

**S F**

487

.M38

LIBRARY OF CONGRESS.

Chap. <sup>SF487</sup> Copyright No. ....

Shelf . M3-8

UNITED STATES OF AMERICA.











THE KEY

— TO —

SUCCESSFUL

POULTRY RAISING

— BY —

J. D. MARTIN,

A Farmer and Practical Poultry Raiser,

BRUCE, MOULTRIE Co., ILLINOIS.

SULLIVAN, ILL.:  
The Progress Publishing Company.  
1887.





# THE KEY

—TO—

SUCCESSFUL

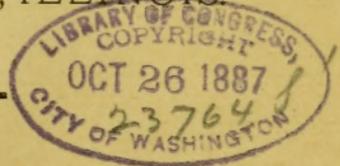
# POULTRY RAISING.

—BY—

J. D. MARTIN,

*A Farmer and Practical Poultry Raiser,*

BRUCE, MOULTRIE COUNTY, ILLINOIS.



SULLIVAN, ILL :  
The Progress Publishing Company.  
1887.

SF487

. M38

---

Entered according to act of Congress in the year 1887, by  
J. D. M A R T I N ,  
In the office of the Librarian of Congress at Washington.

---

8.24/11  
H.  
5.  
11

## ANNOUNCEMENT.

TO THE PUBLIC:—A book is wanted, which every one who keeps a half a dozen fowls, can afford to buy; and at the same time giving all the needed information in plain, short and direct language. The demand for useful knowledge, acquired by constant and steady practice in the Art of Raising Poultry, is everywhere apparent. The call for actual facts, instead of visions from impractical theorists, comes from all sections.

In answer to this demand I offer this small volume, all of which is respectfully submitted to the reader.

THE AUTHOR.



## PREFACE.

KIND READER:—In presenting you this small volume on Poultry Raising, I shall not cumber its pages with guess-work nor imaginary theories, neither shall I copy; but shall give you plain, experimental facts that I have learned from close observation in the poultry yard; and, if in its pages I do not give you my methods of raising poultry, it will be a failure in the execution rather than the plan.

The time is at hand when impractical theories must give way to facts, and in giving you my experience I am not located either in the suburbs or heart of some great city, but am located in the center of the poultry yard with the noise of fowls all around me. The hens are singing their daily song and the cocks crowing for joy. The turkey hen is repeating her sweet melody and the voice of the gobbler is startling the air. The fowls are all doing their duty, happily, knowing that at the regular hours their food will be supplied them.

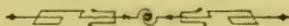
Before attempting to go further with this subject, let me ask you if you are going into the business with the intention of making it a success. Those who will not give their poultry regular attention, shelter them properly, supply them a variety of proper food in liberal quantities, and pay a strict attention to all the details of management, need not ever expect to succeed; but if you will follow the directions given in this book you can not help but succeed.



# THE KEY

TO

## Successful Poultry Raising.



ONLY ONE WAY TO LEARN.

There is only one way to learn the poultry business and that is to commence at the bottom and go up. Learn as you go. It is one thing to have the true theory but quite another to apply it at the right time and in the right manner. If you have only a few fowls to begin with, all the better. From them you can learn their habits and deeds and increase your flock as you learn. Do not get the poultry fever and buy one or two thousand to start with before you have learned the business. All such work ends in failure. If you know nothing of the business six fowls are better to start with than twenty. I know of parties who commenced in the thousands, finally quitting, disappointed and financially ruined.

---

POULTRY RAISING AN ART.

Poultry raising is an art to be acquired only by constant and continual practice and also by close observation, studying the disposition of fowls from day to day. You can, by studying their habits for five minutes every time you feed, soon have the acquaintance of your fowls

so cultivated that you can tell at a glance if anything is wrong with them, and if so, it should have immediate attention. This you must do if successful. Then if you have the proper remedies at hand for each and every disease you will have the pleasure of knowing that you can branch out into the business without fear of any financial loss. If you can master GAPES, CHOLERA AND ROUP and pay strict attention to feed, shelter and general management as herein described you need not loose more than one chicken, either young or old out of a hundred in one year.

---

### MONEY IN FOWLS.

There is money in keeping hens to lay eggs. The every day layers are the breeds wanted for this, such as Houdans, Leghorns, Hamburgs, Spanish and Polish.

There is money in rearing the large breeds for market, such as Brahmas, Plymouth Rocks, Wyandottes, Langschangs and Cochins.

There is money in breeding thoroughbred fowls. Procure them, rear them, advertise them and sell them. No money in giving good stock away.

---

### THE FIRST THING TO DO.

The first thing to be done is to decide what you wish to procure; what you can most economically furnish and sell best. If you wish to furnish both eggs and a market fowl you will need two varieties—one of the small breeds for eggs, the other one of the large or sitting breeds. I would recommend, in order to keep each variety pure, to keep them separate and avoid “in and in” breeding by changing your cocks every year or two from one strain to another. Dispense with all the old ones and procure young ones. A cock is in his prime in his

second year, though the small breeds appear to mature some earlier than the large breeds. In selecting a variety of chickens to buy, by all means procure the one you fancy most. If so you will be likely to take the best care of it. It does not pay to have stock of any kind unless you take the best care of it. Feed your fowls daily if you wish to make the most of them.

---

## POULTRY HOUSE.

Do you intend to start with twenty hens? If so we must first build them a house to stay in of nights and bad weather. A very convenient one and suitable for twenty hens and five roosters is built as follows:

Ten feet long, seven feet wide and five feet to lower eaves, seven feet high in center; door to face southeast with windows on each side of convenient size to admit plenty of sunshine; put two windows on south side also, having them to extend from six inches of the eaves to within one foot from the bottom or floor; side your house with common match boards one inch thick; batton the cracks; cover with shingles. For ventilation: At each end of the house run hollow tubes six inches square on the inside from within ten inches of the floor, perpendicularly through and extending above the roof two feet. These tubes act as purifiers by constantly drawing off the impure air from the inside of the house. In cold weather when the house is closed the foul air, which is greatest at the bottom, is continually passing through these tubes, and have a tendency to keep fresh air in the house at all times, which is so essential to the health of your fowls. You must now arrange your roosting poles in the back and about three feet from south side, situating them in northwest corner; place your roosting poles all on a level to avoid each one struggling for the

highest perch. For a floor, fill in with dry dirt dug up some where, say from the ditch which is to surround it, making the dirt in floor one foot deep. Then two feet from door, just inside, build a partition across your hen house the narrow way, building it of laths extending from floor to top, having your laths about one and one-half inches apart, so that your fowls can reach their heads through to the feed and water troughs which is to be placed in this small hall on the ground, and in this hall you can arrange a box or two in which to keep feed, gravel, dust, ashes, shells and lime so you can use as you need. Make you a lath door to enter the inside from the hall, to gather eggs and see to keeping things clean. Every morning sprinkle from your dust and ash box fine siftings of dust and ashes over their droppings and be sure to clean your hen house out clean at least once a week. Save these cleanings for your garden and you will be amply paid for your trouble, both from your garden and from your fowls. Now just outside your hen house and about two feet from it, dig a trench about ten inches deep so as to have everything well drained. If possible this house and ground should have natural drainage of the surface; if not, see that it gets artificial drainage. It will pay you well to do it. Your run surrounding the house should consist of at least one quarter of an acre, fenced in with laths which are cheap, so as to hold your fowls. If they are of the large breed a four-foot fence with laths sharpened at the top will turn them. If of the small breeds your fence must be higher. Make you a gate to enter the yard. Early in the spring plow up your run—or if set in trees spade up—and sow one-half in oats and grass for green food for your fowls during summer. The other half you can plant in potatoes and in plowing them you will afford your fowls a splendid place to scratch. In the fall sow in rye or wheat and you have a splendid grass run all winter. In this way you can keep your

poultry on the same ground year after year and your ground will be yielding you something too.

### DON'T CROWD.

Twenty hens in one flock in any place and at any time is enough and will lay more eggs, keep in better health than fifty would if kept in the same space. If you keep five hundred let them be in flocks of twenty hens and five roosters each. Fence off your run as desired; place your house in the center; set the ground in plum or dwarf pear trees; set your trees ten feet apart, using the kind that does best in your locality. These two kind of trees do a great deal better where poultry run than where they do not. The curculic attacks on the plum renders it almost impossible in some localities to raise them, but by keeping poultry among the trees this has been greatly overcome and large crops of plums raised. The insects also furnish a large amount of animal food for your fowls, which is so essential to their continuous laying. Your plum and pear trees in a few years will bring you on an average about two dollars per tree and your hens will clear you a profit of one dollar every year.

---

### PROCEEDING TO BUSINESS.

Presuming it is now the first day of January and our fowls well housed, we will proceed to business, but for fear your house will not be comfortably warm during the winter when the temperature of the weather is below zero and still falling, you must cover their quarters completely over, with straw at least one-foot deep, excepting ventilating tubes, door and windows so that your fowls will not be affected by the sudden changes of weather. Be sure your ventilating tubes are working all right so that your fowls will have pure air at all times. You must now feed your fowls three times a day—at morning, noon

and night. Their morning meal should consist of middlings and meal mixed with sweet milk and scraps from the table, seasoned with black pepper. Their noon meal to consist of cooked turnips and potatoes, adding a small allowance of wheat. At night feed whole corn parched and sprinkled with lime. Feed everything hot, giving warm water to drink. You must feed shells. Roast oyster or mussel shells in your stove pans, pound them up and feed them in a nice clean place. Your laying hens need all they will eat. Do not forget to give them gravel. And a dust box they must have. Make it about two feet long, one and one-half feet wide and six inches deep; fill two-thirds full of road dust and ashes; sprinkle two tablespoonfuls of sulphur through, and they will enjoy a dust bath every day if it is kept dry. When they scratch it out fill up again. Now if you have arranged your nest boxes so that the sun can shine on them, you will get eggs. You can not help it. If you feed them my Cholera and Roup mixtures, I find they lay more eggs, by feeding it once per week, than where it is not used. It appears like fowls need something like it as a stimulant on cold days. If you wish to set hens this month and not remove them to the hatching room, you must arrange them a very warm nest connected with a place to dust themselves and to get feed and water. A very good plan is to get you a common sized boot box, cover the bottom, except where the nest is to be placed, with dirt about three inches deep. In the end you place the nest put about what will make, when pressed down, three inches of manure fresh from the stable; on top of this put two inches of dirt, placing some fine straw on top of the dirt and be sure to shape the nest so that the eggs will not roll out. Now cover half of the entire length of the box with boards nailed on, commencing at the end in which the nest is situated. Now place a drinking vessel containing water and feed in the box. Everything is now ready to set the hen, provided

you have placed your box in the hall as instructed in building poultry house. About dark is the best time to remove the hen from laying nest to setting box. Nearly one hour before you intend to remove the hen heat a brick very warm and lay it in the nest until it has thoroughly warmed the nest; have your eggs warm—not too warm—and place them in the nest and remove your setter, putting her on the nest very easily; now cover the other half of the setting box with laths, leaving plenty of room between them so that the hen will have fresh air. Do not nail the laths on but have them movable so that you can feed and water the hen and inspect the nest to see if everything is working nicely. Sprinkle the eggs once per week with milk warm water. The day before the brooder comes off, which will be on the twentieth day, you must dip the eggs in tepid water and then put back in the nest and you will have but very few chicks die in the shell. On the twenty-first day you will have added to your stock of poultry a nest of nice chicks.

Your object should now be to keep them that way, but here the trouble commences.

