POULTRY EXPERIMENTS AT THE U. OF T. EXPERIMENT STATION

NOVEMBER

THE

NDUSTRIOUS

AN ILLUSTRATED MONTHLY FOR POULTRY, LIVE STOCK AND THE FARM

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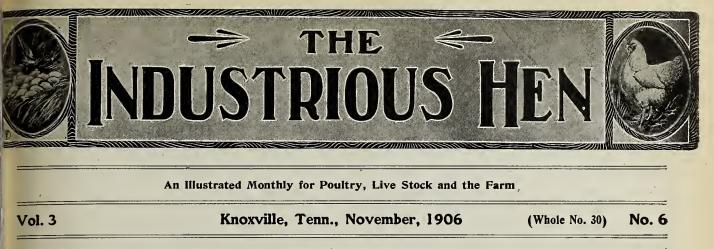
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Greatest Poultry Show of the South, Knoxville, December 11 to 14, 1906





POULTRY EXPERIMENTS—No. 1
 AGRICULTURAL EXPERIMENT STATION, UNIVERSITY OF TENNESSEE

N this issue we give the tabulated results of feeding and laving of the nine pens of thoroughbred poultry at the Agricultural Experiment Station, University of Tennessee, for the months of August and September. During the month of August only eight pens were recorded, the ninth pen, White Wyandottes, being put in early in August, but no record made of its work for that month. This ninth pen is fed similar to the others, but is not trapnested as the others are, but records are kept of the eggs taken from the pen. It will be noted that this new pen produced the cheapest priced eggs during September, the cost being .047 per dozen. This is .026 cheaper per dozen than the next lowest pen, also White Wyandottes. The third pen was Pen No. 2, Barred Rocks, which, for August, produced the next to highest cost eggs. Pen No. 9, the new pen, had a large range, 80x175 feet, in which there was an abundance of weeds, etc., maturing seed during August and September. This tends to show the great value of a wide range of food for laying hens.

By comparing the records for August and September three things are noticeable. First, that all the pens practically gained

KECORD FOR MONTH OF AUGUST, 1906										
Breed	Pen No.	No. Hens in Pen	Weighed In	Weighed Out	No. Eggs	Weight of Eggs, ozs.	Grain Grain	Mash Tps	Cost Per Dozen	Average Per Hen
S. C. B. Orpingtons	$2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7$	$12 \\ 4 \\ 12 \\ 12 \\ 9 \\ 4 \\ 11 \\ 12$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{r} 24\frac{1}{2}\\ 62\frac{3}{4}\\ 66\\ 42\\ 18\frac{3}{4}\\ 31\frac{3}{4} \end{array}$	47 104 151 70 42 81	$209.2 \\98.2 \\197.6 \\298.8 \\133.7 \\79.6 \\158.7 \\168.3$	$ \begin{array}{r} 61 \\ 66 \\ 78 \\ 60 \frac{1}{2} \end{array} $	$14 \\ 4 \\ 2034 \\ 18 \\ 8^{1} \\ 478 \\ 11^{1} \\ 1334 \\ 134$	$\begin{array}{c} 13 \\ 15\frac{1}{5} \\ 22\frac{1}{5} \\ 14\frac{3}{4} \end{array}$	$\begin{array}{c} 9^{1}_{4}\\ 11^{3}_{3}_{4}\\ 8^{3}_{2}\\ 12^{3}_{4}\\ 12^{3}_{4}\\ 7^{4}_{4}\\ 7^{4}_{4}\\ 7^{4}_{4}\\ 7^{4}_{4}\end{array}$
Total		76	3313	3263	699	1344	489	95 <u>1</u>	141	$9\frac{1}{5}$

The grain was composed of equal parts corn, wheat and oats, the mash one part tankage (Swift) and ten parts wheat bran. In estimating the cost of feed, labor was not considered. The feed was valued at $1\frac{1}{3}$ c per pound; loss or gain of flesh at $8\frac{1}{2}$ c per pound. JAS. TYLER, Asst. Poultryman.

in weight; second, that all the pens ate more mash feed and decreased the grain feed eaten; third, that the cost of egg production was very materially decreased; one important factor being that the birds are coming out of the moult; another, that the large amount of mash eaten helped to increase fat production. for it will be noticed that the actual egg yield was not increased but that the eight pens on test actually laid fewer eggs for September than August, laying only 603 eggs in September while they laid 699 in August. The egg yield

of Pen No. 9 is, of course, deducted from the September results. So the material factor in reducing the cost of egg production was the allowance of 9 cents a pound for gain in flesh and the saving in price of mash feed consumed over grain feed. Taking the eight pens tested during both August and September, it will be seen that the total mash food eaten for August was 92 lbs., and for September 213, a total increase. of dry feed of 120 pounds. The total grain consumed for August was 489 lbs., and tor September was 378 lbs., a decrease of 105 lbs. Thus the decrease in grain consumed was exceeded by mash consumed by 15 lbs. While these tests are not at all conclusive, they tend to show that mash produces flesh more rapidly than grain, and that the birds would devour more pounds of mash than of grain feed. It will be noted that Pens Nos. 1, 2 and 3 increased egg production, but Pen No. 4 decreased the number nearly one-half. This materially increased the cost of eggs from Pen No. 4, White Rocks. Apparently these birds are very well out of the moult, much better than the Single Comb White Leghorns, who only fell three eggs under the August production. No cause is

RECORD FOR	MONTH	OF SEPTEMBER,	1906
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Breed	Pen No.	No. Hens in Pen	Weighed In	Weighed Out	No. Eggs	Weight of Eggs, ozs.	Grain Grain	l. Lbs	Cost Per Dozen	Average Per Hen
White Wyaudottes. Barred Rocks Barred Rocks White Rocks S. C. B. Orpingtons Black Langshans S. C. B. Leghorns . S. C. W. Leghorns. White Wyandottes.	2345678	$ \begin{array}{r} 12 \\ 4 \\ 12 \\ 12 \\ 9 \\ 4 \\ 11 \\ 12 \\ 8 \\ 8 \end{array} $	$\begin{array}{c} 483_{4}\\ 24_{2}\\ 62_{3}\\ 66\\ 42\\ 183_{4}\\ 313_{4}\\ 32_{1}\\ 39_{2}\\ 39_{2}\\ \end{array}$	$\begin{array}{c} 27_8^{+}\\ 67_{-4}^{-4}\\ 69_{-4}^{-4}\\ 43_{-5}^{-5}\\ 20\\ 34_{-3}^{-3}\\ 32_{-2}^{-1}\end{array}$	$ \begin{array}{r} 115 \\ 67 \\ 52 \\ 29 \\ 62 \\ 90 \\ \end{array} $	$ \begin{array}{r} 101 \\ 218 \\ 127 \\ 97\frac{1}{2} \end{array} $	$\begin{array}{c} 60\\ 33\\ 60\\ 60\\ 45\\ 30\\ 45\\ 45\\ 45\\ 45\\ 45\\ \end{array}$	$\begin{array}{c} 34\frac{3}{15}\\ 15\frac{3}{42}\\ 42\frac{1}{4}\\ 42\frac{1}{4}\\ 14\frac{1}{4}\\ 14\\ 22\\ 28\frac{1}{2}\\ 16\frac{3}{4}\\ \end{array}$	$\begin{array}{c} 7\frac{1}{4}\\ 8\frac{1}{4}\\ 9\frac{1}{2}\\ 18\\ 14\frac{3}{4}\\ 16\frac{1}{2}\\ 10\frac{1}{4}\\ 4\frac{3}{4}\\ 4\frac{3}{4}\end{array}$	$\begin{array}{c} 11 \\ 1234 \\ 912 \\ 512 \\ 612 \\ 7434 \\ 7234 \\ 1234 \end{array}$
Total		84	366 ¹ / ₄	391	701	$1343\frac{1}{2}$	423	2293	$11\frac{1}{4}$	$8\frac{1}{3}$

The grain was valued at $1\frac{1}{3}c$ per pound. It was composed of equal parts cracked corn, wheat and oats. The mash (fed dry) composed of 5 parts shorts, 5 parts bran and one part digester tankage (Swift), was valued at $1\frac{1}{4}c$ per pound. In estimating the cost of eggs labor was not considered and loss or gain of flesh was valued at 9c per pound.

JAS. TYLER, Asst. Poultryman.

apparent in looking at the White Rocks for the decrease in production, nor does the consumption of food present any reason for the decrease in the number of eggs, the amount of mash eaten being increased until the total food consumed for September was 102 lbs., against 96 lbs. for August. Pen No. 4 also made a gain in weight of three pounds. Pens Nos. 5, 6 and 7 all decreased in September the number of eggs produced, although the food consumed was about the same as for the month previous, and all gained in weight. Pen No. 8, Single Comb White Leghorns, practically held their own in weight, lost three in egg production, increased the mash consumed and produced eggs at the same per dozen.

Taking an average of the total cost of egg production for September it will be seen that it was 11 cents per dozen. Fresh eggs were retailing on the Knoxville market during September at a little over twenty cents a dozen, average through the month. Thus eggs were produced, counting grain at a high price, and not estimating for labor, at a net profit of 9c per dozen.

The average egg production per hen was for all pens during August 9½ eggs, a total of 110 eggs per year; for September, the average was even less, being only 8½ per hen, or 97 eggs per hen a year. It should be borne in mind that the hens were largely in moult during these two months and the egg production was, of course, lessened.

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2	*	ANGORA GOATS	* }
Ś		WRITTEN FOR THE INDUSTRIOUS HEN BY T. E. THATCH	\$
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T is unnecessary for me to go into a description of the animal as doubtless you and all your readers have seen specimens of the long curly haired, docile, and most beautiful of all domestic animals at the fairs, if not the beautiful herd browsing in the field or upon the mountain side. Doubtless some of you have tasted of the delicious mutton of only the culls of the Angora, as they are yet too scarce and dear and too pretty to butcher only the culls of the flock.

It is now generally known and understood that the Sultan of Turkey prohibited the exportation of Angoras in 1881 and



A TYPICAL, "EAST TENNESSEAN," As Bred, Registered and Owned by T. E. Thatch, Angora Breeder, Cleveland, Tenn.

that said prohibition is still in effect and that the penalty for the exportation from said country of a single thoroughbred animal is a \$500.00 fine. However, there are now scattered over the South and West many very fine Angoras, descendants from the Dr. James B. Davis importation of nine Angoras, in 1849, given to him by the Sultan of Turkey, and which later fell to the ownership of Col. Richard Peters, of Atlanta, Ga., and who is the real founder of Angora culture in the United States.

My first Angoras were purchased from A. B. Weaver, of Georgia, who had thirty years experience in Angora culture, in a small way, he getting his original stock from Col. Peters.

Seven years ago I began with three does, the very finest I could procure and have ever since kept trying to breed them up and keep nothing but registered stock.

Right here I will say that real thoroughbred Angoras in this country are very scarce. I now have a beautiful flock

of about fifty which is the envy of almost every farmer who beholds them.

They are not roguish or otherwise troublesome like the common curd or hairy goat, and have by many been misunderstood as the Cashmere goat, which they in no wise resemble. Any fence that will turn sheep or other useful animals will turn the Angora. They can be bred in the same territory with sheep and will not cross. My sheep and goats are kept in the same pasture and around the same barn in winter and are often released on the commons for a short time in the summer, but they do not associate together. They have a "Jim Crow Law" of their own. When turned into the pasture all right together, it will soon be discovered that the sheep have taken either the right or left and the goats "vice versa."

Their natures are entirely different. In summer, during the heat of the day the sheep seek shelter from the parching rays of the sun under a bush, in the fence corner, under an old waste house, the sheep shed or any shade they can find, while the Angora leisurely browses, if he happens to be hungry, at noonday, the very hottest of weather. In very hot weather the sheep graze at night and shade in daytime, while the Angora browses, not grazes, as he eats bushes, briars, weeds and other things not desired on the land, making himself a very useful adjunct to the farm, and then comes home at night and lies down and sleeps all night, never browsing after dark.

The lands in East Tennessee are especially and particularly adapted to sheep and Angora culture and every farmer



A REGISTERED ANGORA. Property of T. E. Thatch, Cleveland, Tenn.

should have a flock of each and if not able to procure foundation stock of both get one or the other. The cost of foundation stock will be about the same, that is of some pure breed of sheep. Don't start with scrubs. They are dear at any price. Foundation stock of any good breed of sheep, Southdown, Shropshire or Mntton Merinos can be had at from \$10 to \$25 per head, while Angoras cost about the same or probably a little more, owing to the scarcity.

Many wild and absurd stories are told of the Angora, such as that an Angora will shear from 10 to 25 pounds of Mohair and that it sells from \$1 to \$2.50 per pound.

The facts are that Angoras shear from 2 to 10 pounds of Mohair and it sells at from 35 cents to 50 cents per pound, owing to its length. It takes a very fine large wether or buck to shear 10 pounds and his fleece will naturally be long and will command the highest price. While breeding does will average about three pounds and it only brings about 35 cents per pound, which makes the annual clip about \$1.00 per head on breeding does. Of course if there are many bucks in the flock the average will run much higher. The fleece on any good breed of sheep runs, with the present prices of wool, which is much higher now than formerly, just about the same.

The great advantages of the Anora flock over the much beloved and valuable sheep, is that the Angora is a prettier animal, is more companionable, making the finest and most beautiful of pets, but most of all being the greatest of brush

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HE Tennessee State Fair at Nashville, Tenn., October 8 to 13, was one of, if not the most, successful State Fair ever held in the South. The display of poultry was especially large for a fall fair, as this is a difficult time of the year to get birds in show condition. The poultry exhibition was held in an ideal building for light, but as the weather turned slightly cold, it was a little too cold for comfort at night, but a curtain enclosing the side exposed remedied the trouble. There were over one thousand birds on exhibition, and in many classes the competition was very strong. The usually strong Barred Rocks held a place further down the line than their White cousins, who lead the van both in numbers and strength. White Wyandottes came in for a close second place both in numbers and quality. All the popular breeds were well represented. The fancy and bantam classes were very well filled also. The judging by Judges Marshal and Jones was dispatched under the comparison system and the kicking was slight, less than is usual at a poultry show. The crowds that attended the poultry show were the best of any exhibit on the grounds, a perfect stream of humanity being constantly pouring into and out of the building. This was encouraging to exhibitors and many good sales are reported.

The live stock exhibit was also exceptionally fine, being the best display of cattle, hogs and sheep ever given in this state. The agricultural display was disappointing, and while very good, was not up to what a great agricultural state like Tennessee should have. The quality of some agricultural products displayed was exceptionally good. One of the highest grade displays of wheat ever seen was made. The display of dairy products was also very good. Farming machinery was one of the features of the fair, the leading manufacturers having exhibits on the grounds. The traction engine exhibit was especially fine. The pacing and trotting races were above the average, but no world's records were lowered.

The usual attractions were on hand, and the airship made several ascensions as advertised. Taken, all in all, the management assembled a very creditable fair. The next one will be a better one in some departments, doubtless, but it will be hard to improve upon in others. Get in line with your birds, your farm products, and your live stock for the biggest yet next fall. cleaners. The old worn sassafras field is, soon, by pasturage of the great Angoras, converted into a beautiful field of grass, cleared of sprouts, briars and all other useless growth and enough of the richest of all manures has been scattered so evenly over the field that the wilderness is made to blossom as the rose. The old axiom that the common curd or hairy goat can flourish on barbed wire, broken dishes, telegraph insulators, etc., and that he can climb over the house or barn or up the telegraph pole for the same does not apply to the Angora, as he is not a climber and although he eats bushes, briars, green cockle-burrs, etc., he requires good food and shelter in the winter, and is the most particular of all animals as to the cleanliness of his food and will starve before he will partake of dirty or unclean food.

The two cuts herewith shown are actual photographs of a young buck Angora and a young doe about nine months of age of my stock. The bucks have large spreading, spiral horns when full grown, often being thirty inches from tip to tip, which said horns they make very useful in protecting the flock from the ravages of the common enemy to sheep and Angora culture, the worthless cur.

Any one who understands sheep culture can successfully breed Angoras, the prime difference being that Angoras are much less trouble and easier raised except they are much more delicate for the first few days of the life of the kid, at which time they require more care and attention than sheep.

