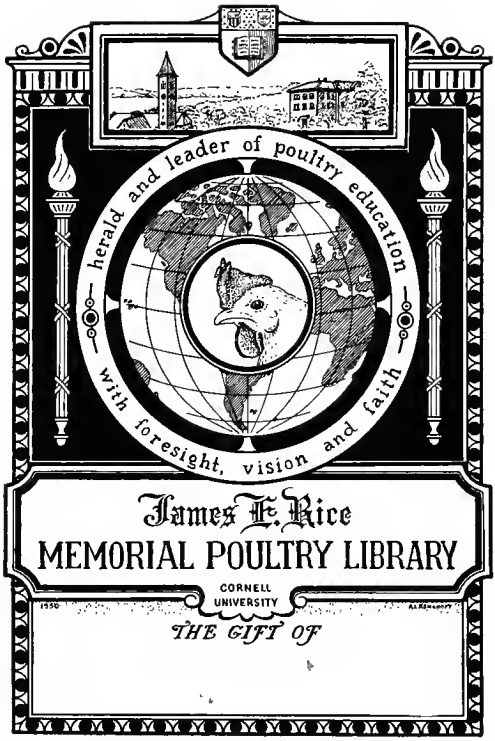
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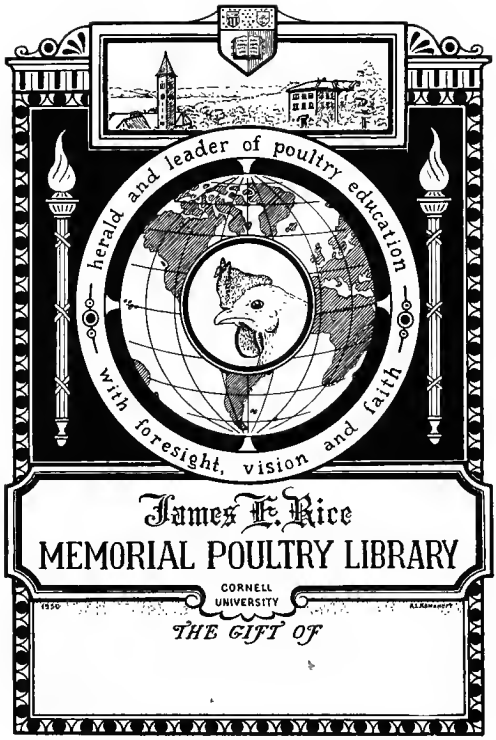
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All About Poultry

By Your Uncle Dudley

Book 12 Section 22

INDEX.

	PAGE
The difference between the Northern and Southern farmer	5
Value of influence of pure bred stock upon the intellectual life of the family	6
Poultrymen	7
The poultry interest in the South	9
A word of caution in regard to Northern poultry papers	10
Crossing breeds to improve them	11
What is a utility chicken?	13
The egg question in Georgia	14
The egg subject	15
The thoroughbred and market eggs	18
The poultry product of Georgia	19
Raising chickens in the back yard of a town lot	21
How to feed little chickens	25
The management of incubators	27
How to raise little chickens on the "cold storage plan"	29
To the wives of the farmers	30
Farmers' wives and cold storage	31
Standard weight of fowls	35
De Shanghi chicken (Poem)	36
The Shanghai fowl	37
The Brahma fowl	40
The Cochin fowl	42
The Plymouth Rock	43
Rhode Island Reds	46
Wyandottes	47
The Langshan	49
Mediterraneans	50
Orpingtons	52
Ducks and geese	55
The Indian Runner Duck	62
Feeding ducks	63
Geese	65
The management of geese	67
Capons	68
Turkeys	70
The Guinea fowl	72
The Connecticut Agricultural College	73
Diseases of Poultry	73
To the boys on the farm	79
Questions and Answers	81
Boys' day at The Georgian	103

Your Uncle Dudley

ALL ABOUT POULTRY

by

Your Uncle Dudley

MACON, GEORGIA
THE J. W. BURKE COMPANY
1910

Almost every article in this book has appeared in The Atlanta Georgian, of which paper I am the Poultry Editor. Hence you will note that reference is made in some of them to that paper. There are, however, several articles that did not appear in the Georgian, but were written for other papers, and are inserted here, because I thought that they might prove helpful to some who will read the book.

YOUR UNCLE DUDLEY.

TO EVERYBODY WHO IS INTERESTED IN POULTRY.

THE GEORGIAN is doing to-day more for the great poultry interests of Georgia than any daily paper in the South. We have a separate poultry department that tells you every day something that is helpful to every one who is in any degree interested in this great, profitable industry.

We are doing our best to awaken an interest in folks who do not know how to breed poultry, and when interested enough to make a start, to help them on to success.

For those who have commenced, we are doing our best to help them over the difficulties that they from time to time meet with. To those who have been for a long time in the business, we are helping, for we are on the lookout for new methods and new appliances, and calling their attention to them. We have a special page devoted to advertising that reaches more people for a less amount of money than you can find elsewhere. All who have tried our advertising columns can tell you all about this.

Now we want to help you another way. We want to hear from you. We want to hear of your successes or your failures, and if you have anything that will be helpful to others, let us have that also. Everybody who works for THE GEORGIAN is like a live wire, always busy, and we will not have time to read and cut out or add to a long letter, and therefore we can not use it, but if you will write us a short and snappy, right-to-the-point letter, not more than one hundred to one hundred and fifty words, we will take great pleasure in handling it. Inquiry letters will receive our prompt attention. Remember that we want to help you, for in helping you we are helping some one else also. Now if we can induce you to fall into line with THE GEORGIAN and pull together with us manfully, we will revolutionize the poultry business of our great Empire State of the South.

Yours Uncle Dudley

THE DIFFERENCE BETWEEN THE NORTHERN AND SOUTHERN FARMER.

In the North and Northwest you will find every farmer giving close attention to the small things of the farm; vegetables, small fruits, pigs, chickens and, of course, eggs. He reads the agricultural and poultry papers. He not only is careful as to the wheat and corn, but endeavors to make everything on the farm count, everything points to the dollar. In the South with better soil and climate the Southern farmer can not see the small things, because he has a bale of cotton so near his eyes that it shuts out everything else. He seldom reads the poultry or farm journals. In the spring he plants about an acre of highly manured land in a garden and makes enough vegetables to feed a neighborhood. His wife attends to the poultry and if he would give her just a half chance by helping her, she would make the poultry pay. In the summer he starts to town; he fills the back and front of the buggy with vegetables, while his wife goes to the barn and in the fence corners and hunts up two or three dozen eggs, and catches half a dozen nice fries and off he goes. On the outskirts of "town" a chicken flutters, he is hailed from a house; his eggs and chicks are sold before he reaches the center of the town. He sells about one-fourth of the vegetables, because the market is glutted. Every farmer in reach of town has done the same thing. He gives them away rather than take them home or takes them back home and feeds old Brindle on them. It cost ten times as much to produce them as it did to produce the grass growing all over the fields, that could have been easily harvested for old Brindle. Now had he planted one-quarter of the acre in a garden and had made a chicken yard for his wife of the other, bought a lot of well-bred chickens — the improved sort — that would enable his wife to raise broilers and

fries in two or three months, while the well-cared for hens would produce two or three times as many eggs as do the common fowls, he would not have had any vegetables to give away in town or to feed old Brindle on such costly food. Just after the war two gentlemen were going down the Mississippi river on a steamboat. One of them was an old planter, the other a merchant, who was trying to get the old planter to plant, instead of cotton, cabbages—4,900 to the acre at five cents each, $240 per acre, with less expense than cotton. The old planter straightened himself up and with a look of intense disdain on his face, said: "Well, who in the devil would have $240 made on cabbages?" There is some of that spirit still in the South. Look around the corner of that bale of cotton, Bud. The chicken yard will not cause you to make a boll of cotton less and then the chickens and eggs from that three-fourths acre will pay you better than any two acres of cotton on the farm. So thinks your "Uncle Dudley."

VALUE OF INFLUENCE OF PURE-BRED STOCK UPON THE INTELLECTUAL LIFE OF THE FAMILY.

Quite apart from the enhanced market value, pure-bred stock has another value which is not always estimated at its true worth—the value of its influence upon the intellectual life of the family. One only needs to go into the family home on the farm where the pure-bred cattle, horses, sheep or swine are reared to be convinced of the reality and beneficence of this influence. If other proof be needed it may be had by comparing or contrasting a home on such a farm with one on the farm devoted to grain farming. It has been said that wheat farming debauches the mentality of the farmer. While this is probably too strong a characterization, yet it graphically suggests

the mental vigor promoted by the life on the stock farm. There are some phases of the profession of farming not always well defined in our own thoughts; it is well worth while to consider some of these in their relation to the intellectual life of the farm family. For example, the circle of acquaintance and the associations which inevitably follow one's identification with any particular pure breed of live stock will widen the mental horizon; also the range of reading — imperative if one would keep abreast of the advance being made by all the pure breeds — will itself strengthen the understanding and broaden the general intelligence. Then, too, the study of nature's methods, the mysteries of heredity, the influence of environment, bring one into intimate sympathetic touch with the great forces or laws that wait upon and reward our intelligence, or perchance punish our ignorance. The more than human response in affection and absolute trust which the horse, and even the Southdown, will make to the master's care, teaches the highest lesson concerning our obligation to others. And all these lessons are so easily, so imperceptibly, transferred to other planes of life, where they inflenuce conduct and destiny. When one appreciates intelligently and sympathetically the high privilege of controlling the conditions that create vegetable and animal life he may get a glimpse of that perfect love and perfect justice Divinity exercises toward its creatures.

The above article is an extract from an address delivered by Mrs. Virginia C. Merritt, of the University of Minnesota.

POULTRYMEN.

It is not an uncommon thing to hear complaints from those who have just commenced to breed poultry as to having trouble with chickens and eggs received from those who have been in the business for a number of years.

Sometimes harsh things are said and from the want of a complete knowledge of the facts of the case charges are lodged against a shipper who has done his best to do the right thing and who is conducting an honest, square business. For about thirty-five or forty years I have been brought in close contact with poultrymen all over the United States. In the South I am personally acquainted with a very large number of the most prominent and also of the lesser lights among those engaged in breeding fancy poultry. I am quite sure that those engaged in this business are above the average in honesty and fair dealing of those engaged in any other business carried on in this country. That there are perhaps a small number of tricksters in this business there is no doubt whatever. But they can not possibly remain in business for any length of time. Now, the poultry business is not conducted like any other business that I can now call to mind. Every man in it is an independent dealer — no trust, or combine, or "special interest" here. And yet there is among these men a settled determination, in order to protect themselves, to expose every man who acts at all shady in the transaction of his business. Again, poultry journals everywhere are conducted by men who necessarily have been engaged in breeding poultry. They must thoroughly understand the business in its every detail, and they are compelled to protect every man who has an ad in his paper and also every subscriber. The moment that a dishonest chap turns up and the fact of his dishonesty is established, it at once becomes absolutely impossible for him to get an ad in any poultry journal anywhere. Recently a man appeared, advertising largely in many poultry papers, claiming that he had the best Rhode Island Reds on earth and that he had a large number of blue ribbons to his credit. He shipped chickens and eggs all over the country. He shortly reached his limit. *The Southern Poultryman* landed on him on a complaint of unfair dealing from one of its subscribers. This paper promptly returned him the money paid on a

contract and discontinued his advertisement. There is not to-day a poultry journal anywhere that will handle his ad business. So you see that while a very, very large percentage of poultrymen are honest and stand for that which is clean in business, the few shysters are compelled to act honestly or quit business.

When, therefore, you give an order for chickens or eggs and there is anything wrong, write the shipper a nice, kindly worded letter of complaint, and ninety-nine times out of one hundred you will be made happy by a quick adjustment of your trouble.

THE POULTRY INTEREST IN THE SOUTH.

In the tier of states known as the Cotton States recently there has been an astonishing awakening in regard to breeding fine poultry. For many years the interest in well bred chickens has lagged. Poultry journals were born only to die for want of advertisements and subscribers.

Chicken shows attracted so little attention that it did not pay to hold them—for almost invariably only "the cranks" attended them and they invariably had to foot the bills, except where they were held in connection with state or county agricultural fairs. And even then poultry was not even reckoned among agricultural products.

Farmers and many of the town folk, ridiculed the fellow who "fooled away his time" on "fancy chicks." Looking backward from the standpoint of to-day it is simply marvelous that such a state of affairs could have existed in a country with the advantages that these cotton states possess.

The state of affairs as mentioned above changed slowly for the better up to two or three years ago, when a real revolution was inaugurated. It rapidly increased in power and intensity. The old farmer visits the poultry shows to-day, adjusts his glasses and looks into a chicken coop.

"How much for that rooster?" "Five dollars," answers the owner. "I'll take him, for he is just the chicken that I want." Who ever heard of such a thing four or five years ago?

Well, the shows have won out, and the fancy are coming into their own.

The "fairs" used to place the chicken coops in the rear, where no one could find them. To-day they are fully recognized as an agricultural product, and are placed in a conspicuous place at all of the fairs.

THE GEORGIAN has been a powerful factor in helping to increase the interest of every class of people in this great industry, and will continue to use its best efforts to help the individual, and thereby to help the poultry shows.

A WORD OF CAUTION IN REGARD TO NORTHERN POULTRY PAPERS.

Not for one moment would I say a word against Northern poultry journals as being adapted to the needs of Northern poultrymen and others engaged in the work who are breeding poultry for profit or pleasure. There are a very large number of them published over the North. Some of them—most of them—are published simply as a scheme to advertise a new system, or an incubator combination, or perhaps a combination that controls several poultry appliances. Some of them, so far as I have been able to find out, are published strictly in the interests of all those who are engaged in raising poultry. Now group them all together and what do you find? Poultry journals, elegant in outward appearance and filled from the first page to the last with sensible, practicable, well written articles, that in a large measure apply exclusively to the North. Of course there are some of these articles that are helpful to the Southern poultry breeder, and to one who has been in the business for some years and who can, from his past experience with

them, use those that are helpful to him in the South, and discard those that apply only to the North. But how about the beginner? He is just starting out, his ears and eyes are open. He does not know how to do the simplest and most ordinary things. He subscribes to several Northern poultry journals. Difficulty after difficulty confronts him. He reads a Northern journal, and gets hold of that which puts him into greater difficulties. He becomes discouraged and quits in disgust. I am giving largely my own experience in the above. I frequently ask myself the question, "How long before an end will be put to the miserable habit of going to the North for everything that we need?" This habit seems to have fixed itself upon us all. These Northern journals have thousands of subscribers in the South, while our Southern journals "languish and pine" because Southern people do not support them. THE GEORGIAN has struck out on new lines. It is the only daily paper in the South that has a special poultry department, and from present indications it is going to be a large factor in the breaking up of this bad habit. Those who have crossed over the line are now looking backward and are singing lustily "never again." They are trying to warn the beginner not to do as they did, but to patronize Southern monthly journals and to call on THE GEORGIAN daily to help them out of their difficulties.

CROSSING BREEDS TO IMPROVE THEM.

People everywhere over the South, and perhaps elsewhere, have some strange ideas concerning crossing the different breeds of poultry to improve them. You can hear persons who perhaps have been raising chickens for a long time say: "I have a better breed of fowls in my yard than any that I know of," and then they will go into the details and tell you how they crossed one breed with

another and then describe the product of the cross. One who has a perfect knowledge of the breeds that he has put together sees in a moment that he has fowls that are inferior to either of the breeds that he has used. These folks do not for a moment consider that it took years of careful and skillful crossing, with a definite object in view, that is, to produce a fowl that could be depended upon to do certain things and to be superior to breeds on the same line. He does not stop to think that by crossing two of these nearly perfect breeds he is very near where the originators commenced to improve them. In the product the result of this boasted cross is that he has a chicken that is no better than the original stock that the skillful and patient breeder commenced with, to produce a fowl that was better than any fowl in its class. In other words, they are not much better than the common barn yard fowls that he could have bought for fifty cents. Again, I have stood by and seen farmers and others pay good round prices for a large Rhode Island Red — or of some other breed — male, weighing eight to ten pounds to cross with his small common hens, with the idea of breeding up to a lot of fowls that would equal in every respect their sire. There is no question that he improves his flock in the first generation, and if he uses a new male the next season he will continue to improve them. But what a slow and tedious process! About one-third of the result will be like their mother and by a slow process he will have a fowl superior to the barn yard fowl, but far inferior to the sire that he commenced with. Now, for a few dollars more he could have purchased a trio and saved a world of trouble trying to produce an impossibility, and that would have made him, with the pure breed, many times more than the price he paid for the trio. It is wise, therefore, to pay a little extra for the thoroughbred fowl, that the other fellow has the trouble and expense of producing.

WHAT IS A UTILITY CHICKEN?

There is, to those not informed as to the terms used by poultrymen, a great misconception as to what is really meant by a utility chicken. Everyone knows what "utility" means, and catches the idea at once, when advertised by poultrymen — that it means a general purpose fowl. But now how is that fowl bred? Is it a scrub? Is it bred apart from the show birds and are the show birds any better layers? Do the show bird's chicks grow faster? Well, let's see if I can explain what a utility bird really is, and how it is bred. In every hatch — large or small — from the oldest strain and the best birds used in America there will be chickens with some slight defect; sometimes it happens that a bird is as fine specimen as there is in the poultry yard, but there is a white feather or several of them where there should have been red feathers. Then, again, perfect except a feather on the leg, or a twist, or a lump on the comb, or a hundred and one small, unimportant imperfections that make the bird unfit for show purposes, but it is from the same parents, and full brother or sister to the bird that goes out of the show with a blue ribbon, and thereby enhances his or her value many times.

These birds will not do to breed from by a poultryman, because he is after, as nearly as possible, mating up his birds so as to produce birds that will conform to the rules laid down in the "American Standard of Perfection," in which every bird is described so perfectly that no one has ever attained to it. Frequently a breeder uses these slightly defective birds with splendid results. For instance, he, in making up his breeding pens, finds a hen from a long line of almost perfect parentage that has a defect in her comb. Well, he has a cock that has a perfect comb, and so where one is weak and the other is strong, he often gets the best results from such a mating. Sometimes it hap-

pens that utility birds produce equally as perfect birds as those of the same blood, mated for show purposes, but they are not apt to do this, and the breeder can not afford to take any chances, but when it comes to egg production or breeding fowls for market they are equal to any blue ribbon chicken of the same strain.

THE EGG QUESTION IN GEORGIA.

It is a matter of surprise to one not informed when he goes into the statistics as given by the agricultural department of Georgia as to the egg product of the state, to find such a great difference in the product of the different counties. The latest report is that of 1899. There have been some changes, of course, and within the last two or three years a decided improvement, but the improvement is, from the best information obtainable, not as great as it should have been, and the relative situation remains about the same.