---

## MANAGEMENT OF THE CHICK.

As soon as the chick is hatched it is exposed to the lice which infests the hen, unless you have used precaution and entirely rid them from your hen house. If you have mixed my Gape preventative with coal oil and rubbed all roosting poles and sprinkled over hen house and kept it perfectly clean, not allowing droppings to accumulate over one week, they will be free from lice; but if not, the lice from the hen will now lay hold of the chick and in a short time it will be gaping. To avoid this gaping business, lice or no lice, apply my preventative as soon as the chick is dry and in fifteen days after you use it, your trouble is over. For extended treatise

on Gapes see another place. You must now clean the nest box out clean and replace with dry dirt; replace the nest with some clean straw; sprinkle three or four drops of carbolic acid, diluted in water, around all parts of the box. As the weather is now generally cold you can leave the hen and chicks in the box. Feed and water is all your trouble now.

You must not feed the little chicks in the box where their feed will co-mingle with their droppings—this must be distinctly understood—for right here lies one of the secrets of success. Should you follow feeding in this manner you may expect disastrous failure. Every time you feed them while they are in this setting box you must lay a clean piece of paper, shingle or board of some kind in their box to eat from. After they get one week old you can use a saucer and it can be washed clean after using and then used again. Give them milk to drink and at this age it must be given sweet. Give also plenty of water to drink, with a little lime added. This is very essential and you should see that they get it. The growth of the bones and feathers consume lime and they must have it in some form.

---

### WHAT TO FEED.

If young chickens are not fed with some regularity and with food that is nourishing, indigestion sets in and they pine away and die. You should not feed them until twenty-four hours old. When first hatched they need hovering more than feed, and should the hen be restless and not wish to brood them, first feed her all the corn she will eat, giving her plenty of water to drink and she will generally remain contented. If at this time you have set two or more hens and you wish to put all of the chicks with one hen you can do so by covering her quarters so as to make them dark, leaving them for

twenty-four hours in the dark with just enough light to see how to eat and drink. If you do not thus arrange, the hen may peck all the chicks excepting the ones she hatched. A good sized hen may care for twenty-five chicks nearly as well as ten, yet they must have more room than ten. After the twenty-four hours have elapsed, if your well-to-do wife has any light bread she must dampen some of it with sweet milk and feed to the new-comers and give them a special invitation to make themselves happy and contented and that she will be at their service for anything they may want. You must be sure now to fulfill the promise you have so faithfully given and when the clock warns you that one hour has passed since you last fed the little fellows you must waste no time in getting back with some more light bread and do not forget to take some water with you this time and a small pie pan or some shallow vessel to drink from. If you have not light bread, which is the best feed young chicks get the first day, mix middlings and meal together and scald it with hot water; meal alone should never be given young chicks, if raw. Feed every hour for the first day you commence to feed. Feed every two hours the second day. Now I wish to make one point clear: you must not feed young chicks more than they want, as the food will be left to sour and mix with their droppings and be eaten again. In hot weather food will sour very soon. 'Feed but little and feed it often' is the point to be noticed now. The second day feed cracked wheat and finally whole wheat when they can swallow it. Such feed is better than soft feed as it will not sour so soon if left by them. Millet seed at this age is one of the best articles of food that ever was given to a young chick.

---

### THEY MUST BE KEPT DRY.

Here lies the main idea: After your feed has been given your chicks you do not want to lose your feed and

chicks besides. Therefore, I can not impress too firmly on your mind the necessity of keeping your chicks dry. Your little fellows can not stand to get all drabbled and wet even in August. You must have a shed or coop for them to shelter in during rains and they must not be let out until the grass and weeds are dry. Do not let them out of their coops in the morning until the dew is nearly all gone.

---

### WARMTH.

The young fowl is very short of feathers and if the weather is very cold will need some protection from the cold. If you have a shed somewhere that you can shut them in, put them there; if not, get you some cheese cloth or as thin muslin as you can get. Make you a frame eight feet long and two feet wide and about eighteen inches high; make it of light material; tack a lath every two feet on top of the frame and then stretch your cloth around the sides, ends and top; cut you a small door for them to go in from. Now you can place your hen and chicks in this and place your roosting coop at the end and the whole thing on a nice grassy plot and your chicks have the nicest little run you ever saw. You can move them daily to fresh ground. You must not let your young fowls roost on the damp ground; make your coops with board floors and they will then be vermin proof also. If you have plenty of money and wish to build something more costly than a muslin coop, you can build a low house sloping to the south with top covered with thick glass and you will also have a splendid place for your chicks in cool weather.

---

### GREEN FOOD.

The craving appetite of fowls for green food of some kind is visible in all poultry yards, and if your young

fowls are confined where they cannot get green food you must supply them. It will not take long to cut some young grass with a knife and feed to them; cut it about one-quarter of an inch long and throw in where they can get it. Your old fowls when confined must have green food in some shape.

---

### ANIMAL FOOD.

Animal food in some form young chicks must have if they are confined where they cannot get it. Feed them, daily, a small quantity of meat of some kind; if fresh all the better. If you live in the city get a small piece of offal from the butcher daily and give them. But if you live on the farm your cheapest and best animal food will be sweet milk, and if given in sufficient quantities will answer very well for the meat diet. When your chicks get about three weeks old and older feed them any and all kinds of milk, sweet or sour, and when they get of age sufficient to swallow it, let their main food be corn. The mineral part of their food must not be neglected, which is gravel, sand and shells broken in small pieces. This completes the food from the animal, mineral and vegetable kingdoms and if you keep feeding will in time mature the chick into the full grown fowl.

---

### A HATCHING ROOM.

If you wish to be successful hatching eggs, you must arrange so that laying hens cannot lay with those that are setting. No eggs will hatch well if the hen that is setting on them must have a fight every day to keep others out from her nest, thus jarring the eggs and probably breaking some. The most convenient way, after the weather gets warm, is to have a room of some kind

by itself for them. I have rooms, ten by twelve, made of common rough plank one inch thick; roof covered with boards. I have no windows in it, barely enough light to see to eat and scratch. This prevents their quarreling. I have dirt floor filled in ten inches deep, with their nests arranged around the wall. When a hen wishes to set you should remove her about dark from the laying room to setting room; confine her on the nest for the first two days, giving her food and drink; afterwards arrange the nest so that she can get off when she chooses, but do not let her from the room; keep the door closed. You must now provide plenty of food at hand, at all times, where she can get it. Feed mainly corn as it will maintain the heat of the body. Feed some kind of green food daily. Keep the dust box and gravel handy and do not forget to give plenty of water to drink. They can all eat and drink from the same vessel when not confined on the nest.

---

### HINTS TO BEGINNERS.

To those who have no knowledge of the poultry business and are thinking of engaging in the same, you will find these suggestions of benefit to you. There is plenty of room and money in the poultry business for those who go at it in a business manner and will use persistent energy to learn it. There is yet room at the top; but there is only one way to learn it. Get some system or work on Poultry Raising; read it over and over carefully until you become familiar with all the details of management. Start with one variety and if only a few of them all the better. Learn all you can about your fowls by close observation. Study their habits and needs daily. After you have been through one year's work, your experience and practice will be worth money to you. If you have been successful with a few do not increase too fast or you may get snowed under. If you

have kept twenty-five on your small lot do not forget that you cannot keep fifty on the same space. In all my varied experience I find it very easy to get too many. Fifty hens on a twenty-acre tract if kept in one flock is too many; under all conditions and circumstances do not keep over twenty-five head together. If you keep several flocks and will keep them a good distance apart they will do all the better. If you are going into the business you must make up your mind to work. If you cannot bear the idea of work by all means "launch your boat" in some other direction. Success in raising poultry means work, work, work! The successful poultryman is the one who has forethought and patience, who makes up his mind that he is in no small business, reading his poultry book carefully and working out the suggestions contained therein. The unsuccessful poultryman wastes his time in meditating on the empty visions of impractical theorists, who envies book knowledge and neglects practicing the principles that insure success. Don't think that you are crowded out of the poultry business because you are not located near some large city; don't let such a false idea rest upon your mind for even one moment. In these days of rapid transit you can get your poultry to a first-class market in twenty-four hours, if you live on through lines of transportation. If you do not, you will get them there soon enough with a very small expense. First decide what you wish to produce. Then commence right where you are.

---

## VENTILATION.

The lack of ventilation is one of the most destructive agents. Fowls to do well must not be deprived of fresh air. It is just as essential that a fowl have fresh air as it is with a person. Deprive your hens of fresh air and you will wonder why you get so few eggs. The natural

law is that they require the pure unadulterated fresh air of heaven. When you construct your poultry house see that it is properly ventilated. The great mistake of farmers is that their poultry become too much crowded. If the size of their house and ventilating tubes are capable of keeping twenty fowls in good condition, they will put about fifty into that space. They get no eggs. Their fowls begin to lose an interest in things about them. They act sleepy, begin to droop, pine away and die with all the symptoms of disease. All who know that this can be prevented should at once see to it. Properly construct your house, put the proper number into it, give them the proper food and proper tonics to keep them in health and you will find your fowls are paying you a profit instead of a loss. There are principles which underlie poultry raising the same as there are principles which underlie farming, and whenever you are trampling these principles under foot you are at the same time trampling your success under foot.

---

### WATERING FOWLS.

I find the best method of watering fowls is to water them from some old iron vessel, keeping water in the vessel at all times so that the fowls can help themselves when they wish. Their water troughs should be kept in the same place all the time. If you change your troughs from one place to another every day or two you will have some thirsty fowls at all times. Keep preventives of cholera in their water to destroy the germs of disease, provided you have them.

---

### MILK FOR FOWLS.

For chickens of all ages and sizes and all varieties, from the miniature Bantam to the largest chicken that

wears feathers—the Light Brahma—milk to drink is one of the most essential articles of food. It contains nutriment for all parts of the body. For chicks under three weeks old it should be given sweet; after three weeks old they can drink milk either sweet or sour without any injury to their health. For laying hens the value of milk to drink can not be over estimated. Instead of giving all the sour milk to the pigs give at least one-half of it to your fowls and notice which pays you best. If you are raising poultry extensively you will find it largely to your interest to keep several of the best milch cows you can obtain. Sweet milk given to your fowls while the animal heat is still retained is better than if given in any other condition. Feed it while still warm occasionally, if not all the time. The farmer who gives sweet milk to his laying hens has solved the problem of producing plenty of eggs cheap. Try it and in the end you will agree with me.

---

## NESTS.

I can not urge too strongly on having good nests for your laying and setting hens. If you have only one kind of chickens, all being about the same size, you only need one size for a nest. Make them a nest with plenty of room; if you do not, you must not grumble when you go out to the hen house and find that your setters have broken two or three eggs each. There are many different ways of making nests. Make the kind that suits you best, but be sure to make it with plenty of room. After you get your nest made whitewash inside and outside, and if you have my Lice Exterminator saturate the joints and cracks with a very small portion mixed with coal oil. After your nest box is completed put about two inches of dirt in the bottom and on top of this about two inches of oats straw if you have it, if not use any

kind you have. Then shape your nest to fit the hen's body. Now if you wish to set a hen put your eggs in, not over thirteen in number for a large hen; put your hen on about dark and remove the nest to the setting room, if you have one; and if not in spring and summer you can place the nest in a good shade out in the open air. In your orchard is a very good place. Then get two planks at least one foot wide and eight or ten feet long. Place them on edge, the width of your nest apart, having them come up closely on each side of your nest and extending their full length on the ground. Then nail laths over the top of them every one and one-half inches apart, the entire length of your plank or you can lay boards on the top and weight them down; you need not nail as you will want to place feed and water in the run daily. Now dig up a place in one end for her to scratch in. Keep plenty of water, feed and gravel by her and you have one of the most complete places outside of a hatching room I ever saw. You must sprinkle the eggs twice per week if the weather is dry and do not forget to sprinkle them thoroughly the day before the brood comes off. If the weather is windy it is best to clean out the nest, replacing nice, clean straw and leave your hen and chicks in this run a few days, by feeding and watering regularly.