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Ŧ	×	ALABAMA	STATE	FAIR	×
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HE Second Annual Alabama State Fair was held at Birmingham, October 14 to 20th. The weather for a few days was unfavorable and the attendance not so good, but with fair days the crowds were very

A special building was erected last year to accomlarge. modate poultry, but the fine display this year crowded it to the utmost, but efficient Superintendent B. C. Garmon placed everything to the best advantage. White Rocks lead the display and Rhode Island Reds were second. Brown Leghorns, Black Minorcas, and Buff Orpingtons were among the strong displays. The bantam class was also good. Among the leading exhibitors were Terrill's Rhode Island Reds, Simmon's Rhode Island Reds, Nesbett's Rhode Island Reds, Henry's Brown Leghorns, Lansden's Black Minorcas, Eastland Poultry Yard's White Rocks, Belle Meade Farm with Rocks, Reds. and Orpingtons, and many other well known breeders. We regret that a complete list of the winners is not at hand now but we hope to publish same in a subsequent issue. It was a pleasure to meet many former acquaintances among the breeders and also many new friends and talk over the great industry of poultry with them. All had kind words to say of THE INDUSTRIOUS HEN and her work. The Birmingham breeders are now working and planning for greater things than ever at the coming Annual Poultry Show which is December 5 to 10. Dr. Elwyn Ballard is working industriously for the success of the show and is meeting with hearty co-operation. The Alabama State Fair Poultry Department was under the secretaryship of John A. Murkin, Jr., who proved such an able secretary for the Tennessee State Fair Poultry Department, and the success of both these poultry exhibits is largely due to Mr. Murkin's artistic abilities to execute that performance known as "peddling heated atmosphere." When it comes to furning the crowd, depend upon Murkin.

There are a number of good breeds of fowls to select from . that will give excellent results if properly cared for. Select the breed that tickles your fancy most and get to business.

To get the greatest results from the management of poultry it is necessary to study it, learn its needs and give diligence to the health and welfare of the fowl.

McCULLOUGH 5 1 CCL WRITTEN FOR THE INDUSTRIOUS HEN BY PLUMMER McCULLOUGH WRITTEN FOR THE INDUSTRIOUS HEN BY PLUMER HE

it behooves us to be up and doing. It is high time you were thinking of patching up the cracks, knot holes, etc.,

in that old chicken house. Going to build a new one? That's the stuff. Don't put in too many fixtures that are worse than useless. I would rather have a house just plain without any fixture at all. No alleys or patent roosts for me. Dropping boards are a good thing as they give more floor space and make cleaning easier. If you have some surplus stock still on hand I would advise you to dispose of it as quick as possible, sell them and make more room for your layers and breeders. If you expect many winter eggs your pullets should be in good shape now. Don't make the mistake of selling all your old hens unless your young stock is far superior. Remember it is the old hen's eggs that hatch those big strong chicks. Her offspring next season should be equal, if not superior to this year's stock. Don't keep too many fowls in one flock. Fifty is really too many. I think twenty-five is better, although some breeders keep as high as one and two

If any should freeze, take it to a fire and thaw out. Don't wait 'till dark to feed your fowls these evenings. When they get on the roost once they are not particular whether they come off again or not. Feed before they think of going to roost. What to feed is a question of great importance. However I am not going to tell you what the "best" method of feeding is, for I don't know. I have better results by feeding sound grains than mash. For the last three or four years I have fed dry grains almost exclusively. I think you get just as many eggs in a year and have a healthier flock of chickens. Feed as much of a variety as possible. Corn, wheat, oats, buckwheat, cracked corn and a little sunflower seed make a good bill of fare. Fresh water is almost of as much importance as the food. Fresh water should be supplied at all times. I think it a good plan to warm the water in real cold weather, but I would not advise this only in very severe weather. Try not to feed the same kind of grain twice in succession. Oats or buckwheat for breakfast. Wheat or cracked corn and a little sunflower at noon and all the cracked corn they will eat.

GOVERNMENT INVESTIGATING CONDITIONS AND METHODS .

± P to within recent years the Department of Agriculture has never had an expert force to study and endeavor (...) to improve the poultry industry of the country, notwithstanding the fact that the American hen and her product bring a larger income to the farmer than the majority of farm crops. The Bureau of Animal Industry has now installed a Bureau of Husbandry, with a poultry branch, under the charge of Animal Husbandman G. M. Rommel, and is making a study of the industry with an effort to rectify evil conditions. The field experts are practical, successful poultry

"We are now endeavoring to point out the way to the farmer to overcome many mistakes which exist in the poultry industry," stated Mr. Rommel in response to the inquiry as to what his division has set before it as its task for the present fiscal year. "We have a number of experts in all sections of the country interviewing successful poultry raisers, and making careful examinations of farms where poultry raising has been abandoned with a loss. Poultry, if raised correctly, and with scientific methods, will give a steady and profitable income, but no one can expect fowls to raise themselves.

raisers in all sections of the country.

"Poultry products have now climbed to a place of more than half a billion dollars in value annually, but there is no question that these figures can be much augmented if more care and attention be given to the industry. For instance, I have yet to see in the large cities a specimen of what I consider a good broiler. Chickens weighing from a pound and a half to two pounds retail for 20, 22 or 25 cents a pound, but they are more bones than flesh. The whole trouble lies in the fact that they are not fed correctly. No animal will put on flesh or fat without proper feeding, and this applies just as well to the fowl as any other animal. If a poultryman would pay strict attention to this one feature alone he would be amply rewarded by a rapid demand for his dressed poultry.

"Capon raising, too, should pay. Experiments have indicated that it costs no more to bring a capon to a marketable size than it does to keep a hen, and the income therefrom should prove profitable. After a little practice most any one can caponize. While it may be well to kill off the young cockerels for the broiler market, the additional feed necessary for all that have been caponized should amply reward the poultryman.

"Capons, unlike the rooster, do not wear off their flesh as fast as they make it by running all over the farm, but, on the other hand, are tame and put on flesh rapidly. Their whole habits change. A most peculiar thing about them is that they are very fond of broody hens, even going so far as to sit down beside the hen on the nest and cackling just like the female. It is not unusual, too, taking as much care of the youngsters as a hen would of her own offspring. This, too, seems somewhat natural, for since the roosters and hens will have nothing to do with the capon, he must turn to the little chicks for consolation."

The dry feeding method has gained many converts within the last year, and it will not be long until we will hear no more of the wet and sogov mashes. As a time-saver the hopper method can not be beaten. However, I find it does not work well with all kinds of fowls. But as the old saying goes, "What is meat for one man is poison for another" and that holds good even among the fowls. Here is a ration I have been using all summer and since early last winter and it has given very satisfactory results, so much so that I will continue to use it again this fall and winter. Equal parts of cracked corn (coarse), heavy wheat and oats. This is placed in the hoppers along with a good quality of beef scraps, always having before them charcoal, oyster shells and grit. On this ration I secured a very satisfactory egg yield while my neighbors were buying eggs of me.

Often fresh bone can be secured for nothing, as it is considered waste by the butcher and he is glad to get rid of it. The feeding of ground green bone means better health in the flock, more vigor, more eggs and more profit.

POULTRY JOURNAL? WHAT MAKES WRITTEN FOR THE INDUSTRIOUS HEN BY H. C. AUSTIN

HIS is a question differently answered. I consider a first class journal one that gives good, practical, common sense articles by practical and successful breeders. There are a number of so-called breeders who

are neither successful nor practical, do not know how to make a decent hen nest even, who buy their birds, and by going the rounds win some prizes, and imagine they are real poultrymen. These men are buyers rather than breeders as generally they buy either the stock or the eggs and do not do the mating to win their prizes. There is a difference between a breeder and a buyer. A breeder mates and raises his own birds. It is the breeder who writes his experience that makes the successful poultry journal. It is usually the buyer that sits around blowing some poultry journal is "no account" when that same journal is full of the very information this buyer needs stuffing with. But practical poultry is too much work and study to suit them, and such buyers usually take up with the socalled scientific methods of poultry raising that offer short cuts to success. Such methods and such papers catch these buyers. These buyers are usually very limited in experience or they would not talk against their local papers. If your local paper is not a good one you are partly responsible for it. If it does not give what you want to know, ask for it and the editor or

some correspondent will answer your questions. But because you do not see what you want to know, being a know-all, you do not want to show your ignorance by asking. Don't be too high-toned to ask for knowledge. There is as much to learn in the poultry business as any profession and it can't all be learned in one year nor in five years. It takes hard study and practical experience.

I wish to say that THE INDUSTRIOUS HEN is coming to the front as fast as any poultry journal in the country. To my mind THE INDUSTRIOUS HEN is the ideal and practical poultry journal. It covers the field well.

Mr. Editor, I have wandered some in this article. It puts me out of patience when I see these know-alls who do not know their a, b, c in poultry raising talking so much and saying so little. I have been breeding poultry for forty-five years and making it a scientific study and there is not a day that I do not learn something in the business, but not from that class that buy all their birds. So my advice to beginners is to buy from those who raise the birds they take their prizes on. I have been in the business of fancy poultry breeding for thirteen years and never bought but one fowl that I got a prize on. I have raised my own show birds and they have won over some of the leading breeders in the United States.



FANCY AND MARKET POULTRY

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OME of the brethren of the poultry press seem much disturbed over the future of the fancy in poultry culture. They lay especial stress on the amount of space accorded the market branch of the business by the leading journals and seem to see in this the reverse of old

customs. One editor is conceited enough to think others are following his lead or stealing his thunder, he being the first, as he claims, to advocate the market side of the business. Don't disturb yourself, gentlemen. The fancier is the one that made poultry culture prominent and profitable in this country and Europe, and he is today, as he always will be, the keystone to the structure, and without him the building will fall in ruins and the poultry press will die a natural death. There is not a poultry paper in this country that could stay in business three years without great loss to themselves, were it not for the fancier and the amount of space devoted to the fancy by other leading papers who show the possibilities of that side of poultry culture. The poultry offered at our market stalls that commands the highest prices and are sought for by people who know what good table poultry really is are thoroughbreds or their crosses. The 200-egg-per-year hen is a thoroughbred or its crosses. The specimens that sell from \$50 to \$800 each are not only thoroughbreds but strictly fancy. The advertising pages of our poultry journals from which the editors derive their only source of profit are filled with the advertisements of the thoroughbred or fancy poultry breeder; not by the market man by about four miles.

The poultry shows of America, more than 1,000 of which are held annually in this country, are made up of thoroughbreds and we can not recall a single instance where an Association has ever had the courage to attempt to run one exclusively for market poultry. With these facts before us, not considering the numerous monuments of misplaced confidence, where thousands of dollars have been wasted on market poultry and broiler plants to be found in all parts of this country, we rather guess that the fancy side of poultry culture will do to stay with for a few days at least.

The Inland is doing its part to encourage the breeding of market poultry on conservative lines, but our advice in every case is to use thoroughbred fowls for this purpose, as we know that better results invariably follow and we depend solely on the fancier to create such breeds as will fill the market requirements both for meat and eggs. In fact, the *Inland* stands first, last and all the time for the fancier and thoroughbred breeder.

The above article is taken from the Inland Poultry Journal, and, of course, was written by that lover of thoroughbred poultry, Judge Theo. Hewes. No one is a closer observer or has more right to speak with authority upon the rise of thoroughbred poultry culture than Judge Hewes. There is no doubt but that at the present time the demand is for poultry that will earn something as well as look pretty in the yards, and there is nothing more certain than that poultry bre ' along Standard lines will do this pretty looking, egg basket filling, and meat producing work also. Of course it is possible that birds can be bred for looks only until the utility features of that particular strain will become very much deteriorated but all who keep posted know that such is not the case today, except in perhaps isolated instances. The Standard of Perfection in all the breeds known as utility or dual purpose breeds, like the American breeds, demands a bird of such size and body development that there is no danger of the fleshproducing side of the question being overlooked. In fact, some claim the danger is along the other lines, to-wit, getting the birds too large. Let us not fret on that account as it is

better to have birds too large than too small, as birds naturally breed smaller. The only danger is along the egg production line. It is reasonable to suppose that any man who is so foolish as to neglect the egg-producing side of his strain will soon be found out and the sensible American people will not long be led to buy birds that are good for looks only, unless they want to buy such birds. There can be no denying that many people do not care for the utility features of a fowl and such people have a right to produce such fowls if they wish. It is also true that many people want egg-production first and such people have the right to work for that end. Both breeders can work along their own lines and get fowls to suit their own purposes, and both are in a sense fanciers. What THE INDUSTRIOUS HEN wants to see is every raiser of poultry in the land, no matter whether located on a city lot or a big farm, do is to raise pure bred poultry as laid down in the Standard, developing the variety or varieties along such lines as suits their own idea of successful poultry culture.

SORE HEAD OR CHICKEN POX

ORE head or chicken pox is very common throughout the South during the early Fall and Winter months. It is especially prevalent at the present time, November. This disease is suppose to be caused by

a tiny mite or germ. The disease is largely local in its effect, that is it confines its work to the head, comb, eyes, face, and sometimes the neck of the fowl. It is also sometimes found to a small extent on the body of the fowl, but this eruption on the body is caused by the fowl scratching the body with the broken out head and causing that part of the fowl to be affected or diseased. The disease is what its name implies, an eruption or pox. The comb is generally most severely affected and in serious cases the eyes become swollen, often being closed, the inner linings of the mouth break out in eruptions, and the orifices of the nose are also broken out. Sometimes the throat is swollen so as to cause strangulation, but such cases are rare. The bird is sleepy and drowsy, and in severe cases does not eat much. When only the comb and upper part of the head are affected the bird does not seem so sick as when the mouth and eyes are also involved. The There disease is highly contagious and runs as an epidemic. are said to be two varieties of the disease, the dry or warty, and the mucuous or running. The dry kind forms in scabs and the mucous runs watery discharges from the pox sores.

A safe and simple remedy is to rub well the affected parts of the head, face and comb with a mixture containing common lard or vaseline, and carbolic acid or some disinfectant as chloro-naphthalene, etc. There should be enough disinfectant used to color the lard a deep brown. This mixture should be applied every day to all fowls affected. Where the sores are severe about the eyes and mouth, the affected parts can be washed with water so as to remove all scabs, etc., so the mixture may be gotten down to the seat of trouble the more readily. The birds in the same runs or near by and exposed runs should have their heads dipped in a disinfectant made of water and carbolic acid, or some standard disinfectant.

It is hardly worth while to remove afflicted birds from well ones as the disease will likely spread of its own accord more or less through the entire flock. If not fatal it is not sufficient to cause great alarm but if the fowls are not treated, the flock will prove profitless for some time, and some deaths will occur.

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O make broiler raising most profitable, warmed houses should be used and the birds raised early enough to be all marketed while high prices are obtainable. The Station does not make a specialty of broiler raising.

The chickens are raised so as to obtain the pullets for egg laying. The surplus cockerels are disposed of by growing them rapidly and getting them off to market before they annoy the pullets. As the cockerels and nullets are raised together, and the cockerels only are finished and sold as broilers, it is not possible to state just how much of the food given to the flock has been eaten by the cockerels, as they were larger and evidently ate more per bird than the pullets did. The quantities of food eaten, aside from labor, have been accounted for, in the work, and the records show that when the chicks that were hatched in April and May were 11 to 12 weeks old, the cockerels weighed about 2¼ pounds, dressed for market. Up to this time the cockerels and pullets had each averaged to eat 9 pounds of grain food, 1 pound of beef scrap and ¼ pound of grit.

When the cockerels averaged 2¹/₄ pounds dressed weight, the pullets of the same age averaged 1³/₄ pounds, and as there were equal numbers of cockerels and pullets in the lot, the average weight of all the birds at that time was 2 pounds. Five pounds of the grain and meat foods were required to produce a pound of dressed broiler, under the described conditions and practices.

The material used in the production f a 2-pound broiler cost as follows:

The labor involved in raising the chick and preparing it for market is not accounted for. The average prices received for each 2-pound broiler last June was 60 cents; July 50 cents, and August 40 cents.

When the cockerels are taken out for finishing, the pullets of the same age are moved to the grassy range, still occupying the same portable houses in which they were raised. At this time the method of feeding is changed and dry food is kept by them constantly, in troughs with slatted sides and broad detachable roofs, so it may not be soiled or wasted. The troughs are from 6 to 10 feet long, with the sides 5 inches high. The lath slats are 2 inches apart and the troughs are 16 inches high from floor to roof. The roofs project about 2 inches at the sides and effectually keep out the rain except when high winds prevail.

