever been brought out, though it does not lessen the value of other people's meals in the least.

W. Cook is often asked what Pheasant Meal is the best. Both in lecturing and paying professional visits he rarely speaks of his own, he usually recommends Spratt's. The best way is to give both a trial, then the breeder can see which is the best.

The price is 19/- per Cwt., carriage paid to any part of England, Ireland and Scotland.

Half Cwt., 10/-, carriage paid. (Not supplied through Agents, only direct from 105, Borough, S.E.)

This Meal is also used largely for rearing young Turkeys the first six weeks of their existence.

W. COOK, 105, Borough, London, S.E.

W. COOK'S PRICE LISTS OF MEAL AND CORN.

	1 cwt.	$\frac{1}{2}$ -cwt.	$\frac{1}{4}$ -cwt.
Poultry Biscuit Meal	17 0	8 10	4 8
General Meal	12 6	6 6	3 6
W. Cook's Special Poultry Meal	15 0	7 9	4 0
W. Cook's Duck Meal	14 0	7 6	4 0
Fattening Meal for Ducks	14 0	7 6	4 0
Bone Meal	14 0	7 0	3 9
Granulated Meat	21 0	10 6	5 6
Ground Oyster Shells	8 0	4 6	2 6
Flint Grit for Fowls, Pigeons, Cage Birds and Chickens	14 0	7 6	4 0
Flint Dust	8 0	4 6	2 6

Delivered free to any Railway Station in England. Half carriage paid on 1 cwt. bags to customers in Ireland and Scotland.

	Sack.	$\frac{1}{2}$ -sack.	Bush.
Wheat (best)	20 0	10 0	5 3
Buck Wheat (best French)... ..	18 0	9 0	4 6
Barley	18 0	9 0	4 6
Maize (small round)	19 0	9 6	5 0
Dari	18 0	9 0	4 6

Groats (whole) extra quality, 19/6 per 112 lbs. ; 10/- per 56 lbs. ; 5/3 per 28 lbs.

Carriage Paid ONLY within the delivery of Carter, Paterson & Co.

Orders for CORN cannot be executed unless a remittance for Sacks or Bags accompany the Orders.

Sacks charged $\frac{1}{4}$, 1-bushel bags, 6d., but allowed for when returned to London Warehouse, 105, Borough, S.E.

CASH TO ACCOMPANY ALL ORDERS.

W. COOK will be glad if Customers will specify the Station to which their goods should be addressed to avoid errors.

Customers favouring us with orders for Meals, Corn and Moss Peat, should write direct to 105, Borough. By doing so, great delay is saved, as sending to the Poultry Farm necessitates the re-posting of these orders to London Warehouse.

NORWOOD, S.E., March 16th, 1891.

DEAR SIR,—I am very pleased to tell you how splendidly my fowls are doing on your food. I have kept fowls for years, but never had them do half so well as now. I have had eggs all through the past severe winter, which I attribute to the use of your Meals and Poultry Powder.

Yours truly,

JOHN WILSON.

**W. COOK, Orpington House, St. Mary Cray, Kent,
and Queen's Head Yard, 105, Boro., London, S.E.**

"THE HORSE: Its Keep and Management."

PRICE, 2/6. POST FREE, 2/9.

The Book contains Chapters on Feeding Horses—Watering Horses—Tying Horses up in the Stable—Bedding down in the Stable—Cleaning Horses—Clipping and Singeing—Horses' Feet—Bandaging and Managing Horses in the Stable—Colds—Diseases and Shoeing—Breeding—Rearing Young Colts—Breaking-in—Driving—What is the best Material for the Stable Floor—Fever in Horses' Feet and Weak Joints—Illustrated.

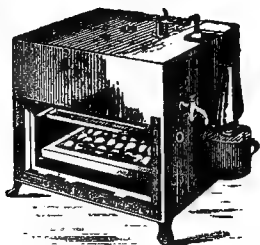
W. COOK is also a Horse Breeder of Ponies, Cobs, and Hunters: he also breeds a few Cart Horses.