---

### A SHADE FOR FOWLS.

Fowls to do well in summer must have some protection from the direct rays of the sun. This can be accomplished by setting out both trees and bushes. A fowl prefers the shadow of a bush to that of anything else. For trees I would recommend setting out either plum or pear trees as they can be set close together. For bushes I would recommend gooseberry, raspberry and currant. Set them around close to the fence and

their fruit as well as their shade will be relished by the fowls. If you prefer you can plant sunflower seed, and as they have a very wide leaf it makes a splendid shade. They will grow in most any kind of soil and their seed is among the best winter food we can get. I once saw a poultry yard where fowls were kept by the thousand and there was not a shade tree nor a bush in the yard. In a short time I heard of the same party selling out what few fowls he had left and quitting the business financially embarrassed. Fowls will not thrive nor do well if they have not a shade of some kind in summer. If you have no shade do not count on much profit in warm weather. The fewer the mistakes you make, the greater will be your profit. Therefore, as they are pointed out to you do not go ahead and make the same mistake. Attention to such things is the true way to success.

---

## ROOSTS.

It is of the utmost importance that your poultry have good roosts. Some breeders recommend having your fowls roost on the ground; others that their roosts be eighteen inches high. My plan, and I find it very successful, is to have the roosting poles about three feet high, and to build it is very easily done. Get four hooks with holes drilled in the top end to nail to the top of the hen house. Get four straps of leather or rope; fasten one to each hook and the other end to a cross piece two inches wide and one inch thick. You now have a scaffold across which you can place your roosting poles, eighteen inches apart. Let the roosts be in the back part of the house and just in front of your first roosting pole make fast one end of a very wide plank across which cleats are made fast every few inches. Put the other end on the ground and have your plank of sufficient length that it will not be too straight. Your fowls can walk up

on this plank and get to the roost without much effort. Your heaviest Brahma can reach the top the same as your highest flying Leghorn. You then have your fowls up from the ground which is so much better for their health as the foul air in the hen house is near the floor, they avoid breathing the worst of it. It does not matter who says for them to perch low, if you arrange as it should be, they will be healthier when perching higher. So do not make a mistake by having low roosting poles or probably none at all. Your fowls with such a roost as described can come down the same as they go up.

---

### LOOKOUT FOR VERMIN.

It is too often the case with farmers that they do not provide suitable accommodations for their fowls. Sometimes they have no hen house at all. Others have houses so dilapidated that their fowls are generally more comfortable on the outside than on the inside. Your houses should be so tight as to keep out weasels, minks, skunks and rats. After your patient wife has spent a whole summer working and raising poultry, it is very annoying as well as a great loss to have them half killed by a weasel or mink. He comes at the hour of midnight when you are sound asleep, and if you do not have a tight hen house or coop, do not blame anybody but yourself. It is natural for the blood-thirsty weasel to see how many he can kill in one night. He will also take the best as well as the poorest of the flock, but it generally happens that he gets the ones you value most, such as the muffled and "keep-sakes" of the family. If your poultry roost in trees, the owls will claim their share and issue an "attachment" on the same. Rats are one of the worst enemies of the young fowl. If they harbor near the poultry yard take your cats and dogs and commence war on them at once, and do not hoist

the flag of truce until the last enemy is destroyed. I have had some very valuable experience with rats and weasels. The first year I raised poultry, in the month of August I lost every young fowl I had and part of my old ones in less than forty-eight hours by a pack of weasels. And I have had the rats take my pets one by one. From such experience I learned: "what is worth doing is worth doing well." Therefore, you must be prepared for all emergencies if you wish to make poultry raising a success.

---

### AVOID MISTAKES.

Now to beginners in raising poultry, you must avoid the mistakes pointed out by others and it will save you time and money. So if you have no hen house now is the time to build. Make small coops for your young fowls but do not get them too small; make enough to accommodate the number you intend to keep, and by all means do not put too many in one coop. One hen and her brood of chicks is plenty for one coop, unless it is a very large one; if so you must partition it off so as to keep but few together. Make your coops tolerably high so that your chicks will have plenty of fresh air. You should bore three or four small auger holes in it for ventilation. Make a board floor for a bottom and a door that will close tight and you will then have no trouble with vermin at night, if you keep the door closed. You should build your coops and hen houses before you need them. In keeping poultry you must always look ahead. No "do as you like way" will meet with success. As soon as your chicks are large enough you should get them off the ground by removing them where you intend to winter them. In two or three nights they will be no trouble about housing and will be well pleased with their new situation.

## JUNE HATCHES.

If you will handle chickens as they should be, June and July chickens are as easily raised as those hatched in March or April. To hatch them now you need plenty of dirt under the nest and if the weather is dry, sprinkle the eggs oftener than you do in the spring. After they are hatched you must provide them a good shade. Feed them plenty of sand, small gravel and pulverized charcoal. Give plenty of water to drink. My June and July hatches are my best summer layers, and, if allowed to run at large, do not require a great deal of feed. But if confined they must have a variety of food. Pullets hatched in June will generally commence laying in January and lay all summer.

---

## LOOKOUT FOR CHOLERA.

If you have had cases of cholera in the spring and have cured them, your fowls all being in good health, you must not think they will stay that way all the time unless you use some precautions against it. In summer and autumn you must be on your guard. Keep everything clean. In hot weather all the filth that is left on the ground and in your hen house begins to decay sooner than in cool weather, fermentation sets in sooner and there is more danger from cholera. In hot weather your hen house should be cleaned out every other day. During warm weather your fowls may have too much looseness of the bowels; if so you should feed more dry feed, such as wheat and corn. Feed more pepper than you have been in the habit of doing. Never let a week go by unless you feed the Cholera Mixture. It is a tonic and a preventive of this dreaded disease. It is now near the time when your fowls begin to moult and if they become diseased it retards their moulting.

## WHAT TO FEED WHILE MOULTING.

Fowls, like animals, shed their coat annually. The drain on the system during the process of moulting is very great and it is of the utmost importance to understand what to feed during this period. Early hatched fowls generally get through all right, moulting, but later hatched ones do not always moult safely. In the summer while moulting is going on a few feathers only come out at a time and these are at once replaced with a set of new ones, but later in the fall more feathers come out at once and are not so rapidly replaced. This is why the late hatched bird is in danger while moulting. If you have a comfortable hen house place them in this where the sun can shine on them at least a portion of the time. Their feed should consist of middlings and meal mixed with sweet milk, adding a little charcoal with it occasionally. Wheat is one of the best feeds while moulting. Feed pepper freely, giving as much sweet substance as possible. Moulting always occurs with the wild bird when it has an abundance of food. Therefore, it is necessary that they should be well fed with a variety of stimulating food.

---

## LAYING.

Arranged by a providential hand and in behalf of man, the hen brings forth her fruit. It is a kind that is relished by all. The poor can have at hand this valuable fruit the same as the rich. The hen and her fecundity are won, not by paintings and red-tape congratulations, but by protection, quietness and a variety of food. The hen sang forth her lay thousands of years ago according to the divine testimony which has been handed down to us. It has been said that man should have dominion over the fowl. Let us make the most of it by having the

egg basket to decide it. Instances are on record of hens laying annually three hundred and twenty-five eggs. This is told only by the word, enormous. Two hundred, with an average amount of feed and close attention, keeping your hens healthy, is not a very large yield of eggs in one year. If you can not get your every day layers to lay until moulting causes them to stop, you may know there is something wrong and this should have immediate attention. For a great while I could not account for this ceasing of egg production. I would feed my hens a variety of food, give them shells, gravel and ground bone, and yet I would not get the all purpose that I was keeping them for—eggs. My trouble now was cholera or roup, yet I did not know it then, but with the experience I now have I know it was present in the incipient stage. Since I discovered my preventative I never have had such a thing happen. I keep an accurate account of all my poultry expenses and all my income and as long as the scales are turning the way they are I am not the man to complain about hens laying eggs. To make the most of our fowls we must have them doing something while around us; if we do not, we are loosing. I know there is a vast difference in the production of eggs from those that are fed and from those that are not, but the greatest difference is between those that are healthy and those that are not. Disease will always stop egg production if it is the vital parts affected. Therefore, the turning point: whether loss or gain for you in the poultry business, is based on this one word—disease.

---

## RAISING CHICKENS IN AUTUMN AND EARLY WINTER.

Spring and summer is not the only time chickens can be raised with profit. We can raise them very easily every month in the year by a little extra preparations

and the profits from those hatched from October to the middle of January are greater than when hatched at any other period of the year, if they are sold in large cities for broilers. I live near the banks of a small stream. I have a poultry house dug out in the bank, so you see it is very warm. It is drained inside and outside so as to be perfectly dry. I fill about four inches of gravel in the bottom and then put some clean straw on top of this. I now cover the top of the hen house completely over with straw, excepting the ventilating tubes. There is a door and window in the south side. This is now ready for the chicks. But in order to get your hens to set: you must have some of the Asiatic or setting breeds. Brahmas, Cochins, Plymouth Rocks and Wyandottes are very good for the purpose; but for raising chicks you need something that feathers very rapidly, as Leghorn or Houdan, the latter being the most hardy. You can set any kind of eggs under your setters and raise any kind you wish. If you have the Langschang set some of their eggs. If you have a comfortable hen house and feed your fowls as directed you can collect eggs on the coldest days. Keep your eggs where they will not freeze and set them when you get ready. Do not forget the stable manure now in preparing nests for setters. Put her in the "setting box" as directed and leave her with the other fowls to help keep warm. Sprinkle eggs once per week with warm water. As soon as your chicks are hatched remove to the house prepared for them; put the hen and chicks in it and they will be as happy and contented as they are in summer. Feed them the same as you do in summer, excepting you must give them green food of some kind and a small portion of meat of some kind. Keep your dust box ready; have water to drink, and keep plenty of small gravel and sand where they can get it at all times. Along about the middle of January or first of February you can get fifty cents apiece for your chicks or twenty-five cents per pound, in Chicago. In

New York or Boston you can get more. Invest some of your surplus change in this manner and see if it will not pay better than Government bonds. By this method you can raise chickens the year round and have produce to sell every month. In this way, brother farmers, you can soon release the mortgage from the farm, provided there is one on it. If you are not so fortunately situated as to live on the banks of a stream, you can certainly arrange some way to keep the temperature from freezing the little fellows by covering your hen house with sod, straw or sawdust. If your chicks all look alike you will get more per pound as broilers than where they are of all colors, shapes and sizes. Hence, a mighty point in favor of thoroughbred fowls.