The roof is easily removed by lifting one end and sliding it endwise on the opposite gable end on which it rests. The trough can then be filled and the roof drawn back into place without lifting it. This arrangement is the best thus far found, for saving food from waste and keeping it in good condition. When dry mash is used in it there may be considerable waste by the finer parts being blown away. When used for that purpose it is necessary to put it in a sheltered place out of the high winds.

In separate compartments of the troughs, they are given cracked corn, wheat, oats. dry meal mixture, grit, dry cracked bone, oyster shell and charcoal. The dry meal mixture is of the same composition as that fed to the laying hens, described elsewhere. The troughs are located about the field in sufficient numbers to fully accommodate all of the birds.

The results of this method of feeding are satisfactory. The labor of feeding is far less than that required by any other method followed. The birds do not hang around the troughs and over-eat, but help themselves, a little at a time, and range off, hunting, or playing and coming back again, when so inclined, to the food supply at the troughs. There is no rushing, or crowding about the attendant, as is usual at feeding time, develop without getting too fat and ripe.

For the last 7 years we have gotten the first eggs when the pullets were from 4 months and 10 days, to 4 months and 20 days old. There is some danver of the pullets getting developed too early, and commencing laying too soon for best results, under this system of feeding. In order to prevent such conditions, the houses should not be located too close to each other, or to the feed troughs, and a large range should be given them so they may be induced to work, which they will do, if given the opportunity early after their removal to the fields. Should the birds show too great precocity, and that they are liable to commence laying in August, the supply of cracked corn in the feeding trough is reduced, or taken away altogether, which causes them to eat the wheat, oats and dry meal instead, and they continue to grow and develop without getting too fate and ripe.

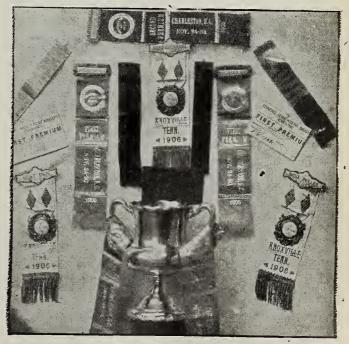
During the last days of October it is our practice to move the pullets into the laying house.

Last season 2,000 pullets were raised for layers and the following materials were used in producing each one:

28 pounds of grain, meal and scrap, costing44.5	cents.
$\frac{3}{4}$ pounds of cracked bone 1.5	
$\frac{1}{2}$ pound oyster shell	
2 ¹ / ₄ pounds of Mica Crystal Grit 1.25	
$\frac{1}{2}$ pound charcoal 5	
1 ¹ / ₂ pints of oil 2.5	
2 eggs 4.0	

54.5 cents.

Before they were moved into winter quarters, many of them were laying in the brooder houses, and the eggs from them at that time had sold for a hundred dollars.



A few of the many valuable Specials and Cups won last season at the Great Charleston, S. C., Birmingham, Ala., Atlanta, Ga., Nashville and Knoxville, Tenn., shows, on Single Comb White Leghorns, as bred and Exhibited by wilber Bros., Petros, Tenn., 20 years specialist, State Vice-President National S. C. White Leghorn Club.



DEVOTED TO EVERY INTEREST OF THE Poultryman, Live Stock Breeder and Small Farmer Entered at the Knoxville Postoffice as second-class matter

REESE V. HICKS. Editor

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ADDRESS ALL CORRESPONDENCE TO The Industrious Hen Company

617 GAY STREET, KNOXVILLE, TENN.

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The INDUSTRIOUS HEN is issued promptly on the first of each month. It furnishes the latest and most authoritative information obtainable on all matters relating to the Poultry industry, Live Stock breeding and in-tensive farming. Contributions that are practical and pithy are solicited. The Editor is not responsible and does not always endorse the opinions as expressed by his contributors. Subscribers desiring a change in address will please give the old as well as the new postoffice.

ADVERTISING RATES

Furnished on application. The value of THE INDUSTRIOUS HEN as an advertising medium is unquestioned. The character of the advertise-ments now in its columns, and the number of them, tell the whole story. Circulation considered, it is the cheapest Poultry journal in the United States to advertise in. Advertisements, to insure insertions in the issue of any month, should reach this office

Not later than the 25th of the month preceding.

Not later than the 20th of the month preceding. BREEDERS' CARDS—Rate beginning with November, 1906, issue, 2½ cents a word each month for one, two or three insertions, 2 cents a word each month for \$2.50. Numbers and initials count as words. Please count the words correctly and avoid delay. We keep no books with this department and cash must invariably accompany the order. THE INDUSTRIOUS HEN reserves the right to reject any advertise-ment for cause. ment for cause.

The fall season is now on and our breeders are showing their faith in THE INDUSTRIOUS HEN by the liberality of their advertising. Your special attention is New Advertisers. called to the large number of new advertisers who appear in this issue. You will find them all progressive, reliable business people, who will be pleased to have your trade. *

In our clubbing subscription offers to be found elsewhere in this issue we are able to present to our readers the best values for the money that experience and The Greatest combination can produce. The prices are Combination cheaper than ever made before for high class of the Year. literature. We are proud that we can offer nothing but the best, feeling assured that our readers will appreciate what they are getting. We have given a great deal of time and thought in perfecting this great combination, and we trust our readers will observe closely the instructions about ordering, as the requirements are very simple and give a great variety of publications to select from.

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In the yards of many of our breeders are birds whose photographs reproduced in THE INDUSTRIOUS HEN would add to the interest of the paper and also put the Photographs strong points of the birds before the public for Wanted. our breeders. THE INDUSTRIOUS HEN stands ready and willing to give such photos insertion free upon receipt of the photos. A small charge will be made for making the cuts from the photos and the cuts after being used in THE INDUSTRIOUS HEN will be the property of the breeder. Both photo and cuts will be sent to the breeder. It is said that a good picture is the best ad. of anything, and that is especially

true of poultry. Here is your chance to get some of the best advertising free. Let us hear from you in time to get the photos in our December and subsequent issues.

Never before have we been able to offer to our readers such a proposition as will be found on another page of this

\$1,000 Accident Insurance Policy Free.

journal. The idea is a good one, is made in good faith, by a most excellent and thoroughly reliable insurance company. and is endorsed by the well known firm

of publishers, Doubleday, Page & Co., of New York. The policy is for \$1,000, fully paid for one year, without any dues or assessments of any kind. It covers a wide range or risks and carries a \$5.00 a week benefit fund. The policy itself in any reliable accident insurance company is worth \$5. By a special arrangement we are allowed to offer a limited number of these policies, by way of advertising, absolutely free to subscribers to Farming and THE INDUSTRIOUS HEN. Read the proposition on another page and act promptly for such opportunities do not come every day.

* * * *

The distance that a prize fighter can reach and deliver a blow with full force is known in the sporting world as his "reach." Within that distance he can deliver Our Reach. a knockout blow and put his opponent out of the ring. This reach varies with men. In the newspaper world and in the poultry journal world more especially there is a "reach" to every journal. Some claim to reach all over the earth while others are modest enough to admit that their field is largely local. The local paper that covers a given territory well is better than a general one that does not cover any where in particular. THE INDUSTRIOUS HEN does not claim to cover every country thoroughly but she does claim and does cover the poultry industry in the central Southern States. Her special field embraces Kentucky, Virginia, the two Carolinas, Georgia, Alabama, Mississippi, Louisiana, Florida. and last, but not least, Tennessee. There may be other poultry publications that cover a small part of this territory as well or even better than she does, but in these states she reaches more people than any other two or three poultry publications combined. In that territory she will and can deliver your advertisement to the poultry folks. That is her reach. This territory she covers and covers thoroughly.

* * * *

East Tennessee is the center of the greatest thoroughbred as well as market poultry section of the South. From this section of Tennessee hundreds of car loads East Tennessee of poultry products go to the markets of the Show. East each year. It is but natural that such a locality should support a poultry show of the very highest class. The East Tennessee Poultry show, which will be held at Knoxville, December 11 to 14, promises to eclipse anything of the kind ever held in the entire South. The indications already are that the number of entries will be very large and special preparations are being made to handle the birds in a satisfactory manner. That the class will be high-grade all who are acquainted with the poultry of this section know in advance. It will indeed be a closely contested show in all classes. The admittances last year were over five thousand, and the price of ten cents admission ought to increase the attendance. Again, the show is just before the holidays and this will bring many country friends and fanciers to town, so that a crowded show room all the time may be expected. Judges F. J. Marshal, of Atlanta, and Charles McClave, of Ohio, two of the leading judges of America, are a guarantee that the ribbons will be satisfactorily placed. Get your birds ready to send and come yourself.

Value of

Shows.

The Tennessee State Fair at Nashville, October 8-10, was a good example of the wide-awakeness of Southern poultry-

men, and also of their "gameness" when it Some High comes to meeting a winning fellow poultry-Priced Birds. man, it matters not from where he hails. U. R. Fishel, of Hope, Ind., came down with a fine string of White Rocks and won a nice string of prizes; J. C. Fishel, of Hope, Ind., brought down a fine lot of White Wyandottes and also carried off the bulk of the prizes. Did the other exhibitors feel sore and look askant at the winning visitors? Not a bit of it. On the other hand, they freely acknowledged the merits of the winning birds and "got busy" to keep the winners among them. Some uninitiated thought the price was too high to pay \$200 and \$150 for a "rooster," but when the best is wanted, no price is too high. These prices also show that the poultry industry is far from dead in the good State of Tennessee, and Tennessee is a fair sample of the liveliness of thoroughbred poultry raising all over the South.

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In going around over the country, there is one thing that often impresses the student of poultry-folks who are breeding

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live stock on good farms keep only the best Farmers and cattle, thoroughbred horses, big fine mules, Thoroughbreds. pure bred hogs and sheep, but when it comes to chickens, just any crossed-up mongrel seems to suit them. Farmers are reading people, that is, the class we are lescribing, and should be lovers of the pure bred whether in ive stock or poultry. Why is it that they do not have improved poultry as well as cattle, horses, hogs and sheep? Too irequently it is simply because the too often despised hen is 10t looked upon for her earning powers, and the idea that any old kind of chickens will do prevails. The f ct that pure red poultry will earn greater dividends has not been yet imressed upon them with sufficient force to cause them to get 1 move on them, as the slang goes, and put in only the best ind largest profit-earning in poultry, which is the pure bred only. The scrubby, measly, unsightly hen and her brood of vorse looking youngsters should go from every farm in the and. We certainly do hope they will be forever banished rom the farm of every reader of THE INDUSTRIOUS HEN.

Only two years ago the present editor of THE INDUSTRIOUS HEN made a trip to Birmingham and other Alabama points in

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the interest of this publication. At that time hen and Now. this journal was comparatively in its inancy. While we met many who not only admitted that there vas room, but actual need for a poultry journal, like THE NDUSTRIOUS HEN, yet many expressed a doubt about the sucess of the venture. Its circulation and prestige were not nown or established. How different did the same people talk n a visit there during the past month, October! By every one HE INDUSTRIOUS HEN is recognized as the poultry authority f the entire South. All freely say she is a phenomenal sucess. Her circulation is admitted by all posted poultrymen to e the largest in this territory, the central South. The opinion 'as almost unanimous that she brings to the poultrymen more usiness than all other publications combined. That testiionial was freely given by men who are in the poultry busiess and who want business back for the money they spend or advertising. Such men have no object in making a misading statement and their volunteer tributes to THE INDUS-RIOUS HEN'S return-bringing power speaks how well the paper esteemed by readers and advertisers alike. To learn that HE INDUSTRIOUS HEN is regarded by well informed poultryien as the leading journal of the South, you have only to visit e leading Southern poultry shows and hear the men talk ho are making poultry raising a success.

The show season is beginning and with it let us hope many new lovers of the beautiful as well as useful in poultry

will be won. The poultry show is a great educator. It educates both exhibitors and visitors. The exhibitor frequently learns he does not yet

possess "the world's best" or that he really has good birds when he has been a doubting Thomas of his own poultry production. The casual visitor to the show often goes away with the germ of "chicken fever" beginning to gnaw upon his faculties and in a few brief months is a regular crank, the kind of a crank the world needs more of. Let us hope the management of our winter shows will make the admission price so low that every one can afford to visit the show several times during its progress and thus add to the interest of both visitors and exhibitors. At some shows a special price of ten cents admission has been found to bring in more morey and, of course, more visitors than the regular price of twenty-five cents. Many visitors means much advertising for the exhibitors and the advertising is what the majority of the exhibitors show their birds for. Nothing is so discouraging to the average poultry exhibitor as to be at a show and see only a small number of visitors attending the show. He usually goes away discouraged and feels the show has been a failure, and he generally feels about right about it too. Let more birds, more visitors, and more shows be the motto this season.

* * * *

The State and some county fairs this year have been afflicted with a class of poultry circuit makers known among poultrymen as "hucksters." These hucksters,

Show as a general rule, buy largely the stuff that Hucksters. tney carry around to shows, buying inferior birds in any condition of health. Their special delight is to get hold of old, almost obsolete breeds that nobody hardly is breeding these days of modern, progressive poultry culture. They will therefore have very little, if any, competition among the local poultrymen. Hence any old kind of a ragged, disgraceful-looking bird will take the first prize. These hucksters lay for inexperienced fair secretaries or those who want a big bunch of birds, no matter how the birds may look. What these fair circuit makers want is an "open list," that is all the breeds listed for prizes. If it is thought a little thing like requiring three or more competitors before prize money is paid will keep them out, a greater mistake was never made. Mr. Huckster simply gets a few other fellow showmen of the huckster kind to also enter at the same fair and this point is avoided. Hucksters usually carry their tough looking stock in trade in coops two deep and crowd them into such close, dark quarters that their stock, if it was presentable and of any value as exhibition stuff, would be lost so far as the visitors to the show goes. About the only person who gets a good view of the stuff is when it is brought to light for the judge to see if it is laid down in the Standard. Recently we saw three birds for "exhibition" crowded into a space fronting twelve inches to the visitor's alley. It was necessary to stand on tiptoe to see the top row of coops. Such exhibitions of mongrel-looking Standard varieties does injury to the breeding of pure bred poultry, because visitors get the impression that the stuff they are looking, or trying to look at, in the threedeck coops is worth raising and frequently buy a lot of it, paying good prices. The stuff they get is frequently diseased when they get it, always badly run down, dies off, or does not prove very thrifty, being inferior, owing to unhealthy condition, to the scrubs the buyer had of his own. Thus a fancier is spoiled in the making and the poultry business generally and professional poultrymen in particular are given a good cussing and pronounced frauds. The lists of our fairs should be so arranged that such exhibitors will be cut out or else must present their goods in showable condition.

PROVIDING PROTEIN FOR POULTRY &

N abundant supply of protein in palatable form is necessary for satisfactory growth of poultry. The development of blood, flesh and feathers is very rapid in young birds, and these parts and organs are rich in

nitrogenous matters. These can come only from the food of the young chick or duckling.

Under farm conditions these indefatigable little foragers will supplement their allotted grain ration with grasshoppers, flies, beetles, worms, slugs and other forms of animal life that are rich in protein, but in confinement, especially where the flocks are large, the young birds can not secure a sufficient amount of protein in the limited range of natural animal food that comes their way to balance up the carbohydrates of the grains. When shut up, also, the birds lack the vigorous exercise that might enable them to utilize large amounts of foods low in protein so that they could secure the needed quantity of this essential requirement for rapid and profitable growth.

The cereal grains, especially corn, are very starchy foods, and no combination of them will give a nutritive ration narrow enough to develop the young bird rapidly. Some supplement must be used. Seeds of the legumes, like peas, beans or cowpeas, are richer in protein, but, unfortunately, these foods are not well liked by poultry, and will not be eaten in any considerable quantity.

Those materials that are richest in nitrogen are the concentrated by-products, but these products are not in a way natural foods. They are refuse materials from slaughterhouses, from creameries or from oil mills, parts of grains from starch factories and glucose works, sprouted grains from distilleries and breweries, or other materials whose natural composition has been changed in some way. It is not safe to depend on the contents of protein and fat in estimating the food value of such materials for poultry as may usually be done in case of whole grains. Palatability, constipating or laxative effect, excess or deficiency of mineral matter are all factors that must be considered. The adaptability of such feeds can only be determined by actual trial.

The station has fed several of these by-products to poultry, and finds such marked differences in their effects that the results are well worth presentation.