A rather remarkable feature in this report is this: that the counties in which are located the large cities produce fewer eggs than counties of the same size or smaller in other parts of the state. For instance, Fulton produced only 122,460 dozen eggs; Bibb, 82,090 dozen; Chatham, 65,570 dozen; Richmond, 84,140 dozen; while Cobb produces 266,710 dozen; Houston, 118,940 dozen. The small county of Bryan, adjoining Chatham, 71,890 dozen; Burke, adjoining Richmond, 278,330 dozen. Then Glynn, 13,740, and Wayne, 67,040. You have, then, Atlanta, Macon, Augusta and Brunswick each in counties that produce far fewer eggs than the surrounding counties.

The farmers just at their best markets are allowing the adjacent counties to go over them and supply markets that are first at hand. Now this is said in no spirit of criticism of the counties adjoining the counties with the large cities in them, because all of these cities use thous-

ands of cases of eggs shipped in from other states. These facts are only given to inform the "near-town" farmer what he loses by not producing more eggs.

Carroll county produces 421,230 dozen eggs; Glynn, the smallest number, 13,740 dozen. The next largest is Gwinnett, with 335,880 dozen. The first ten counties produce over 200,000; there are fifty-seven that produce over 100,000, and sixty-eight that produce less than 100,000 dozen. The total production of the state was 15,505,303 dozen.

Now the above figures are taken from the last report of the agricultural department, and no doubt the next report will show a great improvement over the report from which these figures are taken, but the fact remains that the farmers of Georgia are far behind other Southern states in regard to the very important matter of breeding poultry.

THE EGGS SUBJECT.

The country was startled and perhaps shocked when it saw in the newspapers that thirty-six million eggs and several tons of poultry had been discovered in a cold storage plant near New York City that was put on storage last April. To folks who know what this means and are posted as to cold storage eggs and poultry, a fearful menace to human life is seen in this statement. An egg taken from cold storage will decay very quickly, when it becomes absolutely useless as an article of food. The people all over the country are rapidly becoming acquainted with the facts concerning cold storage eggs, and therefore the extension of this knowledge is increasing the demand for the fresh article. Should any one wish to prove the above statement, let him try to poach an egg just out of cold storage; it can not be done. Some of the hotels and restaurants use these eggs to scramble. Two days out of

storage and they will not do to fry. They are then used for cakes and served in the scrambled form.

The above facts, if known and acted upon by the farmers of the South, would undoubtedly cause them to produce more eggs and chickens, and make them a part of the main crop. As the case stands to-day, no one ever heard of a farmer who carried eggs back home because he could not sell them; but properly handled, he could increase the price of every egg that his poultry can produce to ten cents above the market price and have regular customers. The date when laid is marked on every egg. They are nicely packed in a paper carton that holds just one dozen, and the demand always far exceeds the supply. Other poultrymen are doing the same thing and their delighted customers say they are always glad to have them. The price now is about fifty cents per dozen. I mention the above because I know the above statement to be a fact.

King Cotton stands alone with the Southern farmer. His majesty needs help in order that he may properly carry on the government. He would like to create several new peers — the Earl of Pigey and the Duke of Roosteroso, and Lady Hen, and her daughter, Lady Pullet, and Sir Vegetable. Bringing these royal assistants to his help, he would then be such a mighty power that the meat trust and cold storage would be relegated to the rear.

There is to-day a very serious question confronting the Southern farmer, that they should at once look into and correct. Recently, there has been all over the country, North, South, East and West, a determined effort on the part of the United States government, and then by the governments of the different states and also by many prominent individuals, to give the people of the entire country pure food. Georgia is making a splendid fight against impure grain for the farmer, and impure food for everybody. Every citizen of Georgia should do everything in his power to assist in this great fight. Pure food

means much to each individual, and as the farmer is the producer of everything that we eat, it is but reasonable that we look to him to get into the front ranks and do valiant service, not only for his own, but also for his neighbors' protection and so, I desire to call his attention to some facts about eggs. Now the question that should deeply interest him is, what sort of eggs am I sending to market?. And what sort of eggs are my wife and children eating day by day? So in this article I purpose to give facts that will probably startle some folks, but you can not disprove a single fact that I give. Eggs are porous, and they absorb bad odors; if laid in a filthy cowpen they absorb part of the filth. If the nest is out among the noxious weeds they absorb the noxious odors. Put one or two drops of turpentine on an egg and you can not eat it. Kerosene oil will produce the same effect. Did you ever milk a cow in a filthy cow stable? Well, if you never have done so, I want to tell you that you can detect the foul odor in the milk as soon as you get to the house, and yet eggs take in bad odors more quickly than does milk. Again, as to feed. Every farmer knows that in the spring, if the cows eat bitter weed or wild onions, what the result will be to the milk. Why? Because everything that the cow eats goes into the milk. Now why not everything that a hen eats go into the eggs? Well it does. Laying hens kept about a filthy lot, taking into their crops and breathing into their lungs this filthy air, necessarily become saturated with filthiness. Then how can their eggs be pure enough to eat? Are we all really bent on having pure food? Well, says the farmer, how can I remedy this? Have a yard built for your laying hens, a house for them to roost in, feed them on grain and green food, make nests around the fence for them, do not let them lay in the hen house, empty the ashes in the yard, spade it up once a week. When you go to town tell the folks what kind of eggs you have for sale. Go to every doctor in town and tell him that you have eggs, packed in boxes,

one dozen each, with the date that the egg was laid marked on the egg; that the hens were fed on pure, clean food, that you guarantee them to be fresh and clean inside and outside. He will want them for sick folks and you will soon build up a trade that will enable you to get for every egg taken to market, ten cents a dozen advance on the market price.

THE THOROUGHBRED AND MARKET EGGS.

By request, Mr. E. W. Burke, of Macon, Ga., breeder of Buff Orpingtons and Rhode Island Reds, wrote the following for The Georgian:

"Oh, I don't want any fancy chickens; just want some to lay eggs for the family; can't afford to go in for the fancy." Ever hear anybody say that? Let's see which is cheaper, which pays best. If a hen can be maintained at the cost of $1 per year, she will pay a profit, if she lays eight dozen eggs in a year; if she lays ten dozen, she will pay fifty per cent. more profit. During 1909 the price of market eggs did not go below twenty cents, and the average price was about twenty-six cents, so that the eight dozen-egg hen earned above her feed $1.08; the ten-dozen hen, $1.60, and the twelve-dozen hen, $2.12. The fact is that the twelve-dozen hen earned more than $2.12, because in order to produce 144 eggs she had to lay some of them during the cold months, when eggs were higher. The cheap hen, costing about $1 and $1 to feed, will only go to eight dozen in a year; most frequently not over six dozen, and the majority of them lay during the pleasant months, when eggs sell at the lowest prices. Again, eggs from mongrel fowls are not uniform in size or color and do not command the price of extra fancy eggs.

The figures used in the foregoing estimate are based on eggs at wholesale market, or case egg prices; but there is a better profit than this to the egg farm near a city, for

special customers can be had to take guaranteed eggs gathered daily and sold before they are twenty-four hours old, and they will easily pay from five to ten cents more a dozen for them above the retail market price. In Macon the past few months, I have sold guaranteed eggs at forty to fifty cents a dozen.

To command these good prices, eggs must be gathered daily, packed in cartons of one dozen; each carton sealed and every egg under the seal guaranteed to have been laid on the days marked on the carton.

Doctors are prescribing egg diet in so many cases that the demand for strictly fresh eggs is greater than it has ever been, and it is steadily increasing.

Pure food is the order of the day, and an egg should be as free from impurities as any other article of diet. An egg farm must have yarded, grain-fed birds, and not the barnyard scavenger that produces the usual "fresh eggs" on the farm. Germs can as well be transmitted by the egg we eat as by the milk we drink.

The doctors are appreciating this fact and the invalid is only too glad to be able to get the pure and palatable egg at an advance in price over the ordinary kind.

E. W. BURKE,

The Oaks Farm, Macon, Ga.

THE POULTRY PRODUCT OF GEORGIA.

There are some facts concerning poultry breeding that should be known to every farmer in Georgia. I believe that it is the experience of poultrymen that all things considered, the production of eggs pays better than breeding chickens, and yet, with intelligent management, broilers and fries sent to market early in the spring pay a handsome profit. Later on, when the market becomes well supplied, eggs take the lead, so far as the profits are concerned. Your early hatched pullets will make your winter laying

hens, and if you can hatch off your chicks in December, January and February, they at eight to ten weeks old will bring from fifty to sixty cents each. It takes close attention and careful management to accomplish the above results, but there are a few men in Georgia doing this to-day, and if one can do it, all can, if the right sort of effort is made. Now, in a previous article I gave the latest reports published by the agricultural department of Georgia as to the egg crop of the State, and from the same report I find that the last report on poultry is as follows: Fowls over three months old, bred in one year, 4,549,144, turkeys, 103,416; geese, 208,997; ducks, 64,895, and again the same thing obtains largely as in the report of the egg production. The counties in which are located the cities, produce fewer chickens than the surrounding counties. Fulton, 39,120 fowls; DeKalb, 45,375; Bibb, 21,363; Monroe, 40,425. This is a large county and so is Houston, with 48,655, but every county touching Bibb produces more poultry than Bibb. Richmond is an exception, for it is bordered by two large counties and three smaller counties, two of which it exceeds, and one of which—Hancock—more than doubles Richmond.

The Glynn product is only 5,668 (this is not a good county for Methodist preachers), while the small county of McIntosh goes to 8,342. Again we find Carroll leading every county in the State in poultry with 108,292, and Glynn with 5,688.

Now from the above figures, taken, as I have stated, from the latest and best reports that we have as to the egg and chicken product of Georgia, we easily see what a splendid business opening is presented to the farmers, for all the counties are producing one-tenth or less, perhaps, of chickens and eggs than the people of the State consume; a product, too, that is as saleable as cotton, and that is always sold like cotton, for spot cash.

RAISING CHICKENS IN THE BACK YARD OF A TOWN LOT.

Some forty years or more ago, I commenced as a pastime to breed poultry on a small town lot. I had to rely upon my friends for advice, almost every one of whom had his own way of doing things, very few of them agreeing on any one point. I was, therefore, largely thrown on my own resources, and so what I am going to say about raising chickens in a back yard is the result of my own experience. I wish to state that for several years past I have not lost a chicken that came from the egg in good condition, except from my neglect, and that seldom occurred.

There are several things that are absolutely essential in the matter of raising chickens when kept closely confined within the dimensions of a small back yard. First, you must be in love with this delightful pastime—so much in love with it that you will not in the least degree think that anything connected with the work is troublesome, but on the other hand, is, to a tired business man, recreation—pleasure. Second, never forget that your chickens are in close confinement, leading artificial lives, and that they are entirely dependent upon you for such things as are essential to their health and general well being; that they could easily obtain on a larger range. In the main they need lime, supplied by cracked oyster shells, which will supply them also largely with grit; then, as a back yard is always hard and will necessarily soon become foul, it will need frequent spading. Then crushed bone and an abundant supply all the year 'round of green food; fresh ground bone about once or twice a week or dried beef scraps, if the fresh article can not be had. Fresh ground bone fed every day would not injure them, but if suddenly discontinued, will cause them to eat their eggs. An abundant supply of clean, fresh water is essential. They should be

supplied with crushed charcoal, which, mixed with the oyster shell, will please you to see how readily they eat both. Now, if you are interested in chicken breeding in your back yard, cut this out and keep it for it will be followed by other articles, telling you how to set the hens and care for the chicks.

In a former article I told you how to prepare the yard and also some of the things that were essential in order to make a success in the above pleasant and profitable pastime. Now as to the best breed of fowls to use: My advice is that fowls like the Rhode Island Reds, Orpingtons, Wyandottes or Plymouth Rocks are far superior to any others. They stand confinement better than Leghorns or any of the non-setters. They are quiet, very gentle in disposition and are easily managed; and then they afford you so much pleasure in raising the chickens. There is no great difference in the general characteristics of the above varieties named. Having selected the variety, purchase six or eight hens and a rooster from a reliable dealer, and with a hen-house built as nearly as possible according to the following plan you are ready for business. The above number of fowls will give better results than a larger number. It will insure you a large percentage of fertile eggs, and prevent crowding, which causes disease. For the above number you will need a house, say, six by eight or ten feet square and eight feet high. It should be built of good seasoned lumber. Two sides should be entirely closed; avoid having cracks in the solid sides; a small draught will give fowls a cold that will end, unless checked, in roup. The front and west side should be slatted —the slats two inches apart, or wired with two-inch mesh poultry wire. If possible, have the solid sides face north and east. The roost should be about three feet from the ground, round if possible; if not, narrow three or four inches wide edge-up, with a board with slats nailed across it, so that the hens can walk up and down to the roosts. There should be no nests in the hen-house. Be sure to

have the roof tight. The roof should slope about one and a half feet.

Now about the treatment of poultry confined in the back yard. Hens like to be in a quiet place at all times. They soon become wild and hard to manage if they are disturbed. Kindness and gentleness soon teach them that you are their friend, and in a short while you can pick them up and caress them, or minister to their needs in sickness. Never lose sight of the fact that they are utterly dependent on you and that they highly appreciate any kindness that you show them. There should be shade in the yard or some place where they can get out of sight for one or two hours at noon.

Avoid soft food entirely if possible. In the morning, as early as possible, give them the mixed commercial feed, but never more than they can eat up clean. At noon feed as in the morning. At evening whole corn, oats or other grain. Be sure that they get enough and leave none on the ground. In the winter, for green food, soak oats in water until they sprout and commence to show the green, and they will eat roots and all. Alternate with dry alfalfa dampened and mixed with wheat bran. Do not forget to keep crushed charcoal and oyster shells, cracked, always accessible to them. Keep also in a box three or four inches deep charcoal, fine, one inch deep, one-half inch sulphur, with wheat bran sprinkled over the sulphur. Keep this out of the rain, where they can get it. A frame to fit just inside the box, covered with inch and a half poultry wire, will prevent them from scratching the contents out. Now, of course, no one can give explicit directions as to feeding day by day, and the above may be varied according to circumstances However, small grain, wheat, rye, oats, etc., may be fed separately. Oats is about the best of them all. Ground bone, fed with wheat bran, dampened, three or four times a week. Fresh lean meat, liver or dried meat scraps three or four times a week. Keep the yard spaded up. Feed on the loose ground, and

give them fresh clean water all the time. All of the above is intended only as an outline to act as a guide for the man who keeps chickens in his back yard on a town lot.

The disease that gives great trouble in raising chickens is roup It begins with a cold, and if not checked will spread rapidly until the entire flock is affected. In its first stages it is easily cured, later on it is almost impossible to cure. Almost every poultry man has a different remedy. I have been successful with the following: Sulphur, lard and pulverized charcoal, one part each, made into a pill as large as your finger and half as long, given morning and night for two or three days. Five grains of quinine with first dose. Then, with a dropper such as you use to fill your fountain pen, inject chloro naptholeum, one part to twenty parts of water, in the nostrils, and in the slit in the roof of the mouth. The affected fowl should be confined, apart from the flock, for the disease is highly contagious. In the second stage of the disease you can easily detect its presence by an offensive odor from the mouth.

Sore head is a summer trouble, and as it generally appears suddenly, affecting, perhaps one-half of the flock at once, a close watch may enable you to arrest it at once, but if allowed to get a firm hold on the flock it is difficult to cure. It commences with a number of small warts on the head. Use the same treatment as for roup, except that you paint the warts with the chloro naptholeum solution. Of course both of these remedies are for grown fowls. Lessen the dose, therefore, according to the size of the chicken.

Gapes can be easily cured by giving the chicken a lump of cooking soda about the size of a pea.

Sour crop is caused from indigestion. The crop becomes enlarged because the food does not pass to the gizzard. Feeding soft food is largely responsible for it. Remedy: Fill the crop with warm water and then hold the fowl's head down and gently squeeze the crop until it is empty.

It sometimes requires two applications of the water to cleanse the crop thoroughly. A little cooking soda should follow the cleansing of the crop.

The above three diseases are those that give the most trouble. To cure the others, try and find "Your Uncle Dudley."

HOW TO FEED LITTLE CHICKENS.

I am going to give in this article my way of feeding newly hatched chickens, and then in another how they should be housed on the "cold storage" plan. Feeding and housing are almost inseparable; therefore, you will have to read both articles in order to arrive at a proper understanding of this all-important part of a chicken's life. In telling how to manage an incubator, I said that the hatch largely depended upon the first seven days during incubation, and so the lives of the little fellows depend very largely upon the first ten days of their existence.

For the first twenty-four hours they subsist on the yolk of the egg, and require no other food whatever. They should be taken from the incubator or from the hen and placed in a coop, which will be described in the next article, and given only fine, natural sand or grit. I do not like the artificial or manufactured article. Now, the object of this is to enable them to get sand in their gizzards before any food is given them. God gave them, you see, a mill inside of them, but He did not furnish them with the rock to operate it, so if you will give them the opportunity they will take in enough grit to run the mill after twenty to thirty hours. As soon as the mill is ready for business, give them a little small grain. I have never found anything better than small cracked rice, but any small grain will do, except cracked corn or corn in any shape whatever. Never under any circumstances feed on soft or medicated feed. Pure wheat bran can be sprinkled over the sand

with the cracked wheat or rice. All along through their lives they will need wheat bran. Your object should be to develop every organ at the same time; so you give them the rock for their mills and then something to grind, but when you give them wet meal their mills are almost choked up and the soft stuff will sour. Then comes indigestion and then death, but keep the mill busy with grain and it will develop, while scratching in the wheat bran for the grain to grind develops the muscles and all of the organs move along together, as nature demands that they should. Charcoal (fine), green food, fine crushed oyster shells, and, of course, fresh, clean water, should be kept before them constantly. Continue to feed in this way from ten to fifteen days, when you can feed the ordinary commercial feed. But see to it that there is very little corn in it. Dry alfalfa or sprouted oats will furnish green food. A shallow box with cracked charcoal at the bottom, sprinkled with sulphur and covered with wheat bran, should always be before them.

The little chickens are now about fifteen days old. They have been fed with small grain, green food, pure wheat bran and have had constantly before them crushed oyster shell, sand, crushed charcoal, and a supply of clear, fresh water, but no soft food, no corn in any form. There are about twenty to twenty-five in each coop. They now are getting to know you, and when you go near the coop they all run to meet you. You have laid the foundation for a good, strong, evenly developed constitution, and they feel good. Their mills are working beautifully, their muscles are becoming strong and they need a slight change of diet, and so you will have to feed them on the commercial food, composed of wheat, barley, rye, clipped oats, but see to it that the kind that you buy has no, or very little, cracked corn in it. You will find sometimes that it contains oyster shell. Crushed oyster shell is worth $1 per 100 pounds, while the grain food costs about $2.25, or over, per 100 pounds, so buy your shell apart from your grain. They

will not eat it up clean for the first eight or ten days and you will have to move the coops about every other day to a place that has been spaded up, and raked off, so as to have nice, clean quarters with a fresh supply of grit. They will now require fine ground meat about twice a week—lean meat if you can get it—and if possible, ground fine with green bone; avoid giving them fat meat. Should you be unable to get the fresh meat, give them dried meat, which you can get at any time from the poultry supply stores. Never give fowls or chickens the medicated prepared food advertised to make hens lay and chickens grow fast. Good, sound grain will do all that is claimed for this stuff, much better than medicine will.