---

### CONSTITUENT OF AN EGG.

To know what the egg is composed of is very important to poultry raisers, as it is of the first importance that our hens must have the wherewith to form the egg if they produce them. They will generally get all of these themselves if allowed free range, but they will not get them in sufficient quantities to produce eggs as they should and we must therefore assist them. Chemically the shell of the egg is composed chiefly of carbonate of lime, with a small quantity of phosphate of lime and animal mucus. The yolk of an egg consists of oil, albumen, gelatine and water. The white of an egg is composed chemically of water, albumen, mucus, soda, sulphuretted hydrogen gas and benzoic acid. The shell material is generally the most difficult for the hen to obtain, but it is a great deal depending upon the situation and soil of the place they are kept. Now if you will feed your hens something that contains all of these materials you will get eggs. A hen is a natural walking machine for producing eggs, if fed egg material. Mid-

dlings, meal, wheat, corn, oats, millet seed, broom corn seed, oyster shells, ground bone and milk contain all that is required in the formation of an egg. If you will supply these articles in sufficient quantities, your hens being in health, they will lay eggs and can not help it.

---

### UNFRUITFUL EGGS.

It appears like all hens will sometimes lay eggs that will not hatch. This being the case we should endeavor to find as soon as possible those that are not fertile and relieve the hen of their care. About the eighth day of incubation get a piece of stiff paper and make it just the size to go on outside of your lamp flue; cut a hole in one side about the size of an egg; now put this around your lamp flue; light the lamp, holding the egg between your eye and the light. If the shadow which it forms wavers keep the egg as the wavering is caused by the motion of the chick within. If it remains stationary throw it away and relieve the hen of its care. If the eggs have been fresh laid the chick will be developed earlier than otherwise. With fresh eggs you can, about the fifteenth day, by applying your ear to the egg, hear a grating noise within; but if the eggs are not fresh this will not happen until about two days longer. The nutriment at this time will be gradually entering the body of the chick and in this manner the little chick is nourished until the time appointed by nature for it to work its way out. It keeps pegging and growing until the raised portion on the bill pips or breaks the shell. It then works its way from the shell afterwards the raised portion of its bill drops off.

---

### HOW TO PRESERVE EGGS.

Get a small sized box, about one foot square. Take common salt and heat it in some vessel, as your stove

pan, until thoroughly dry. Then put a layer of salt, one inch thick, in the bottom of the box, then put in a layer of fresh eggs, small end down and far enough apart so as not to touch one another; next put a layer of salt, then another layer of eggs until the box is full, letting the last layer be salt. Nail a cover on the box. Keep them in a cool place, but not where they will freeze in winter. In a cellar is a good place to keep them. Turn them every day, first on the side, then on the end, until all sides and ends have been down. Then begin the rotation again moving it once every day. Eggs put up in this manner will keep from September the first until New Years, and no one can tell but what they were laid the day before, even by the test of eating. There are several methods of preserving eggs but after trying all you will say this is the best and cheapest. After you take the eggs from the salt you can feed the salt to your stock as it does not injure the salt for them in the least.

---

### HOW TO FAIL.

Within the pages of the history of poultry raising are recorded failures as well as success.

All who enter the business thinking it is easy and all to be done is to procure fowls, build a shed and let them scratch for a living; to clean out the shed once a year and, in fact, let the hens run the business, except to gather the eggs, will certainly realize a failure.

If you wish to fail provide no hen house.

If you wish to fail have no ventilating tubes in your hen house.

If you wish to fail keep forty where twenty only ought to be.

If you wish to fail let your fowls go half starved.

If you wish to fail breed "in and in" all the time.

If you wish to fail sit in the shade most of the time.

If you wish to fail pay no attention to feed and water.

If you wish to fail commence in the thousands.

If you wish to fail have no preventatives at hand for gapes, cholera and roup.

---

## HOW TO SUCCEED.

If you wish to succeed you must realize that you are in a business that requires work. Attention to little things and in the right time is the key to success.

If you wish to succeed give your fowls food and water daily at regular intervals and in sufficient quantities.

If you wish to succeed feed a variety that contains all the ingredients required in the formation of an egg.

If you wish to succeed you must have a good shelter for your fowls.

If you wish to succeed you must confine your fowls to a certain extent.

If you wish to succeed you must not keep your fowls in close confinement, unless in a movable coop.

If you wish to succeed you must not keep over twenty-five in one flock.

If you wish to succeed you must avoid "close" and "in and in" breeding.

If you wish to succeed you must change your cocks every year or two.

If you wish to succeed you must keep young fowls out of dews and rains.

If you wish to succeed you must feed young fowls a variety of stimulating food.

If you wish to succeed you must not have too many young fowls roosting together.

If you wish to succeed do not let chickens and ducks roost together.

If you wish to succeed you must have some sure preventatives of gapes cholera and roup at hand.

## FALL AND WINTER MANAGEMENT.

It is now presumed that your chicks have attained size and age enough to go to their regular winter quarters. If you have not already divided them, you must now divide them into flocks of twenty pullets and five cockerels each. But if you do not intend to save any eggs from your pullets for hatching purposes during fall or early winter, you need only to put three cockerels with twenty pullets. Divide your entire flock in this manner that you intend wintering. Place them in your poultry house. Your early hatched pullets will commence getting fat as soon as a few cool nights come. Their combs will assume a deep red color which is an indication that they are ready for business. Pullets to lay now must be hatched in February or March and well fed. Sometimes your pullets are too fat to lay; feeding oats remedies this. Oats are a splendid food in fall and early spring. When you find how many fowls you have to winter you must then prepare food for them. Have it ready before hand and do not let every day provide for itself. In all you do look ahead. "Be prepared" is a good motto for the poultryman. You must see that the bins for the fowls is well filled with wheat, corn, turnips, potatoes, cabbage, broom corn and cane seed. See that you have collected plenty of road dust. You can get it in the fall in the public road; put it in boxes and barrels and it is then ready for use, but be sure and keep it dry; if you let it get wet it spoils it. Place it somewhere handy, as in the hall in your poultry house and you can then use as needed. Save dry wood ashes also to mix with the road dust. Now put your dust box in some corner of the poultry house so that your fowls can enjoy a bath whenever they feel so disposed. You must provide them oyster or mussel shells for winter. You can procure oyster shells in large towns. Mussel shells you can pick up along creeks and rivers. Roast

them until you can take a hammer and stone and easily break them in small pieces. You can then put them in a barrel and they will be ready for use. Gravel you must not neglect. Before winter sets in go to some creek or river where you can get gravel and sand; haul it home and keep in a dry place. You will then know that you have made sure of this important article. Get you a barrel of lime, let it air slake; it will then be ready for use. Get some iron vessel for your fowls to drink from. Be sure you have arranged warm nests and hung so that the sun will shine on them. Now feed your fowls as directed to feed in January, seeing that they are well supplied with food from the vegetable, animal and mineral kingdoms. Feed your preventative of cholera every week and you will be well paid in eggs for so doing. Because it is winter do not think your poultry house needs no cleaning out. Every morning sprinkle road dust and ashes over their droppings and clean out once per week unless it is frozen so hard as to be too tedious; if so you can leave until it thaws a little, but you must sprinkle plenty of dust over the droppings daily to keep things clean. Your roosting poles must be movable. Take them down every morning and stand them in one corner so that your fowls can not perch during the day, but do not forget to replace them before night. If you have wheat or oat straw cover the floor in front of the roosting poles with this, making it three or four inches deep. Just back of this and in front of your first roosting pole make fast a wide plank to prevent the straw from mixing with the droppings under the roost. You can now sprinkle wheat, oats or corn over this straw and have them scratch for it. But be sure to change the straw every few days. This will pay you well for the time it takes as your fowls need exercise. The hen house should be covered with straw to keep the combs of your fowls from freezing. Fowls with large combs are easily frozen and this in a degree prevents their laying.

## THE TURKEY.

The domesticated turkey traces its origin to the wild bird of Mexico. As now bred there are six different varieties, viz.: The Bronze, Narragansett, White Holland, Black, Buff and Slate. All are very nice and profitable to handle. The Bronze and Narragansett being the two largest. The White Holland lays the most eggs and is very hardy. In raising them choose the variety that suits you best. A cross between the White Holland gobbler and the Bronze turkey hen is a very desirable bird to breed for market, being hardier than either alone; yet they will not produce as many eggs as the White Holland.

The turkey is one of the most difficult fowls to raise in the poultry yard. When young it is very tender, but when grown it will endure the blasts of a winter storm in the top of a tree and seem to enjoy it. There is more failure in raising turkeys than in chickens, ducks and geese combined. If you understand the principles of raising them it is one of the main fowls to raise, because it pays. Lice kills two-fifths of all the turkeys hatched in the United States in the first twenty days; indigestion kills fully one-fifth. It appears that farmers' wives have not many of them solved the problem of raising turkeys. Hence, the general failure.

I propose to now give you the details so minutely that they will enable you to become successful. While it is true that during the summer and fall turkeys need large range in pastures where they can obtain a large part of their living, yet it is fully as true that during the laying and hatching season they need and must have restraint. If you do not arrange some place for your turkeys while laying and setting do not count on having many turkeys to sell. You can fence off a lot fifty feet square with laths, build a small cheap house for laying in, and six dollars here will build the lot and house

sufficient. Tie a shingle across the back and wings of your turkey hens to keep them from flying out. Place your best gobbler with your best plump hens in the lot and you are ready for business. You must now feed and water them regularly. Their feed must now consist of the same food as for laying hens, being sure they get plenty of shells and bones. Make a nest and put one egg in it and always leave a nest egg of some kind. Feed green food of some kind while confined. If they are too fat to lay, feed oats. By feeding a small allowance of wheat, daily, your turkey hens will lay their third laying and should then be allowed to set. You can set the first laid eggs under common hens. You must not let the eggs get chilled in the least and while setting they must be kept well sprinkled. On the thirty-first day the turkey hatches. If your turkey hen wants to leave the nest before all are hatched you will have to remove the young turkeys and keep them wrapped in warm flannel until all are hatched.

Now there are three things that we must constantly keep in mind that we must do if successful. They must be kept free from lice right from the start, and until they are nearly two months of age; if you do not have something "dead sure" right here will be your first stumbling block and it will trip you every time. If you have my Gape preventative apply one drop and it will rid them of lice. You have now overcome the first trouble.

Secondly: They must be fed of food that is adapted to their constitution and it must be fed in a manner so that indigestion will not set in. This is the second trouble where many fail. Do not feed them anything until twenty-four hours old, and up to this time they must be well hovered. The home of the wild turkey being in warm regions where they can obtain spices to keep up heat in the body is reason enough that they should be supplied with something of the kind. The first thing to feed is a grain of black pepper to each. For

the first three days feed boiled rice and meal mixed in equal parts. Boiled perfectly dry and just simply dampened with sweet milk and sprinkled with pepper. After the third day feed cracked wheat and millet seed. Feed them of this kind of feed until they can swallow whole wheat readily. Give them an occasional feed of soft feed containing middlings and meal, but do not have it sloppy as such feed kills young turkeys. In feeding soft feed after the third day be sure to always put pulverized charcoal and pepper in it. The water you give young turkeys, until at least six weeks old, must contain two teaspoonfuls of tincture of iron to every gallon. See that they get no other water. You must feed and water them as directed until the head and neck assumes the color of the adult. You can during this time give them plenty of milk to drink, and if confined should have a small allowance of meat with their diet; it should be fresh. They should also have gravel, sand, and, if shells, all the better. When they acquire what is termed the "red head" you may consider them out of danger and may then be turned out to free range.

The third point to consider in raising young turkeys is to keep them dry and warm. All the time you are feeding them as directed this important part must not be neglected. Your coops in which they roost at night must have a board floor, and on top of this put an inch of dry dirt and do not neglect to clean out clean once a week, and replace with dirt. If you have an open shed keep your turkeys in it for the first week so as to keep them warm and dry. You must arrange some way for this purpose; if you do not you will bear the loss.