In the test with ducklings three pens of from 25 to 30 birds were fed for nine weeks, starting when the ducklings were one week old. Three highly nitrogenous rations were fed, the basis of each being corn meal, green alfalfa and a mixture of four parts cream gluten meal, two parts each of pea meal and lowgrade flour, and one part each of corn meal, wheat middlings and blood meal, with five ounces of salt for every 100 pounds of the mixture and with a liberal allowance of sand.

To this basal ration there was added about one-third the amount of the by-products to be tested: For Lot I "animal meal" and "meat meal," for Lot II blood meal and bone meal, and for Lot III "milk albumen" and bone meal.

Lot II made much slower growth than either of the other lots, I and III being about equal. The average gain for the birds in these lots in nine wecks was five and one-seventh pounds, for those of Lot II four and one-quarter pounds, but each lot ate almost exactly the same amount of dry matter for a pound of growth; that is, the ration for Lot II was of the same productive value as the other rations when eaten, but it appeared to be unpalatable, so that the ducklings would not eat it freely enough to make a rapid growth.

The ration containing the "milk albumen" was the most

satisfactory so far as the general appearance of the birds was concerned, as the plumage developed more rapidly and evenly under that ration than under "animal meal" and "meat meal," but the relatively high cost of the "milk albumen" made the ration less profitable to use.

In another test 40 to 50 chicks in each of four pens were fed for eight weeks. The by-products tested were: For Lot I "animal meal," for Lot II "milk albumen," for Lot II gluten meals, and for Lot IV gluten meals with ground bone to make up any deficiency in ash. The growth of the chicks was slow. Most of them were Leghorns. Lot I on "animal meal" and Lot II on "milk albumen" did fairly well, the increase being about equal for the two lots. The chicks of Lot III on gluten meals gained only one-third as much as those in Lots I and II, and those in Lot IV, with ground bone to supply the ash deficiency of the gluten meals, about two-thirds as much. The gluten meals appeared to be unpalatable; cream gluten meal less so than Chicago gluten meal. The use of anise and fenugreek to disguise or flavor the gluten meals resulted in but little better consumption of food. The "milk albumen" here, as with the ducklings, was palatable, being somewhat superior in this respect to the animal meal, and was the more healthful food, but its cost made the ration unprofitable.

It was observed in both of these tests, as in many *other* tests along different lines, that the unfavorable effect of a ration was most marked during the first few weeks of the bird's life. Differences tended to disappear as the chicks or ducklings became older.

It is essential that young poultry be fed rations made up of foods known to be palatable and healthful. Older birds can utilize to better advantage some more questionable materials.



A Typical Rhode Island Red Cock, as Bred by the DeGraff Poultry Farm, Amsterdam, N. Y.

^{*}This is a brief review of Bulletin 271 of the New York Agricultural Experiment Station on the adaptability of concentrated by products for poultry feeding, by W. P. Wheeler.

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WHAT I FEED AND THE RESULTS WRITTEN FOR THE INDUSTRIOUS HEN BY R. E. TRAVIS

"N the last number of THE INDUSTRIOUS HEN you ask the "opinions" of breeders on "special breeds." At this writing, 1 prefer to give some experiences in the feed used in my yards with the Rhode Island Reds, White Rock and White Wyandotte. I speak with special reference to layers and yearlings, not of those birds requiring soft food in chickhood. First of all, I think, there should be green food in the yards, supplied by nature or some carefully selected daily and given the birds. In my yards are timothy, herds grass, orchard grass, clover, blue grass and the annual grasses. The feed is a ration, given but twice a day as I do, of cracked corn and whole wheat or whole oats and this mixed with either-sometimes whole corn, but not so often, unmixed with anything. In the yards, even now, October 6, is all the late fruit the birds can eat. During this season, with this plan of feeding, there has been scarcely a case of a seriously sick bird in the pens. There were two cases of serious ailment, I should say, when another party on the farm carried to the pens a sloppy mash and overfed the flock; for I am inclined to the belief that a full ration of mash food of any kind too wet is overfeeding. It seems to me that the study of the food question in a way that will bring the birds closest to nature is far better than compounds whose ingredients are not well known. The layers did their best and the yearlings matured rapidly. However, in feeding oats, as is my custom, I think it advisable to dampen them in the feed bucket before giving out on account of possible irritation from the spiculars on the points of the husks. I find that when the birds have eaten

grain—whole or chopped—they busy themselves plucking the grass or hunting insects; but never appear feverish or restless from the gnawing of an empty crop. The tender shoots of the fall growth of the bluegrass affords the birds much exercise in the winter. I do not think that artificial means, either in food or management, can endure very long in the strain of any breed of birds without injury. Such stock produced now will likely deplete and bring disappointment or injury to the purchaser. There must be no compromise in the foundation stock, but the only way to develop over the past and to improve the present is to stick close to the hidden laws of nature. My three breeds named take appetizingly to their treatment and cackle and crow like a hilarious set.

Hot house methods might give artificial results, but to gain even some desirable points by such methods with the bird emasculated, is to practically ruin the next man as your customer. With all that is desirable in plumage and build, the bird must be kept hardy, and this can only be done by finding out what it would live on if it were wild. There is absolutely nowhere to be found such grace and mould in fowls as we see in those that have the wide world for their domain and the seeds and fruits of nature for their stores. No touch of man can improve upon them. Domesticated, the most beautiful of them are as the fading picture to the original.

Plenty of fresh water, nature's food—if any one can find out what it is—cozy housing, with a master of judgment and kindness, will grow a flock of birds for eggs, the show room or the table—such as will be at the top and stay at the top.

e PEKIN DUCKS e e

W few farmers throughout our Southern States grow ducks for market in any quantity whatever. Yet, in no other branch of the whole poultry industry do we find such large profits coming so regularly and so sure. There is at all times a steady demand for well fattened

young ducks on every market of the United States. I tried Mobile last fall with some very inferior ones several months old, and weighing only 2½ pounds. But for them I received 24 cents a pound. Whew! this is paid for poor stuff? What could we get if we had first-class young ones?

The large white Pekin duck is bred almost exclusively for market, and is made to weigh five pounds when ten weeks old. The hatching season opens in November, but no considerable number of ducks are hatched until January. The season continues until July.

Ducks from one to three years old make the best breeders. They should weigh from eight to ten pounds and be free from blemishes in all parts. Also they should never have been stunted while young.

The drakes are the big half of the flock, and should be very vigorous. They should weigh at least eight pounds when not fat, but merely in good breeding condition. It is best to have ducks and drakes no kin to each other.

Breeding ducks do better when having water for bathing, but good results are obtained where only a supply for drinking can be had. Growing ducks want only a supply of clean fresh water at feeding time, making better growth when they have none for bathing.

The Pekin duck is a non-setter, so it is necessary that the eggs be incubated either under chicken hens or in incubators, an incubator to be preferred. The eggs should be washed before setting. During incubation they should be sprinkled with lukewarm water (say 90 degrees F.) from the 10th to the 26th day.

The machine should be closed when the first eggs pip, and not be opened again until the hatch is well over. The young ducks then are removed to a brooder and get their first feed, consisting of one part hard boiled eggs, three parts stale bread crumbs. After feeding this the first three or four days, change to equal parts of corn meal and wheat bran mixed with boiled vegetables and a little beef scrap, gradually increasing the beef scrap. Feed five times daily.

Grit should always be mixed with the mash. Never feed till you have filled their drinking vessels with fresh water. They should be fed at regular times five times a day, at first feeding sparingly and at the end of the second week they should be getting all they will eat up clean in ten minutes.

When ten weeks old they should weigh five pounds each, and be fully feathered. They are then ready to kill. They are bled in the mouth, dry picked, allowed to thoroughly cool, and packed in barrels with broken ice, a large block usually being placed on the top. The barrels are headed with a sack, which is hooped on. It is preferable to ship them at night when possible.

The breeding stock should have for feed three parts wheat bran, one part ground oats, one part corn meal, five per cent beef scraps and five per cent grit (gravel), and all the green stuff they will eat. Feed twice daily.—*R. Norton Crane, Agricultural College, Mississippi.*

Grade your fowls before marketing. Don't try to sneak a few poor specimens in with a bunch of extra good ones in hopes of getting a good price for the culls. It works the other way; the culls pull down the price of the good ones.

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OME six years ago Indian Runner Ducks were first known in the United States. From the reports then received from English breeders one would judge that the ideal duck had been found. Their original home

was in India, but are now most extensively grown in England. These birds are very quick motioned and it is possible for them to move very rapidly, being very strong in legs, well set back, with erect carriage. There is no suggestion of the awkward waddle of the common duck. Hence their name, Indian Runner.

In color they are fawn and white. The head is fawn and white adorned with a cap, and cheek markings of fawn. Neck perfectly white. Breast, back and body light fawn or gray. Wings pure white. Legs and toes a deep bright yellow. Head is long and flat, eyes set high in the head. Neck long and thin. Body is long, narrow and racy looking, without the slightest indication of keel. They are very erect and alert in every motion.

Their peculiar markings and racy appearance make them very attractive, and to see them is to admire them. But what is best of all is their egg producing qualities, easily surpassing anything yet produced. This is a broad statement, but we are sure we are not making a statement that can not be verified.

English breeders claim their flocks lay 220 eggs per year; 180 to 190 eggs per duck, however, was the average of our flocks the past season. This is a most phenomenal record and is not equaled by that of any other fowl that wears feathers.

Indian Runners mature very rapidly, reaching four pounds in about twelve weeks. The Standard weight for mature drake is 41/2 pounds; for mature duck, 4 pounds. Their small size when first introduced into this country was much against them, but this, by careful selection, has been almost entirely removed. We have many runners weighing 6 to 7 pounds.

We find them easy keepers. Our flock consumes one-half less food than Pekins would under similar conditions, the Runners laying continuously while the Pekins do not. By actual test last season we found that it required no more food for a flock of runners than for a flock of the same number of Buff Orpingtons for best laying results.

We have tried them in both large and small flocks, but observe no apparent difference in the egg yield or fertility of eggs. In mating we use eight ducks to one drake.

Runners care little for a large swimming pool, but they are great foragers and find no small part of their food over their range in the form of grubs and worms, which they delight in hunting among the grass and weeds. While they do best when given range, they can be quite successfully handled in limited quarters, a two-foot fence being sufficient to enclose them

The Indian Runners are particularly adapted to the market poultryman's needs, as their wonderful laying qualities insure a constant supply of eggs the year round, except four to six weeks in fall and during moulting season. Eggs are large and pure white.

The quality of their flesh is superior to that of the Pekins. It is of a deep yellow, fine grained and palatable, much more firm in texture than the Pekin, and remains tender until the birds are almost a year old.

Indian Runners are a fowl of beauty, very docile, light eaters, non-setters, money-bringers.

JUDGING RUNNERS.

Weight is generally found. It means as with most ducks 25 per cent of the whole. Typical carriage counts ten and is the most important part of the breed. If I made the require-

ments for Runners I would call Typical Carriage to be worth 25 points. The Carriage makes the Runner, cut heavy for that reason for defects in same. Cut the full ten points if bird is low. The German disqualify for horizontal carriage. Let body, back, breast, all conform to the general racy outline. If the body indicates plumpness and back is broad, you must cut for it. Runners are not supposed to be heavy meat carriers. Always give the light fawn color the preference, other things being equal. Bird with best head markings should win over bird with better body, back or breast markings.

It is allowed to have drakes with darker head markings than the light fawn, the darkest brown is permissable. Body color of drake may be lighter than the color of the duck.

Uniformity of color, evenly distributed counts for a good deal. High skull should be cut five points. Bill and head should form a straight line or top if viewed sidewise. All flight feathers should be white .- C. S. Byers, Hazelrigg, Ind.

THE WHITE PLYMOUTH ROCK Written for the Industrious Hen by Plummer McCullough

ODAY we have many so-called general purpose fowls, and all of them have more or less good qualities, but the grand old White Plymouth Rocks are to me the best general purpose fowl I ever tried. I don't go so far as some people and say they are the "only" or "best" variety, for just saying so does not make them the best. But I do say they are the best fowl I ever tried. Of course I have not tried them all but I believe the White Plymouth Rocks will compare with the best of them. As a market fowl they are equal to the best. For the farmer they are just the fowl, being a "real" general purpose fowl. A farmer usually wants a

fowl that will lay lots of eggs and at the same time bring a good price when sold for market. This is what he has in White Plymouth Rocks, and much more. They being of a solid color makes it easier to breed a uniform flock than with a parti-colored variety. They dress very nice and owing to their white plumage they do not show dark pin feathers when dressed for market, as do nearly all parti-colored varieties. Having yellow legs and skin, they are the fowl that American people want and are therefore very easily sold. When dressed they look very plump and are a fine looking fowl. As layers they are equal to the best. When I bred Buffs and Barred and Leghorns, etc., my White Rocks layed a trifle better than any of the rest. Some one will say my other varieties were a poor laying strain; but they were not. They were the "world's best" strains and were, and are yet, bred more than all other strains combined. Most every one who keeps White Rocks alongside of Barreds claims that the Whites outlayed the Barreds. For the city fancier they are certainly what he needs, as they stand confinement remarkably well and do nearly as well in confinement (if propely cared for) as when on the range. As a fancier's fowl they lead. No variety brings better prices, and few if any as good. Single birds have sold as high as \$800, and \$1,000 was refused for a first prize cock. If you breed White Rocks stick to them and they will stick to you. If you don't breed them give them a trial and be convinced of their good qualities as I have been.

Hens are less inclined to exercise in cold weather, and if nothing is done to prevent it they will cuddle together in the poultry house. To lay eggs a hen must have plenty of exercise and a supply of straw and chaff scattered over the poultry house floor will keep them busy.

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Secolds, BRONCHITIS AND ROUP

OVEMBER winds and cold rains usually bring the first colds, and bronchitis, of the season, and if neglected the much dreaded roup will follow. All stock should be carefully housed in October or early No-

vember in anticipation of the coming cold weather, and the drafts and cracks that will cause colds closed up. Next to a draft, a damp house or roosting place is the most prolific cause of colds in fowls. Look after the dryness and ventilation of your roosting quarters also.

A plain cold can be told by the fowls having a watery discharge at the nostrils and eyes and the birds throwing their heads and sneezing. A plain cold is easily told from the roup by absence of a cheesy substance in the throat and nostrils of the birds. This cheesy mass always accompanies roup. The head will frequently swell with a cold, but the swelling is more marked in roup. A common remedy for colds is to apply keresene oil to the heads of the worse afflicted birds. A slight film of kerosene oil on the drinking water will often cure mild colds in a few days.

Bronchitis is the cold extended to the bronchial tubes and the fowls make a rattling noise when breathing. This disease continues for weeks in some cases. Treat like a severe cold with kerosene oil, pouring the oil well down the nostrils and throat.

In cases of colds, roup, and bronchitis, it is well to keep the birds out of the cold rains or snow.

In roup there is a decided swelling of the head, cheesy formation in the throat and mouth, watery discharge from the eyes and frequently they are swollen shut. The symptoms of a cold are present. Roup is very contagious and will likely run the entire flock unless the sick birds are removed as soon as discovered. The entire premises should be disinfected carefully every week until the contagion abates. Roup is also very fatal, a large percentage of the afflicted birds dying, and those that recover are generally subject to a renewal of the roup or a severe cold on return of unfavorable weather conditions. Roup is very hard to cure and only in case of valuable birds is there use of doctoring. Even then if you save the bird you are frequently carrying over trouble when the bird gets sick again and spreads the roup among the well fowls. It is also claimed that the roupy fowls do not throw good, strong, vigorous chicks. About the best treatment for roup is kerosene oil mixed with a good disinfectant and poured down the nostrils and throat by means of a small sewing machine oil can. This treatment may be used every four hours in bad cases. Give the fowls a tonic of tincture of iron. A few drops of brandy is also well where the birds are weakened down.

In all cases of colds, bronchitis, or roup, the food given the fowls should be nourishing and easily digested. Equal parts corn meal and wheat shorts with a pinch of salt and pepper for seasoning mixed up with sweet or buttermilk is good. Any kind of bread softened with milk is also a good sick food. Feed fresh meat, a small bit to each fowl, every other day, if the bowels are not too loose. If the sick birds are troubled with loose bowels, cook the meat and feed less of it.