As the chickens grow they should be separated and given larger quarters. They should never be crowded. A great many chickens are lost by confining them to close quarters. They should be given room enough to enable them to move out from the crowd when they get too hot. When they get to be six weeks old let them have as open place for their roosting place as possible, shielded from wind, drafts and dampness. You will, of course, have to depend upon your judgment for many things that could not be told here, but just think, and then use good, old-time horse-sense and you will succeed.

THE MANAGEMENT OF INCUBATORS.

The following remarks as to managing an incubator are intended for those who are just starting in the poultry business, and not for the old-timers. The directions given are in a general way the main points, for, of course, I could not cover the minor points in an article of the length of this:

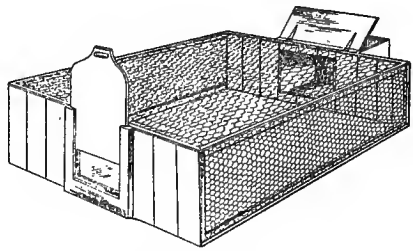
The most important thing to do is to buy a first-class machine; cheap machines are often worthless. Your

machine should be operated in a place where you can, at all times, maintain an even temperature, and where it would never come in contact with a draft. It should be beyond the reach of bad odors. The room should be dry. The machine should be level and steady. It should be opened and aired before putting the eggs into it. You should be careful and under no circumstances put a soiled or an imperfect egg in it. It should be set at a temperature of 102½. Never pile the eggs one on another, but fill the trays with clean, fresh eggs. During the first seven days the eggs will require careful attention. They must be turned two or three times daily. This must be quickly and carefully done, for should they become chilled it will seriously affect the hatch. At five days the embryo commences to take life, which on the seventh day can be plainly seen. (All first-class machines send egg-testers with the machines). Every egg should be carefully tested now. A perfectly clear egg is infertile; a dark or cloudy egg is imperfect. These should be removed. The infertile egg can be used for food and the cloudy egg should be destroyed. At the beginning of the second week the temperature should be raised to 103 and kept at that figure until the hatch, except that during the latter part of the second week and along through the third the ventilators should be opened for a short time to give the eggs a fresh supply of oxygen. On the twentieth day some of the eggs should be pipped, and on the twenty-first all should be hatched. On the twenty-first day, in the morning, examine those not pipped; hold the egg in your hand, and should you feel a slight movement in the egg, make a small hole in the butt end, being careful to use an instrument that will not penetrate far enough to touch the chick. Look in, and if alive, carefully help the little fellow to get out; but be careful not to cause the inner skin of the egg to bleed. Just open the egg enough to allow the chick to free himself. In a first-class machine you will not need to supply moisture, except just before hatch, when a clean

cloth (not dyed), dampened with warm water, can be spread over the eggs.

I will say something about caring for little chickens in my next.

HOW TO RAISE LITTLE CHICKS ON THE "COLD STORAGE" PLAN.



I have contended for years that artificial heat was not only unnecessary, but hurtful, to newly hatched chickens. I have written much on the subject, and while no one paid any attention to me, I just plodded on in my way of feeding and brooding without lamp or hot water. I seldom raise less than one hundred per cent. of the hatch that come from the egg in a healthy condition. In the article just in advance of this I have told how I feed them, and now I give you the cut of a simple coop that I have been using successfully for some years back. As you will see, the coop is lightly built. It has a door on the front, which is solid, except the door. The sides and top are covered with one inch mesh wire; on the back end is a box, the top of which is tight, but on hinges so that it can be raised, thus giving you access to both ends of the coop. The box should be two inches from the ground. The coop for twenty-five chickens should be three feet wide and five or six feet long, and about ten or twelve inches high. The nest box at the back end of the coop should have an inside

opening of six inches long and four inches high. There should be a small shed above the opening to keep the rain from beating into it. There should be on top of the coop a light water-proof cover—a frame covered with roofing paper will answer. This should not be nailed to the top, but loose, so that in bad weather the coop can be kept dry, and the front of the nest box also protected. The nest box for twenty-five little fellows, should be about eighteen or twenty inches square, and sixteen to eighteen inches high. A little fine excelsior on the bottom will add to their comfort. On every cold night cover the coop with burlaps. Be sure to have the top of the box to shut down tight, so that a draft will not reach them. Now, put them in as soon as twenty to twenty-five are dry, feed as in former instructions and you will raise them all if you are careful. Watch them for one or two nights, to see that they all go to bed.

TO THE WIVES OF THE FARMERS.

I have written a great many articles about the great importance of the poultry interest to the farmers of the South, and while there is now going on all over the South a great awakening among the farmers, it seems that this great interest should show a greater awakening than it does, so I am going to have something to say to their wives. It is said that upon one occasion a farmer's wife was set upon having a certain thing done that her husband opposed. He finally said: "I want to tell you that I am the head of this family and it shall not be done." "Well," said the good wife, "you are surely the head, but I am the neck, and the neck always moves the head as it wishes," and the head moved that way. So I am going to write one or two articles to the necks. Women have a natural God-given talent for breeding poultry, and where they read upon the new methods of breeding poul-

try, raising early chickens and learn how to prepare eggs so as to market them to the very best advantage, it is wonderful what a success they meet with. I read often in the papers how intelligently they discuss the problems that are under discussion among the poultrymen, and then at the great success that they meet with in the show room. I stood by and heard it asserted that a woman was offered one thousand dollars for five Buff Orpingtons that she had at the Atlanta show, and she had been in the business for only five years. Now, this is (I admit) somewhat an extreme case; but with eggs at forty cents a dozen for case eggs, and for eggs properly packed, clean, as nearly as possible all of one color, bringing in the cities and towns fifty cents, and hens at seventy-five cents each, with no broilers and fries to be had at any price in Georgia, in the early spring, there is surely something wrong among the farmers that their wives should correct, and if they do not know how to turn the trick, they should quickly learn how by reading up on poultry; get in a stock of the best breeds and thereby keep some of the money at home that the Tennessee folks are pulling out of our State.

FARMERS' WIVES AND COLD STORAGE.

Did anyone stop to ask why eggs are put on cold storage? Well, because there are not enough eggs produced in the United States in the winter to half supply the demand, and so in the spring eggs are bought up in large quantities, put on cold storage and held over to supply the winter demand. This is a fact that should be known by every farmer's wife in the South, for in the North, while they do produce large quantities of winter-laid eggs, they do it at so much expense that it strikes the profits a heavy blow. What an enormous advantage the farmer's wives have here if they would take advantage of this fact and learn some simple things about poultry culture! I

believe that it would be a paying investment for the legislature to provide for a poultry bureau under the control of the agricultural department, empowering the department to send a well informed Southern poultry man to lecture to the farmers' wives on poultry culture, and especially on the production of winter-laid eggs, and how to increase the supply. The Southern farmers' wives, properly instructed, could in a few years produce a sufficient quantity of eggs to run cold storage eggs out of the Southern market and put millions of dollars into their pockets.

In our splendid climate we have the ability to grow winter and summer every article of food that is necessary to produce an abundant crop of winter-laid eggs, and this would mean twice as many winter-laid eggs as the entire country could consume. We would then be sellers and not buyers of winter eggs. This will never be accomplished, though, until the farmers' wives take the matter in hand. Think what a happy day that would be! Bill out in the field fixing for cotton, tugging at the bell rope with which he was gee-hawing old Balaam, and Mary in the poultry-yard singing, to the sweet music furnished as an accompaniment by the cackle of the hens, and thinking of the happy time when she will market them, and have the dollars roll into her pockets.

In 1903, the Western and the New England States awoke, as from a dream, to the importance of the egg business in the United States. Previous to 1903 the papers, poultry journals, farm papers, and the dailies commenced writing up its importance as a money-making business. New England was the first to give the business much attention; the West—more particularly the far West—opened their eyes and went after the dollars that they have since gathered. Then there was an awakening that traveled south along the Mississippi valley. The business increased with wonderful rapidity.

Kansas, in 1903, produced $6,498,856 worth of eggs, and

in 1907 the output was $10,300,082. Today the bulk of our eggs comes from the farms in the Mississippi valley. Unfortunately, it has not spread farther over the South. There is, however, a marked increase in the interest that the cotton belt states are taking in the production of eggs and poultry. There is a matter, however, that should attract the attention of the wives of the farmers, and that is the quality of the eggs produced on Southern farms, and also the great loss that they sustain in the careless manner in which they handle them. The eggs produced by the common or dunghill hens that are bred all over the South weigh nineteen and one-half ounces (average) to the dozen; the average Tennessee weight is twenty-one and one-half ounces to the dozen; Western eggs, from twenty-four to twenty-five and one-half ounces to the dozen.

Now, the above facts show, even without the application of the up-to-date methods of handling improved poultry, their great superiority over the common stock in the matter of producing heavier eggs. In the Eastern States and largely in the West the common hen is a thing of the past. In the Eastern and Western States and largely in the Missisippi valley the farmers avoid letting their hens lay around the barn or in the fence corners or in the weeds, because they can not ship soiled or stained eggs. In many localities they are unsalable, so they provide nice clean nests, and, when necessary, force their hens to lay in them. A soiled or stained egg is frequently unfit for food, for eggs quickly absorb dampness and with its odors and uncleanliness that affect the taste and quality.

Pack a few eggs in pine sawdust. In two hours break one of them and you smell turpentine.

The following six breeds of fowls are, in the opinion of the majority of the poultry breeders of the South, best adapted to our climate: Orpingtons, Rhode Island Reds, Barred Plymouth Rocks, Wyandottes, Leghorns and Minorcas. The first four named have more or less Asiatic blood in their veins. The two latter are of Mediterra-

nean origin. The four first named generally lay dark colored eggs. The two latter lay clear white eggs. The Minorcas lay perhaps a larger egg than any other breed. The Leghorns and Minorcas require warm, comfortable winter quarters, and if well cared for they will lay fairly well in the winter. The other varieties should not be kept too closely housed, but they must be kept where the cold north winds can not reach them in their roosting house. The following suggestions as to the general treatment of fowls in order to increase the winter production of eggs may help you:

Provide comfortable winter quarters, facing south. Do not let them roost in the barn or out on trees. No not house the first four breeds in quarters that are too warm. The two last named must be kept comfortable at night and require warmer quarters at night than the others. Feed them regularly, and let them go to bed with full crops. Keep clean, fresh water before them at all times. Gather the eggs once a day, and in warm weather twice a day. Never take an imperfect or soiled egg to market. In the summer place the eggs in a cool, dry place, where there are no offensive odors. Avoid straw or hay for nests; they produce mites. Use excelsior if obtainable; if not, use clean, dry, fine sand or earth that has never been fertilized.

Now, I have said some of these things before in my articles, but not to the wives of the farmers, and I close these letters to them with the wish that every farmer's wife in Georgia would commence now to take a deeper interest in poultry culture. Select the breed that seems best to you, read the poultry papers, study this book, make a wired poultry run, and you will soon be glad that Uncle Dudley advised you to breed poultry.

STANDARD WEIGHTS OF FOWLS.

We have often been requested to publish the standard weights of the various breeds. It is a good idea to have the correct weights of your breed in mind when purchasing.

Breed.	Ck.	Ckl.	Hen.	Pul.
Plymouth Rocks, all varieties	9½	8	7½	6½
Wyandottes, all varieties	8½	7½	6½	5½
Rhode Island Reds, all varieties	8½	7½	6½	5
Light Brahmas	12	10	9½	8
Dark Brahmas	11	9	8½	7
Cochins, all varieties	11	9	8½	7
Orpingtons, all varieties	10	8½	8	7
S. C. Black Minorcas	9	7½	7½	6½
R. C. Black Minorcas	8	6½	6½	5½
S. C. White Minorcas (no rose combs)	8	6½	6½	5½
Langshans	10	8	7	6
Dominiques	8	7	6	5
Javas	9½	8	7½	6½
Buckeyes	9	8	6	5
Silver Gray Dorkings	8	7	6½	5½
White Dorkings	7½	6½	6	5
Cornish Fowls (Indian Games)	9	7½	6½	5½
White Faced Black Spanish	8	6½	6½	5½
Houdans	7	6	6	5
Bronze Turkeys	36	25	20	16
Pekin Ducks	8	7	7	6

The Leghorns, Anconas, Hamburgs and Polish have no standard weights.

A cock is a male bird over one year of age.

A cockerel is a male bird under one year.

A hen is a female bird over one year of age.

A pullet is a female bird under one year of age.

De Shanghi Chicken.

Oh! de Shanghi Chicken
Am a mighty funny fowl,
Said de double-headed Pigeon
To de one-eyed Owl;
De old Grey Goose,
Wid de web 'tween her toes,
Most kills herself a laffin
When de Shanghi crows.

De Shanghi Rooster, he gro so hi
He head it almost tech de ski,
An when dat Rooster gins to cro
He neck bens back des like a bo.

CHORUS:

Oh Shanghi! Shanghi
Don't bet your money on de Shanghi.
Catch a little chicken; drap him in de ring,
But don't bet your money on de Shanghi.

THE SHANGHAI FOWL.

It was in the middle of the fifties that I saw for the first time in my life a dark, terra-cotta colored egg. An uncle who was fond of poultry gave twenty-five dollars for a trio of a new breed of fowls that had been brought from China some years previously. I have a distinct recollection of these fowls. They were light colored, or white with dark markings. They were very large, with long, feathered legs, and the person from whom they were purchased said that when fully grown the male bird would be able to eat off of a flour barrel. Many other wonderful things were told of these remarkable fowls. Previous to the advent of the Shanghai, the common chicken in South Carolina was largely mixed with game, and because of their quick feathering, particularly their wing feathers, it was difficult to raise them. Now, of course, after the excitement had cooled down and many others commenced to breed the Shanghais, I was given a setting of the eggs. I think my chicken fever, which has since become chronic, began with that setting of eggs. Well, the chicks hatched and commenced to grow, and, wonderful to behold, instead of being heavily feathered, they were over half grown before they commenced to feather at all. There was a feeble effort made to feather, but they were nearly naked. Now, they were quick growing, and very hardy, and when fully feathered very beautiful.

The above is my boyish recollection of the Shanghai fowl. After this I remember the Brahma Pootra, and the Chittagongs, and then came the Cochin. I have written the foregoing as the starting point in the history of the Asiatic fowl, for my purpose is to write the history—or what is known of the history of the most wonderful, to my mind, fowl on earth. They have been traced back in China —some of the strains—for nearly two thousand years. I

have read accounts of the origin of these fowls that are somewhat confusing, for these accounts tell us that the Shanghai and the Cochin are identical. This is an error. The Brahma that we have today came from the old Shanghai, while the Cochin is of a different strain. The Buff and Partridge Cochins have been bred in China for hundreds of years—somewhat like those bred in America today.

No breed of fowls in America—or, for that matter, in England—has as interesting history as has the Asiatic fowl. It was early in the fifties that a vessel arrived in New York from Shanghai with a large number of fowls of different colors. They were larger than any yet seen in the United States. Not only this, but in many other respects, these fowls were entirely different from any fowl that Americans had ever seen. George P. Burnham bought from the captain of a vessel a number of them that were gray in color, and commenced breeding them. There is no doubt that there were a few brought over before. A missionary brought some of them from China to his father, who lived in Connecticut, in 1847, and then a few were received in 1849. But Mr. Burnham sent nine of his flock to England, presenting them to Queen Victoria in 1852. This attracted the attention of the whole country to them. The only breed that had been given any attention before this was the game. They were bred all over the country by aristocrat and plebeian. They were bred for no other purpose but to fight. News traveled slowly in those days, but in comparatively short time the wildest rumors spread over the country concerning the Shanghai fowl. Fabulous tales were told about them. Everybody talked of them, and as the reports traveled over the country they rivaled (if they did not surpass) the history of the three black crows. Enormous prices were paid for them, but not as large as the yarns that were spun concerning them. The record as to many things pertaining to their history in the early fifties has long been in dispute, but the record

is clear as to one thing, and that is, that the first case of chicken fever occurred in the early fifties; that it spread rapidly, became epidemic, and that more men, women and children have it today than ever, and the number is still increasing. To the old gray Shanghai belongs the honor of being father of fancy chicken breeding in these United States.

Today two breeds represent the Brahma-Pootra, Cochin-China, Chittagongs, gray Shanghais and some other names by which they were known in the fifties, and they are all known now as the Brahmas and the Cochins. I will take each of them up in another article.

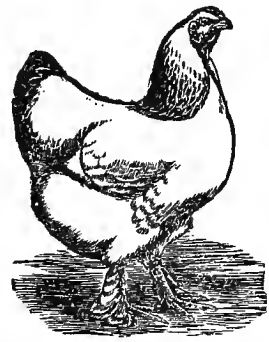
Years ago there lived on a plantation near Summerville, S. C., two old maiden ladies. With the exception of a nephew, whom they had adopted and reared, their relatives were all dead. The boy, whose name was William Smith, was a bright, energetic, good fellow, bubbling over at all times with good will for all mankind, and fun for his companions. Now, the two old ladies were old-time Methodists, and like all of the old Methodists folks, kept open house for the preachers. Among the preachers was one, a grand, good old patriarch, who used to say that he was at home in South Carolina, wherever he had his hat on. His name was "Uncle" Sidi Brown. Billy Smith used to say: "Yes, and more so, when it is hanging up on our hat-rack." Well, Billy said that upon one occasion Uncle Sidi stopped at the gate at about eleven o'clock in the day, got out and came in. He received a cordial welcome, his horse was "put up" and the good old folks set about getting dinner ready. The chicken cholera had just swept over the country and all that was left these good old folks was a Shanghai rooster, a guinea hen and a muscovey drake, and Billy was told to catch one of these for dinner. After a vain effort to locate either of them, he returned and reported the fact to his aunts. The old ladies were forced to sit Uncle Sidi down to a dinner consisting of corn-bread, bacon and greens. Uncle Sidi enjoyed his dinner and then called for his horse. He

bade the folks good-bye and started out. Just here the old Shanghai appeared in the back yard and crowed: "Sidi is g-o-n-e!" but Uncle Sidi had forgotten his umbrella and started back for it. Now the guinea hen was doing picket duty on the fence, and as Uncle Sidi started back, gave the alarm: "He's come back! He's come back," and then old Muscovey sounded a warning, when he stuck his head from under the house and said: "Hush-hush-hush," and so ended what came near resulting in the tragic death of one of the three that survived the cholera, and so endeth the history of the Shanghai fowls.

THE BRAHMA FOWL.