---

### HOW TO FATTEN TURKEYS.

The most economical way to raise turkeys is to feed them all they will eat from the shell to the

slaughter. When young, turkeys need feed very often, every two hours during the day; but when on the range they should be fed only twice a day, in the morning and at night. It is a great loss to farmers to send their turkeys to market when only half fatted. Turkeys when properly fatted will bring two or three cents more per pound than the poor, lank, lean turkey. To fatten them properly you must commence in time. Before they go to the range in the morning, if you have plenty of milk make you a trough and pour the milk into it where all can get at it. If you do not have milk give them a feed of meal and mashed potatoes, but do not feed them so much in the morning that they will not want to go to the range. At night feed them all the corn they will eat. Continue feeding in this manner until frost, then you must give an extra meal at noon; wheat is very good for this meal. Feed in this manner and when you get ready to sell they will bring you something.

---

## THE DUCK.

Raising ducks is one of the most profitable branches of the poultry business as they can be kept at a very small expense, if they are furnished with a good sized range and a small pond. Some breeders claim that ducks should not be allowed large bodies of water to swim in. If you have not a small pond or pool for your ducks they will do very well and be apparently satisfied by sinking some small vessel in the yard and filling it with water. Yet, if they have a larger body of water, as a pond or creek, they will obtain a large part of their living from it, as they eat bugs and several species of insects which live in the water. Then if allowed, in connection with that, a large grass range they will catch slugs and bugs in quantities sufficient to furnish at least three-fourths of their living. If you have a potato patch

fenced off to itself turn them into it daily and they will rid your vines of bugs.

I will now give you my method so minutely of raising young ducks that if you follow it to the letter you can not help but succeed. To start with choose the variety that suits you best. The three leading varieties, I think, are the Pekin, Rouen and Aylesbury, all being fine large ducks; yet each one has its special merits, neither one excelling the other in all the useful qualities. About the first of January, in warm climates, and about the first of February, in cold climates, your ducks if well fed and sheltered in bad weather will commence laying. Their morning feed should be middlings and meal mixed together, being fed soft. Their noon meal should consist of about the same as the morning meal, adding cooked turnips and potatoes if you have them. At night you must feed whole corn. If you follow this system of feeding, giving plenty of sweet milk to drink and broken shells to eat, you may expect to get plenty of eggs.

Where will they lay them? Shall it be just where they may happen to be at laying time or will it be in some suitable place provided for them? To have them lay well you must pen them every night and make their quarters dark. Do not have large holes in their roosting sheds so that it will be as light as if they had no shed. Build close to the ground but do not crowd too many in one place; have room enough for all to move around freely if they choose. Make them nests in the back side of the shed and see that they have plenty of water to drink at night. A duck needs water often; hence, I can not insist too strongly in having plenty of water at all times where they can get it.

If you have suitable accommodations, I would recommend hatching young ducks early in the season. Of course, if successful in this, you must have warm quarters. Early hatched ducks sell for more money in the fall and early winter than later hatched ones. They

will be larger and make a quicker and better growth of feathers. They will also commence laying earlier. Some breeders say not to hatch ducks very early in the season. Yet I find the early ones, if rightly handled, the most profitable. To raise them early you must set the first laid eggs under hens. If a very small hen six duck eggs will be enough. For a Brahma hen nine is plenty. There is a great deal of complaint about duck eggs not hatching when set under a hen, yet the reason is plain enough. We must learn from the duck the best method of hatching her eggs. When left to herself she will take her daily excursion for food and water, and before returning will take a swim completely wetting her feathers. She will then return to her nest with her feathers dripping with water, which gives the eggs a thorough moistening. Then if we would be successful let us imitate her in this respect by sprinkling the eggs with water. If you neglect this important part in hatching the eggs, you will have but few ducks. To sprinkle the eggs is to have nice thrifty ducks. After they have been set on from twenty-eight to thirty days you will find a nest of nice young ducks. Pekin duck eggs, if well set on, will hatch in twenty-eight days. For some others it takes longer.

We must now know something concerning the feed and management of these young ducks, if we wish to raise them. You should first feed eggs, meal and milk beat and mixed together. Cook it in your stove pans until it forms a curd; then if it is too stiff add a little sweet milk. Feed this for the first three days, but do not feed it if it sours. Give them plenty of sweet milk and water to drink. Afterwards feed sweet corn bread and mashed potatoes mixed with milk. In fact, feed all kinds of feed, you may have anything for a variety. There is hardly anything that comes amiss in the duck's bill of fare. After a few days feed them wheat and when they get so that they can swallow it feed whole

corn. Keep feeding them soft feed all the while. Mix a little charcoal, well pulverized, in their feed twice a week. While young do not let them have water to swim in. Do not think that a duck while young can stand to take all dews and rains that may come. If you do, you will find your mistake when you try it. Keep them up in the morning until the dew is nearly all gone, but be sure to feed and water them while in the coop of a morning.

---

### THE GOOSE.

Geese can be raised with profit if they have access to large bodies of water. If you have not, and wish to raise them, make a small pool of water, having it large and deep enough for them to swim in. This can be very easily done by digging and scraping out a hole in the ground as large as you wish and about three feet deep. Make it where there is a natural slope of the surface, then, commencing back as far as you see fit, sink a tile ditch letting the mouth extend into your pit; this will probably hold water the year round.

As to the kind of geese to keep I shall not dictate. There being several kinds you can probably be suited. The feathers from geese are more profitable than to simply raise them to sell the carcass.

In some portions of the country geese farms are kept, which pay a large profit. They are hardy and live to be old. Hence, a mighty point over most other fowls. But if geese are kept in pastures where stock is kept, I doubt the propriety of raising them, as they damage pastures so much. They do not bite the grass off but pull it up, frequently bringing a portion of the root. Their droppings are very offensive to the scent of stock. Therefore, I would advise you to keep them by themselves. If you wish to raise a great many geese you had better set some of the first laid eggs under hens. Goose

eggs have a very thick shell, and to be successful you must sprinkle them thoroughly the last ten days before hatching. The day before the brood is to come off dip the eggs in warm water, not too warm, then put them back in the nest and you will have but very few die in the shell.

After your goslings are hatched you must pay strict attention to them while young. Do not feed them until twenty-four hours old. Be sure to keep them dry and warm for at least three weeks. Their general feed should consist of middlings and meal mixed with milk. To keep their feathers in nice shape give them a small portion of salt in their food. Goslings hatched early in the season can be picked once and their feathers grow out in time for fattening for the Holiday market. The first picking from a gosling will pay for the expense of raising it.

Geese can be wintered at a small expense as they will eat most anything. Throw them some hay in winter and let them eat the blades and seeds off. If you have nice clean fodder it will supply a large amount of their food during winter. A goose seems to prefer something of this kind. You can feed them boiled turnips and beets. For fattening: feed oats and shelled corn thrown in a vessel containing water. Geese generally pair, though an extra goose will be accepted by the gander if she has no mate. Probably the best goose for market is a cross between the Toulouse and the Bremen, making a larger and plumper fowl than either. If you wish a good cross, try it.

---

## THE GUINEA.

There is no use to doubt profit on raising guineas. When they are confined they seldom set. When given liberty they will hatch broods and rear them where other

poultry with the same chance would fail. The young ones feather very rapidly and after five or six weeks old need but little brooding.

Feed young guineas the same food you do young chicks, but they must have it oftener. Feed them meat of some kind every other day. The young need feed oftener than any other fowl as their feathers grow so quickly. A few feeds being missed and they will very often die. Guineas are naturally very wild and hide their nests, but as they are so noisy you can generally find them if you use caution. Several guineas will often lay in the same nest. Their eggs are small but they lay a great many of them. The old guinea is a very valuable fowl to have around the hen house at night. The least disturbance and they will give the alarm. They are also valuable in keeping hawks away from the poultry yard. The guinea pairs, yet two or more females may be allowed with one male.

---

### VALUE OF BONES.

The majority of poultry breeders do not seem to appreciate the value of bones. But a small proportion of them ever use them. Nearly every family has bones enough of some kind to give their poultry occasionally. Do not throw the bones away. Roast them in your stove pans; get a hammer and a stone and mash them up. Feed a small portion in their feed twice a week. It will pay you to do it.

---

### FEED YOUR FOWLS.

I know there is a great many farmers who do not want their fowls to pick up even a grain of corn, but want their stock to eat it all. If you keep fowls about

you by all means feed them. If you can not feed, them and intend to kill the first chicken you see putting its head in the crib for a grain of corn, you had better sell them all and not keep a fowl on the place. Try doing without one year and you will be apt to stock up at the end of the year and be willing to feed them, as you will then realize there is money in keeping fowls. Do not grumble if you see your wife feeding her fowls wheat and corn.

If you wish to try an experiment furnish your wife with fifty dollars worth of fowls and a place to keep them. Then supply yourself with fifty dollars worth of hogs. Buy feed for both of them and keep a strict account of all your expenses and your income; being sure to keep each account separate. Square your books at the end of the year and see who has the most clear money. As a rule she will double you.

Do not think it is no business to take a load of turkeys or chickens to market. The poultry business is fast stepping to the front as the leading industry of the country; the products of which in 1886 amounted to over eight hundred million dollars in the United States. Who will say it is a small business with such statistics on record before him.

---

## EGGS IN SUMMER.

If you are going in for eggs in summer, I would recommend to you the every day layers or non-setters, such as Houdans, Leghorns, Polish, Hamburgs and Spanish.

There is one point a breeder should notice by which he can improve the laying qualities of his hens. You should always set eggs from your very best every-day-layers. If you will follow this system for two or three years you will find the amount of eggs increased.

## EGGS IN WINTER.

It should be the object of every poultry raiser to have his hens lay during winter. Most any hen can lay some eggs in summer when eggs are cheap. The winter eggs are the ones to work for as you will generally get more than double in winter for your eggs than you do in summer. If you can not get your hens to lay in winter you are losing the profits that the wise poultryman is reaping.

In the first place it is very important that you have a good warm hen house. If you do not have this do not figure on many eggs in the winter.

In the second place you must feed a variety of food and feed it while warm, and it must consist of vegetable, animal and mineral food prepared as directed.

Third, to get plenty of eggs, you must select a variety that lays well in winter. Any of the Asiatics or large breeds are good winter layers. It makes but little difference which kind of the large breeds you select as there is more in their feed and management than there is in the breed.

The small fowls are splendid winter layers but require so much warmer quarters if they lay that they are not so advisable for the common farmer in winter as the large breeds. The Brahmas, Cochins, Plymouth Rocks, Langschangs and Wyandottes are good winter layers.

---

## CLEANLINESS DURING BREEDING.

It should be the aim of every breeder during breeding time to give his fowls the best of care. One of the first essentials is to keep the fowls clean and nice. If this is done properly you will keep your fowls healthier than they would be if allowed in all the filth of the poultry yard where it has not been cleaned for six months,

allowing them to drink out of every little hole of water during the wet months. You should keep everything drained about your yards so that the water will not stand in puddles for four or five days after every rain.

I find nothing more convenient about my yards during breeding time than a coop which is capable of being moved. It should be made ten feet long, five feet wide at the bottom, coming together at the top A-shaped; use light material for the frame and laths for the sides and ends. Make a small door in one end, placing one of your roosting coops at the end of this. Put a dust-box and a nest-box inside. Give them plenty of feed and water and by moving them daily you can have your fowls on nice clean ground. They lay well, handled in this manner. For a shade you can tack a thick piece of muslin coated with tar on one end of your coop. You will find this kind of a coop very convenient in the poultry yard.