November brings us to winter's edge. In another month it will be much colder and our flocks will want to be properly housed and given the right kind of feed in order that they will lay eggs when eggs are at a premium. In order to get the best results from our flocks there are several things that we must do if we expect them to fulfill their part of the contract. We must provide plenty of scratching material—straw or leaves—although I have found that leaves do not hold up very long and make a very fine dust after being in the houses a few days. Corn stocks run through a cutter make an excellent scratching material. Rye straw is very tought and will last about twice as long as either wheat or oat straw. Last winter I ran short of straw and used meadow hay. I found this very good, being of a wiry nature and not easily broken up.

Now is a good time to begin the reformation if you have been careless with your fowls. Before corn picking begins is the time for odd jobs to be done by the men folks on the farm. Induce them to make the thorough cleaning of the chicken house one of these jobs. Better ask them to help you instead of leaving the work entirely in their charge. It is well for the housewife to make suggestions as to the thoroughness of the job. A good cleaning now and clean fowls put into the clean house means much less work and healthier, more profitable fowls this winter.

It is a too common practice, where one is keeping a flock of poultry and the profit is such as to greatly encourage him, to branch out suddenly by increasing the flock to about double its former capacity. The lack of judgment in not increasing in proper proportion the essentials that have been the cause of the former flock's success is where the first serious mistake and loss occurs. The sooner every one recognizes that poultry raising as a business must be conducted on just the same proper business principles that brings success in all other occupations the better.

Another season has arrived, bringing its work with it, and much of it is work that can not be neglected. A little inattention now, perhaps in some seemingly unimportant detail, may be the cause of serious trouble later. The early hatched chicks are now nearly or quite as large as the adult birds, and require as much room, especially at night. Do not allow them to crowd into some small coop, where they sleep packed like sardines unless you are breeding for wry tails and crooked backs.

Few people realize that the farmer's hen is a close competitor with wheat for supremacy in the products of the farm. The annual report of the Department of Agriculture shows that the total value of poultry products in the United States during the last fiscal year was \$500,000,000. That is an enormous sum and it should not be forgotten that the bulk of the credit for such a grand showing is due to the farmers' wives.

Those who keep late pullets with the expectation that they will begin to lay in winter will, as a rule, be disappointed. Such pullets seldom lay until the warm weather of spring begins. Birds do not lay in winter in their natural state and barnyard fowls are no exception to the rule, as they must receive assistance in the way of food and warm shelter.

If the farmer will take time to replace the window panes that have been broken, apply a fresh coat of whitewash to the interior of the poultry house, sprinkle gravel on the floor and lay in a few barrels of dust fort he fowls to roll in, it is safe to say that his wife will attend to the lighter work.

The raising of poultry requires a great deal of hard work and the farmer who neglects it will find his profits considerably smaller at the end of the year than his neighbor who gave his fowls the care they required.



THE DRY FEEDING METHOD

HE beginner with poultry will probably assent when I say that to find out how to feed chicks in order to grow good layers, or to feed hens for eggs, by reading several poultry journals, is a task that produces mental confusion and leads to no uniform conclusion, says Dr. H. P. Nottage, writing in *Commercial Poultry*. He continues: But those who have followed the trend will recognize that we are approaching uniform-

ity in opinions. I have vivid recollections of the time when I studied all the poultry papers I could get to see if there was any agreement on the subject of feeding chicks. I determined to produce if possible some agreement among poultrymen, and so bent my energies to evolve what could be called a universal method of feeding.

Noticing that chicks by nature would eat continuously from morning until night, the first step seemed to be to let them follow their own inclinations. But that was a rank heresy, because everyone said, "feed them five or six times a day." What an enormous amount of labor when one has a thousand or two thousand chickens! About all one's time would be spent in feeding those chicks. Again we are told to cook Johnny-cake, to mix and cook mash, to chop up boiled eggs, to mix this and boil that. With a thousand chicks on hand, how much time would be left during the day to look after the laying stock, to gather the eggs, to clean the houses and the brooders, to fill and trim lamps, turn the eggs and set new hatches? What an enormous amount of labor for the comparatively small profits that poultry brings to any one individual!

Am I the slave of these chicks or are they working for me? To solve this question I took my chicks that were on free range or in big grass runs, placed the grains that I would mix in a mash, together with the whole and cracked grains that we feed to chicks in self-feeding hoppers, provided unlimited access to dried beef scraps and let them "go it." What was the result? Well, instead of feeding five or six times a day, I filled my hoppers about twice a week; kept water cans filled and brooders and coops clean and had plenty of time to sit under the shade of the century-old elms in my yard and ruminate on the tendency of us all to get into ruts, and the useless labor caused thereby. And while I was ruminating, my pullet laid an egg, then another. I looked at the Old Farmer's Almanac and lo, it was five and one-half months since that ball of down gathered its first meal from a feed box.

WHAT IS DRY FEEDING?

I ask that question because some have said it is feeding all grains from a hopper. Now that is only half a truth. If I were living in a country where there was grass the year through, and where my stock was on free range, I would feed everything from hoppers; but those who live in cold climates where the grass is hidden six months of the year will find that they must modify their feeding so as to have both a summer and a winter method. In the winter it is best to provide litter and feed one feed a day at least in the litter, and at the same time to keep part of the food before the fowls all the time in hoppers. In this way exercise is provided, and the hen who is doing her duty by the egg record will find plenty to eat when she comes off the nest, where she was when you fed in the litter and the other hens scratched it all out. So it is best to sav that dry feeding is the feeding of all grains and meat foods dry. I have said nothing about green food, for that must be supplied whatever system you use. Some feed

cut clover in the dry state, letting the fowls have access to it at all times. Others freshen it with water, letting it stand a while and pouring off the water. Some take bundles of clover hay, wrap them in a square of poultry netting, tack them to the wall and let the hens pull out the leaves. Others having abundance of clover hay, put a forkful into a pen once a day, let the hens eat off the leaves and the stalks remain for litter. Whatever you feed, do not forget the green stuff.

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ADVANTAGES.

Although the feeding of dry grains to fowls is not new, there are methods of feeding that may be fairly called new. The following are believed to be some of the results that follow dry feeding:

Saving of Labor.—It cuts the labor at least one-half as long as grass is on the ground, and greatly reduces it in the winter. It is just "no trouble at all" to raise chicks by the hopper method.

Larger Fowls.—The growth of chicks is rapid on free range with dry feeding one and one-half to two pounds in seven to eight weeks. This means quick maturity; so that in cold climates the bird is well matured before cold weather sets in and receives no check to growth by the beginning of winter. This presupposes a good system of brooding, of course. Years of such treatment results in large, healthy birds, provided they are not coddled or housed improperly. The Wyandotte, for example is a medium sized bird. A poultry editor who saw my birds in December, and to whom no remark was made regarding size, exclaimed when I opened the doors of my pullet house, "My! What big, vigorous birds; they are as big as hens."

Larger Eggs.—As my experiments have been confined to White Wyandottes, I will say that the well known poultry judge, I. K. Felch, said that the average weight of the Wyandotte egg is twenty-two and one-half ounces to the dozen. A mixed dozen of my pullet and hens eggs will weigh 28 ounces to the dozen. I received a letter from a man who had dry fed his stock for 30 years with one or two interruptions, and he said that when he left off dry feeding the eggs got smaller in a year or two.

A More Steady Output of Eggs .-- Many are reporting that they never had so many eggs since leaving off the mash and changing to hopper feeding. I have never yet heard of its reducing the number of eggs, only as any change of method will do it for a week or two if adopted suddenly. The main point is that there is continuous growth from the time the chicks break the shell. They come to a quick maturity, are well feathered and ready for business when the cold days of winter begin. They commence to lay early and keep it up, just because they feed good, are healthy and must lay. The egg is the surplus product after the hen becomes well nourished. She must put on enough fat and be in prime condition before she lays. Dry feeding seems to produce continuous laying until the broody period. As to whether it will make a hen lay any more eggs in a year than mash feeding, no one individual is capable of determining by a few experiments, for it is only by rigid experiment station methods over a term of years that this point can be scientifically determined. I have usged from the first that experiment stations take this up and prove my results, and am gratified to see that several are working along these lines, notably those at Logan, Utah, and Orono, Me.

As to Methods.

If you do not care to adopt any particular method of dry feeding, you will find it far safer to blaze your own trail with

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dry feeding than with mash feeding. Your mortality will be less. I said nothing about this under the heading of "Advantages," because I wanted to put it right here where you begin the trail. You can take your chicks just out of the machine, place dried beef scraps and small cracked grains before them and let them have all they want all the time, and your mortality will not be so high as with the mash feeding, other things being equal.

If I have accomplished no other thing by constant writing on dry feeding than the reduction of the mortality bill, I ought certainly to feel well paid. No need to wait until several days before the first meal and then place a wet mash before chicks and permit them to gorge themselves and then struggle with undigested yolk and fermentation germs in their little insides. Again, leave something to the natural instinct of a chick. If he does not want to eat, you can't make him, and if he begins to eat as hunger comes on, he will eat gradually as hunger increases, and never overeat, provided the dry grains are before him all the time, together with beef scraps. Right here it may be well to say a word on

BEEF SCRAPS.

We should all be working toward uniformity in this product. I have had samples of scraps sent me from all over the country, and am impressed with the fact that they vary in color, consistency, coarseness and quality. Some samples I would not dare to feed to hens, much less to newly hatched chicks. So in dry feeding it is necessary to be sure of your meat food, for it is a cardinal principle with me to keep it before them all the time. We may roughly judge scraps in this way: Reject all scraps that are the color and shape of rat droppings, that look as if made of blood and refuse that had been passed through a perforated plate and dried. Every one sending me samples of such scraps reports diarrhœa and other trouble. Sometimes the hens are sensible enough not to eat them. Scraps should be granular, with visible pieces of bone and fibre, of a dark brown or golden color. If there is a large proportion of bone they will assay only about 35 per cent protein. If the scraps are good they can be put before chicks just from the machine. If you wait several days and then put the scraps before them, they may overeat at first.

Fertility.—When dry feeding began to be extensively employed we used to have the question asked frequently if it had any effect on the fertility? I have never seen it lower fertility, but have had reports of high fertility where it had been used. My own flock of White Wyandottes have averaged above 80 per cent for years. Some one has suggested that the increase of fertility by dry feeding may be due to the fact that the male bird eats more when the food is fed in hoppers, and does not feel called upon to hunt so much for the hens. Being better nourished and hence in prime condition the fertility is helped thereby. This is a point that ought to be worked out at some experiment station. It looks as if there were "something in it." At all events, you need fear no lowering of fertility by adopting dry feeding.

Changing Methods.-Any sudden change of method is not good for egg production. If you have a flock of laying fowls and want to change to hopper feeding, don't do it suddenly. The hens may get into bad habits, such as getting their fill and going to roost, or loafing around doing nothing. Commence by a more generous feeding in the litter each day until you notice at night that there is some feed left in the litter. You may then, while keeping on feeding in litter, fill the feed box, reducing the amount of feeding in litter until in the winter you feed only once a day in that manner. Instead of putting corn in the feed box at this time, try oats. They are not so fond of oats as corn and will not be so liable to overeat. After they are used to the oats, you can then add other feed. Perhaps the safest way is to begin with a dry mash containing mostly brain with a little middlings. They will not eat much of it at first, as it is so dry and has no corn meal in it. Later on you can add corn meal and make up a mixture for laying fowls. It is not my custom to put meat in the mash. I prefer to let them have access to scraps all the time and eat as much or little as they want. In this way no hen that is ailing is obliged to load up her digestive organs with meat. Of course the best way is to begin dry feeding with little chicks and never let the feed box get empty. They will then never eat too much, but be in prime condition all the time.

Applicable to All Breeds.—While my experiments have been confined to my own flock of White Wyandottes, I am getting hundreds of letters a month from poultrymen all over this country and from abroad. They all report good results with whatever breeds. We may find that hopper feeding may not be so suitable to Leghorn chicks in winter brooding houses as to other breeds, but this point has not yet been determined satisfactorily. All chicks that are confined in winter should have feed in litter, and it remains to decide how much of the feeding can be done in hoppers. There is no question at all about any breed of chicks that can get out on grass, for there the hopper method gives most brilliant results. To show how easily we may come to a conclusion that further experience may show to be false, I will mention one instance.

A prominent breeder wrote that his Leghorn chicks last spring in a winter brooding house, before they could get out on ground, were not doing well with feed in hoppers. They were feathering out too rapidly. Wings drooped, and they went off their legs. It happened that I at that time had a new experience. I put some White Wyandotte chicks into my brooding house that is provided only with individual brooders and no artificial heat beyond this. We had been enjoying a mild winter and it looked as if we were to have an early . spring. This was the last week in February. The very day I put them in the house there came a cold snap that burst water pipes and lasted for days. The coldest weather of winter followed and the rest of the season until spring opened was cold. The temperature in the brooding house was down to 22 degrees in the morning. I had no difficulty in getting all the heat I wanted under my open hovers, but the house was so cold that the chicks kept close to the brooder all the time. The result was that that brood of chicks feathered out as if they expected winter instead of spring. Many of them went off their legs, and I ultimately put the whole bunch to the block, for I would not keep them for breeders. Here was exactly the same result reported by my friend. He laid it to hopper feeding and concluded that it was not good for Leghorn chicks in winter condition. Now without changing my method one iota, I went right on with the next brood just the same. The weather by this time was warmer, and the chicks did finely as they always have done, barring the instance just named.

We may conclude, therefore after reading the combined experiences of hundreds of poultrymen, that in dry feeding and in hopper feeding we have a safe and sane principle to follow in the raising of chicks and the handling of laying stock—that it is the safest way for the beginner. The expert can get good results in ways that would not be safe for a beginner to follow. We have in dry feeding a labor-saver, time-saver and money-saver, a path that a man though he be a fool need not err therein. Let us then work for uniformity in the feeding of poultry and hail the day that emancipates us from some of the drudgery.

When the poultry breeder becomes successful with one breed it's time enough to turn attention to another. Even before such a move is made he must consider the importance of increasing every one of the essentials so that the two breeds can enjoy about twice the range, a proportionate increase of food and house accommodations. Neglecting these increased facilities is the point where many ambitious poultry raisers become wrecked.

SOME RHODE ISLAND RED HISTORY



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E are indebted to Thos. F. Rigg, of the American Poultry Journal, for the following facts relating to the interesting subject of Rhode Island Reds: There seems to be no halt in the onward march of the Rhode Island Reds. As a fancier's fowl they are becoming more popular every day, while the market poultrymen and egg-producing farmers are eagerly seeking the breed. The oncome of the Rhode Island Red has been one of

the few spectacular performances in the poultry world. It has been exceedingly interesting, and during the past few years everything has given way before the Red wave.

It is but a few years ago that this fowl, without name, was unheeded by fanciers. It was doing service upon the farms of Massachusetts and Rhode Island, yielding the best market poultry and supplying an abundance of eggs. Type and breed characteristics were unestablished, yet withal it was an attractive fowl.

During 1896-7 fanciers in Rhode Island and Massachusetts determined to take up this splendid market fowl and wonderful egg producer and to establish for it a breed character. In the case of the Rhode Island Red those who claim that the American fanciers look only to feather markings and ignore utility in this fowl must note an exception. It was the remarkable utility qualities of the Reds which first attracted the attention of the fanciers.

A few lovers of the Reds held a meeting in the Coffee Tavern, in Fall River, Mass., in February, 1898. At this meeting the Rhode Island Red Club was organized, officers being elected as follows: President, Daniel P. Shove; vicepresidents, Wm. P. Shepard and Thos. Roe; secretary-treasurer, John Crowther. These officers were voted "power to act" in promoting the interests of the breed.

On December 10, 1898, at Fall River, Mass., a meeting of "all interested Rhode Island Red breeders" was held and a standard for Reds formulated. Those who took a leading part in this proceeding were Dr. N. B. Aldrich, John Crowther, J. W. Freelove, V. L. Stafford, Daniel P. Shove, F. W. Cochrane. At this meeting the original officers were re-elected. The standard adopted at that time proved to be an excellent working guide to breeders until the Boston meeting of 1901, when a more formal description and a more detailed statement of the points of excellence of the breed were decided upon. In the meantime the membership had grown to upwards of fifty. Included in the list were breeders from about a dozen states. The election of officers at this meeting resulted in the choice of Hon. Charles M. Bryant, of Quincy, Mass., as president; William P. Shepard, of South Swansea; R. V. Brown, of Natick, R. I., and E. A. Robbins, of Nashua, N. H., as vicepresidents; John Crowther, secretary-treasurer; with an executive committee comprising, besides Messrs. Bryant, Shepard and Crowther, ex-officio. Vernon L. Stafford, Fall River; D. P. Shove, Somerset; Dr. J. Fred Watson, Nashua, N. H., and P. R. Park, Methuen, Mass. Honorarv vice-presidents were designated as follows: Maine, I. F. Clark; New Hampshire, Luther Robbins; Vermont, Sanford Daniels; Massachusetts, C. A. Sanborn; Rhode Island, Samuel Cushman: Connecticut, R. C. Tuttle; New York, Chas. Smith; Illinois, E. L. C. Morse; Missouri, R. F. Smith; Canada, W. R. Walters. It was decided to copyright the Club Standard. At that time the club numbered 102; today the membership is nearly 1,200.