The Brahma and the Cochin fowls that are bred in large numbers in the North today and that are so highly esteemed there, as I have said in a former article, are the descendants of the fowls that in the latter part of the forties and in the first of the fifties arrived in this country and created such a sensation. We are told by travelers, missionaries, and others that in the interior of China the people are experts in incubation and breeding poultry, and that the fowls differ in size, shape and color, according to the location in which they are bred, and that they are taken to the nearest city for sale. The original importations were generally named for the city that they came from, hence Mr. George P. Burnham selected and bought light colored fowls from the captain of a vessel that came from Shanghai and named them Gray Shanghais, and there is no doubt in my mind that these fowls are the progenitors of the Light Brahma of today, but this is disputed. Of course there may have been some admixture of other Asiatic blood, but in shape and color the fowls that I bred as a boy resembled the Light Brahma of today very closely, as I remember them. The dark Brahma resembles the light or penciled Brahma in many respects,

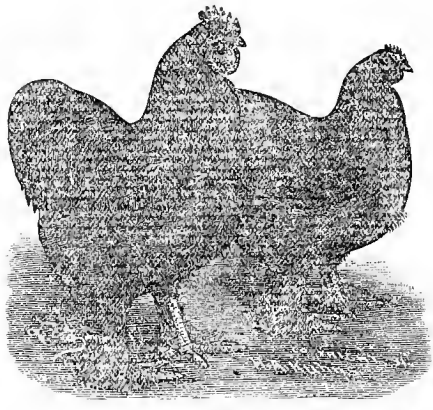
and evidently came from dark-colored Shanghai stock. The Light Brahma is the largest fowl of which we have any knowledge, and weighs one pound more than the dark Brahma, both cock and hen. Their weight by the standard is, cock twelve pounds, hen nine and one-half, while the dark Brahma cock should weigh eleven pounds, hen eight and one-half. Very few of the Brahmas are now bred in the South. They were once very popular. Those who once bred them found them sluggish. They are not good foragers. Their great size and consequently their weight made them poor mothers and they were cast aside for the thrifty Leghorns and the barn yard hens were used for mothers until the Plymouth Rocks came, and largely supplanted the Leghorns. In the New England States they are still highly esteemed, particularly the Light Brahma. Both the light and dark Brahmas are good winter layers. The chickens, it is claimed, are more easily raised than those of any other breed. The light variety lays next to the largest egg of any other breed, and, it is claimed, heavier than all other eggs. The Minorca lays the largest egg of any breed. The dark Brahma would be more popular among breeders but for the difficulty in getting them bred to standard requirements. The Brahma, however, still stands at the head of all fancy poultry bred in America, and will perhaps reign king for many years to come.



LIGHT BRAHMA HEN

THE COCHIN FOWL.

In the article that precedes this I have said much about the Brahmas that can also be said of the Cochins. In fact their history in America is so interwoven and, as it were, blended together that breeders have been squabbling for about forty or fifty years in the honest effort to get their history correctly written without having been able to straighten it out. A number of books have been written pro and con on the subject. Travelers have been interviewed; men going to different parts of China have been asked to investigate and report on their return. Then various reports have been discussed in the poultry papers, books written about them, and then discussed in the clubs, and today we are just where we commenced. It would fill several pages of The Georgian to notice a small part of them. The claim on the one hand is that the Cochins and the Shanghai are identical and on the other that they are a separate and distinct breed. The Cochin family, it is claimed by some, came from Cochin, China, and while this is disputed, the evidence is largely in favor of the first and against the latter claim. It is uncertain when they first came to America. It is supposed that they came over in the early fifties and were called Shanghais. They evidently are not Shanghais, for they are nothing like the latter in shape or feather. A missionary who traveled years



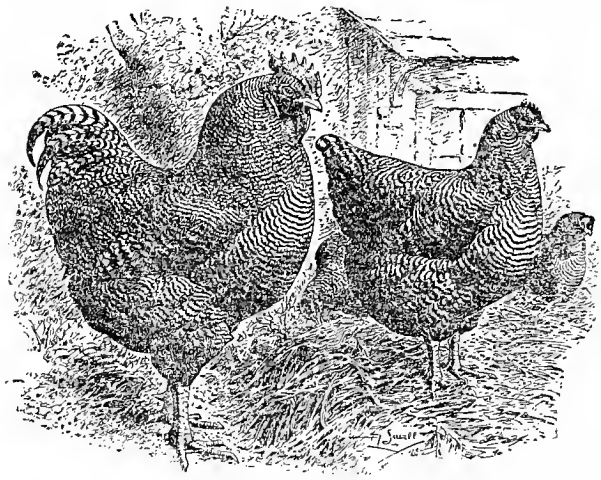
COCHIN COCK AND HEN

ago in China and India mentioned the fact in speaking of the dense ignorance of the people—that the people believed that the spirits of their dead went into fowls that were a beautiful buff and others of them, like the Partridge Cochin of today. In his description of the fowls he stated that their size was so great because of the care that the people took of them. The record of them, which was carefully kept, went back about fifteen hundred years. Now there are four varieties of Cochins, Buff, Partridge, White, and Black, alike in every respect except in color. They are shorter in body than the Brahma, legs shorter and more heavily feathered. The standard weight is the same as that of the Dark Brahma. It is claimed by many that they are better winter layers than the Brahmas; that their chickens mature more quickly and that they are better mothers. However, these characteristics largely depend on the strain from which they come.

THE PLYMOUTH ROCK.

No one can dispute the fact that since the Plymouth Rock made its bow to the public it has steadily advanced in favor with the poultry men and the farmer. Today it is the most popular fowl bred in America. The Shanghai, Brahma and Cochin fever had cooled. Their slothfulness and the activity of the Leghorn had much to do with the bringing about this result, for when at this juncture this fowl made its appearance it supplied a want that existed all over the country. The Asiatics were too slow, but the Mediterraneans did not sit; so when a fowl appeared that had the best characteristics of both of the above breeds, it at once filled a long-felt want, and at once took a strong hold on all classes who were interested in poultry. Its reception when, it became known, was almost as enthusiastic as that of the old Shanghai. Folks went wild over

it, and told wonderful tales as to its superiority over every other breed. It could never have maintained its hold upon the people had it not proved its sterling good qualities. It had defects, which I will not enter into, for some of them are slight, and its good qualities cover the others to such a large degree that they can be overlooked. They are



BARRED PLYMOUTH ROCKS

gentle, of robust constitution, easily acclimated. They seem perfectly at home from Canada to Texas. They seem to thrive in the back yard of a town lot or on a good range on the farm. Their chickens are generally strong and easy to raise. They mature quickly; are good winter layers (although in the two latter points it is claimed that some of the new breeds surpass them). They are superior utility fowls. There is actually no certainty as to their "make up." It is claimed that they originated in Worcester, Conn., and that they were the result of a cross of the old American Dominique and Black Cochin. This is disputed by prominent breeders, who claim that they are the result of a cross of black Spanish and white Cochin, and the fowls of this cross bred on the American Dominique again;

that they are the result of a blood mixture of the Dominique, black Java, light Brahma, dark Brahma and pit game. They made their first appearance in 1869, and attracted very little attention. Afterward there were some six or more claims as to the breeds that composed their foundation stock; but out of it all came the final result—the production of a grand, good utility fowl, the first breed that was ever built up by American breeders. There are three breeds recognized by the standard—barred, white and buff.

The fowl bore the name of Plymouth Rock until the advent of the other varieties, when "Barred" was added in order to distinguish it from the White and Buff varieties. We are told that about the year 1876, Oscar W. Frost, of Monmouth, Maine, had hatched some white chickens from Barred Plymouth Rock eggs. He raised them and found that they had the Rock shape and characteristics. Then others reported the same results from Rock eggs. In tracing the breeding back of these white sports, it was found that the strain from which they came had been crossed on a fowl called White Birmingham. Several other whites came out in this strain, but finally these different strains were bred together and resulted in the White Plymouth Rock of today—an exact counterpart of the Barred in everything except color.

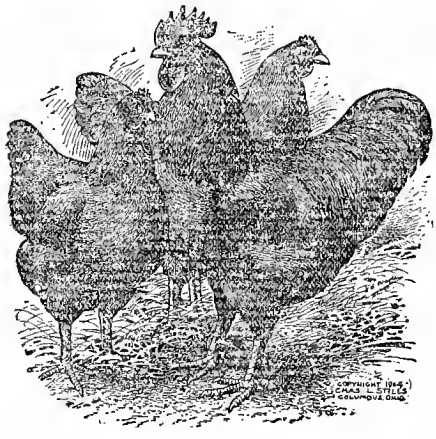
In 1890 the first Buffs were exhibited. It seems somewhat singular that in this year, or the year after, Rhode Island Reds and Buff Wyandottes made their first appearance.

Originally there were two separate strains produced at the same time—the Wilson strain and the Buffington strain. The Wilson strain was the result of a cross between Buff Cochins and Light Brahmas. The Buffington strain was made up from a cross of Rhode Island Reds (as yet an unknown fowl) and White Rocks. Neither strain was a perfect Rock type, but both had some strong, well defined Rock characteristics. These two strains were bred together

and we have today the Buff Plymouth Rock that is very rapidly forging its way to the top in this trio of popular, all-purpose fowls.

RHODE ISLAND REDS.

There are very few of us—the chicken folks—who take as deep an interest in the history of the different breeds of chickens as we should. I would give much to be in possession of a complete knowledge of the origin of every breed represented in the "Standard of Perfection." Where did they come from? Who commenced to improve them? What different breeds are mingled together to produce the splendid results that we have with us? We know the history of only a limited number of breeds. In a large majority of them, when you ask about their history, you are answered with a reply like this: "I have heard, but it is disputed," "John Smith or Peter Snooks or some other fellow claims, but no one knows," and so on.



RHODE ISLAND REDS

Now, let us look into the pedigree of the great Rhode Island Reds. Their history is unique. It stands out apart from the history of all other breeds. As we attempt to look into it we can not help thinking of old Melchizedek, for, like the ancient king, it has no beginning of days, but

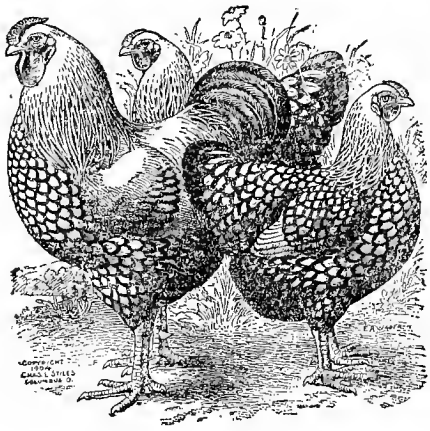
he was on the earth, and no man can tell where he came from. He blessed old Father Abraham, and his blessing abides with us today, and so this great breed just came to Rhode Island from somewhere, but we know not where, and has been a blessing to us all; and will continue to be. We are told that for many years the good people in the smallest of these United States have had among them a remarkable breed of fowls; that most of them were a deep cherry red in color, but others of them were buff, and some of them were between red and buff—a color known as "smoot" among poultry men. Some of them were feather-legged; some of them had single combs, and others rose combs; some laid white and others dark eggs, and so on. They were unique. They defied classification. They are today in a class by themselves. In shape and in the color of their legs, "they say" they were all alike and different from any other breed. They are today a red chicken—beak, red horn color, legs the same, and their flesh a very deep yellow. The Standard says of them that they are believed to have originated from crosses of the Asiatics, Mediterraneans, and Games, but no man knoweth. They are here; they have in late years been greatly improved; they will continue to be improved. They are great chickens and they will remain red, for you can not breed a white, black, buff or pencil neck Rhode Island Red.

WYANDOTTES.

These birds have an intensely interesting history. Books, articles in the poultry papers, innumerable speeches in the poultry associations, an all-night discussion when they were first put forward for admission to the Standard and then the wonderful way in which they were originally bred —all together make their history read like a romance. Now, I can not in this article, of course, give their history in full,

for if I did, it would take up several pages of this book, for it is almost as voluminous as the national ode of the Tartars, which is said to have been written on sixteen miles of parchment; so I will just outline the story.

In 1866, or about that time, a large number of men in several of the Northern States set out to create, by crossing different breeds together, a new breed of fowl. Some of them were working at random; others had a very definite idea of the shape, color and chief characteristics of the bird that they were trying to produce. It is rather remarkable that one in New York, one in Michigan and one in Massachusetts had in their minds, without the knowledge of the others, very nearly what the others were driving at. The others seemed to be working at random. They each produced a new breed and each had a name for the fowl that he had bred. They were named Hambrights, Hameltonians, Eurekas, Excelsiors, Columbians, Seabright Brahmas, American Seabrights, and perhaps some other names. These different breeds resembled each other in some respects. Now, the fowl that all of these men were trying to produce was a smaller fowl than the Asiatic, and a larger fowl than the smaller breeds; so that it would fill a much-needed want in the retail trade, and then at the same time a fowl that would mature quickly, lay large marketable eggs and plenty of them. There was a long, hard fight to get them in the standard, but there was such a great difference in the fowls presented that



SILVER LACE WYANDOTTES

neither the breeders nor the American Poultry Association could agree, and they were turned down; nor could they agree on a name. In 1883 another effort was made among the breeders, and they came near another disagreement as to a name, when F. A. Hondlette, of Massachusetts, suggested "Wyandotte." This being accepted and other differences adjusted, they were admitted into the standard. They at once became very popular. Now, these fowls were the silver Wyandottes of today. Since their admission, seven other varieties have been admitted, white, buff, black, Columbian, silver penciled, partridge and golden. It is a little singular that these fowls were bred by crossing almost every then known breed in America—three varieties of Cochins, two varieties of Hamburgs, two varieties of Brahmas, French Breda, the old Chittagong and the little Seabright bantam are among their ancestors, and perhaps some others.

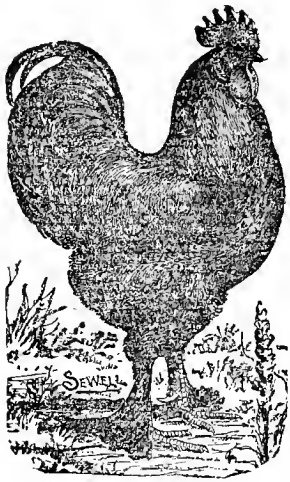
The result of this unusual state of affairs is that in the Wyandotte we have a fowl whose superior is hardly to be found among the many breeds in America. They should be bred in greater numbers than they are.

THE LANGSHAN.

Here we have a fowl with a history which, unlike the other Asiatics, is pretty well known, and over which there has been very little dispute. There are two varieties of this breed—black and white. They were brought from China by an English officer, Major Croad, in 1872. There was a difference of opinion at the time as to whether or not they were a new breed; but this, upon a close examination, was soon adjusted, for it was made clear that they were a distinct breed and that they had been bred in China, in and around the Langshan district, for generations back, and also that they were almost regarded as a sacred bird by

the Chinese who bred them, and who carefully kept them from admixture with other breeds.

It was at first claimed that they were Cochins, and to a novice the black Langshan and the black Cochin look alike, but there are many differences between these fowls. In shape, they are totally different. The Cochin is a pound heavier. Langshans have white flesh and dark shanks, which are not feathered as heavily as the Cochins. The Cochin has yellow flesh and yellow or blackish-yellow legs. They are more active than the Brahma or the Cochin. They are good foragers. Those who breed them seem unanimous in their claim that they lay more winter eggs; that their chicks mature more rapidly and are more vigorous and hardy than the other Asiatics. They are undoubtedly a very superior table fowl, and by some who breed them they are called "the Asiatic turkey." They are very quiet in disposition. They are excellent mothers. They are very handsome in appearance, particularly the hens of both white and black varieties. The blacks for some reason are preferred to the whites.



BLACK LANGSHAN COCK

MEDITERRANEANS.

There are several varieties of fowls known as Mediterraneans—Leghorns, Minorcas, black Spanish, Andalusians and Anconas. They are all non-sitters. The Leghorn stands at the head of this family as egg-producers. The Minorca is the largest and heaviest. It is generally conceded that the Andalusian is the most beautiful. The An-

conas, the smallest of the family, are close competitors of the Leghorns as layers and of the Andalusians in beauty. The latter are not bred to any large extent in this country, while in some parts of Europe they are highly esteemed, being prized because of their beauty and their good qualities as layers. They all lay pure white eggs, and so did all other fowls in Europe and America until the introduction of old King Shanghai. There is much uncertainty as to the origin of this breed. They have been known for years all over Europe. The black Spanish have been bred for a long number of years along the Mediterranean border of Spain, and also in the interior, and for many years have been bred just as we find them today. There is a great deal of uncertainty as to where the Minorcas originated; many contend that they are identical with the black Spanish and that they differ only in the white face of the black Spanish. Others contend that they are a distinct breed that originated on the Island of Minorca in the Mediterranean Sea. There are so many marked differences in the two breeds that the latter opinion is held by a large majority of poultry men. Very little is known of the history of the Andalusians and also of the Anconas. They have been long known in certain localities of Europe. They, like this entire family, are prolific layers, but differ with the others in plumage. The Andalusians are a beautiful blending of light and dark blue and are generally considered as the most beautiful members of the family. But when you look upon the plumage of the smallest of the family, the Anconas, you are apt to doubt the judgment of others. It is true that, like some of the other members of the family, these fowls in Europe, or in that part of Europe where they are supposed to have originated, are not bred to feather as carefully as are American fowls. The Ancona, best known in America, is thus described in The Standard: Beetle green ground, each feather tipped with white, evenly mottled throughout.

The Leghorns are undoubtedly a very popular fowl in

America. Some think that they are in advance of the Plymouth Rock, for lately there has been a larger profit in eggs than in chickens. The brown Leghorn is undoubtedly the first of the Leghorn family to reach this country. They came in a ship from Leghorn, hence their name. I bred brown Leghorns for several years before I ever heard of a white Leghorn. I remember that in some journal I saw where some white Leghorns were purchased from the captain of a ship that came from Mediterranean ports. My recollection is that his name was Cook, and soon they were being bred all over the country. This was thirty or thirty-five years ago. It is a well known fact that the other varieties—black, buff and silver duck wing Leghorns—are the creation of American breeders. The white Leghorns are claimed to be the best layers. The browns are next. The Minorcas lay the largest eggs of any fowl of any breed. The Andalusians lay next to the largest eggs. The Minorcas are the largest and best table fowl and are claimed by some breeders to be the best winter layers. The entire family are not good winter layers, but they can, by careful management, be made to produce a fair quantity of eggs in winter.

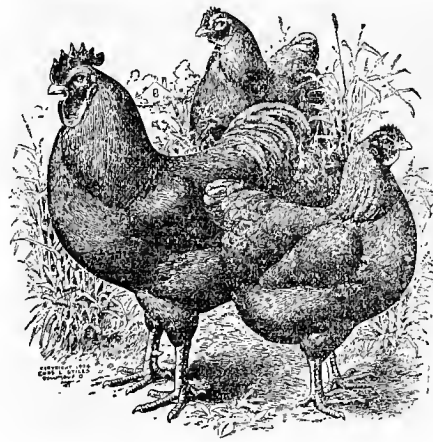
ORPINGTONS.

The entire Orpington family were originated by Mr. William Cook, of Kent, England. They made their first appearance in England in 1886. Ten years previous to this Mr. Cook determined to produce a fowl superior to any fowl, as he tells us, in the world. The first to appear was the Black Orpington, then in 1889 came the White Orpington. In 1894 the Buff Orpingtons made their appearance. In 1897—Queen Victoria's jubilee year—came the Diamond Jubilee Orpington. Mr. Cook presented a pen of these birds to the queen, and named them in honor

of this great event. Next and last came the Spangled Orpington in 1899.