---

## WILL IT PAY TO KEEP THEM BY THE THOUSANDS.

This is a question I am often asked by poultry raisers and in answer to all let me say, that depends upon your ability and experience. If I had the care of three or four thousand I should want to know where my help was to come from and if I could rely on them every day in the year. I should also want about eighty acres of land to be devoted to their keeping. It will not do for the inexperienced to commence in the thousands; you had better not commence in the hundreds. Commence with a few and as your experience and practice will warrant you, climb to hundreds and then thousands.

There are a great many mistakes published by writers on raising poultry. Persons writing who follow some occupation other than raising poultry. They lead hundreds of others in their own errors. All such per-

sons are to blame very much. If you know nothing of poultry raising and wish to learn it, right in the poultry yard is the place to take the first lessons. You must learn from books and periodicals all you can about the business, but first find out if possible whether the "author" is a poultry raiser and one who has sufficient experience to warrant what he says. Then practice it daily in your yards and you will come out all right if you will always use strict business principles in your dealings. If you are breeding fancy poultry to sell always give each customer the worth of his money. Be fair and you will come to the front soon enough. There is room for such persons in the poultry business.

---

## DEMAND FOR THOROUGHbred FOWLS.

We live in an age of progression. The old dung-hill fowls served their generation well, but profit from poultry now is greatest when good stock is kept. The call for something better is everywhere apparent. People are becoming tired of breeding poultry unless they have the best, from the fact that it pays to keep the best. Fowls that are thoroughbred will lay more eggs and their flesh be sweeter and better. The cost of production is less than where the barn-yard fowl is kept. There are a great many different breeds of chickens and there is a demand for all of them. Some want one kind and some another. It makes but little difference what breed you get if you wish to raise thoroughbred fowls to sell. But by all means get the best to start with.

Get your fowls from some reliable breeder who has reputation at stake and you can depend on what you get. Your cost from him may be a little more than it will be from the bogus breeder who cares not for reputation. The difference in cost will be no comparison between the fowls you get. My first mistake in thoroughbred fowls

was right here. I took my first lesson in cheap fowls which cost me \$1.50 apiece. I thought I must have something cheap. I bought five to start with. When they arrived my birds did not fill the "standard". They had the roup in its last stages. In forty-eight hours my entire flock was contaminated with this dreaded disease. Never was there a stream that flowed so smoothly that did not have some rocky shoal. I was now the "thoroughbred poultryman" dearly receiving my first lesson "on the sand bar," knowing not which way to steer. It taught me a lesson I will never forget, and it was all because I wanted something "cheap." My time, labor and money was lost. I now commenced anew, but did not want something cheap.

Here is the road that separates the National from the bogus breeder: The one will have nothing but the best. The other cares not for quality but makes quantity his highest aim. The one can build fine houses and barns; the other complains of hard times generally. Therefore, do not make the mistake pointed out to start on. After you get a trio of fancy birds to start with the rest will come easy enough. Clerks, bankers, ministers, mechanics, as well as farmers, may find this a change of employment and recreation from the day's dull routine.

---

## RAISING POULTRY IN CITIES.

Because you live in the city you are not excluded from raising poultry. While it is true that the greatest advantages for raising poultry are on the farm, it is just as true that poultry can be raised with profit in cities. Every family, who has a lot fifty by one hundred feet, can raise poultry to a good advantage. Fence your lot in with a fence high enough to hold them. Set the lot in plum trees for a shade. You can, in this space, keep two varieties and keep them pure by having a partition

fence. By selling your fowls before they are grown you will be surprised at the amount of fowls you can raise and sell in one year on a lot fifty by one hundred. By selling your chickens when about half grown you will get prices for them far in advance of the standard price for old fowls. They will then bring you nearly as much as if they were grown and sometimes more. Of course your fowls would do better if they had more range, but by paying strict attention to cleanliness and using tonics in their feed and water, you will make it a success.

---

### FATTENING FOWLS.

It is very essential that a fowl should be brought to the table only when well fatted, as the lean fowl is scorned by all who have a taste for, and delight in, having "the fat of the land" to live on. A chicken may be fatted in ten days. In fattening you should feed meat or grease of some kind, and give plenty of water to drink. For grain food feed mostly corn. Have your fowls confined in a coop having just light enough to see how to eat and drink. In ten days you will generally have them nicely fatted. To fatten geese: confine them and feed them corn and oats thrown in a vessel containing water. The turkey must not be confined while fattening. You should confine the duck while fattening.

---

### CROSSING FOWLS.

To insure a successful cross you must have some knowledge at least of the laws of procreation. You must have some knowledge of the effects of parents upon their offspring. You must also have some knowledge of the different breeds if you wish to produce a cross between them. A cross between two breeds becomes a specie,

and this specie becomes a variety only when there is sufficient stamina to reproduce its kind and like produce like. Strictly speaking there is no such thing as our fowls being pure bred. We have them that have been bred "straight" for several years and we all agree in calling them pure bred, because they now produce chicks like parents. From the old Cochin-China or Shanghi there are several varieties, all being akin, but go by different names, such as, the Light and Dark Brahma, White, Black, Partridge and Buff Cochin, all having sprung from a common parentage since 1847. Introducing foreign blood into a variety, for some specific purpose, is beneficial, if it then be bred out until you get the family all looking alike. Again, it is very desirable that the parentage should be healthy and from ancestors that were healthy. They should also be similar in make up, should be of good size, domestic in habits, fine fleshed, splendid layers, good setters and careful nursers, and should have nice plumage.

In judging of the purity of the blood there are several leading points to be noticed. If the leg is good size for the breed they generally are pure blood; but if the leg is smaller than most others of the same breed it is degenerating in important respects. It is necessary to select the best fowls for either crossing or breeding pure or else they will degenerate rapidly. The color of the legs is also one way of judging of the quality of the breed. If the legs are dark for the breed, the fowl will be of good blood. The flesh will be better and sweeter. The quality of the flesh should go along way with the breeder, and he should breed from those that have the juiciest, finest and richest flavor of their flesh. The plumage is also a very good index to the quality of the flesh. If the plumage is rich and glossy, lying close to the body, you may assure the blood is good. But if the feathers are very loosely arranged and have a rough appearance while young, you may know it is of

deteriorated blood. If the fowl is rather light in proportion to its size, the flesh will be more or less coarse. But if heavy in proportion to its size, the flesh will be fine. If the flesh is fine the bones are fine, and the plumage is also fine. If you, in selecting, choose a fowl of a rich and glossy plumage, its legs will be a deep color for the breed.

---

### SELECTING BREEDING STOCK.

As there are so many breeds it would be very difficult to give the points to be noticed in selecting each. But summarizing: I will say, select those of the breed that come up to the standard in points. If you can, make vigor and activity the foremost qualities. It is not always the largest fowls that are most vigorous and active. But it is the one with full, bright eyes, compact body and quick muscular movement. The selection of a hen is of as much consequence as that of the cock. For the breed select a medium sized hen, a brilliant eye, wide tail, large (not necessary long) legs, an industrious forager and the very best layer.

---

### SELECTION OF A COCK.

Select the largest, if he has full hackle and tail. His comb, wattles and throat should be large. The comb should be a deep scarlet red. The color of his eye corresponding in general to that of his plumage. His bill should be crooked and sharp; neck should be long and hackle extending well down to the shoulders; nice erect tail and should be very active.

## INCUBATORS.

Do you use incubators? I have been asked time after time. I do not, and to say anything in regard to them I can only give you my idea. I believe there are incubators that can be made a success with those who understand using them. I can hear of persons who are using them with success, but I have never seen a person that did. I have seen them in operation, but I never have seen a person who was satisfied with them yet. I knew a person last spring to put two hundred and twenty eggs in one and only hatched seven chicks. That, however, is the worst failure with one I know of. There are several different incubators on the market, all embracing somewhat similar principles, yet I do not know of any where the proprietor is willing to warrant it. So far as economy in hatching eggs is concerned they are all a failure as yet. The cheapest incubator I know of is one costing eighteen dollars and a half. Its capacity is one hundred eggs. To hatch one hundred eggs will require the time of eight hens. The feed of these eight hens while hatching will not cost as much as the fuel will for running the incubator the same length of time. The value of these eight hens is not exceeding four dollars. This leaves you a margin of fourteen dollars and fifty cents, in favor of the hen. Now this is the business view of it, and if you want to try one you have an undoubted right to do so. Try them until you do make a success. If you get one by all means get the best there is on the market. But if you follow my system of feeding, laying and setting hens you will have no need of an incubator, unless you intend to supply chicks for market by the thousands.

---

**BREEDING.**

There are several different terms for breeding, being designated from the manner in which the breeding is

carried on. They are termed "in and in," "close," "mixed" and "high breeding." And it is from the knowledge of the laws of procreation that the success of the thoroughbred dealer is mainly due. When breeding is carried on between individuals of the same breed or between brother and sister it is termed "in and in." When breeding is carried on between the parent and his offspring it is termed "close breeding." The connection between different breeds or varieties is termed "mixed breeding." When the parent stock is selected of the same race and of remote consanguinity, perfect in all the general characteristics, it is termed "high breeding"; and to secure the best results this must be resorted to yearly. If a breed is pure the offspring will resemble the parents in almost every respect. In plumage and general outline, they will look the same. "Close breeding" is what ruins most breeders. If followed it will result in deterioration of the breed in the most important respects. When the blood is mixed the plumage will vary according to circumstances. The law of nature seems to be "close" and "in and in" breeding as with the pheasant. In their wild state they resort to "close" and "in and in" breeding, yet the race does not seem to degenerate; neither change in appearance. You may examine and compare these birds and you can not find any dissimilarity between them. They seem to be pure of their breed.

The reason why our breeds of fowls degenerate by breeding "close" and "in and in" is because they are not pure of their kind but have mixed blood in them.

---

## EGGS FOR HATCHING.

It is with some a great mystery why they get a good hatch from some eggs and from others they get scarcely any chicks at all. There are several reasons for this. You should not save the eggs from a pullet if you wish

them all to hatch. Your cock should also be of sufficient age to be fully matured; if he is not there will be several unfertile eggs.

Eggs to hatch well should be collected as soon as laid, especially if the weather is cold and windy. They should be kept resting on some soft material, no one resting on another. If you have a cellar keep them there. It is the best place to keep them at all seasons of the year. Sometimes your hens get too fat; if so their eggs will not hatch well. Feeding oats is good for them at this time. Your hens also need exercise if you wish their eggs to hatch well. From hens, kept in close confinement, eggs will not keep real well. You should, in selecting eggs, select the medium sized egg that the hen lays, such as you have reason to believe have been rendered fertile. And as to the sex of the egg no one can tell until it is hatched. In this all signs fail. So "do not count your pullets until they hatch." Put your eggs in milk warm water and set those only that readily sink to the bottom. If you wish to improve your stock so as to have them lay larger eggs always select the largest eggs for setting and in a few years you will be surprised at the difference it will make. Yet the large egg will not hatch so well as the medium sized egg the hen lays.