During the years 1901-2-3 the club members made large exhibits of these fowls at the Boston and New York shows, and at the smaller exhibitions throughout New England. No breeds applying for admission to the American Standard of Perfection met the opposition which was directed against the Rhode Island Reds. They were decried most loudly and vigorously by a great many fanciers. They were but mongrels picked up here and there from the farm yards of Massachusetts and Rhode Island, said their traducers. They possessed no beauty, and it was ridiculous for their promoters to offer them to the Standard as a distinct breed! There was no established blood in their veins! All this, and much more, said the selfappointed guardians of the Standard of Perfection. The editor of a leading poultry journal, whose columns now teem with Rhode Island Red advertisements, referring to the exhibition of these fowls at the New York (Madison Square Garden) show 1902, described them as a "motley lot, of all colors," and advised their friends to speedily withdraw them from an offended public gaze.

And why, we may well ask, has this once denounced, ridiculed and much abused fowl become one of America's most popular and prominent breeds? It is, first, because it is worthy of the place. This thing of the Rhode Island Red coming into its own is another illustration of the truth of the saying that "truth crushed to earth will rise again." But this is not all. The Rhode Island Red would not have reached the high place it holds today, would still be in the humble place we found it a few years ago, had it not been championed by men who firmly believed in it-men who possessed the ability, the courage and that determination which balks not at opposition. Theirs was indeed a task before which most of men would have quailed. But C. M. Bryant, Dr. N. B. Aldrich, D. P. Shove, Lester Tompkins, Phillip Caswell, John Crowthers, R. C. Tuttle, F. D. Bareman and their co-workers did not turn from a practically united opposition. They knew the merits of the fowls they were supporting. They realized, as well as did the critics of the breed, that their fowls were crude and unfinished so far as color markings were concerned. They proceeded, undaunted, to establish the desired color markings. This done the battle was nearly won, for shape was firmly and satisfactorily established long before. Next they fixed the beautiful red color markings. The great merit of the fowl, its desirable shape and beautiful color markings-the deep rich red-at once won the approval and love of American fanciers and breeders. It was a battle royal, and merit finally won, as it always does in the end.

Today the Rhode Island Red Club is the largest specialty club in America, numbering among its membership prominent fanciers in every state and territory in the Union. The Rhode Island Red is today extensively bred in not only the United States but in Europe, and several other foreign countries. It is everywhere recognized as one of the most useful and beautiful of Standard-bred fowls. As an exhibition fowl it has taken rank with the Wyandottes and Plymouth Rocks. At the show held at Cincinnati, 1906, in connection with the American Poultry Association annual meeting more than 426 Reds were shown. The writer had the pleasure of placing the awards in this interesting and attractive class, in which the leading Red breeders of American were competing, and we wish to say that the winning birds there were marvels of beauty.

The Single Comb Reds were admitted to the Standard in 1904.

At the Minneapolis meeting of the American Poultry Association, 1905, the Rose Combs were admitted as American Reds. This action was bitterly denounced by the breeders of Reds generally, and the 1906 meeting of the association rescinded the action and the Rose Combs were admitted as Rose Comb Rhode Island Reds.

See illustrated article on Rhode Island Reds in December issue.

THE WORLD'S RECORD BY THE WORLD'S BEST

At the great Nashville (Tenn.) State Fair, Oct. 8 to 13, 1906, in competition with 253 White Wyandottes, representing seven states and considered by all to be the greatest show ever brought out in the South, our

WORLD'S BEST WHITE WYANDOTTES

Won 1st, 3rd Cocks; 1st, 2nd, 3rd, Hen; 1st, 2nd, Cockerel; 1st, 3rd Pullet; 1st, 2nd Pen.

A record never equaled by any White Wyandotte breeder East, West, North or South.

Number and quality of competition considered.

We will show no more this season and our prize string of winners are for sale.

Also 1,500 of the choicest early hatched show birds we ever owner. Send two 2c stamps for Catalog and price list. own. Send two 2c stamps for Catalog and price list.

J. C. FISHEL & SON, -24 Jackson Street, Hope, Ind. WHITE WYANDOTTES My first pen is headed by that wonderful bird \$50 second prize cockerel at the Tennessee State Fair. He is mated to 93 to 94 point hens under Judge F. J. Marshall. Eggs from this grand pen \$5 per 15 in season. My second pen is headed by a 93 point cockerel mated to pullets from pen of the 1st hen at Nashville and are a strictly high-scoring lot of pullets. Eggs \$3 per 15. I have two other good pens from which I offer eggs at \$2 per 15. High Grade Young Stock Now. Choice cocke ing and magnificent young pullets at reasonable prices. Choice cockerels of best breed mable prices. Write now. MRS. W. R. LUKE, R. F. D. No. 5, NASHVILLE, TENN. Brown and White Leghorns The kind that Lays & the kind that Wins wherever shown. 1 have over 300 Choice Birds now ready for sale. Eggs \$1, \$2 and \$3 per set-ting. :: :: Write or phone your wants to Hoyt V. Drewry, Route 4, Greenfield, Tenn. Columbian Wyandottes The Coming **Utility Fowl** Combining the beauty of the Light Brahma with the Wyandotte shapes, thus deriving their wonderful qualities from two of America's

First Prize Cockerel, Knoxville, also First Pullet.

FRED L. BEYMER, Knoxville, Tennessee

leading breeds. My strain is sired by the first cockerel at St. Louis. Will breed true, produce large brown eggs and plenty of them. A few pairs of high bred stock for sale, and eggs in season.



Cure for Roup

A good remedy for roup that I have used with success for a number of years is as follows: Put 15 to 18 drops of carbolic acid in pail of drinking water. This for every day prevention. For swabbing throat use two or three drops of acid in teacupful of water. Swab with feather.—A. B. Henry.

Curing Colds

Each fowl showing evidence of cold or congestion is shut up in a small coop and given two grains of calomel at night, followed by a one grain quinine pill night and morning for two or three days. If there is any discharge from nostrils, a few drops of camphorated oil are injected into each nostril. If any improvement is manifest in two or three days they are removed to a small room and a solution of copperas added to the drinking water. They are kept here for a week or two, or until they show a complete recovery. If, on the other hand, after two or three days observation and treatment no improvement is manifested, the bird is killed and buried.— *American Agriculturist.*

Scaly Leg

Scaly leg is a filth disease, if it can be called a disease, it being caused by a tiny "mite" which burrows under the scales of the legs and toes; it lives and breeds there. The remedy is very simple and easy. It is only necessary to grease the legs with any kind of grease. An ointment of a third kerosene oil and twothirds lard is easilv applied, and if well rubbed on (and in) half a dozen times, a couple of days apart, should kill the mites and the scales will come otr. Don't pull off the scales that have become large; that will hurt the birds, something as pulling off your finger nails would hurt you. The grease remedy is so easy, and the prevention of the trouble by simple cleanliness is so easy, there is no sort of excuse for scaly leg; it is simply and purely "neglect."—Exchange.

Wilber's world's best White Leghorns. Wilber Bros., the White Leghorn men, Petros. Tenn.

Gather up the charcoal from that old brush pile and throw it into the poultry yard or into the scratching shed.

Awarded Wilber Bros., the White Leghorn men, Petros, Tenn., at the recent great Charleston, Birmingham and Nashville shows, first or first tie hens and pullets.





QUESTIONS AND ANSWERS

What must I do for a Black Langshan hen that has a slight cold? Ans .- Use a little kerosene oil on her

nostrils.

I have no Standard of Perfection by which to pick my birds for the show. Please give me the requirements for Brown Leghorns as follows: Weight, shape, color of eyes, comb, wings, back, and also breast.—T. T., Atlanta, Ga. Ans.—To give you a full and complete

description such as would enable you to pick show birds in Brown Leghorns, pick show birds in Brown Legnorns, would require more space than the scope of this department. Besides the infor-mation you require would have to be copied from the Standard, which is a violation of the copyright. We advise you by all means to buy and study you a Standard Standard.

Is a Standard of Perfection issued each year by the American Poultry As-sociation? If so, has the requirements for Single Comb Black Minorcas been changed since 1905? If so, in what way? Please give an article on this breed. Ans.—The Standard is supposed to be

Ans.—The Standard is supposed to be revised only every five years, but some slight errors have been corrected since 1905. However, there have been no changes in the Standard for Minorcas since 1905. We will take pleasure in which is a compared particles on Minor publishing some good articles on Minor-cas. Please send them along, breeders.

What is the best feed to make hens lay?—J. L. M., Birmingham, Ala. Ans.—For a one-grain feed, wheat is about the best, but hens do better on a mixed feed. A very good mixture is one-third wheat, one-third corn, and bal-ance ords, feeding ten per cent once ance oats, feeding ten per cent once a day beef scraps unless the hens are fed green cut bone or have plenty of cottage cheese or other milk products. Green cut bone is one of the best feeds to make hens lay, but it is likely to give bowel trouble if fed too freely.

Make arrangement for ample winter quarters for the fowls. Over-crowded quarters mean disease, death and disas-ter. Each bird should have at least six ter. Each bird should have at least six square feet of floor space, unless extra special care is given them, in which case four square feet may be sufficient. Not more than twenty-five birds should be kept in one flock. If divided into flocks of about this size they will do better than in one large flock.—*Commercial Poultry* Poultry.



TWENTY-FIVE YEARS EXPERIENCE



IN BREEDING

Barred Rocks

HIGH CLASS BREEDERS A SPECIALTY

400 Youngsters From 1906 Matings

Show Birds for the Fastest Company or your money back

PERSONAL ATTENTION TO YOUR WANTS

HUTCHISON & LAMAR CRYSTAL SPRINGS, MISSISSIPPI

Fishel's White Plymouth Rocks

"What makes the White Plymouth Rock fowl so popular?" was asked of U. R. Fishel, of Hope, Ind., at the Tennessee State Fair, Nashville.

"Because they are the most beautiful and profitable fowl bred today," was the quick reply. Then Mr. Fishel continued: "There is no fowl that has the beautiful plumage of the White Plymouth Rock, nor one that has the size

nor the excellent egg-producing quali-ties of this grand breed of poultry." One needs but see this exhibit of Mr. Fishel's to convince him that what is said above is true. Mr. Fishel also re-marked that the availant point is recmarked that the excellent point in rearing White Plymouth Rocks was that they breed true to color and shape. If you have ten or one hundred White Plymouth Rocks you know they are all white, and good ones. This is not the case with many other varieties. No breed of fancy poultry has ever com-manded the high prices the White Ply-mouth Rock has and no foul is in ac mouth Rock has, and no fowl is in as preat demand. Mr. rish stated that he sold during 1905 over 12,000 birds of this variety, they going to every section

of the world. When Mr. Fishel was asked what he thought of Tennessee as a State for poultry he remarked: "It is the garden spot of the world for the poultry business. Your climate is ideal, your land cheap and rolling and you are close to market both for your feed and your product. There is no State in the Union so well adapted to the rearing of fancy and market poultry as this grand State of Tennessee. Every one must admit that the hen will make you more money than anything else in the State; then why not encourage your people to take up the poultry business?" "Are you in any other business?" Mr.

Fishel was asked.

"I am in the banking business," was the reply, "and every dollar I have on





VERY atom that hens use in making eggs, comes from the *food they eat*. They

E VERY atom that hens use in m comes from the *food they* can't get it anywhere else. That being true, you must, if you expect eggs in abundance, feed foods rich in egg-making materials. Analysis shows that not only earse but the bonne the lear man

eggs, but the bones, the lean meat and the feathers of fowls are all made up of what the professors call "protein."

call "protein." Hence, fowls must have protein if they are to give you the best results. But protein is found only in small quantities in most grains and vegetables, but in large quan-tities in animal food. That's why all fowls crave

tities in animal food. That's why all fowls crave worms and bugs Instinct teaches them that they *need* such food. Of course, they can't catch "the early worm" in winter or when they are yarded, so you must give them this protein in some other form. form.

form. The best substitute is fresh-cut, raw, green bones—the trimmings from the meat market, with meat and gristle adhering to them. In its raw state it contains ex-actly the same food elements as. the worms and bugs. It contains over four times as much protein as grain, and is



No Money in Advance

F. Box 121

rich in lime and other egg-making materials. That's why fowls like it so well and why it doubles the egg-yield, increases fertility, makes larger hatch-es land stronger chicks, develops earlier broilers and layers and makes heavier market fowls-Because it "balances the ration" by supplying what is most scarce in grains. You can't get the best results without it. Green bone is easily and quickly

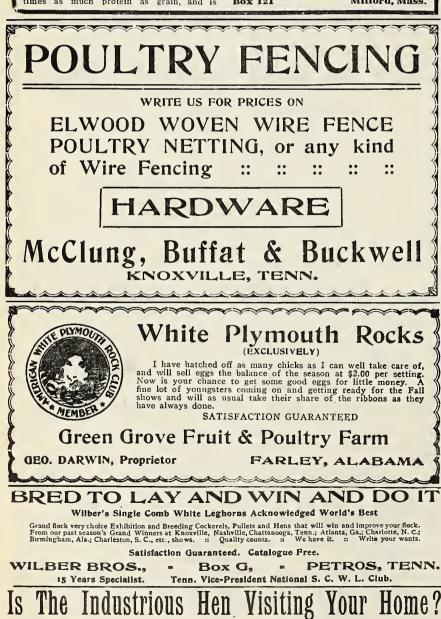
Green bone is easily and quickly prepared, with



We want you to try this machine. You don't have to buy it—just try it first.

it first. To prove to you what it will do, we will send you any one you may select from our catalogue on **10 Days Free Trial** (No Money in Advance,) It cuts all bone with all adhering meat and gristle, never clogging and wasting nothing. It automatically adapts itself to your strength, so that any one can use it. It is strong, durable and does not get out of order. But try it! Send today for catalogue-select the ma-chine you want to try-we'll do the rest. W MANN COMPANY

W. MANN COMPANY. Milford, Mass.



Rock poultry. Any one in Tennessee can do the same thing it they will but take up the poultry business and push it as any business enterprise should be pushed. The time is here now when the farmer and poultryman of Tennessee should awaken to the fact that poultry pays.'

earth was made out of White Plymouth

To the Boy Fanciers

I wish to establish a club among all I wish to establish a club among all the boys in the South. I have had my experience as a boy "chicken crank." Most of the boys of this sort are dis-couraged, and told that "there's nothing in it," which is quite wrong. Every grown poultryman was once a boy. Now, boys, if you wish to know any-thing about poultry raising, write me a letter, enclosing a two-cent stamp, and I letter, enclosing a two-cent stamp, and I will gladly inform you. I can also get eggs for you of some varieties, and can give you names of a lot of other boy fanciers. If you don't take this journal you will lose a lot, as in my opinion it is the best in the land. My address is, R. G. Fields, 33 Caruthers avenue, Nash-ville, Tenn.

Rhode Island Reds

Some of your readers have asked me to write something of what I thought of the Rhode Island Reds in your paper, so I can only say I have tried nearly all kinds of poultry and find the Rhode Island Reds the best of them all for all Island Reds the best of them all for all purposes. They are the best layers and the best for broilers and the healthiest. The only fault to them is they do not all come true to color. But this is not strange as, it is the case with all other broads that one made up from sourced breeds that are made up from several kinds of fowls. They way I do to im-prove them and keep them up to the Standard in color is to kill out all but the best in color and in shape. By doing this I can improve them all the time. I have had them eight years and like them so well I do not keep anything but the Reds now. All my old hens have aver-aged over two hundred eggs to the hen for the past year and some of my pullets begin laying before they are five months old. Any one that has not tried them will not make any mistake in trying them and after trying them they will not part with them. Any questions that any one wants to ask, please write me and I will gladly answer it if I can.