There are ten varieties. The five mentioned are bred in single and rose comb, making two distinct varieties each of the five mentioned.

Mr. Cook is called the Luther Burbanks of poultry culture. Each of these varieties has been produced by an entirely different system of crossing other breeds together, and yet producing the same results except in color. They have been bred in every part of the world. Mr. Cook tells us that in order to test them thoroughly, they have been bred in Central Africa and then in the north of Russia, at Archangel, on the White Sea, and also in the extreme north of Canada. They do well in any part of the world if given a chance.



S. C. Buff Orpingtons

Mr. Cook claims for these fowls that they are all alike in shape, all alike in flesh—which is superior to any other fowl in flavor; that they lay more eggs—particularly in winter—than any other breed. They are very quiet and gentle, with no disposition to fly; are larger than any clean legged fowl. They mature quicker than any other breed; good setters and mothers; easily broken off when broody; do as well on a barn lot as on a range. They are robust in constitution, and are immune from climatic changes, and that in consequence of these good qualities they are the best fowl on earth.

I will now give an account of the way in which Mr. Cook, by different crosses built up the ten varieties of Orpingtons. He commenced in 1876 to produce a fowl, superior as he tells us, to any fowl on earth. He had been breeding fancy fowls for years and had a perfect knowledge of the characteristics of the different breeds then known. So he selected fowls that had one or more of the strong points that he wished to combine in one breed. Black fowls were very popular in England then, and Mr. Cook having a clear idea of the fowl that he wanted, when his Plymouth Rocks produced a few black chickens that proved to be in line with his desires, bred the pullets on black Minorcas and the pullets of this cross he bred on a Langshan cock. Then it took nine years breeding the result of this cross together to produce the Black Orpington. He accidentally found a few Rose Comb Langshans in a shipment just arrived from Shanghai. He secured a few of them and from this cross came the Rose Comb Black Orpington. He then commenced to breed for the whites. After experimenting for some time he produced the fowl that he was after by crossing White Leghorn cocks on Black Hamburg pullets. The pullets of this cross were nearly all white. These he crossed with White Dorking cocks and after some years got what he wanted, a White Orpington. Rose Comb Dorkings produced the Rose Comb Orpington. Before the blacks and whites were perfected, Mr. Cook commenced experimenting to produce the buffs. He had then, he tells us, the best Buff Cochins in the world. They had the best egg record of any other breed. Some of them have laid forty-one eggs in forty-one days. They were not inclined to be broody, and when broody were easily broken up. He finally mated these Cochins on Spangled Hamburgs and their chickens on Dark Dorkings. Having bred these chickens for a year or two, he brought out the Buff Orpington, crossing back on the Rose Comb Black Dorkings, and he produced the Rose Comb Buff.

The Diamond Jubilee was bred like the Buffs. except that a speckled Dorking was used. The Spangled Orpington was produced by crossing Dark Dorkings on Barred Rocks, and the result crossed on Spangled Hamburgs. Mr. Cook likes the Buffs best.

DUCKS AND GEESE.

The Southern people somehow have never been as much interested in raising ducks and geese as they should have been. Improved ducks and geese are as much superior to the common kinds as well-bred poultry is to the barn yard fowls, and yet for years this important farm industry has been given the go-by.

Some varieties of ducks and geese are very valuable when bred for market or for eggs. In the North, particularly around the large cities, millions of ducks and geese are annually raised. The income from the product of the duck and goose farms on Long Island, N. Y., alone runs up into the millions. Ducks and geese are easily raised and are less subject to disease than fowls. Several varieties are non-setters and lay an almost incredible number of eggs. As the Indian Runner duck has attracted so much attention, I thought that several articles on this subject would be not only entertaining, but profitable to those engaged in breeding poultry.

The ducks bred in America are divided into two classes —those that are used for commercial purposes and those that are denominated "fancy." Of the latter, there are five varieties that are bred almost entirely as pet stock. Seven varieties are bred for profit.

Of the former class are the white Pekin, white Aylesbury, colored Rouen, black Cayuga, colored Muscovey, white Muscovey, and the Indian Runner. Of the latter variety, the gray Call, the white Call, black East Indian, white crested and blue Swedish, are the varieties

most bred. The Call ducks are quite small and are known as the bantams of the family. The white crested are larger, but not large enough for commercial purposes; they are, therefore, on the middle ground between those bred for profit and those bred for the show room. The blue Swedish are scarcely known in this country. Each of these varieties has a different nationality. The Pekin comes to us from China; the Aylesbury, from England; the Rouen, from France; the black Cayuga is an American. As to the Muscovey, they are in a class by themselves and their origin is uncertain. When a boy, I was told that they were from Russia, but as they have been found in a wild state in South American countries for many years, if from Russia, how did they get over in South America? On the other hand, they are today and have been for a number of years, bred all over Europe. The Indian Runner comes from India. The blue Swedish is from Sweden, though this is disputed.

The above named varieties, of course, do not include the wild ducks that visit our Southland every winter, nor those that are natives of the South and remain with us all the year around. We are quite familiar with our little summer ducks. The drakes of this interesting family are the most beautiful, I think, of all ducks. The females are quite plain in plumage and yet even in plain clothing are graceful and elegant in appearance. They can be easily domesticated and become very tame, but the young ducklings are very wild at first and have to be confined when they can fly for some time until they become accustomed to their surroundings.

At the head of the duck family stands the Royal Pekin. It was imported from China in the early seventies. Like the old Shanghai, it attracted attention at once. Its great value, however, was not at once recognized; but as it became better known its sterling qualities brought it into great favor, and it at once advanced to the front ranks of the duck family, and there it stands today.

It is a pure white duck. In shape and carriage it is unlike any other breed. Its body is rather long and somewhat narrow, and yet its breast is plump and full. Its legs are set well back. Its body stands erect with rather a long neck, beautifully curved. It is not quick in its movements, except when frightened. They are timid, easily frightened, as are all other members of the duck family.

The Pekin is the largest duck bred in this country—the largest known in any country. They can easily be made to weigh ten pounds each. They are non-setters, lay from one hundred to one hundred and fifty eggs in a year, are not subject to disease, they mature quickly, and are, if properly cared for, ready for market in ten weeks.

After reading the above description of this duck, the question naturally comes to one: Why are they not bred in large numbers in the South? They lay winter and summer. The ducklings can be raised at any season of the year. They grow off so rapidly that they can be marketed in from ten to twelve weeks. The demand for them can not be supplied. Properly dressed, packed in ice, and shipped to any city (should the home market be supplied), they will command a better price (or fully as good) than hens.

The Aylesbury duck originated in Aylesbury, England, and is bred there in large numbers.

They are not as popular in this country as the Pekin, and in some respects are not the equal of the Pekin for market purposes. They are pure white, except that like all other white fowls, their feathers yellow under the rays of the sun in summer. They are large ducks, weighing from nine to ten pounds for the drake and seven to eight for the duck. They mature rapidly, but not as quickly as the Pekin; the ducklings being strong and vigorous, and are easily raised. These ducks seem to be built upon finer lines than the Pekin. Their feathers are of a finer texture and their flesh of a somewhat better quality. Their feathers are exceedingly soft, and this is

one of the Aylesbury's chief attraction in regard to beauty. It is, as I have said, considered second to the Pekin, and yet when you measure their good qualities and those of the Pekin, there is not really much difference between them. They mature rapidly; are very prolific; easily acclimated; are seem to be built upon finer lines than the Pekin. Their feathers are of a finer texture and their flesh of a somewhat better quality. Their feathers are exceedingly soft, and this is one of the Aylesbury's chief attraction in regard to beauty. They are, as I have said, considered second to the Pekin, and yet when you measure their good qualities and those of the Pekin, there is not really much difference between them. They mature rapidly; are very prolific; easily acclimated; are not affected in the least by a change in weather conditions. They are of large size, and then, because of their soft, snow-white feathers, are the most beautiful of all white ducks.

The next in order as to popularity among breeders, is the colored Rouen. This is a French duck and is held in high esteem by American poultrymen. The only thing that keeps this duck down to the third place is its slow maturity. They are very hardy, quiet in disposition, easily raised. For table purposes they are, by some, said to excel all of the others. They are large, weighing about nine pounds for the drake and eight for the duck. In plumage they closely resemble the wild mallard and are thought to be akin to this beautiful wild species; but if this is true, they do not inherit the wild disposition of the mallard, nor the length of its wings, for they are very quiet in disposition and are so short-winged that they can not fly.

I have been writing about the different breeds of ducks, and now I want to say something about the history of breeding and marketing them. Some twenty years ago enterprising breeders in New England and on Long Island, N. Y., undertook to raise ducks for market. Previously they were considered a very unprofitable fowl.

There was for some reason a prejudice against them, chiefly because the only ducks on the markets of this country were those raised on ponds and water courses where they fed on fish, slugs, etc., which gave their flesh a flavor that only a few people, comparatively, relished. The men who commenced to breed them, realizing this fact, saw before them the great difficulty of overcoming this prejudice. They commenced to rear their birds on dry land, for by experiments that were carried on for some years, they demonstrated the fact that ducks could be bred to better advantage by keeping them entirely away from water, except just enough for them to drink. Well, they commenced to put this new duck product on the market. It took hard work and quite a large expenditure of money, while they were gradually, as it were, forcing their dry-land duck product on the people. After some few years it commenced to bring these breeders some remuneration. They had won the victory that they had long seen by faith in the distance. Gradually the demand for ducks increased until the demand exceeded the supply, and this state of affairs obtains today.

The large duck farms are now producing an enormous number of ducks, some of them over thirty thousand yearly, while hundreds of the smaller concerns, scattered all over the North, are in the aggregate probably furnishing as many as those who breed in large numbers.

Here again we have to ask the Southern people, why have they not been in all these years breeding ducks?

A short article in The Georgian some little time back set all Georgia wild over the Indian Runner duck. In about ten days every Southern poultryman, and all of the Northern poultrymen who advertised in The Georgian, had sold every duck and egg that they could spare, and actually wrote to Uncle Dudley to announce in The Georgian that they had sold out and that they were receiving more letters than they could answer ordering ducks and eggs.

Now let us look a little deeper into this duck problem: The Northern poultrymen have had a hard fight. Victory complete has perched upon their banners. They have opened up the way for us. Will the Southern people take advantage of this splendid opportunity to help themselves and their State by entering quickly into this profitable business?

We can raise ducks every month in the year, for ducks lay winter and summer. They endure heat better than fowls, cold never affects them. The Northern poultrymen can only breed them profitably from February to July. With great care, that requires long experience, we can grow from the hatch a broiler in six or eight weeks that will weigh one and a quarter to one and a half pounds. You can by the same skillful management grow a full grown duck, ready for market, in ten to twelve weeks. True, it takes a little more feed, but far less trouble. For, get a duckling over the first ten days, and if you have his rations handy, he will take care of himself—eat sand and soft food, drink water and grow day and night.

In feeding and raising ducks we swing over to the other extreme from feeding and caring for chickens. Soft food, as I have always contended, will kill young chickens; hard grain will kill young ducks. Ducks have no crops, no place where they can store up a supply of food to be taken to their mills as needed; but their food goes directly into their gizzards. There it remains only a short time, and then passes into the intestines, where it is quickly absorbed and turned into bone and flesh. Hence their rapid growth. There is a great difference of opinion as to the treatment of ducks during the breeding season.

A great many people contend that much better results can be obtained by keeping ducks entirely away from water at all times. On the other hand, about as many contend that a shallow pond of water one or two feet deep is absolutely essential to their well-being. A great many of the large breeders have an artificial or nat-

ural brook running through their yards. Then again, there are a few that have their duck yards located on low, flat lying ground, beside a swamp, where the ducks can get their fill of slugs, snails and swamp bugs. The wet and dry folks are, it appears, about evenly divided, while the swamp landers are largely in the minority. Apart from these differences, breeders almost unanimously agree as to housing, and in a general way, feeding their flocks, from the hatch to the market. Housing ducks in the North is quite a different thing from housing them in the South. The buildings required in the North to successfully breed ducks cost a large sum of money. The laying or roosting houses, the brooder houses, incubator cellars, feeding houses and some other buildings, cost fully twice as much in the North as they do in the South. This also obtains as to poultry. Incubator-hatched ducks, it is conceded by all breeders, are the most difficult to raise, and many of the large breeders have partially dispensed with them; others have entirely put them aside and now use hens. These are used in large numbers to hatch the eggs, as they never put more than nine eggs under a hen in the early part of the year and later on, thirteen. They soldom go beyond this number. Large hens are never used; neither are small hens. The medium-sized hens of different breeds, such as Wyandottes, Langshans and Plymouth Rocks, are preferred. With incubators a large supply of moisture is necessary, particularly just before the hatch. The heat required is not more than that used for chickens, one hundred and two degrees for ten or fifteen days and one hundred and three degrees until the hatch. Breeders generally keep the ducklings in the incubators for two or three days with the heat at about one hundred and four degrees—of course, carefully removing the egg shells.

THE INDIAN RUNNER DUCK.

I give an article, taken from The Southern Poultryman, Dallas, Texas:

"While the Pekin is at present raised by the breeders and attains the marketable size more quickly than the other varieties, it now has a stronger competitor for honors in the Indian Runner, a duck not quite as large, more active, more graceful in carriage, and a beautful fawn and brown in color. The greatest known fowl for egg production. The Leghorn of the duck family will produce more eggs yearly than a two hundred forty-egg Leghorn hen. The eggs are mostly nearly white, some tinted with green, and nearly one-third larger than hens' eggs. An egg record of over three hundred eggs yearly is what is well authenticated, the eggs being deposited in the night and gathered in early morning. Besides this, I do not believe any living fowl will grow as fast for the first ten weeks as these ducks. I have them ten weeks old, fully feathered, large as old ducks apparently, and weighing four and three-fourths to five and one-half pounds, still following the White Leghorn hen who hatched them, seventeen of them, each looking twice as large as she, and they are babies more timid than a rabbit, who get scared at trifles and stampede so violently as to endanger their tender bodies by tramping over and colliding with stationary objects in their course.

"They need only water to drink and bathe their heads in, but are good feeders; first, a bite of mash and then a bite of sand and a drink of water. This is repeated until they are filled up; then they are as contented as a fat hog and will sit down and grow.

"They have no diseases, no roup, canker or sorehead, scaly legs or wry tails.

"They do not scratch, but will pick every bug out of a garden.

"They do not fly; a two-foot wire fence will keep them anywhere. They are very intelligent and learn their feed-

ing ground, roosting pen, and attendant in a short time and make little trouble. With these characteristics you can see that they are much more desirable to raise than chickens, and if their all-round qualities were generally known, the rush to get this valuable breed of ducks would swamp the market. I am glad to tell my friends these things, and hope for their own profit they will keep their eye on the Indian Runner. "W. H. SISSON."

FEEDING DUCKS.

The feeding and management of ducks is almost directly opposite to the feeding and management of fowls. Ducks are less subject to disease. They never require any medicine. A little ordinary care until they are eight or ten days old, and they will take care of themselves if you put proper food where they can get at it.

There is very little difference in the manner of feeding or in the composition of the ration among the large breeders. There is a difference as to the percentage of each of the things that compose the ration but even here the difference is slight. In one of the letters received and answered last week, the question was asked: "Should fowls and ducks be kept in the same yard?" The answer to this is: They should not be kept together. Ducks have no crops; their food passes from mouth to gizzard, as I have stated previously. They require soft food only. Fowls require hard food only. Cornmeal is not a good food for fowls—ducks thrive on it, except that it must be ground very fine. There are some things that are essential to the health and growth of ducks that would kill chickens. Whole grain of any kind, fed constantly will kill a duck; soft food of any kind, will kill a fowl if constantly fed. They should therefore be kept apart. In feeding ducks, there is a difference in the object to be attained. For market, they should be crammed with food. Those to be used for breeding purposes should be fed so as to have

them grow up and develop naturally. The following is about the ration used to feed ducks for market: For the first five or six days cracker dust or crumbs and cornmeal —fine—equal parts. Hard-boiled eggs, fifteen per cent. of total bulk of meal and crackers, fine sand five per cent. of crackers and meal, mix with water or milk. Feed four times a day. From five to twenty days wheat bran, two parts by measure, fine cornmeal one part, crushed oats fifty per cent. of this bulk, beef scraps five per cent., sand five per cent., green food ten per cent. From twenty to forty-two days old the following mixture: Wheat two parts, bran two parts, by measure, cornmeal one part, beef scraps five per cent. of this bulk, sand five per cent., green food ten per cent.; mix with water to a dry crumbly state and feed four times a day. From forty-two to seventy days old the following mixture: Cornmeal two parts by measure, wheat bran one part, beef scraps ten per cent. of this bulk, coarse sand or grit five per cent., green food ten per cent.; mix with water to a crumbly state and feed four times a day.

The above directions are taken from agricultural reports. There are slight differences in these reports. The above treatment is that generally used by large breeders.

Ducks for breeding purposes are fed as are those for market, except that less fattening food is given them by reducing the beef scrap and cornmeal one-half.

The following ration is recommended: Equal parts of cornmeal and wheat bran, five per cent. each of the bulk of meal and bran, sand, beef scraps and green food.

For laying ducks, fifty per cent. by measure cornmeal, fifteen per cent. green food (cooked vegetables, such as potatoes, turnips, carrots, etc.), twelve per cent, beef scraps and eight per cent coarse sand or grit; mix to a crumbly state with water and feed twice a day, morning and night.

GEESE.

Geese have never been bred in the South to any great extent since the war between the states. There are many reasons for this. For, unlike the duck, which can be bred with or without access to water, the goose finds water absolutely essential to its existence. The duck lays many times as many eggs as the goose. The duck matures more quickly and while more troublesome and expensive to get to market, gets there quicker, and thereby brings in double returns. But while the above facts are well known, there are many farmers who have swampy, low-lying land that could be used profitably by breeding geese. The market for young, fat geese is always short; the demand is always greater than the supply. They are more easily raised than all other poultry, and then, being almost self-supporting, when brought to market are almost all profit. Then when the crop of feathers is gathered, while a little behind the duck as to time, he is not far (if at all) behind him financially. This, however, only obtains where one has a pond, a running, wooded brook or swamp land. There are seven varieties of geese breed in this country, as follows: The gray Toulouse, white Embden, gray African, brown Chinese, white Chinese, gray wild goose and the colored Egyptian.

The gray Toulouse is, at its name indicates, a French goose, where it is bred in large numbers. They are large. The gander weighs about twenty pounds and the goose about eighteen pounds. They are very compactly built, bodies short, well rounded; short back, and full breast. They are strong and vigorous as goslings, but mature slowly. The body plumage is gray on neck and body, shaded to white on under part.

White Embden geese came from Embden, in Westphalia. They have been profitably bred in this country

for many years. They are pure white. They are not as prolific as some other geese, but mature more quickly. They are large, weighing about the same as the Toulouse.

The Egyptian is a very beautiful goose and is bred only for ornamental purposes.