---

### CHANGES OF FOOD.

The changes which food undergo in fowls is partly mechanical and partly chemical. Fowls swallow the grain without mastication and it is digested in the stomach. The digestive functions in fowls differ materially from some animals which subsist on nearly the same kind of food. The digestive organs of fowls are six in number, namely: Gullet, crop, stomach, gizzard, liver and intestines. The gullet extends from the mouth running along the neck and terminating in a membrancus

bag, in front of the chest, called the crop or craw. It is somewhat similar to the rumen or "paunch" in the ox. It receives the gullet from the upper part; it then extends downward to about the middle of the crop. Its function is to receive the food when first swallowed. It secretes an acid which is held in solution by numerous glands covering the surface. The food is here macerated and dissolved by this acid. The food passes thence into the second stomach which is also furnished by a large number of glands which are hollow. Their office is to secrete a digestive fluid and to discharge it into a cavity through a small opening. When this has thoroughly performed its office it then passes into the gizzard. The gizzard is the last stomach, being composed of muscular fibres running in different directions and lined with a horny membrane. It is capable of powerful grinding or trituration. It is adapted to answer the purpose of grinding teeth in other animals. This trituration may be distinctly heard by standing beside the fowl on the roost at night. The outlet of the gizzard discharges, the digested food into the chyle-gut, being the first of the intestines. The function of the liver is to prepare bile from the blood, conducted to it by the veins, and by a duct, carrying the bile from the gall-bladder into the chyle-gut, to be mixed with digested food. A fluid being now brought from the pancreas to the chyle-gut completes digestion. From this the food passes into the small intestines whose surface is lined with absorbents which open to take up nourishment prepared by the stomach. The refuse passes from thence to the rectum and is discharged from the body. Fowls also have kidneys which are situated in a hollow beside the backbone. Its office is to remove superfluous fluid from the blood. Fowls have no bladder and if their droppings are moist it is an indication of health.

## DISEASES OF POULTRY.

Poultry constitutes no exception to the list of things that are subjected to disease. Nature, which has given every creeping thing an organism of parts, has so arranged those parts that they become diseased whenever they are for a certain length of time acted upon externally or internally by some agent which is moving their functions contrary to the law of nature. The organism of fowls is not exempt from this law. Disease will prey upon them at times as with other living things. The barn yard fowl is so constituted that it can not resist but a certain amount of the germs of disease. The diseases which prey upon them are numerous. Many of them malignant and a few of them fatal. Yet if a proper regard is had of their sanitary condition, by the use of tonics and appropriate remedies, these diseases can be overcome.

I shall not say to you, I know it all concerning the diseases to which poultry are subjected, and their remedies. If I should I would say more than any person living can truthfully say. There may be other remedies for the diseases of fowls than those that are contained in this book. But in the following pages I will give you facts as I have learned them concerning the symptoms, causes and remedies of diseases. I shall give you the manner of treating diseases so plain that you can by a little practice keep your fowls as healthy as I keep mine. In fact, you need not loose them if you will administer the remedy in time. After using my system you will agree with me that the object in view can be successfully accomplished. Without some sure system I would have to bid "farewell" to the poultry

yard and seek employment in some other business. When a fowl is attacked it should be immediately removed to itself to prevent the contamination of the remainder of the flock. Nature, who is a preserver of fowls while in health, will also nurse them in weakness, and the aim of all my medical treatment is to co-operate with her in restoring and preserving the health of fowls.

---

### CONTAGIOUS DISEASES.

You all know that some diseases are capable of being caught and that others are not. I shall now speak of the first class:

In the case of measles with persons you understand that it has germs of its own. If you are exposed to the mumps, you will not take the measles and if exposed to the measles you will not take the mumps. The germs of these diseases are vegetable having no spontaneous growth of its own. They inhabit the atmosphere and from it a person inhales them. They are about as small as you could imagine. They are absorbed by the blood, transforming into the type of disease. The symptoms of poultry Cholera are in a great majority of cases a yellow coloration of that part of the excrement which is excreted by the kidneys and which is in health a pure white. This yellow coloring matter appears while the excrement is yet solid, the fowl still having its spright gait and the appetite yet good. In a few cases the first symptom is a diarrhea, the excrement being passed frequently and in large quantities. In all cases the diarrhea soon becomes a prominent symptom. The excrement in the latter stages change to a greenish or even a deep green color. When the diarrhea sets in the fowls begin to loose an interest in things about them. The comb looses its red color and becomes pale and bloodless; the temperature rises, reaching from 109° to 110° Fahr.; the

wings droop and the fowl sleeps. The duration of the disease varies. Sometimes the bird dies within twenty-hours of the first symptoms. In others life is prolonged two weeks, and some few worry along and get well.

In chicken cholera it is these microscopic germs transforming and multiplying until blood, flesh and entire system is full of them. While in health poultry can resist these germs a long time. Sometimes they can resist them until they get well. Some fowls have naturally stronger constitutions than others. Those that have had it once and get well may take it again and die in a very short time.

For a great while I could not prevent this contagious disease and it caused me trouble and great loss. I experimented a great deal on chicken cholera. I read all the poultry books I could get, but the thing I most needed and wanted to know was not to be found. So I began to reason from cause to effect. I studied the anatomy, habits and disposition of fowls; I studied the nature of the disease; I watched closely the effects through the different stages, from the beginning until it finally took the life blood away. After I was sure I knew the cause of chicken cholera I sought for a preventative of that cause. I called to my aid the science of Chemistry; I searched its pages from morn till night. I had long ago learned that Chemistry is not a mere mass of dead facts, but that it is a living science. So I began its practical application in the art of raising poultry. I tried first one thing and then another, always noticing the effects. "A preventative I must have or failure would be my lot," was my conclusion. I finally tried ingredients that did just the thing I wanted them to do. And I know as long as there is poultry to have the cholera my mixture will prevent it if used as directed, and remember it will cure it in its first stages. There is no use to dispute it. All doubts vanish when you try it. It has been in use too long to question its merits. Your

hens will lay more eggs by its use than without it. It has proven a success from Minnesota to Texas. This wonderful preventative has proven a success as far west as the Pacific coast. In fact, it has proven a success in all climes and in all latitudes wherever tested.

---

### HOG CHOLERA.

There is a relation between hog and chicken cholera. But you can not give a chicken the cholera from the blood of a hog with the cholera. Neither can you give a hog the cholera from the blood of a diseased chicken. Yet there is some similarity between them. Hog cholera is also caused by microscopic germs which multiply and transform themselves until the system is full of them. They occupy about the same time in transformation as do the germs of chicken cholera, producing death in about the same time. I have noticed for along time that if you had one of the diseases on your farm the other was sure to follow soon, unless precautions were taken against it. You must use tonics and something "dead sure" that will nip these germs of diseases in the bud. They are in the water, the atmosphere contains them. You may walk through a hog lot containing these germs and they will stick to your boots with the soil, and can be carried into a lot where they are not and from these a hog will take the cholera. It appears that the temperature of the weather does not affect them in the least, no difference how cold or how hot it gets. I use a tonic that will destroy these germs, wherever found, before they take their great hold in transformation.

What is a preventative of chicken cholera is also a preventative of hog cholera. What will kill these germs of disease in one will also kill the germs of disease in the other. Their sanitary condition must be looked

after the same, but their feed and care is different. This is my theory of hog and chicken cholera. I prevent it and cure it in its first stages based on this theory.

---

## APOPLEXY.

*Symptoms*—The fowl is attacked suddenly, apparently when in good health. These symptoms are occasioned by the rupture of a vessel in the skull and the effusion of blood, which, by the pressure on the brain, produces the evil.

*Causes*—Is most frequent in birds that have been overfed, it is most common among laying hens, they being attacked while on the nest. Sometimes over stimulating food, as bean or pea meal, will cause the disease.

*Remedy*—The only sure way is opening a vein with a sharp pointed knife or lancet. You should select the veins on the under side of the wing. It must be opened in a longitudinal direction, not cut across. By pressing the thumb or finger on the vein between the opening and the body, the blood will flow freely. You must now feed on light food.

## PARALYSIS.

*Symptoms*—Inability to move some of the limbs. It is most frequent in the legs.

*Causes*—It is usually an affection of the spinal cord and is caused by over-feeding.

*Remedy*—Hold the fowl's head under a small running stream of water. Give ten grains of Jalap. The bird should be kept on a rather low diet and kept warm for a few days.

## VERTIGO.

*Symptoms*—Running around in a circle and fluttering about with loss of power over their muscles.

*Causes*—The affection is caused, evidently, by an undue flow of the blood to the head, and is dependent on a full blooded state.

*Remedy*—Holding the head under a stream of water will arrest the disease at once. Giving eight grains of Jalap will remove the tendency to the disease.

## DIARRHEA.

*Symptoms*—Are: Voiding of calcareous matter, streaked with yellow; frequent discharge of the excrement.

*Causes*—Generally caused by having too much green food; sometimes from undue activity of the bowels.

*Remedy*—When caused from green food give them a supply of grain food, as corn or wheat; if from undue activity mix charcoal and five grains of powdered chalk in their feed, giving freely of pepper in their soft feed.

## CATARRH.

*Symptoms*—A watery discharge from the nostrils, with a slight swelling of the eyelids. In bad cases the face is swollen and it at once passes into roup.

*Causes*—Exposure and dampness, such as continuous wet weather, or it may be caused by roosting where a current of air is passing.

*Remedy*—Remove to a warm and dry place; feed a variety of stimulating and nutritious food, seasoning freely with cayenne pepper. If it passes into the last stages, treat as for roup.

## BRONCHITIS.

*Symptoms*—There is a rattling in the throat, being an accumulation of mucus, which the fowl coughs up and expectorates at intervals.

*Causes*—Caused from roosting in damp places and exposure to cold.

*Remedy*—Removal to a drier place will generally effect a cure. If that does not cure, give one grain of calomel and one-fourth grain of tartar emetic.

## CROP BOUND.

*Symptoms*—Continued hardness of the crop with a disinclination to eat.

*Causes*—It is generally caused by the fowl having swallowed something it cannot digest, as a piece of glass, bone or shell.

*Remedy*—Sometimes you can relieve them by feeding a tablespoonful of fresh lard and then rubbing the crop so as to commingle the lard with the contents of the crop. If this does not effect a cure, take a sharp penknife and make an incision through the skin and then into the upper part of the crop; clean the crop of everything in it. Then stitch the incision and feed for a few days on bread soaked in sweet milk.

## ROUP.

Roup is one of the worst diseases the poultryman has to contend with, as it will contaminate a flock in so short a time. Roup is common among fowls of all ages. It is either acute or chronic. It sometimes commences gradually; at other times, suddenly. It is better by far to prevent this disease than to cure it as it spreads so rapidly.

*Symptoms*—Difficult breathing, gaping frequently, rattling in the throat; the head is swollen and somewhat

feverish; the eyelids turn dry; the sight is obstructed and they sometimes go blind and starve to death. There are frequent discharges from the mouth.

*Causes*—It is generally caused by deep seated colds and moisture; sometimes by want of cleanliness. If your fowls roost in dark, unhealthy places it predisposes the disease.

*Remedy*—I have never found anything that I have ever tried that will do any good excepting my Roup Mixture. It is a reliable preventative and will cure in all but the very last stages.

### CONSUMPTION.

*Symptoms*—In the first stages of the disease the symptoms are hardly observable; later, there is a wasting away of flesh with a sneezing or coughing.

*Causes*—It is often caused by neglected cold; confined in dark, unhealthy places with scrofulous tubercles arising on the liver and lungs. It is most generally caused by breeding "in and in" too long.

*Remedy*—In the first stages a teaspoonful of cod-liver oil mixed with meal, is beneficial. In the latter stages the "chopping black" is the only remedy.