Any gentleman wishing to view his Stock should apply to him as they can only be seen by appointment. W. Cook has also a few Young Horses for sale annually, well broken-in and trained, as he keeps a professional horse-breaker for the purpose.

PUBLISHED BY THE AUTHOR—

W. COOK, Orpington House, St. Mary Cray.

CHRISTY'S INCUBATORS & POULTRY APPLIANCES.



40 EGG METAL INCUBATOR

WITH SLIDE DOOR REMOVED SHEWING INTERIOR
THROUGH INNER GLAZED DOOR.

The well-known
THERMOSTATIC
INCUBATOR
has been further improved in its details, and is now fitted with a very superior method of regulation.

—o—

25 Egg (Metal)	Price	£3 0s.
40 " " "		£4 4s.
50 " " "		£6 0s.
100 " " "		£8 0s.

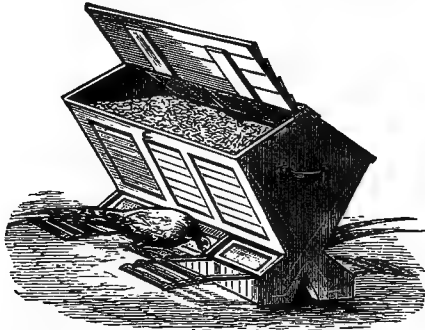
Artificial Mothers and other Appliances of the newest types.

APPLY TO THE MANUFACTURERS—

ED. SPENCER & CO.,
87, FENCHURCH ST., LONDON E.C.

C. FRAZER'S EXECUTORS, MANUFACTURERS, NORWICH.

No. 77. Improved Pheasant Feeder. (Design Registered.)

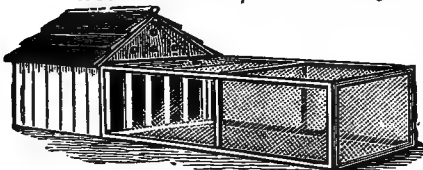


This Pheasant Feeder is constructed on quite a new and improved principle, adapted to the purpose for which it is intended, and combining lightness with strength. Is very simple and noiseless in working, and cannot get out of order. Constructed so as to be self-feeding—the corn being put in the bin at the top, and as taken away by the birds, gradually runs down into the feeding tray. The birds can see the food through the glass panel, and when they alight on the step it moves inwards with them, exposing the food. When the bird flies away, the step returns to its position, and the food is again covered.

REDUCED CASH PRICES—Carriage Paid on orders 40s. value and upwards.

For Six Pheasants	...	...	...	...	£2 5s. 0d.
„ Four	„	...	...	...	£1 12s. 6d.
„ Two	„	...	...	...	17s. 6d.

No. 78. Coop and Run for Poultry or Game.



Coop and Run 7ft. long by
2ft. wide, 1ft. 2ins. high
at eaves, 2ft. high at
ridge.

CASH PRICES—Carriage Paid on orders 40/- value.

Coop and Run complete	...	...	...	...	£1 0s. 0d.
Coop only	...	...	...	...	15s. 0d.
Run only	...	...	...	...	5s. 0d.

Runs can be supplied any length or height required.

Orders of 40/- value Carriage Paid to any Station in England. New Illustrated Catalogue of Conservatories, Greenhouses, Garden Frames.

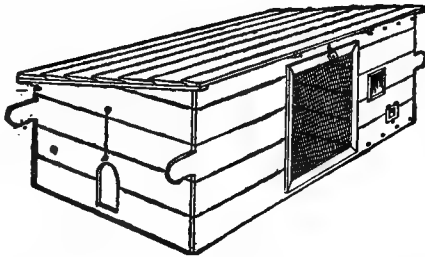
Silver Medal,



Birmingham, 1892

CAPTAIN TUNNARD'S PATENT POULTRY & PHEASANT REARER.