The gray African geese are, by many breeders, considered the most profitable of all geese to breed. They are rated in The Standard as weighing the same as the Toulouse and Embden, but specimens frequently exceed these weights by several pounds. They mature more rapidly than other geese and can be forced up to eight or ten pounds in about ten weeks. They are also prolific, laying about forty eggs during the season. They are highly esteemed for table purposes. They are gray in color, dark on upper part of the body, shaded lighter on under part.

The white and brown China geese are identical, except in color. I bred these geese some years ago and found them to be very profitable. They are six or eight pounds lighter in weight than those above described. They are very prolific, laying from 50 to 60 eggs a year. They are very beautifully marked—neck light brown, shaded darker on body, with a deeper dark brown stripe running down the neck to the body. The under part of the body is a lighter grayish brown. The white are pure white, with not a colored feather. The beauty and graceful carriage of these geese make them very attractive.

The gray wild goose is well known and largely bred in this country. They are among the most valuable and practical birds for good raising. They are hardy. Put out in a pasture where they can get grass, bugs and slugs, they take care of themselves. They are good layers and highly esteemed as a table fowl. They are not large, weighing about ten to twelve pounds when fully grown.

THE MANAGEMENT OF GEESE.

Geese are more easily raised than any kind of poultry, if certain conditions are met. They require very little care. At ten days' old, turn the goslings out into a suitable pasture and they can take care of themselves and even during the first ten days of their lives they require very little assistance if you confine them in an inclosure where they can get water and grass. It is deemed best by many who breed them to keep them up for a few days until they are strong enough to follow the mother goose. Others never confine them, but turn them out and let the mother care for them. This applies to the ordinary goose that we see on the farms in the South to-day. Now, when it comes to caring for the other geese, those that I have been writing about, the treatment should be somewhat different. They should be confined for the first eight or ten days and fed on cornmeal and wheat bran, two or three times a day, with grass and water always where they can get to it. It is best at this age not to let them get into the water. After they are ten days old, they can be turned on the grass plot or in the pasture, where they will find water, grass, bugs, etc. They should be provided with some sort of shelter at night, near the barn or near the dwelling, and taught to come home every night. They can be easily trained to do this by calling them and feeding them on any soft food. They will soon form the habit of coming home and will come without being called or driven up. They are now practically self-supporting, if you have a pool with trees around it or a swampy piece of land, or a wooded branch for them to run on.

By having a shelter for them, they are induced to lay about the lot and they will make nests and lay in them. When they have laid about ten or fifteen eggs they will become broody. You can put the eggs under hens, about

six, or if a large hen, eight, then shut the goose up in a dark place where she can get water, but no food, and in two or three days she will be laying again. You can repeat this with the second laying, and then let the goose hatch the third hatch. In this way you can get three hatches instead of one. This does not apply to the white and brown Ching geese, for they do not sit. Of course you can use incubators with about the same temperature that will hatch a chicken, one hundred and two to one hundred and three, but eight or ten days before the hatch you should go to one hundred and four. It takes thirty days to incubate a goose egg, and the eggs require more moisture than fowl eggs, particularly during the latter days of the hatch. You should buy your geese in the fall of the year, when you start to breed them. Put them out in the pasture, so that they can become perfectly familiar with their surroundings. When the grass gives out they should be fed twice a day, on fine chopped alfalfa, or clover, or for that matter, fine hay. Give them also boiled vegetables, mixed with wheat bran and cornmeal. Put in the ration about five per cent. of the bulk bran and meal, fine sand. Now, you see how small the expense and how little the trouble there is in raising geese. Each goose will give you about one pound of feathers a year. The feathers will pay you more than the cost of the feed and the geese are therefore all profit.

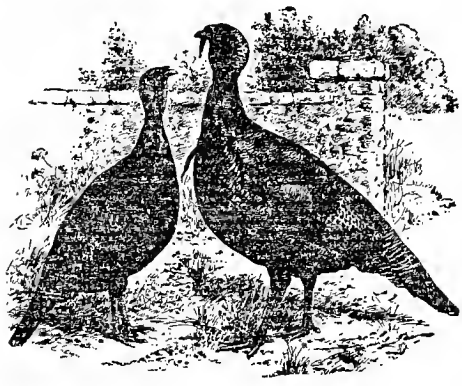
CAPONS.

Latterly, I am quite sure no subject that has been up for discussion among the poultry fraternity has been of greater importance than the brooder question. So far as using heat in a brooder is concerned, I settled that question several years ago. I found out that many chickens were killed by overheated brooders, and that chickens

could be raised without heat other than that which comes from their own bodies, where you would put enough of them together, without crowding to keep themselves warm. Almost everybody disagreed with me from the first and continues to disagree with me even unto this day. Now, I have always known, and all agree with me in this, that the best brooder on earth is the hen. "But," say we all, "the supply is always limited, and when needed most the demand is always far in excess of the supply." Very true, and I fully agree with everybody in this. Now, some are for the kerosene brooder and others are for "cold storage" brooder. Well, there must be a middle ground somewhere between these two extremes to which we can all come. Well, here is the middle ground that will end old Dominick's troubles and decrease the sale of kerosene: Why not use Capons? A severe spell of illness about a year ago put me out of the chicken business. I am rapidly regaining my health. When entirely recovered I will be back into it again, and as long as I continue in it, the capon will be the only brooder that I will ever use, to the limit of their capacity. "But it is so hard to make them carry chickens," some will say. Not a bit of it, for it is easy. Take a capon of any breed except the large breeds, about a year old, or over, put him at night in a nest box, made so low that he can not stand up in it; put a little excelsior in the bottom, and give him the chickens. The nest should be placed in a coop where neither capon nor chickens can get out. Keep feed and water in the coops, and in two or three days he will generally mother the chicks. Sometimes this fails, but not often. A medium-sized capon will care for about twenty to twenty-five chickens. I have not yet patented the "capon brooder," so you are at liberty to use it if you wish to do so.

TURKEYS.

In a short article like this, it is impossible and unnecessary perhaps, to give a description of the different varieties of turkeys that were found in America when this country was discovered. There were, however, four and perhaps five different varieties, or breeds, differing in color and shape. The variety that we breed is that which was found in this part of America, changed perhaps by domestication or crossing with the breeds farther South. The wild turkey found today in our swamps is just as it was originally. The turkey that is now bred in the South is much improved in color and in vigor by a cross on the wild turkey. The young are stronger and more easily raised. Young turkeys are the most helpless of all our poultry. They need careful attention. For about two weeks they should be kept in an inclosure. They should be housed at night in comfortable, dry quarters, and confined until the ground gets warm in the morning. The worst enemies of young turkeys are internal worms—like the puppy dog's—and they are subject to indigestion. Later on they are subject to other diseases, but if they receive proper attention for three weeks, there is very little trouble in raising them. They should be kept in the dry ground with fine natural grit in it—a sandy place—and fed on



BRONZE TURKEYS

wheat bran, having water before them in shallow pans, arranged so that if possible they shall not get wet for two or three days.

Small grain should be given, but no cornmeal or cracked corn. When about a week old, they should be given a small quantity of the common "Jerusalem oak," a weed that grows all over the South. The leaves can be given green or dried. It should be fed with wheat bran. The best way is to mix with bran and rub between the hands, dampened a little, then stuffed down their throats. This will remove the worms and also cure indigestion. After they get stronger, it should be kept up. After two weeks their range should be enlarged, when they can be fed on small grain, wheat, oats or any grain except corn. Feed every morning and be sure to feed every evening. A grass plot is a splendid place now for a small run, for they will need bugs and insects. They can now, when a month old, have a larger range, but they should, while young, never be put out on wet grass. Turkeys require a large range, and when about two to three months old, they can be turned out and allowed all the range that they can get; but be sure always to have something for their supper when they come home. Wheat bran, mixed with the "Jerusalem oak" should be fed, dampened, until they are six months old. Follow the above directions and you will make a success with the best paying poultry that you raise.

THE GUINEA FOWL.

Here is a very valuable member of the domestic poultry family. I say "domestic," and yet while it is generally so considered, it has never been completely domesticated.

This interesting fowl has been known for many years, and back in the times of Rome and Greece it was highly prized as a table fowl. It was valued among these ancient people for the delicacy of its flesh and the rich flavor of its eggs. It was bred in ancient times all over Europe, and then in the dark ages disappeared entirely. It is a native of Africa, where it is found today in a wild state, not exactly as we see it on our farms now, but so little changed that should we see one from its native wilds we would at once recognize it as the ancestor of our "potrac" friend that is with us today. The change in plumage is slight. The markings of the head are different. The legs are of a different color from its wild cousins, but its disposition is still that of the barbarian. It takes on civilization slowly. In fact, if left to its inclination it quickly returns to its wild state. After its disappearance from Europe, it was found in the West Indies and reintroduced into Europe. It was evidently taken to the West Indies by Europeans from Africa. In many of these islands it is today found in large numbers as wild as it is in Africa, and is hunted as game. This is also the case in England and some other parts of Europe, where they are found in game parks of landed proprietors.

The guinea has many bad traits of character, and many that are very good. It is to be regretted that it is not bred more largely in the South than it is, for it is really a very valuable fowl to the farmer, and if properly handled can be made to pay well. It is almost an impossibility to raise chickens during the summer in the South, and as the guinea comences to lay in June, and continues until some time in August, their chicks can be bred very profitably to be used as broilers and fries in the fall. They are very easily

raised if hatched out in July by using hens. The guinea is a bad setter and a careless mother, except where they are allowed to lay in thick woods and never disturbed. Their young are hard to control when this is done. By using hens and raising them about the yard, they become more civilized. When hens are used to raise them they have to be closely watched at the hatch. The hen should be confined in a close place, where the little guineas can be closely cooped for five or six days—or until they become used to the cluck of the hen. If not confined they will run out from the nest and go aimlessly on until they die from exhaustion.

The little fellows when first hatched should be fed on grass, or other small seeds, until they got strong enough to follow the hen. They should also have a small quantity of meat—green if possible. Green food is also required. They should be kept in a dry place. The guinea is the sworn enemy of the entire feathered tribe. They, if in large numbers, will keep the hawks away from chickens, and it is said that Cuffy will not steal the chickens when a guinea is roosting with them. They keep down the usual crop of insects, and eat so freely of the seeds of the weeds about the farm as to almost destroy them.

I am in receipt of a neat catalogue of the Connecticut Agricultural College, of Storrs, Conn. Last summer this college opened up a summer school of poultry husbandry, which met with such large success that it was determined to increase the facilities for handling the work, as it was found that a very large number of students would be in attendance this year. Last season the course was an experiment and only a few students were admitted, but the faculty were surprised and gratified when they found that people in every walk of life were intensely interested in poultry breeding. Among those who attended the opening session were a stenographer, a high school principal, a draftsman, a naval officer, a New York high school teacher and many others whom one would not have thought

were in any way interested in this delightful and profitable pastime. Then there were poultrymen and many who were desirous of going into the poultry business. This, I believe, is the first agricultural college in the United States that has a poultry summer course. Poultry lectures will be given by members of the college faculty and also by prominent expert poultrymen. They have a fully equipped poultry plant, incubators, brooders, etc. with ducks and a few pigeons. Students are taught how to operate the incubators, and to handle and feed the chickens and fowls. This college is supported by Federal and State appropriations. The summer school opens July 5, and closes July 29, 1910. To residents of Connecticut tuition is free; to non-residents five dollars tuition for the course is asked.

Almost everyone in this state is fully aware of the intense interest created by the establishment of a daily poultry department in The Atlanta Georgian. It was like this Connecticut college, a new departure from the old rut—a breaking out, as it were, in a new place. People in Georgia are today breeding chickens who one year ago did not dream that they would ever become so much interested in poultry as to breed them. Go where you will among the people—bankers, merchants, real estate men, lawyers, doctors, insurance folks, druggists, the wage-worker, men, women and children, breeding them or preparing to breed them.

Gentlemen of the legislature and of the agricultural department, The Atlanta Georgian is doing its part in this great movement that means millions to the people of the State. Will you do yours? Will there be established a poultry department in an agricultural college in Georgia? Will a fully equipped summer school be put in operation, where the people can be taught how to take part intelligently in this great industry? This is not the last time that The Georgian will bring this matter to your attention. We are going to try to interest you, as we have interested the people.

DISEASES OF POULTRY.

You will notice that as I describe the diseases and give remedies in this book that I recommend largely the use of charcoal and sulphur. Charcoal is a powerful disinfectant and deodorizer. Sulphur purifies the blood and therefore the entire system. It will keep lice and mites off of a hen if fed in a large quantity. This is not best for the hen. It will put her out of condition and make her stop laying, but in small quantities each day will benefit her, particularly in the moulting season.

I have said a number of times that poultry should have before them always a box with fine charcoal at the bottom, with surphur sprinkled over it, then wheat bran on top of the sulphur. This box should be about three or four inches deep, and a piece of poultry wire of about two to two and one-half-inch mesh on the bran to keep them from scratching it out. They will eat the dry bran and get enough of the charcoal and sulphur to keep them healthy.

ROUP.

Now, roup is one of the most troublesome diseases known to poultrymen. It is the disease that affects human beings; is called catarrh. It is confined entirely to the head in its first stages, and is caused by a cold. In its second and third stages, it affects the whole boly. It can be cured in its last stage, but the fowl then is of very little value and totally unfit for breeding purposes. Its first symptoms are a slight discharge of fetid matter from the nostrils; eyes a little inflamed, and at night it is restless and makes a noise as though it were choking and gasping for breath. These symptoms after two or three days become more pronounced. The eyes become swollen, a white substance like gristle forms in them. The throat becomes

sore; and a very offensive odor comes from the mouth. The disease rapidly increases in intensity, until it has spread through the entire system. In this last stage it is almost impossible to cure it. They finally become blind and die.

Now, a practical poultryman can just glance over his flock and detect this trouble in a moment, and with little effort arrest the disease and cure it. If you had piled up before you a copy of every poultry paper in the United States and would glance through them to find remedies for diseases that poultry are subject to you would be amazed at the different ideas that folks have of their nature and at the remedies used for them. A man in Connecticut once sold roup pills at fifty cents a box all over the country. They were utterly worthless. But he had gathered in a large amount of money before he was exposed. All of the old poultrymen know his name. He is yet living, but is not in the roup pill business now. Every remedy that I recommend in these articles has been tested by me. They are based on common sense principles and are not for sale. They are gladly given to anyone who asks for them. When the first symptoms of the roup appear, give the fowl five grains of quinine and with a small syringe, such as you use to fill your fountain pen, syringe each nostril and slit the top of the mouth with kerosene oil two or three times a day. Then give a pill as large as your finger and half as long of fine charcoal and sulphur, equal parts, with lard enough to make them unite. Give this once a day for two or three days. The fowl should be kept apart from the flock. This treatment will cure roup in its first stages. In the second and third stages substitute diluted chloro naptholeum for kerosene oil. One part of chloro to twenty-five or thirty parts of water; in severe cases one part of chloro to fifteen or twenty parts water.

SOREHEAD.

I do not intend to tell you what causes sorehead, for I do not know, and I do not stand alone in this, for no one that I have heard from in the poultry business is in

the least degree better off than I am. Of course, every one who has come in contact with it has his "theory" in regard to it, and some have proved, to their own satisfaction, that they know all about it; but unfortunately they can not prove this to the satisfaction of other folks. That it can be cured is a fact; but to do this requires prompt action on its first appearance. Let it get a good hold on a flock of birds and it is almost a matter of impossibility to arrest its ravages. This I am absolutely sure of, that by keeping charcoal and sulphur before the little chicks and grown fowls always, you can prevent its appearance in the flock or mitigate its severity to such an extent, that by applying remedies given below you can banish it from the flock. It almost invariably makes its first appearance among the little chickens. Looking over them some morning, you discover a few small wart bumps on their heads. The next day the number of these little warts has greatly increased. Take one of them up and pick the little wart off and you will find that it is, so to speak, a cover that rests on an ugly little sore. Every chick so affected should at once be removed to the hospital. It should be given a dose, according to its size, of charcoal and sulphur, mixed with lard, and its head and mouth bathed with kerosene oil, or diluted chloro petroleum, one part of the chloro to thirty-five parts of water. If a large chicken or grown fowl, this latter can be made one of chloro to twenty parts of water. Feed on oats, dry bran, and green food until cured.

PIP.

I have just answered an inquiry as to pip, but I will repeat it here. Pip is caused by improper feeding. The fowl has indigestion. It can be quickly cured by a change of diet and a dose or two of cooking soda. Confine the fowl to a coop and feed on oats or any grain except corn, very light; or better stop all feed for a short time. Do not follow the barbarous practice of pulling half of her

tongue off and thereby causing her to suffer so much agony. This will cure her, but the remedy is worse than the disease. It only makes her unable to eat and that cures her indigestion.

Both in sorehead and pip, fowls have fever and should have quinine, five grains for a grown fowl and less according to size of chickens.

Fowls almost invariably have fever when sick because they never sweat.

Uncle Dudley, The Georgian, Atlanta, Ga.

Dear Uncle—I am not engaged in the poultry business, but having been recently crippled for life, I have been seriously considering trying it, hence have been reading your department pretty close. I noticed a few evenings ago, in an article on sorehead, you said you did not know the cause or any one who did. I would not like to claim such distinction as to the only one who knows, for I am sure there are many who do know. There has been so many and grevious charges laid to the mosquito that I don't like to charge him with any other devilment, and yet, I think him capable of all of them, and he, and he alone, is the cause of sorehead in chicks. You notice that chicks rarely ever have sorehead until late in the season, say last half of August, through September, and until the weather gets cool enough for the hen to hover her brood entirely, which they do not do while the weather is so hot, for the little chicks persist in keeping their heads out from under her. And you also notice that mosquitoes do not get so numerous until about this time. I have watched the chickens before it got too dark to see and found them swarming around the roost and seen the chicks in their efforts to keep them off, but chickens, like everything else, must sleep, and then is when they get in their work. Now, the remedy you suggested was good in two ways, healing and keeping off the mosquitoes.

Now if you will arrange your sleeping quarters for your

chickens both large and small so they can be entirely covered with netting, I will guarantee you will have no sorehead among your chickens. I have tried this and know whereof I speak.

But you are doing a good work and people are more and more becoming interested because you tell us a whole lot of things about chickens we didn't know. Yours for learning. S. M. BUCHANAN.

I wish to call especial attention to the above letter. Let us all, this summer, try this preventive for this very troublesome disease. It looks as though Brother Buchanan is on the right track. YOUR UNCLE DUDLEY.

TO THE BOYS ON THE FARM.