### PIP.

*Symptoms*—The appearance of a dry horny scale upon the tongue is the characteristic of this disease. The fowl has a short spasmodic cough. The first thing should be to remove the hard part on the tongue.

*Causes*—Exposure to cold and the use of filthy water.

*Remedy*—Take a small quantity of lard and mix into it some Scotch snuff. Give two or three doses every day for two days. Keep warm and dry and it will soon recover.

## RHEUMATISM.

*Symptoms*—Inability to move the limbs; manifest pain on attempting to move.

*Causes*—Exposure to cold and wet.

*Remedy*—Nourishing food and a warm, dry habitation is the best thing that can be done.

## GOUT.

*Symptoms*—Feet swelling, attended with some degree of heat.

*Causes*—Result of cold and exposure.

*Remedy*—Give one grain of calomel every night for four nights, keeping them warm.

## LEG WEAKNESS.

*Symptoms*—This disease is usually among cockerels though not always. The bird is more or less unable to support itself and squats around on its hocks, after standing for a short time as if tired. In bad cases they are even unable to walk.

*Causes*—It is usually caused by the rapid increase in weight of the body from the effects of over-feeding. It is more common in large breeds than in small ones. It often arises from "in and in" breeding.

*Remedy*—Dip the legs in cold water. Feed plenty of shells and mix lime in their feed.

## BUMBLE FOOT.

*Symptoms*—It is distinguished by a small wart like body on the ball of the foot. Enlarging, it ulcerates and the bird becomes lame.

*Causes*—The cause seems to be from flying down from the roost, where there is nothing provided for them

to walk down; sometimes caused by pressure from sharp stones.

### SCALY LEG.

*Symptoms*—The formation of a whitish scurf on the skin of the legs and toes. It becomes hard and warty in appearance, if neglected.

*Causes*—It is caused by a parasite working under the scales of the fowl's legs. It is evidently contagious and should have immediate attention.

*Remedy*—Wash the legs in water and coal oil mixed in equal parts, after the lapse of three minutes wash in strong soap suds.

### BALDNESS AND WHITE COMB.

*Symptoms*—A hard and scurfy appearance of the comb, head and neck; in advanced stages gradual loss of feathers from the head and neck.

*Causes*—Unnatural food, the want of fresh vegetables, impure water, ill ventilation and dark quarters.

*Remedy*—Return to the natural diet, give clean quarters, good ventilation. Feed daily plenty of sulphur and charcoal.

### CHICKEN POX.

*Symptoms*—A covering of the head, face or body with ulcers containing infectious matter.

*Causes*—Sudden changes of weather with a scant supply of food.

*Remedy*—Wash the parts affected with strong soap. Feed tincture of iron, sulphur and charcoal.

### MOULTING.

*Symptoms*—This is not a disease, yet it is the most critical stage in the year, especially, for old fowls. The

symptoms of bad moulting are: standing around as if not well, with its feathers having a rough appearance; inactivity and falling away in flesh.

*Causes*—As the body of the fowl undergoes a change it must also have a change of its plumage to keep up the life giving process of nature.

*Remedy*—Place the fowl in warm quarters where the sun shines freely. Feed nourishing feed and a small quantity of tincture of iron daily.

### ABORTION.

*Symptoms*—Moping about as if not feeling well after dropping a soft or perfect egg suddenly.

*Causes*—Sudden fright by anything generally the cause.

*Remedy*—Supply plenty of nourishing food. Feed shells, ground bone and lime.

### ASTHMA.

*Symptoms*—Panting as if difficult to breathe; opening of the beak often.

*Causes*—This is an obstruction of the air cells, being an accumulation of phlegm. The membrane of the wind-pipe becomes thickened.

*Remedy*—My Roup mixture is the only thing I know of that will do it any good.

### SWELLING OF THE HEAD.

*Symptoms*—Their head swells and is feverish. They appear stupid.

*Causes*—This is caused by filth, stagnant water and indigestion.

*Remedy*—Give eight grains of Jalap, afterwards feed sulphur and tincture of iron in their feed.

## BLACK ROT.

*Symptoms*—A black appearance of the comb; swelling of the legs and feet, and loss of vigor.

*Causes*—Want of exercise and feeding sameness of food.

*Remedy*—Feed nourishing food and plenty of green food.

## PROTUSION OF THE EGG PASSAGE.

*Symptoms*—The symptoms of this disease vary with the part of the oviduct affected. This occurs with laying hens and we can locate the seat of complaint by the state of the egg extruded. If the lower part is affected the egg is expelled before the shell has been secreted, and the result is a soft-skinned egg. If the middle part is affected the membrane is incomplete. If the whole tube is inflamed the yolk is dropped without any covering whatever.

*Causes*—Over-feeding and the lack of the proper shell material; inflammation of the oviduct.

*Remedy*—Give one grain of tartar emetic, and feed crushed oyster shells, ground bone and lime.

## INDIGESTION.

Indigestion is of frequent occurrence among fowls and is generally caused by improper food. The remedy is to give a variety of food and that which is nutritious.

## COSTIVENESS.

Costiveness frequently arises from feeding dry feed too long and deprivation of green food. It is certain to happen unless green food in some form is given. Fre-

quent attempts to relieve themselves is a good symptom of the disease.

*Remedy*—Give a dose of castor oil and feed bread soaked in milk for a few days. Supply plenty of animal and vegetable food.

### LICE.

It seems that the whole feathered tribe are infested with lice. They are very annoying to the poultry raiser. Fowls that are infested with lice will not thrive. It retards their growth and prevents their fattening and laying. Your chicks when once stunted with lice seem to never get entirely over it. My Gape preventative is also a complete lice exterminator. It will kill the lice and not injure the fowl in the least, either young or old. It will rid your hen house of lice.

### GAPES.

*Symptoms*—Sneezing, standing, drooping, gaping, and gasping.

*Causes*—Feeding sloppy feed, foul water, exposure to wet, eating a small species of bugs that stays on vegetables; transformation of mites from lice.

*Remedy*—The only preventative and cure in the incipient stage I know of is my Gape Preventative.

This disease is so prevalent I will tell you what I know about it. The gapes appear to be worse on some places than on others. Sometimes I find them on old settled places and sometimes on new ones. I think I would be safe in saying, that two-fifths of all the chicks hatched in the United States die of the gapes. This gaping is caused from the presence of numerous small red worms, about the size of cambric needle, adhering to the lining of the windpipe. The male and female are double and together somewhat in the shape of the letter Y. They multiply very fast, forming in this way

quite a roll of them. The blood vessels fail to give so many of them nourishment and the weaker ones letting go fall down in great numbers, choking the chick to death. The mites on the head of the chick, if the chick is lousy, will go through a transformation on entering the nostrils and produce these worms. There is also a species of bug that lives on certain vegetables which produce them. There is a specie of vegetable lice that stay around old chip piles which produce this worm also. It does not lose vitality by freezing nor during hot weather. In cool weather it appears to be the worst. After the chick gets of sufficient age, so that the muscles of the windpipe are toughened until it can not get hold, they can not hurt the chick. You may take a hen and chicks and let them run where they wish and if you are using my Gape Preventative they will not have the gapes. Take a brood of chicks that has just taken the disease and you can cure them. This I have tried time and again. I have had others try it with the same success. A lady friend told me that she had cured them when down and could not get up with my Gape Preventative. If your chicks run where others have had the gapes, they will pick up the gape-worm and be gaping too in a short time. Plowing land, turning it completely over, is very beneficial in destroying the gape-worms in the soil, especially if you cultivate beans or potatoes on said land. On some old settled places the ground has not been plowed for fifty years—in the yard and around the fence corners and barn lots where poultry uses.

Must we follow in the footsteps of our grandfathers and grandmothers letting our chicks die of the gapes or will we take advantage of the progression of the age in which we live? The old remedy our grandmothers had was to seize the chick by the throat, get a horse hair and push into the windpipe and extract the worms if they could. Sometimes they would get part of them

out and sometimes they would not. Frequently they would kill both chick and worms by such barbarous treatment. Such as this is uncalled for now. If it was not, THE KEY TO SUCCESSFUL POULTRY RAISING would never have had a passing thought. I would have been compelled to quit the poultry business, casting my eyes to my vacant coops and inquiring, "Is there not a cause?"

For gapes there is a cause and I have the preventative of that cause. If you begin in time the use of my preventative, (it is best to apply as soon as the chick is hatched,) and use promptly for a few days your trouble is over, and your success with this dreaded disease will be accomplished.



HONEST AND FAIR DEALING WITH ALL

---

# Honey Creek Poultry Yard.

---

## Thoroughbred and Fancy Poultry.

I have in my yards all the popular varieties of fowls. I guarantee ENTIRE SATISFACTION in every instance, and if any fowl shipped by me does not suit the purchaser it can be returned—express paid—and the money will be immediately refunded. I do not ask above a fair price for first-class stock. Anyone in need of fowls can obtain the price by writing for what variety they want. I will also feel very thankful for your patronage.

---

## EGGS FOR HATCHING.

I guarantee all eggs shipped FRESH AND TRUE to name. I ship no eggs over three days old when they leave my yards. I can ship eggs only by express to any State or Territory. The utmost care will be taken in packing eggs so as to have them arrive in good condition, and to hatch every egg if possible.

In ordering, if your postoffice and express office are not the same, be sure you give each. Order if convenient at least twenty days before you want the eggs. All orders filled in the order they reach me. Be sure to write your name plain. Send for price of the variety you wish and address,

J. D. MARTIN,  
Bruce, Moultrie Co., Illinois.



# One of the Secrets of Success!

---

YOUR AVERAGE HEN WILL LAY 100 EGGS PER YEAR. THE SAME HEN, IF MY SYSTEM IS FOLLOWED, WILL CERTAINLY LAY 200 IN THE SAME LENGTH OF TIME. THIS IS AN INCREASE OF 100 EGGS. AT ONE CENT EACH MAKES A GAIN OF \$1.00. THE GAIN FROM THREE HENS ALONE WILL PAY FOR

## The Key to Successful Poultry Raising

AND MEDICINE ENOUGH FOR FIFTY FOWLS AND TEN HOGS ONE YEAR. THEN YOU SAVE YOUR CHICKS FROM GAPES AND ROUP AND YOUR HOGS AND POULTRY FROM THAT DREADED DISEASE—CHOLERA. ALL PERSONS HAVING HOGS AND POULTRY CAN AFFORD TO BUY MY BOOK AND MIXTURES, BUT NO ONE CAN AFFORD TO BE WITHOUT THEM.

## THE KEY TO SUCCESSFUL POULTRY RAISING

—AND MY THREE MIXTURES:—

*Hog and Poultry Cholera Remedy,  
Gape Preventative and Lice Exterminator,  
And Roup Mixture*

MAKE A COMPLETE AND SURE SYSTEM OF HANDLING HOGS AND POULTRY SUCCESSFULLY.

Hog and poultry cholera remedy—Package No. 1, 60 cts.

Package No. 2, containing twice that am't., \$1.00.

Gape preventative and lice exterminator, per package, 50 cts. Roup remedy, per package, 50 cts. Sent to any address postpaid on receipt of price.

Bruce is not a money order office. Send all money orders drawn on the post master at Sullivan, Illinois. Money sent in registered letter at my risk. Checks or exchange received. Be sure and address letter to J. D. MARTIN, Bruce, Moultrie County, Illinois.











LIBRARY OF CONGRESS



0 002 851 074 3