Number of Chickens.	SIZES.	
	Long.	Wide.
25	5ft.	2ft.
50	6ft. 6in.	2ft. 6in.
100	9ft.	3ft. 6in.



PRICES	
£3	5s. 0d.
£4	0s. 0d.
£6	6s. 0d.

Specimen Testimonials.

Erin Manor Poultry Farm,
Burgess Hill, Sussex.

DEAR SIR,—We are very pleased indeed with the Rearer and think it perfection, it seems by far the best one that has yet come out.

Yours truly, J. and A. TURTLE.

The Farms, Knighton,
May, 1892.

DEAR SIR,—Enclosed you will find cheque value £4 in payment of Rearer I had from you. I should be glad if you will please forward me another, same size, as soon as possible. I am exceedingly pleased with the one I have in use, it being simple in construction and very easily managed. I feel sure that anyone who has once used your Rearer would avoid—in future—rearing with hens if possible.

Faithfully yours, JOHN R. BACHE.

Cool Rearers, Fowl Houses, Safety Laying Boxes, Broody Coops, Fattening Pens, Feeding Troughs, Grit Boxes, Wire Netting, &c., &c.

FOR PRICES & PARTICULARS APPLY TO—

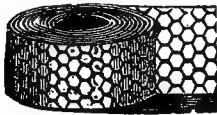
CAPTAIN TUNNARD, RUGBY

THOMAS'S Pheasantry, Poultry Yard & Field Requisites.

BEST QUALITY GALVANIZED WIRE NETTING.

Reduced Prices per Roll of 50 yds.

Cash with Order only.



Mesh.	1ft. Wide.	2ft. Wide.	3ft. Wide.	4ft. Wide.	6ft. Wide.
3in.	1/9	3/5	5/2	6/10	10/3
2in.	2/5	4/10	7/3	9/8	14/6
1½in.	3/5	6/10	10/3	13/8	20/6
1in.	4/6	9/0	13/6	18/0	27/0

Netting Staples 2d. & 3d. per gross.

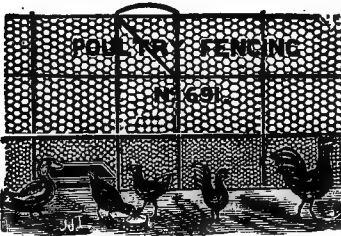
Cutting Nippers 1/3 per pair, very useful for Cutting Wire, &c.



NETTING STAKES.

	2ft.	2ft. 6in.	3ft.	4ft.	6ft. above ground.
Painted	3/9	4/9	5/6	7/-	12/6 per dozen.
Galv'zd	4/3	6/0	7/0	9/9	18/0

IMPROVED PHEASANT & POULTRY FENCING—No. 691.



- In Hurdles, 6ft. long, 6ft. high ... 2/3 yard.
- Gate, 2ft. wide, including Standards and Arched Stay ... 7/6 each.
- Angle Iron Pillars, for Corners ... 1/6 each.
- Light Poultry Hurdles, for Temporary Pens, 4ft. long, 3ft. high ... 1/6 each.

Very suitable for Pheasant Enclosures.

STEEL WIRE—Galvanized.



50 yard Reels	..	..	..	2/5.
100 "	..	..	..	4/3.
280 " half cwt.	..	..	..	9/3.
560 " one cwt.	..	..	..	18/6.
Solid Fencing Wire	..	..	..	9/6 per cwt.
Straining Screws & Nuts, 12in. Galvanized	..	..	..	3/0 " doz.
Fencing Staples, one and-a-half inch long	..	..	..	1/0 " gross.
Galvanized Wire Cable	..	..	..	17/6 " cwt.
Jet Varnish in Casks	..	..	..	1/6 " gallon.

Special Quotations for Large Quantities.