I was reared in the Sunny South. In my youth I lived about half the year on a large plantation and the other half in a city; then after the "unpleasantness" in the early sixties, on a farm for a while; then from the farm to commercial life. A boy can never drift away from his first love. If he was brought up on a farm he may get out into the commercial world, make money, live in a fine house and congratulate himself that he has made a business success amid the busy city life, but meet him at rest, commence to talk to him about business, and he will discuss business with a wearied look that denotes his inner thoughts. Now change the subject, mention some trivial incident that occurred on the farm in his younger days, and then see how quickly the wearied look disappears. His face has completely changed; at once he is—as it were transformed. He is not now the wearied business man; he is the joyous country boy. He willingly banishes business from his mind and with a bright, glad look upon his face, will sit and talk of the bygone days, when he was as happy as could be on the farm. Deep down in this successful man's

heart he is thinking to himself: "It would have been best for me and for my children if I had remained on the farm." Every successful or unsuccessful business man who was reared on a farm who may happen to read this, will tell you that I have pictured his experience exactly in the above statement; and yet boys on the farm today are making every effort to get into the cities and towns, endeavoring to cast aside the freedom that they have on the farm for the slavery that they will go into in commercial life. The city life is so bright and beautiful to the farm boy, only because he does not think of the yonder; he is thinking only of the now. If he could only be induced to stop for a moment and look around about him at the old men who when as boys left the farm for the city and know that out of perhaps one hundred of those who left the farm for city life only one has made a success, while ninety-nine have made a dismal failure! On the other hand, let him look at the farmer boy who stuck to the farm; one or two have gone down, but ninety-eight or ninety-nine are free men—nobody to boss it over them. They have possibly small farms; some of them have large flourishing farms. They all live comfortably. They own the farm and the stock. They labor hard for five or six months in the year and then it is light work, getting ready for the next crop. Now meet one of these sturdy farmers and ask him if he made a mistake in sticking to the farm; ask him if he would have been off had he gone to town to make a living; watch his face. Why, he is so astonished that he can hardly reply to you. He gets up from his chair, looks you in the eye in order to see if you are not joking, and then nearly yells out: "No, siree; I would not give up my freedom on this little farm for every lot in town, if I had to quit the farm and live there."

Boys of the farm, an old man is saying to you: "Remain on the farm." If you take his advice, in after years you will rise up and thank him for this piece of kindly advice.

QUESTIONS AND ANSWERS.

Uncle Dudley, care Georgian:

Dear Sir—Please advise me whether it is advisable to set eggs from hens that have been fed beef scraps. Does it interfere with the fertility of the eggs? Thanking you for your reply through The Georgian, I am yours very truly. J. L. R.

Colbert, Ga., March 22, 1910.

The above question can only be answered by going into the general treatment of laying hens. I believe that E. W. Philo is the first man that ever suggested the idea that feeding laying hens improperly was largely responsible for the death of fully matured chickens, just as they were ready to hatch, but Mr. Philo in another part of his book tells how he liberates the chickens that had been bred according to his methods. And so it appears that he has not eliminated the trouble entirely by feeding according to his system. I am perfectly sure that you can get better results in the hatching and raising of chicks from properly fed and cared for hens. I have always been opposed to feeding food to laying hens that tended to fatten them. I have fed as little corn and meat as possible to laying hens, not more than once or twice a week; but oats, wheat and other small grain, just what they would eat up clean, all the green food they would eat, and then a bountiful supply of wheat bran. This latter should be fed in this way: Make a box about three or four inches deep of a size suitable to the number of fowls that you have; put in the bottom one inch of crushed charcoal; on this sprinkle about half-inch sulphur, then fill with wheat bran. A piece of poultry wire of about two-inch mesh, fitted in the box on top of the wheat bran, will prevent them from scratching the bran out. Keep this in a dry place, where they will always have access to it. Laying hens should

always be kept busy; put their grain food on a soft place in the yard, spade it in and make them scratch for it once a day; or under straw chopped fine, so that it will give them some trouble to find it. Keep this idea always in your mind. You should make fowls that are confined to a small yard work as hard to get food as those out on a range do to get theirs. A little beef scraps once or twice a week will help them.

Waycross, Ga., April 14, 1910.

Uncle Dudley:

In yours of today's Georgian, replying to T. L. Marchant, of Millen, Ga., you say: "Corn in any shape will kill them." Our dealers sell "Purina Biddy Feed." It is principally yellow corn cracked fine, mixed with other seeds, but seems to be mainly corn. You say: "After ten days feed on commercial feed." Would you eliminate "commercial feed" if it contained any corn at all? I'm making a scrap-book of your suggestions and advice and think your column is one of the very best enterprises of The Georgian. It fills a long-felt need, especially in these days of high prices, when "eggs is eggs."

Sincerely yours, V. L. S.

Answer: In all of my articles in The Georgian, I have only given my "experience," as the old-time Methodist used to say. I have been for many years experimenting with chickens and studying their natures and their needs, not from a "scientific" standpoint, but in a common-sense, practical way. I have found that I can keep the little fellows perfectly healthy by eliminating corn entirely for ten to fifteen days and substituting small cracked rice, or cracked wheat, or any small grain. I found out long ago by actual experiment that corn will sour when wet quicker than any other grain and that chickens fed on it would have indigestion and die, not all of them, of course, but it is almost impossible to raise all of them. This is par-

ticularly true as to incubator-hatched chickens. Now as to commercial chicken feed, almost all of it has cracked corn in it, but some of it has very little corn. After fifteen days a small quantity of cracked corn fed with other grain, will perhaps not hurt them, if they have wheat bran always before them. I feed as little corn to large fowls as possible, except when I want to fatten them (old fowls), but it is not a good feed for laying hens.

YOUR UNCLE DUDLEY.

Atlanta, Ga., April 14, 1910.

Dear Uncle Dudley:

I have been keeping a few chickens for years with pretty good results. Please tell me what to do for the following trouble: A hen of mixed-breed, less than a year old, and which has been laying for several months, this morning passed what seemed to be a soft-shelled egg, but with only a very small amount of fluid, not a teaspoonful in it. I feed my hens on mixed grain, dry mash from hopper, green food. They have plenty of gravel and slacked lime always in reach. I will greatly appreciate an answer from you. Yours truly,

MISS L. H. STERCHI.

Answer: From what you have written, my judgment is that your hens need lime, slacked lime will not do the work. Fowls do not eat lime in that shape. Get cracked oyster shells, which will answer for lime and grit at the same time.

YOUR UNCLE DUDLEY.

Uncle Dudley, Atlanta Georgian:

Dear Sir—Two weeks ago I bought a trio of single-comb Rhode Island Reds. The hens were both laying when they reached me; all seemed to be perfectly healthy. Last Thursday one hen acted as though she wanted to set and soon showed signs of being sick. She was very droopy,

and on examination Friday I found that her crop had not been emptied during the night and breath very fowl. She has no appetite, but drinks quantities of water. Today she does not seem any better. Please tell me what to do for her, or the next case, and also tell me what is the matter with her.

The Georgian has come daily to my home for three years, but I can honestly say that it was never so interesting to me as it has been since the useful and interesting articles by our Uncle Dudley began. Thanking you and The Georgian for the help that I have already received and that I know is still in store for me, I remain,

Yours truly, FRANK HARRISON.

Answer: Your hen has sour crop; cause, overfeeding on (I suspect) soft food. Fill her crop with warm water, and then hold her head down, gently pressing the crop until it is empty. Repeat it in one or two hours if not entirely emptied. Shut her up in a coop with her feet on the ground. Give her a little cooking soda and five grains of quinine. Feed her very little for a day or two and not much water.

Dear Uncle Dudley—Your articles in The Georgian on the subject of poultry raising have interested me very much, and in following them I have become confident that you are a thoroughly posted man on this subject; consequently I come to you for some advice. My position is this: For four years I have been sick and have been able to do very little work of any kind during that time. I have spent a great deal of my time in studying poultry management in various magazines, books and journals, but I have had absolutely no practical experience. Now my health is improved and I believe that light outdoor employment will help me to effect a permanent cure.

If you can advise me on the following points, I will certainly appreciate it:

1. About how many chickens can I accommodate on one-third of an acre?

2. Are not the brown or white Leghorns a very good breed for this climate?

3. Is this not a good time to begin incubation?

Any other information will be kindly appreciated; also notify me if there is any charge for this information.

Yours very truly, C. W. STROZIER.

I am glad to receive the above letter, and take great pleasure in replying to it. In my opinion, outdoor work among the chickens will benefit you. I sincerely hope that it will.

1. This depends upon circumstances. If you were thoroughly up on handling chickens, you could manage a large number, but you say in your letter that you are not; therefore, my advice is that you get a few, say, eight or ten white or brown Leghorns and a fifty-egg incubator and work on them through the summer, and then you will be able next fall to handle three times this number. Save all of the first hatch of pullets and they will furnish you eggs for late fall use.

2. The white or brown Leghorn do well in the South.

3. Yes, sir.

Of course, there is no charge. It is a pleasure to help you. Should you get in trouble, call again on

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Dear Sir—I follow up your points in The Georgian and clip most of them for future reference and am after a little more information than you have, up to this date published.

I want to go into chicken-raising mostly for egg-production for market purposes, and can buy pure-bred Leghorns at about one day old. Now, are all chicks subject to what is known as the pip, or is it just occasionally that

some have it? What I mean, does nature cause them (each one) to have the pip, or must I look for it on all? And what will cure it? Must it be pulled off? Also, how old would the pullets from pure-bred Leghorns have to be before they commence laying?

Now, while I intended Atlanta to be my headquarters, yet causes are shaping themselves so that I may either have to go to Jacksonville, Fla., or New Orleans, La., and I wish to know if climate in those places would be good for young chicks. Mosquitoes and sand fleas are terrible there, and I am informed (not by expert authority) that sand fleas are very injurious to chicks, causing great mortality among them by going into their nostrils up to the brain, thereby causing death. I will appreciate any information you will give and continue looking for your dope.

Thanking you, C. H. B.

Atlanta, Ga., April 3, 1910.

Answer: Pip is caused by indigestion and is quickly cured by shutting the fowl up and feeding it on oats and dry wheat bran. Give it a small lump of cooking soda about the size of a grain of corn, one dose, morning and night, which will generally produce the desired effect, but do not tear the poor bird's tongue to pieces. This barbarous practice will effect a cure because it stops the fowl from eating. Shutting it up for a week would produce the same result, but you can cure it in two or three days by the remedy given above. Five grains of quinine will help.

All fowls fed on soft or any other indigestible food are subject to indigestion in all its various forms.

Brown or any other of the Leghorn family are fine layers. The chickens mature rapily. Those hatched in the early spring will frequently lay at three months old and have been known to lay a little earlier. They will be perfectly at home anywhere in the South. Chloro naptholeum, one part to twenty-five or thirty parts of water, sprayed

all over the fowls and around the premises will get rid of mites, fleas and vermin generally.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

I have enjoyed your letters and watch very closely for The Georgian so as not to miss them. We have "hen fever," but a mink cooled it off considerably when he got eight of my fine Rhode Island Reds that were ready to wean. How many hens can you use with one rooster? I have read that fifteen was a good number. Very respectfully, MRS. A. L. D.

Answer: You can run ten or twelve hens with a young rooster, if you are breeding any of the small breeds. I prefer ten even with them. With the large, heavy birds, never use over eight. I think that six would insure a large number of fertile eggs.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Dear Sir—In spite of your kind answer of a recent date to previous question, I do not want to trouble you too much; at the same time if you do not mind telling your readers what is the best way to stop hens from being "broody," I should be obliged, and do doubt others would also. When compelled not to sit, what advantage is gained? Do they lay sooner than if permitted to bring out a setting of eggs?

Yours gratefully, IGNORAMUS.

Answer: Your apology for calling on me for help in the poultry business is accepted. It, however, need never have been made, for The Georgian has me employed for this purpose, and then I get almost as much pleasure out of helping folks as I do from what I get from the Georgian. To break a hen from sitting, shut her up in a coop

and put a male with her is the quickest way that I know tc accomplish this. Moving her to some other yard where she has never been before will stop her. Many poultrymen contend that a hen will produce more eggs in a year if you will let her produce one brood of chicks than if not allowed to sit. They contend that it gives her a rest that, in accordance with natural laws, enables her to lay as many or more eggs during the year. My own opinion is that hens should be allowed to raise a brood of chicks once a year. I believe that they will continue for a greater number of years to be profitable. This, of course, does not apply to non-sitters.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Dear Sir—I have been reading with much interest your helpful pieces in The Georgian, and am coming to you with my trouble hoping you can help me. I have lost two fine hens that seemed to be egg-bound or to have had a broken egg in them. They are weighted down behind and walk upright like a duck or as if their back were broken. They stop laying all at once, but continue eating heartily. In the first place, they are too fat, having a free range. I applied several remedies, but one of them died. I cut her open and found the egg broken, but with a very brittle shell. The other has been this way about a week and seems to get no better or worse. Am inclosing a postal for reply, hoping you can help me.

Thanking you, I am yours,

O. W. BLEDSOE.

Answer: You have not told me this, but I am quite sure your hens roost too high, or have been subjected to rough handling. You say that they are too fat. Overfeeding laying hens is a source of much trouble among beginners in poultry breeding. You will have to lessen their feed or you will have more trouble with the hens, and

the chickens that you hatch from their eggs. You can remove a broken egg from a hen if the removal takes place within twelve to twenty-four hours. After this time inflammation sets in, then I know of no cure for it. Better cut her head off—if you discover the trouble before twenty-four hours, anyway. After fever sets in she is not fit for food.

Lower your roosts. They should never be over three feet high. Two feet from the ground is best for large, fat hens, and three or four feet from the ground for the smaller and lighter breeds.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Having read with great interest all your points on poultry in The Georgian, I consider you an expert in the business, and being greatly interested in poultry, I decided to ask your advice.

I am using a small sixty-egg incubator for first experience. I got only seventeen chicks from sixty eggs. I broke all that did not hatch, according to your method, and found a chicken in all but five. They were all fully developed and all seemed to have died about the same time. The shell was about two-thirds full.

I began with one hundred and two degrees and increased to one hundred and three degrees; kept all ventilators open when I could; had a small dish of water under egg tray. The thermometer went as low as ninety degrees for probably one hour one time, and was to one hundred degrees several mornings. I aired the eggs every day at noon for twenty minutes, until the eighteenth day, and turned them twice a day until the nineteenth day.

For the past two weeks all my hens have been laying very small eggs; seldom normal size and often about one-half normal size. I have Barred Plymouth Rocks. I feed "Red Comb Scratch Feed," oats, mash feed, etc., and keep plenty of crushed bone and oyster shell before them at

all times; also fresh water. Kindly give me the name of a good incubator and brooder. Thanking you in advance for your advice, I am, Yours truly,

E. W. HIGHTOWER.

Answer: I gave in an article some time ago in The Georgian, general rules for the management of incubators. I also said that I could not, of course, give many of the little details that are absolutely essential to success. With all incubators, full instructions are furnished, and as all of them differ in construction, these instructions should be carefully followed. So in writing that article I meant for it to apply in a general way. Your failure to hatch more than you did was evidently due to a lack of moisture in the latter part of the hatch. Try again. Read the instructions sent with the machines. On the seventeenth or eighteenth day spread a clean cloth, dampened with warm water, over the eggs, and you will have better success. You may have been feeding your hens too much and giving them too little exercise. Make them work for their living. Do not let them get too fat.

All first-class incubators give good results. Make your own brooders.

"Heat Kills More Young Chickens Than Cold."

Dear Uncle Dudley:

I have a fine stock of chickens and the most of them are little fellows. By some means or other they have got lice on them. I would be very glad if you would tell me of a good remedy that would get rid of the lice. I am interested in the poultry business and I certainly would appreciate your answer in regard to my question.

Yours truly, CHARLES JORDAN.

Answer: I replied by postal card to you today, but could not give reply in full to your question. The best way to get rid of lice, mites, etc., is never have them. Every-

body who contemplates raising chickens, should very early in the spring thoroughly disinfect and otherwise cleanse chicken houses and coops. Whitewash everything but the chickens, inside and outside. Chloro naptholeum, a teaspoonful or so to the gallon in the whitewash, will help much. In reply to an inquiry made today, I answer your question as to getting mites, etc., off of the chicks.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Dear Sir—We set a hen on White Plymouth Rock eggs that had been shipped about twenty miles, packed very carefully in lint cotton. The hen went to sitting on the 3d and should have come off on the 24th, but on that day she hatched two, but kept sitting for a day or two after, and we decided eggs were no good and after breaking found the chicks ready to come out, but dead. Can you give us some reason for eggs not hatching? The hen stayed on her nest as well or better than any of our hens. Thanking you in advance, I am very respectfully.

Answer: You have run up with a difficulty that poultrymen everywhere would like to solve. Some think that it is caused by a lack of moisture; others think too much moisture during the last four or five days. Others attribute it to improper feeding of the hen that laid the eggs. If the dead chickens filled the eggs there was too much moisture and if they were shrunken, too little, in the last week of the hatch. A hen set indoors, is apt to have the eggs too dry. I always sprinkle a little water over the eggs on about the eighteenth day, but occasionally I have had about the same bad luck that you have had. See my recent article about saving the chicks on the twenty-first day.

Dear Uncle Dudley:

Dear Sir—Could you please tell me what breed you consider as the best for raising fryers? Which breed reaches

the greatest weight soonest? I have an incubator and would like to raise fryers in a small way. I have been a most interested reader of your column in the best paper in the South. Yours truly.

P. S.—Please answer in The Georgian, if you have room.—W. S. T.

Answer: Orpingtons, Rhode Island Reds or Langshans seem to be preferred as best adapted to raising early broilers, but some breeders prefer other of the large breeds. Much depends on "the man behind the guns."

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

I have started in the poultry business in a small way. Have about one hundred little fellows, which am having considerable trouble with. They will droop for a day or two and die; most of them appear to have symptoms of cholera, while others appear to have swollen crops, either full of wind or water. I put ten or twelve of the affected ones in a separate coop yesterday and they are all dead except two. All of these chickens except twenty-five were hatched from incubator about three weeks ago and seemed to be doing well until about five days ago. I had seven fine breed hatched from hen ten days ago. All of these have died except two.

Would very much appreciate any information you can give me in regard to this trouble and treatments for same. I am yours truly,

T. L. MARCHANT.

Answer: Your chickens are suffering from indigestion. You did not commence right with them. I rather think that you have been feeding corn in some shape, either meal or grist, or perhaps, some soft "prepared to make chickens grow" stuff. They should have been taken from the hen or incubator and placed on nice, clean sand for

twenty-four hours after hatch. A little wheat bran on the sand will not harm them. After twenty-four hours, feed fine grain, cracked rice or wheat, green food and clean water. Feed them a little at a time for eight or ten days and then on the commercial feed. The life of a chicken depends entirely on its treatment for the first eight or ten days of its existence. Corn in any shape will kill them.

Dear Uncle Dudley:

I guess I am one of the most "crankety" chicken cranks you ever heard of, though I have had very little experience in the business. This, of course, counts for my calling to you for aid. I contemplate keeping, another season, about sixty hens, consisting of the following breeds: Single-comb Brown Leghorns, single-comb White Leghorns, single-comb Barred Plymouth Rocks, single-comb Rhode Island Reds and Buff Orpingtons. Now, what I want to know is this: What height should I have my fence to keep the Leghorns inclosed? The larger birds, I think, I can manage. I want to fence off my orchard and keep my birds in it. Will build portable houses for roosting purposes; these will be large enough to accommodate ten birds. Can I breed successfully from the cockerels and pullets which I am raising now another year without new blood? These came from a standard poultry farm and hatched in March. Any other information which you can give will certainly be appreciated. Thanking you in advance, I am,

Yours truly, W. S. LANDRUM, SR.