E. R. CASH, Gaffney, S. C.

Cull the flock and send to the table or boarding houses all hens that are not good layers and good mothers.

Coal oil is a cheap and effective pre-ventive and exterminator of vermin that infest the chicken houses.

Wilber Bros., the White Leghorn men, Petros, Tenn., are world-wide known for quality, laying and exhibition Leghorns.





Poultry Educational Campaign

Special Train With Live Exhibits and Lecturers Tours Missouri

A "feeding machine" is one of the attractive features of a poultry train that made a trip through Southeast Missouri on a campaign intended to double the poultry output of the state, which already produces more poultry annually than any other state in the union.

The use of the feeding machine was suggested by one of the largest packinghouses in the country, which has established enormous receiving stations for poultry in Missouri and near-by states, where poultry secured from the farms is taken and fattened. The difference realized on the finished

The difference realized on the finished product after a period of fattening and regular feeding is often greater than the price paid originally for the fowls, and the farmer will be taught to properly fatten his fowls before marketing them, in order to secure the greatest possible profit. The packing-houses have embarked in the business, it is said, for the reason that they can not secure sufficient numbers of properly fattened towls.

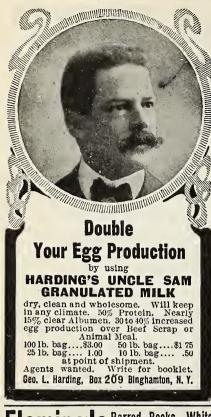
The art of caponizing cockerels will be explained to the farmers, and they will be urged to caponize all male birds not necessary for breeding purposes. Capons in prime condition, it is said, bring three and four times the price per pound that is offered for ordinary fowls.

MAKE-UP OF THE TRAIN.

There will be three cars in the train. One is to contain high-grade poultry, bred by the best fanciers in the State, several of which have won prizes at the recent State Fair at Sedalia. The second is to contain poultry appliances of all kinds, including incubators, brooders, poultry feeders, bone cutters and feed mills, besides a file of agricultural and poultry papers. The third car will be used by those who will participate in the campaign.

the campaign. John T. Stinson, who was director of the Missouri Fruit Experiment Station at Mountain Grove, Mo., for several years and later pomologist connected with the department of horticulture at the Louisiana Purchase Exposition, will





Fleming'S Barred Rocks, White and Golden Wyandottes

again victorious at the great North Carolina State Fair Oct., 1906, they winning eight prizes. The grandest lot of youngsters I ever raised. \$2.00 each, \$5 00 trio.



LELAND POULTRY FARM SPRING HILL, TENN. S.C. Buff Orpingtons, Barred Plym u b Rocks, S.C. Bown Legions Fine lot young birds from all strains for save Ergs in season Must sell. White for prices. MAYES HUME :: PROPRIFTO

Wanted—Real Estate FOR HUNDREDS OF CASH BUYERS

Who read and adverties in the "Farm and Real Estate World," the best paper for Farmers, Home seekers, Real Estate men and Investors. Friee is,75e a year. Send us 75c and we will send you "The World" until January, 1908, and print for you a 50-word advertisement two months FREE as an inducement. If you want to buy, sell, or exchange anything this ad will do the business. Three months trial subscription 10c. Address

Farm and Real Estate World

400 Cleveland Ave., CHICAGO, ILL.

LOCOMOTOR ATAXIA AND PARALYSIS CONQUERED AT LAST BY DR. CHASE'S BLOOD AND NERVE FOOD. Write me about your case. Advice and proof of cures FREE. DR. CHASE, 224 N. 10th St., PHILADELPHIA, PA.

The INDUSTRIOUS HEN

have charge of the train. While Mr. Stinson was at the experiment station he inaugurated an agricultural lecture car, which covered the Ozark region, educating the farmers in the use of sprays to be used to combat diseases of apple trees. This was followed by the seed specials in Missouri and Iowa. The use of a poultry train has never before been tried. Professor C. M. Lewelling, of Beaver City, Neb., will accompany the party as poultry lecturer, and R. M. Washburn, State Dairy Commissioner, will discourse on dairying. Henry C. Steinmesch, well known in Missouri as a breeder and judge of poultry, who was in charge of the poultry exhibit at the World's Fair, will be with the party. The composition of the various feeds

The composition of the various feeds shown will be explained, and the farmers instructed in the method of combining them for various purposes. Laying hens receive one combination, molting birds another and little chicks a totally different mixture.

BREEDS ON EXHIBITION.

More than twenty different breeds are installed in exhibition coops in the first car for the inspection of farmers. An effort has been made in selecting the breeds shown to give prominence both to the egg-producing varieties and the flesh-producing breeds. The Leghorn fowl will be shown as the "egg machine" and the Plymouth Rock will be emphasized as the table fowl.

Special instruction will be given in the method of packing and marketing fowls so as to secure for the farmer the highest prices. In most markets, it is said, it is the practice, when a shipment of fowls is received from a farmer, to sort and repack the consignment before it can be placed on sale. The loss from this cause is considerable.

If the present trip is as successful as the promoters expect, the train will be taken over all the lines of the Missouri Pacific Railroad Company in Missouri. The idea was worked out by the indus-

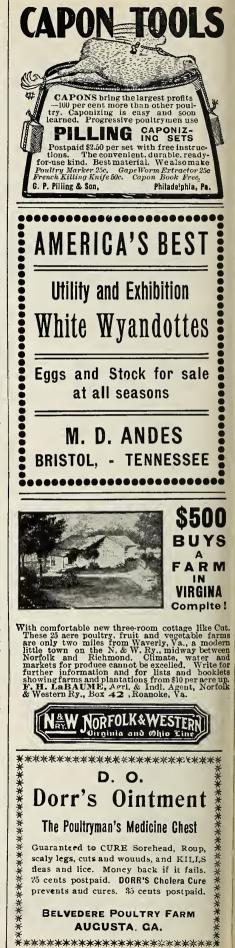
The idea was worked out by the industrial department of the Missouri Pacific Railroad, in co-operation with the State Board of Agriculture.

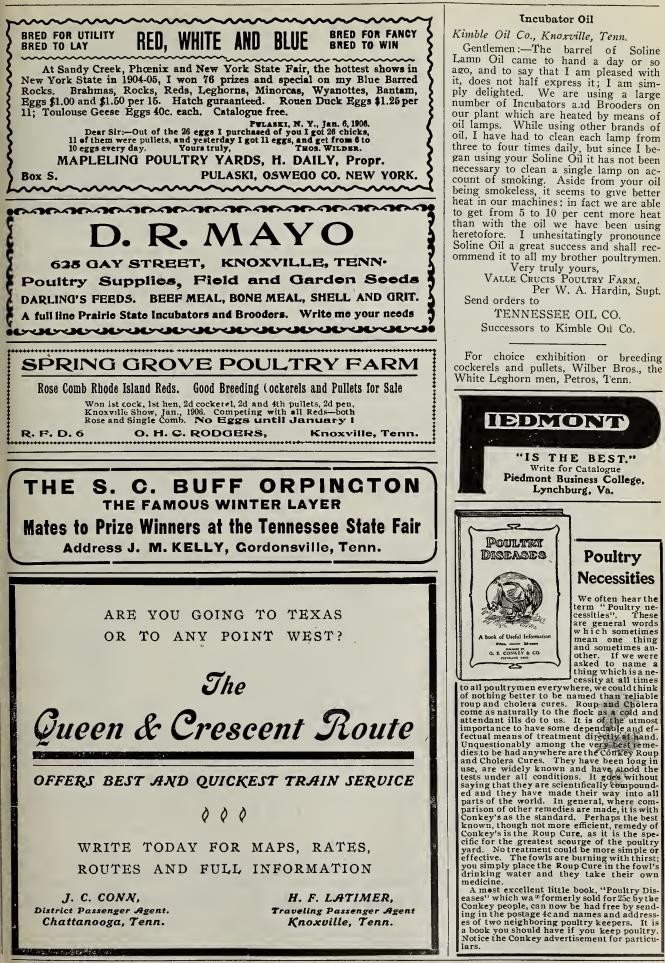
Accept my congratulations on the great improvement in THE HEN. It is without doubt the leader of the South. Thanking you for past favors, I beg to remain, PLUMMER M'CULLOUGH. Mercer, Pa.

At the recent great Charleston, Atlanta and Birmingham shows, first pens and first cockerels to Wilber Bros., the White Leghorn men, Petros, Tenn.

Bargain Sale

Two brand new 1906 Incubators, two second-hand ones, good as new, one Mann Bone Cutter, new; two Lenox Sprayers; one dozen drinking vessels and one lot of lice killer powder. These must be sold and will go at bargains. Address J. R. G., care THE INDUSTRIOUS HEN, Knoxville, Tennessee.





Prizes Going to Hen Advertisers

The following is a list of the awards to our advertisers at the Tennessee State Fair:

White Wyandottes—J. C. Fishel, Hope, Ind., first and third cock, first and second cockerel, first, second and third hen, first and third pullet and first and third pen. Forhes Poultry Yards, New Decatur, Ala., second cock, third cockerel, second pullet and third pen.

White Plymouth Rocks—U. R. Fishel, Hope, Ind., first, second and third cock, first and sec-ond hen, first, second and third cockerel, first and second pullet, first and second pen. Shel-ton & Crockett, Nashville, Tenn., third hen, third pen. J. O. Norton, Nashville, third pul-let

S. C. Buff Leghorns-E. L. Wilson. Colum-bia, Tenn., first cock, first and second cock-erel, first and second hen first and second pullets, first pen.

S. C. Brown Leghorns—Forhes Poultry Yards, New Decatur, Ala., first and second cock, first and third cockerel, first, second and third hen, second and third pullet, first and

second pen.

Barred Plymouth Rocks.—W. V. Thompson, Columbia, Tenn., first cockerel, third cock, first and third hen, first and second pullet, first pen. J. O. Norton, Nashville. Tenn., second cock, second hen, second and third cockerel, second pen

Cornish Indian Games-W. J. Burchard, Mar-tin, Tenn., first and second cocks, first, second

PROLIFIC

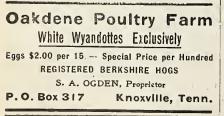
Jamesburg,

The

Dutchman with a

Square Deal

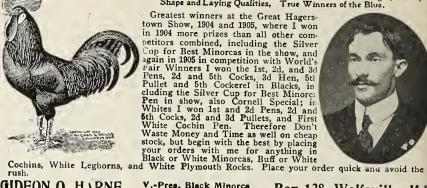




IS

GIDEON O. HARNE'S MINORCAS

The World's Undisputed Champions, Developed by Careful Selection from Foundation Stock of First Prize Winners. Bred for Vigor, Beauty of Shape and Laying Qualities, True Winners of the Blue.



Greatest winners at the Great Hagers-



WHEN WRITING TO ADVERTISERS PLEASE MENTION THE INDUSTRIOUS HEN.

ROCERS.

::

Up on Weight.

::

Rogers Breeds the Winning Buff Rocks

::

.

Eggs \$2.00 per Setting.

Cleveland, Tenn.

Geneva, Ga.

A. T. MAUND,

Fine in Color.

....



and third hen, first, second and third pullets, first and second pen.

Buff Orpingtons-W. S. McFall, Columbia, Tenn., first hen, second cock, third pullet, sec-ond hen. W. H. Puryear. clendale, Tenn., second and third hen, first pullet, first pen. R. A. Harrington, Nashville, Tenn., first and third cockerel. cockerel.

Silver Wyandottes—k. E. Jones, Paducah, Ky., first and third cock, first cockerel, first, second and third hen, first second and third pullet, first and second pen.

Golden Wyandottes—R. E. Jones, Paducah, Ky., first cock, first and second cockerel, first and second hen, first, second and third pullet, first and second pen.

Light Brahmas—T. Reid Parrish, Nashville, Tenn., first and second cock, first, second and third cockerel, first, second and third hen, first, second and third pullet, first, second and third pen.

Black Breasted Red Bantams-Fred Klooz, Nashville, Tenn., third cock, second hen, sec-ond pullet.

BRIEF MENTION

Judge Colfax Schuyler, Jamesburg, N. J., has an advertisement in this issue of his line bred strain of White Wyandottes and Colum-bian Wyandottes. Judge Schuyler is one of the best known breeders in this country and has high quality stock to supply you.

Granulated Milk is said to be a* fine egg producing food and has proven a successful animal food for 4aving hens wherever tried. It is manufactured by Geo. L. Harding, Bing-hampton, N. Y. It will pay you to try Granu-lated Milk. See the advertisement of this food in another column.

John R. Baldwin, proorietor of the Sunny-side Leghorn Farm, Rockwood, Tenn., writes he has purchased a larger farm and will soon move on to it, where he can raise more and even better "World's Best" Single Comb White Leghorns.

Will Not Exhibit

Will Not Exhibit It will be news to our readers to learn that Mrs. R. H. Bell, who has won prizes at all the shows for the past twenty years, will not exhibit any of her birds this season. She saws she has some of the best she has ever had and will sell her stock, making especial effort to please those who purchase for show purposes. Mrs. Bell is known all over the South for her uprightness and square dealing, and no one has a higher regard for honorable business transactions than she has. Readers of THE HEN who know her know that her stock is of the best and just what she claims for it. See in her advertisement elsewhere in this issue the different breeds she has and if you want some nice show birds consult her.

Wilber Bros., the White Leghorn men, Petros, Tenn., fitteen years specialty breeders.





CLUBB'S BARRED ROCKS

Are one of the greatest prize winning strains in America. If a show record proves the quality I certainly can give one that is unequated. At Louisville, Ky., in the last 4 years I have won 15 first prizes out of 20:12 second; Il thirds, and 9 fourth prizes. Louisville, Jan 1906. I won every lst, two 2ds, four 3ds, and three 4ths. Louisville show is cousidered by the leading judges as one of the best in the United States—as good as Chicago, when speaking of quality. At Frankfort, Ky., Dec., 1905, I won every lst prize and every 2d but one in very strong competition. Judge Hewes said it was one of the strongest classes he had judged in many a day. At Frankfort, Ky., Dec., 1905, in very strong company, I won every lst prize. In fact, every prize offered was won by me or some of my customers. At the Kentucky State Fair, 1906, I made a clean sweep, winning every prize offered—a remarkable victory never before accomplished oy any hreeder in this State. I have made four shows in the last year, winning every lst prize and many of the smaller prizes. At Cincinnati, Jan. 1905, I won more lst and 2d prizes than any one competitor. I have also won many specials, including some 50.00 silver cups. My birds have never failed to win in the hands of my customers in some of the best shows in America. I have often been in competition with the best birds that could be bought in the East and would iuvariably win. We don't have to go East to buy : we have as good right here in the South as there is in the country. I try to improve my stock and I have by far the finest lot this season I ever raised. I am now prepared to furnish winners or fine breeders. Write your wants to

HARRY CLUBB

PLEASUREVILLE.

KENTUCKY

BRIEF MENTION

The Virginia Valley Poultry Club will hold a show at Harrisonburg, Va., Dec. 4-6, 1906. Geo. O. Brown, judge; C. O. Henton, secretary

Oakdene Poultry Farm, Knoxville, Tenn., breeds White Wyandottes exclusively. Write them if you want special prices on eggs by the hundred.

Edward G. Noonan, Marietta, Pa., proprietor of the Donegal Foultry Yards, breeds a number of the leading and most popular breeds of poultry. He will be glad to correspond with you and supply your wants. See his ad.

The popularity of the buff breeds has been phenomenal and none have forged to the front faster than Buff Rocks. B. E. Johnston, Kirkwood, Mo., has a "new crop now ready," and what is more important even, they are good ones

The Sure Hatch Incubator Co. has been compelled by the enormous increase in its business to cut loose from the little town of Clay Center, Nebraska. It has removed to Fremont, Nebraska, where it now has under construction the largest incubator plant in the world.

Our readers are familiar with the famous "Clubb Strain" of Barred Plymouth Rocks. Mr. Harry Clubb, Pleasureville, Ky., is the originator of this strain and offers some of his choice birds direct to our readers. Look up his ad and write him if you are interested in Barred Rocks.

The Alamance, N. C., County Fair, Oct. 8.10, was the most successful this year of any in its existence, the display of poultry being especially large. The compctition was open to the world. Dr. John W. Lasley, Burlington, N. C., writes that he won fifteen prizes on seventeen birds at this show.