Sheep Hurdles	..	..	3/0 each.	Soft Galvanized Tying Wire	..	..	4d. per lb.
Cattle Hurdles	..	..	4/0 "	Roofing Felt, 32in. wide	..	..	3d. per yd.
Field Gates, 6ft. wide	..	..	27/6 "	Corrugated Iron Roofing	..	..	1/9 sheet.
Continuous Fencing	..	..	1/9 per yd.	Galvanized Ridge Capping	..	..	6d. per ft.
Unclimbable Hurdles, 4ft. high	..	..	4/3 "	Poultry Troughs	..	..	1/0 each.
Kennel Railing	..	..	4/0 "	Poultry Houses	..	..	60/0 "

J. J. THOMAS & CO.,
87, Queen Victoria St., 360 & 362, Edgware Rd., London.

ESTABLISHED 1860.

E. CLARKE & SON,

Letterpress, Lithographic and Copperplate
PRINTERS,

Publishers, Wholesale and Retail Stationers, Bookbinders
and Booksellers,

53, HIGH STREET, BROMLEY, KENT,

And the Printing Works, St. Mary Cray,

Offer the resources of their large and most completely appointed
Works to all who are desirous of obtaining First Class Printing
either Plain or in Colour, at Moderate Prices.

Their Works at Bromley and St. Mary Cray are among the best equipped
in the County—Spacious Premises, Powerful and most approved
machinery driven by Gas Power, a very extensive assortment of the
Newest Types and Ornaments, a complete Stereotyping Foundry, and
Bookbinding Plant and Machinery, together with a Large Staff of
Competent Workmen, enable them to undertake Printing and Book-
binding Contracts of any magnitude.

TESTIMONIALS.

Quernmore, Bromley, Kent,
March 14th, 1890.

I have much pleasure in bearing testimony to the excellent work turned out for me by
Mr. Clarke, who has printed several of my books, not only in English, but also in classical and
modern languages. The work is characterised by care, neatness, precision, and good style.

JOHN GIBSON, M.A.

REV. J. G. GARDNER, B.A., St. Paul's Cray, Kent.

It would be ungracious concluding this little book without returning my best thanks
to Mr. E. Clarke, Printer, of Bromley, and St. Mary Cray, for the taste and care bestowed in its
publication. From his very moderate charges, I should imagine would-be-publishers of their
own works could not do better than consult him before doing so.

*Printers of "The Poultry Journal," edited by W. Cook,
and other publications.*

Estimates promptly furnished for all kinds of Printing, including Music
Printing, and Works in Classical, Oriental, and Modern Languages.



"The *EARL OF SHANNON* will be obliged if *Spratt's Patent* will forward him one 'Kennel Medicine Chest' to below address as soon as possible.

Lord Shannon used *Spratt's 'Game Meal'* and '*Crissel*' for rearing his *Pheasants* this year, and NOT ONE BIRD died of any DISEASE, of course there were some losses from vermin, etc."

Castle Martyr,

Ireland.

16/10/91.

SPRATT'S PATENT

Coarse, Medium, or Fine Ground.

G A M E M E A L,

20/- per Cwt.

Mix with hot or cold water a few hours before use, so as to allow it to thoroughly swell. Make it crumbly moist, and if given warm do not give to birds too hot.

Patent Granulated Prairie Meat

"CRISSEL."

A pure preparation of Meat, taking the place of Ants' Eggs & Insect Food.

26/- per Cwt.

— C A R D I A C, —

A Tonic Powder, 2/6 per 7lb. Bag. Also in Shilling Packets.

Dust a little over the Food in cold or inclement weather, or when there is any tendency to diarrhoea.

BONE MEAL FOR YOUNG PHEASANTS,

1/- per Tin.

Ditto for Chicks, 1s. per Tin.

Bone Meal for Full-Grown Pheasants or Fowls,

14/6 per Cwt.

-- SAMPLES POST FREE. --

PAMPHLET ON PHEASANT REARING. POST FREE.

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SPRATT'S PATENT

(LIMITED),

Henry St., Bermondsey, London.