Answer: My advice to you is to breed only one or two breeds. Select the fowl that you like best; build runs as you describe in your letter; put in each run a young cockerel (if Leghorns) and about fifteen pullets or hens, the latter preferred, for with this mating (a young cockerel and hens) you will be apt to get more pullets among the chickens. Have two pens of each breed, so that you can

the next season change the mating, taking chickens from one pen, to prevent inbreeding. Then select a breed from the larger varieties and do as above, except that eight or ten hens or pullets are enough for one cock. The Leghorns are great layers, and so are the Rhode Island Reds and Orpingtons and Rocks. However, my advice is that you breed only one variety next year, and learn thoroughly how to handle a few, and then increase the number of fowls and varieties. To entirely control Leghorns, you would have to cover the runs or clip their wings. The seven flight feathers of one wing will keep them from flying.

YOUR UNCLE DUDLEY.

Dear Uncle Dudley:

Would you mind telling some time in your articles on chickens at what age the Pekin and Indian Runner ducks begin laying, and if they are incubated at the same degree of heat and hatched in the same number of days as hen eggs? I am anxious to get your book when it is ready, and hope you will sell every poultry crank in Georgia one. It makes no difference how long you have been raising chickens, you can be taught something new. Hoping you won't be offended at me for not signing my name, I am, as ever.

Answer: The Pekin and Indian Runner ducks are non-sitters. They both mature quite early and commence to lay at six to eight months old. Some have reported the Indian Runner to have laid even before this age. The Indian Runner commences to lay somewhat sooner than the Pekin and lays more eggs than the Pekin. The Pekin is much larger than the Indian Runner. The degree of heat is the same as that used for chicken eggs, one hundred and two to one hundred and three degrees though with duck eggs it should be raised to about one hundred and four toward the last of the hatch. Duck eggs require more moisture than fowl eggs.

Dear Uncle Dudley:

I have a lot of little chickens that have lice on them. What can I do to get rid of them? Please answer through The Georgian.

Answer: Grease the hens' breasts and under the wings. Burn up their sleeping quarters, or move them to a place out in the yard. Dig up a place under shelter, sprinkle wood ashes over it, so that the hen can take a daily dust bath. Of course any good insect powder will kill lice.

Dear Uncle Dudley:

Another question or two:

Without using trap nests, how can one best tell the chickens which are not laying and which are eating their heads off and should be eaten? Is it all right to kill chickens which are broody? Please give us one of your wise dissertations on the slaughter of those innocents.

I have a peculiar rooster. He stands up erect as a penguin; indeed, as time goes by, he almost falls backward, so ultra-military is his attitude. But he is not at all soldierly in his gait, for he progresses by throwing his legs out sideways in an exceedingly comical fashion. I keep him as a curiosity, and my man wants to enter him in a dime museum, out of which he thinks a nice little income could be obtained, especially if a handsome hen could be induced to flirt with him and make him show his paces. What kind of a dislocation or other anomaly has this animal, do you suppose?

With thanks for all your wisdom spread so liberally before the public, I am yours truly.

IGNORAMUS STILL.

Answer: It takes some experience to pick out the hens that are laying in the flock. This may help you: The laying hens have red combs. They are restless. They sing sweetly, and to a genuine lover of poultry,

sweeter than the folks in the grand opera. Those not laying have a listless way of conducting themselves, and to all outward appearances have "no music in their souls." Just keep watching them and you will soon be able to tell which are laying and which are not. Do not, however, be too quick to act, for some hens are on the eve of laying before their combs look bright.

Your rooster has probably rheumatism, or it may be that he has a blow on his back. Give him a laxative, a teaspoonful of kerosene oil and five grains of quinine, and if this does not cure him, turn him over to "Jedge Briles." He may have met up with a tiger that had his eyes open.

Dear Uncle Dudley:

Why is it that poultrymen ship eggs for setting that are not uniform in size, color and form? I have recently handled five sittings in each of which were eggs I would not select for setting myself or shipping to others. Should eggs with ridges, bumps or with watery or cloud-colored shells be set? Can you give us some rules for selecting eggs for setting? Yours truly.

Doraville, Ga. M. T. E.

Answer: As to the size and color of the eggs that breeders ship out for hatching purposes, I have this to say: Almost all of the new breeds have been built up by the introduction of Asiatic brood, and some of them lay white and others brown eggs. Now if the eggs are perfectly formed, the color and size amount to very little unless they are unusually small. Ridges and bumps on eggs render them unfit for incubating purposes.

Dear Uncle Dudley:

I have been very much interested in your articles in The Georgian. I would like to ask a question. I live in the country and am troubled a great deal with hawks,

and have been advised to feed nux vomica to the chickens to kill the hawks. Do you advise it, and would it injure the chickens.

Answer: Nux vomica will not hurt chickens. It is a fine tonic for them. A piece of sheet tin twelve by twelve or larger, hung on a pole so that it will revolve will sometimes frighten the hawks away. Try it, and then report as to your success with it.

Dear Uncle Dudley:

I had seven chicks hatched under a hen three weeks ago; six of them are still living and doing well. I also had thirty-nine hatched in an incubator and all are dead except six. In other words, at three weeks old, six out of seven the hen hatched are living and six out of thirty-nine the incubator hatched are living. I kept the temperature at one hundred and two and a half for two weeks; the third week the temperature ran up to one hundred and three to one hundred and three and one-half. The eggs always felt warmer than the eggs under the hen. The incubator was run as to directions. Are chickens hatched in May any harder to raise than those hatched at any other time? Some people say those hatched in May will all die.

Answer in The Georgian. I read all of your pieces and enjoy them very much. Thanking you in advance, I remain. R. C. F.

P. S.—I never gave these chicks anything but grit for thirty-six hours, and then I fed them on rice, wheat bran and other small grain.

Atlanta, Ga.

Answer: Chickens hatched in incubators are more difficult to raise than those hatched and mothered by a hen, particularly when handled by a beginner. It takes long experience to raise chickens successfully. Do not be dis-

couraged; a failure now, if carefully considered, will teach you how to avoid the mistakes that you have made, and, by avoiding them, bring you ultimate success. So far as May chickens are concerned, I have for years, been unable to make any great success with them. I have always found that they are more subject to disease than those hatched earlier in the year. When sorehead attacks the flock, with me, it has always commenced with late hatched chickens. I have a good many times pulled them through all right, but it takes close watching and much trouble. I think it best for a beginner to quit getting off chickens after April and then commence again in September. Keep the hens laying, for you will make more money selling eggs than raising chickens.

Dear Uncle Dudley:

Is inclosed formula a good general chicken powder? If not, will you please give me one that will keep chickens well and also make hens lay?

Answer: For many reasons I am utterly opposed to doctoring chickens or any other animal when they are well.

The formula mentioned contains the names of twelve drugs. A chicken is a hard animal to poison, but there are some things that will poison them, and one of them is salt. I read in the Bible where the Great Teacher tells us: "They that be whole need not a physician, but they that are sick." Now, as to the stuff that is advertised in most—and I suspect all—of the poultry papers to make hens lay is, in my opinion, absolute poison, and in this way some of them will make hens lay, perhaps, but it acts upon them like morphine upon the human body, "and the last stage of that man was worse than the first."

I have never found any trouble in bringing them up to their individual capacity in the production of eggs by feeding oats, wheat, rye and other grain. I do not feed corn at all, except to fatten grown fowls for market. This

treatment is, after years of experiment, the best way that I have found to "keep chickens well and also to make hens lay." Cut out all drugs. They are generally advertised to sell, and the fellow that uses them is almost always badly sold himself.

A subscriber asks:

"Why do hens eat eggs? Can you give me a cure for the habit? I would rather feed sixty-cent corn than twenty-cent eggs."

Egg- eating is a vice usually started by one or two hens. If the ring-leader is caught and killed, there is usually no further trouble. Another remedy is to cut the beaks off bluntly to the quick. If a point is left, the work is of no use. Or if plenty of egg shells are to be had, feed them by the bushel (practical only when egg shells can be procured from bakeries) until the birds are sick of the sight of them. It is probably a craving for more lime. If the house is not well supplied with nests and eggs are laid on the floor, the hen first investigates. If the egg breaks she and her mates eat it, and in a short time learn how to break and get the tempting morsel. Provide plenty of nests, plenty of lime, and watch for the chief offender.—*Exchange.*

The above was clipped from a poultry journal. I neglected to mark the name of the paper on the clipping. Egg-eating hens are troublesome customers in a poultry yard. They soon teach every hen in the yard to form the habit. It is sometimes hard to locate the ring-leader until several have been taught that eggs are a great delicacy. The habit is caused in several ways, and almost in every instance by careless handling. Among the causes that have been observed by me, and that breeders have told me about are these: Putting the shells of eggs that have recently been used, with possibly some of the egg left on them where hens can get them. Soft shell eggs that are

nearly always laid at night. Feeding fresh meat freely and then stopping suddenly. Then, on the other hand, confining them in a small yard and giving them no fresh meat, or scrap meat. It sometimes also happens that they are forced to lay in an empty box, or in a barrel, where they have to fly down to reach the nest and thereby break the egg, and thus get a taste of the broken egg. They soon learn how to get into a perfect one. An insufficient supply of lime will cause them to eat eggs. I have my serious doubts about making a hen sick of egg shells by feeding them in large quantities. In my opinion they would eat what they wanted and then come back when they needed more. I know a breeder, who in order to make his hens lay and his chicks grow off quickly, fed a large quantity of fresh meat to them every day. The butcher failed to come for one or two days and almost every hen that he had went to eating eggs. He said that they got so ravenous for eggs that they tried to eat glass nest eggs, and that one large Orpington hen actually succeeded in smashing one of these, but discovered her error before she ate it.

IN REPLY TO ABOUT EIGHT LETTERS OF INQUIRY.

I receive sometimes a number of letters in which the writers ask questions along the same lines, and it is frequently the case that these questions have been previously answered in the articles written or in answer to the identical questions asked by some one else previously. Then, again, some do not get a clear idea of what I really did say in some of my articles, and several times since in reply to questions. I have said that what I had written and what I would in future write was entirely taken from my experience as a breeder of chickens for a long time—something like fifty years. Some have written me nice, kindly

letters, saying "I differ with you entirely on this subject." My invariable reply has been, "I am glad that you do, for if we never have folks to differ with us we will never arrive at the truth."

Now, here are some of the questions that have been asked me very recently: "Do I understand you to say that salt will poison a chicken?" This is in answer to two inquiries.

What I have said is this: That salt in large doses will kill chickens, and even in small doses is injurious to them. Now, in the past two weeks this question has come to me from several: "Will corn poison fowls?" Now, I am quite sure that I never said that, and you who have asked that question can not possibly find it in any of my articles. "What did you say, then?" Well, I said, and still say, that corn in any shape fed to newly hatched chickens, in my opinion, was like poison to them; that they should be fed on small grain until they are at least ten days old; that I fed them on small grain until they are fifteen days old, and that cracked rice gave me better results than anything that I have ever used for little chicks.

After they are fifteen to twenty days old the commercial chicken feed could be fed, provided it did not have too much corn in it. Now, as to feeding laying hens, the commercial feed with corn in it will not hurt them, if there is a superabundance of other grain to balance it. Corn alone fed to them will quickly make them so fat that they can not lay. I have replied to several letters on this point.

For fattening poultry for market corn will give better results than any feed that I have ever used.

YOUR UNCLE DUDLEY.

SOME QUESTIONS THAT UNCLE DUDLEY WANTS ANSWERED.

First. We are drifting into making a large percentage of our hens non-sitters? It seems to be a well known fact among poultry men that you can take a bunch of pullets of any breed and from the start never let them sit and they will finally show very little inclination to take the nest. Do the next generation in the same way and the inclination to sit is lessened. Keep on this line and you will ultimately have a breed of non-sitters. Now, I have never tried this, but I have seen it so stated in the poultry books. On the other hand, I do know a breeder, right here in Georgia, who has for several years been breeding single-comb Brown Leghorns. They are of as good strain as is bred anywhere. They are not in runs, but are all in one flock, and have the freedom of the farm. He commenced some years ago to encourage them to sit, and now, as he told me, they sit and mother chickens like any other breed. He sells utility birds, chickens, broilers and fries and eggs. On many of the large poultry farms, where incubators are used exclusively, very few, perhaps none, of the hens are allowed to sit, therefore decreasing the inclination to take the nest. My attention has been called to this subject and I have been asked why it is that my Plymouth Rock hens will not take the nest when others around me have hens that are all wanting to sit. These complaints are more frequent than they formerly were. I would like to have some of the older breeders let us hear from them on this subject.

YOUR UNCLE DUDLEY.

BOYS' DAY AT THE GEORGIAN.

I met a very prominent gentleman last week who thanked me for solving a problem that he had for a long time been struggling with. He had been trying, without employing harsh means, to keep his boys at home when out of school, and, said he, you, in your chicken articles in The Georgian, have placed me under many obligations to you by doing just what I have been trying to do with very little success for a long time. They have in the back yard, boxes, saw, hatchet, wire nails, etc., and are the busiest chaps that you ever saw trying to follow Uncle Dudley's instructions about chickens. They in the afternoon sit and watch for The Georgian, read and discuss what Uncle Dudley has written.

The above gave me more pleasure than I have had since coming to Atlanta. I am told also that the boys at recess at school freely discuss Uncle Dudley almost every day. Now, having heard the above good news, I decided that on Saturday next, I would have what I will call "Boys' Day" in The Georgian. I therefore want to have every boy in Atlanta and elsewhere in Georgia to write Uncle Dudley a short letter on one side of the paper, telling him about your chickens. What kind you are breeding; how many eggs they have laid; how many hens you have sitting; how many chickens you have out or anything that would interest some other boy. Then there are some boys who have been reading Uncle Dudley's articles who want to raise chickens but who are so situated that they can not now keep them. Well, write that and your letter will be put in The Georgian. Now, you must not write a long letter boys—not over forty words—because there will, I think, be a great many boys that will write to me, but if you have something real good to say and you go a little over forty, Uncle Dudley will get it in the paper. I hope to

hear from every boy in Georgia who has read Uncle Dudley's articles, but do not wait until the latter part of the week, but send the letter just as you read this.

At the Macon poultry show last fall, a boy about fourteen or fifteen years old had a pair of Partridge Wyandottes that took a blue ribbon, and the judges told me that they were as good a pair of birds as there was of any breed in the show. That boy raised that pair of birds. Now why not some other boy in Georgia astonish the old breeders by taking some of the blue ribbons home with him? Now who is going to be first with a letter? And who, after writing his letter, is going to get some other boy to write one? I would like to have enough letters, boys, to fill a whole page of The Georgian, and if enough letters are received, I'll give you two pages or more if you will send the letters in. Won't there be a lot of fun in the "Boys' Day" Georgian next Saturday?

Atlanta, Ga., January 24, 1910.

Atlanta Georgian and News.

Gentlemen: We, as officers of the Georgia Poultry Association, wish to express our unqualified approval and indorsement of the great help and support The Georgian daily has given to the poultrymen of this section, and more particularly the publicity given, both editorially and reportorially, to the Atlanta poultry and dog show held here during the week January 18-22.

This show was the greatest ever held anywhere in the South. It had nearly 3,000 entries of the best breeds from famed coops of the Southern fanciers.

So signally successful was it that already it has been determined to hold a national show here in January, 1911. This is quite an ambitious undertaking, but one that will advertise Atlanta from one end of America to the other, and will give Southern impetus to chicken raising.

But to do this successfully, we must work with one accord, must bring to bear our influence, and above all things, have the continued use of your columns, in order to advertise it to the world.

The poultrymen of this section have so long needed a daily newspaper in their cause; have, in fact, all but begged other Georgia dailies to lend a helping hand, that when Mr. Bacon came to us unsolicited, and said: "If you chicken breeders of Atlanta will get together and reorganize the Poultry Association, I will see to it that you get all the newspaper publicity you want. Not only that, but The Georgian will help you pull off the biggest poultry show the South has ever had." We got together and reorganized on the strength of that promise. The Georgian and Mr. Bacon have both kept that promise, finding its fruition in the remarkable success of the poultry show just closed.

We believe you could do no better service than to continue to help build up the poultry business in Georgia. It now ranks fourteenth among the states in this industry, but does not raise anything like enough to supply its own demands. In fact, Tennessee, which, by the way, ranks first, ships into Georgia, thirty per cent of the chickens, turkeys and eggs we eat.

Mr. Bacon and The Georgian, just keep up your good work. You have a thousand chicken lovers right here in Atlanta that believe in you, and will give you their every support, together with all the advertising they have to place.

Thanking you again for your masterful work and material assistance to the poultry industry, we have the pleasure to subscribe ourselves your well wishers and friends.

THE GEORGIA POULTRY ASSOCIATION.

H. G. Hastings, President; J. M. Karwish, Treasurer; C. O. Harwell, Secretary.

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We can supply you with anything from a good utility bird to one fit to win in any company and in any quantity desired at reasonable prices :: :: ::

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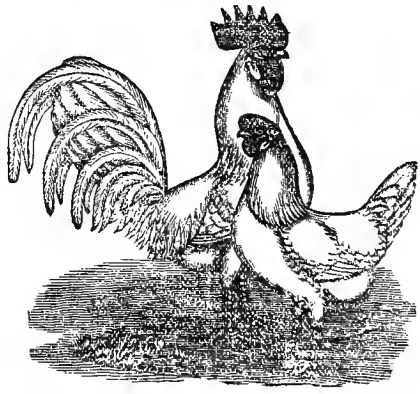

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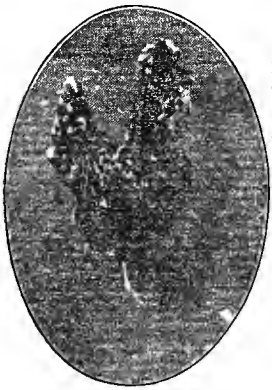
Dr. C. L. BASKIN, Temple, Ga.



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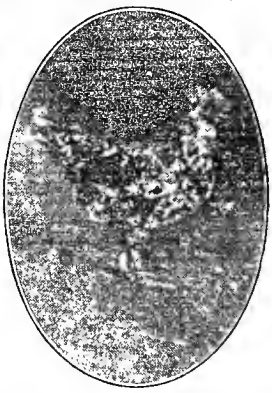

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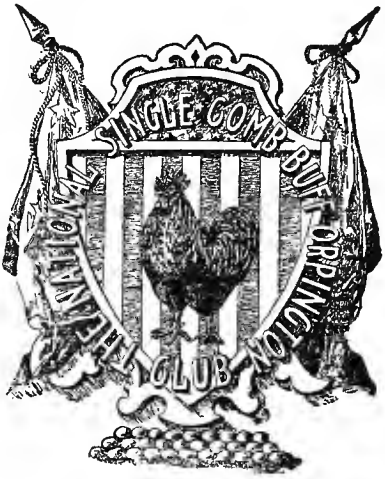

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