The Monroe (La.) Show, December 6 to 8, promises to be one of the best and most complete ever held in the South. A splendid list of prizes is offered, and Secretary E. S. Eby will take pleasure in furnishing prospective



BARRED, BUFF and WHITE PLYMOUTH KOCKS

White Wyandottes, White Minorcas, White Leghorns and Mammoth Pekin Ducks, \$3.00 each, \$7.50 for Trio, \$12.00 for Breeding Pen. : : : : : : : : Catalogue Free.

EAST DONEGAL POULTRY YARDS EDWARD G. NOONAN, Proprietor, MARIETTA, PA.

Single Comb Buff Orpingtons

MRS. J. A. MARTIN, Johnson City, Tenn.,

Breeds the Winners in S. C. Buff Orpingtons

1st and 3rd Cockerel, 1st and 4th Cock, 1st, 2nd and 3rd Hen, 2nd, 3rd and 4th Pullet, 1st, 2nd, 3rd and 4th Pen, at Knoxville, Tenn.. show, January, 1906.

Eggs and Stock at Any Time. **********

WALTER J. HUNTER, Johnson City, Tenn. Breeds the Best in S. C. WHITE LEGHORNS

The foundation stock was the best and they have been bred scientifically. No better birds can be bought, north, south, east or west. Get your orders in early and shacents will be prompt.



WE WANT NAMES

We want you to send us the names and addresses of from ten to twenty-five persons liv-ing in the United States, each one having twen y-nve bens or more. You can send us the names from any number of different post-offices. If you will send us these names we will send you TWO BEAUTIFUL COLORED PICTURES FREE. These pictures are repro-ductions of the most celebrated paintings in the world, and they are of high quality, and we know that you will be pleased and delighted with them; no pictures will be given for a list of less than ten names. We want to send a free sample copy of a special issue of the HOME MONTHLY (The National Poultry Journal), to a lot of poultry raisers who are not now taking our paper and for that reason we want these names. Send us immediately a list of at least ten poultry raisers and we will mail you, postpaid, **ABSOLUTELY FREE.** TWO REPRODUCTIONS OF THE WORLD'S FAMOUS PICTURFS, heautiful colors, size 15x20 inches. Address: THE HOME MONTHLY 20 North William St., New York.



exhibitors any information desired. His address is Monroe, La. H. W. Blanks will be the judge of this show.

The Corno Hen and Chick Feed is claimed to be onc of the best feeds ever offered poultrymen. Every sack is guaranteed exactly right and equal to samples sent poultrymen. It contains a large percentage of sunflower seed, and no grit. Freight is prepaid to your own station. Notice their special offer in our advertising columns and at least get a trial offer.

The initial number of Valley Poultry Journal is before us. It is the official organ of the Virginia Valley Poultry Club, and is pub-lished the first of each month at Harrisonburg, Virginia, under the editorial guidance of C. O. Henton. The Valley Poultry Journal is a four page, six column raper, made up newspaper style, and presents a very creditable ap-pearance. We wish the new publication success.

"Your money's worth or your money back," is the way Mr. John H. Fleming, of Warren Plains, N. C., deals. He is a breeder of Barred Rocks and White Wyandottes, and says he has some exceptionally fine birds for sale now. Mr. Fleming has been one of our advertisers. in a small way, for a long time, and we have found him to be thoroughly re-liable.

It is with pleasure that we call the attention of our readers to the reading notice of the Tennessee Oil Co., which appears in this issue. Read what Mr. W. A. Hardin, superintendent of the Valle Crucis Poultry Farm says regard-ing the oils manufactured by the Tennessee Oil Co. Those of our readers using incuba-tors and brooders will do well to correspond with this company. It is thoroughly reliable, and a trial will convince any one of the supe-rior quality of its product.

The Tennessee Poultry Association will hold a great show at Nashvule, enn., Jan. 14 to 19, 1907. The hustling secretary is John A. Mur-kin, Jr., and the judges are F. J. Marshall, W. C. Deny, and C. N. Hanson. The officers of the association are R. A. Bennett, Presi-dent (city recorder); E. L. Doak, Vice-Presi-dent (U. S. Commissioner); E. F. Langford, Treasurer (Lawyer); Chas. W. Longhurst, Superintendent (city marshal). On the Execu-tive Committee are West Morton, T. Reid Parrish, S. H. Davidson and W. D. Gale. With this crew of thorough fanciers at the head of the organization, a magnificent show is assured. In our December number we will announce details of the forthcoming show.

The tenth annual show of the Alabama Poul-try & Pet Stock Association will be held at Birmingham, Dec. 5 to 10 inclusive, McClave and Sites judging. A list of all breeds and breeders will be distributed among visitors. Ribbons positively will be up within thirty-six hours, and score cards will be sent out be-fore show is over. Carbon copies of all score cards will be kept. All exhibitors will be furnished a list of the competitors, giving score of all birds. Birds will be classified for ship-ment for particular trains in the show room, thus avoiding delay usual in classification at trains. Score cards will have the seal of the Association fixed. Secretary will be glad to answer letter. Write Dr. Elwyn Ballard, secretary, Birmingham Ala., for information.



ALABAMA

STATE FAIR MENTION

W. S. McFall, Columbia, made a nice winning on Buff Orpingtons. His Orpingtons are good, both in shape and color.

B. A. Hasting had some nice White Wyandotte pullets, and a cockerel, slightly brassy, but with the nearest ideal comb in the show.

J. M. Kelly, Gordonsville, Tenn., exhibited some choice Buff Orpingtons. Mr. Kelly is a member of the National Single Comb Buff Orpington Club and a breeder of repute.

That fine old breeder, Black Langshans, was well represented by some of the best bred, by F. R. Noble, of Nashville. Mr. Noble has a fine strain and is breeding the right kind or Langshans.

W. J. Burchard, Martin, Tenn., had displayed some of the nicest and largest Cornish Indian Games it has been our pleasure to view for some time. His pullets are especially large and fleshy.

Mr. Seeleg, representing the Sure Hatch Incubator Co., Clay Centre, Neb., displayed a fine incubator full of newly hatched chicks, showing the very effective work of these standard machines.

Frith & Co., Nashville, had on exhibition a Model incubator and brooder with hatching and newly hatched chicks. The fuzzy little fellows were interesting to the visitors and showed what a Model will do.

E. L. Wilson, of Columbia, had on exhibition a good display of Buff Leghorns that were buff and all buff. This breed is rapidly coming into popularity and we were pleased to see the very high-class of stock on display.

Mr. J. O. Norton won third pullet, and as he so well put it, "which is doing mighty well when you look down the White Rock aisle and see the hot competition." Mr. Norton has some exceptionally fine White Rocks and his display showed the strength of his stock.

In Bronze turkeys, Mrs. U. R. Fishel, Hope, Ind., won first cock and first hen, and some very strong birds were in competition. Tennessee is pre-eminently a fine turkey state and this shows that the Fishel turkeys are well bred. The mammoth 40-pound cock was a center of attraction.

Judge Theo. Hewes, of the Inland Poultry Journal, was an interested attendant at the show. He was given a hearty reception by the breeders of the Sunny South. Judge Hewes spoke very favorably of this section and its poultry. We hope to have him come to other Southern shows.

Jones, the Wyandotte man's "strongest blood lines on earth," was there with a beautiful lot of Goiden and Silver Wyandottes, among them being some of his most famous winners at Chicago, Cincinnati and other bir shows. A glance at the awards will show that he is taking all in sight, as usual.

An elegant display of hen and chick feeds, oyster shell, cracked bone, mash feeds, various



MANY ATTRACTIVE FEATURES DINWIDDIE'S STANDARD AND BUSINESS BRED BARRED PLYMOUTH ROCKS AND S. C. WHITE LEGHORNS Stock for sale, better this season than ever before. Standard Bred, fit to win; Business Bred for eggs; for size, Business fed on a balanced ration; raised on a free range. These are the guaranteed combined qualities of my birds. Write for prices, stating your wants. HUNDREDS TO SELECT FROM. J. A. DINWIDDIE, ROUTE 3, NEW MARKET, TENNESSEE -1111--- 111 -- it fi - 1111 -PLYMOUTH ROCKS BARRED Line bred for 10 years. Winners at Cincinnati (big A. P. A. meeting); Nashville, Louisville, Princeton, Ind., and Owensboro, Ky. Thirteen out of 25 firsts, 9 seconds, 6 thirds, 5 fourths and 1 fifth, in competition with 825 Barred Rocks shown by 70 exhibitors from eight states. Did your matings produce the quality that you expected? Did those eggs you bought hatch the kind of birds that you want to introduce into your flock? Don't you need one of those great big yellow legged, close, narrow, snappy, barred cockerels to help you out in the show room or to head your best pen? Then write to us. We can furnish birds with quality to suit for any purpose. CLOVERBLOOM POULTRY YARDS OWENSBORO, KY. Benj. H. Baker, Mgr. -1111--Ā., --1111---1111er's Barred Rocks and Wh The Farmer's Friend The Fancier's Favorite Are line bred and mated to produce winners for you as well as us. Place your order for eggs at once and start right. We won firsts in all the leading shows this season. We can furnish eggs from prize winning stock, \$2.00 per 15. Order today. NONE BETTER. We have a nice lot of young stock coming on. WALKER BROS., Route 1, Madisonville, Tenn. Cooper's Rose Comb White Leghorns Lay the Eggs and Win the Ribbons.

BIRMINCHAM SHOW

ANNUAL EXH

DECEMBER 5, 6, 7, 8, 9, 10, 1906 MCCLAVE and SITES, Judges. Send for Premium List. DR. ELWIN BALLARD, Sec'y

POULTRY AND PET STOCK ASSOCIATION

SAM M. COOPER, Fountain City, Tenn.

The QUEEN & CRESCENT ROUTE Is over two hundred and lifty miles the shortest and twelve hours the quickest line from points reached through Chattanooga, Atlanta, Birmingham and Meridian to Shreveport, Dallas, Ft. Worth, El Paso and points reached through these gateways. Operating the most modern vestibule trains with through sleepers and dining cars to both Shreveport and New Orleans. For cheapest rates, schedules and other information apply to \therefore \therefore \therefore C. H. SMITH, Gen. Pass. Agt. New Orleans, La. J. W. WOOD, Traveling Passenger Agent - - Meridian, Miss.



the rest of the fair exhibition, races included. A crowd was surging around her pen all the time wanting even a glimpse of "that thousand dollar chicken." Ladies begged and pleaded for "just one feather," and one even tricd to bribe a poor poultry editor with 25 cents to pluck a feather from the famous hen as a souvenir. Mr. Fishel sold a nice bunch of birds to local fanciers. His strain of White Rocks are deservedly popular.

J. C. Fishel & Son, Hope, Ind., won all first in White Wyandottes. Mr. Fishel, Sr., was pleased to show his birds to all visitors, His White Wyandottes are too well known to need any favorable comment, except that his usual high quality was on exhibition. His first hen was a model in shape and color, and although several Nashville breeders tried to keep her at Nashville he refused all offers to sell her under five hundred dollars. Mr. Fishel's Wyandottes have that fine broad, blocky shape that too many of our Southern breeders are weak in, especially on the pullet side

The Eastland Poultry Yards, Shelton & Crockett, proprietors, Nashville, had some magnificent White Rocks on exhibition, winning third hen and third pen. Mr. Shelton is a lover of the White kocks and very suc-cessful in breeding them. The Eastland Yards purchased from Mr. U. R. Fishel the first cockerel at Indianapolis for \$200, the first pullet at Nashville for \$150, the second cock and hen for \$100 each, and two other pullets at \$50 each. These birds are all white to the skin, ideal in Rock shape, and birds that are strongly line bred and will very materially strengthen the already strong line of the Eastland breeding pens.

The Corno Mills Co., East St. Louis, Mo., was represented by Mr. I. B. White, of the house, and Mrs. Florence W. Forbes, of New Decatur, Ala. A liberal supply of samples of this company's excellent Corno products was given every interested visitor. "The Feed that is all Feed" is well known to all fanciers and many new friends learned of its excellence. Orders were taken for about thirty tons of feed, which is good when it is remembered the buyers were mainly in small lots. Mr. White informs us that nearly every poultryman and fancier who visited the show bought at least a trial order, so well pleased were they with the Corno goods on inspection.

One of the centers of attraction was the brooder shown by the Roger Brooder Company of Lebanon, Tenn., from which floated proudly the blue ribbon, showing it the first prize winner. This brooder was pronounced by expert poultrymen and women who attended the fair as the nearest approach to perfection in this line that they had seen, and Walter Rogers had testimonials from a number of them evidencing their appreciation of this machine. The brooder is the result of long study and many experiments on the part of Walter Rogers, who knows the poultry business and its needs from the ground up. He has worked a long time to produce a brooder that will raise the chicks after they are hatched, and that he has succeeded most admirably is the verdict of all who know the requirements in this most important branch of the poultry industry. Many entirely new features appear in the Rogers brooder, such as correct ventilation ,the contact form of the hover, ease in cleaning, accessibility of all the parts, and a number of other valuable points.

Advertise in THE INDUSTRIOUS HEN.

The INDUSTRIOUS HEN

THE AGRICULTURAL EXPERIMENT STATION OF THE UNIVERSITY OF TENNESSEE

Carries eight varieties of thoroughbred birds from whose pens we are able at all times to furnish eggs, trapnested and true to breed.

Pen No.1—White Wyandottes.

Headed by a fine cockerel true to type and color and properly mated to twelve handsome females. These birds possess both beauty of form and color and have proven themselves prolific egg producers. Up to weight and pure white. Eggs from this pen \$3.00 per 15.

Pen No.2-Barred Rocks.

No finer male can be found in the South than the one that heads this pen. Typical in shape and fine in station with the real blue barring so pleasing to the eye. He is most excellently mated to only four grand females. Eggs from this pen are \$5.00 per 15 straight.

Pen No.3-Barred Rocks.

In this pen are twelve exceptionally fine hens mated for best results to most ex-cellent blocky birds of good color. They are up to weight and good egg producers. Eggs \$3.00 per setting.

Pen No.4-White Rocks.

(ANNANN

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The cock at the head of this pen is typical in shape. He is grand in size and color, and mated with due regard for results to twelve hens specially selected for size and vigor. Eggs \$3.00 per 15.

Pen No.5-S. C. B. Orpingtons.

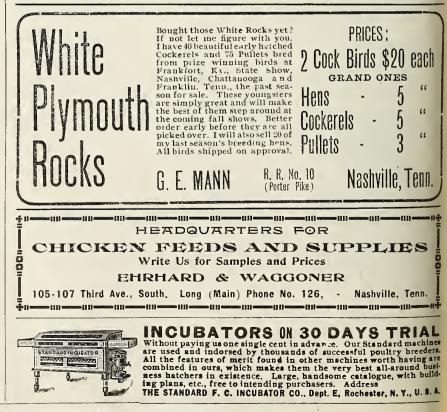
Peli N0.3—S. C. B. Orpingtons. The S. C. Buff Orpington has many ad-mirers and no one could fail to admire this handsome pen of twelve females, head-ed by a magnificent cock. The mating has been made with due regard to results. They are fine layers and excellent table fowls. Eggs \$3.00 per 15.

A pen of fifteen fine females, bred to a handsome richly colored cock. This pen is not trapnested, but mated especially for eggs. Many of these birds are of the same strain and as good as some in Pen No. 7. Eggs \$1.50 per 15.

Eggs are trapnested, numbered and dated, absolutely fresh, selected with the greatest care, properly packed and shipped same day order is received. We can furnish superior stock and eggs in limited numbers from any of

the above varieties, and can fill orders for any variety of stock or eggs. Write us your wants. Orders booked now for future delivery.

ACRICULTURAL EXPERIMENT STATION KNOXVILLE, TENN. **Poultry Department**,



WHEN WRITING TO ADVERTISERS PLEASE MENTION THE INDUSTRIOUS HEN.

Pen No.6-Black Langshans.

The male bird heading this pen is of fine size and color and the twelve females are fully up to standard weight with ex-cellent feathering and color. This mating will give fine results. Eggs \$3.00 per 15.

Pen No.7-S. C. B. Leghorns.

A pen of twelve Brown beauties headed by a richly colored cockerel. The mating would please the most exacting as due re-gard has been paid to color and size. These birds are bred for eggs and for beauty and they have measured "p to the requirements. Eggs \$3.00 per setting of 15.

Pen No.8-S. C. W. Leghorns.

This is a pen of *white* birds. The fe-males are properly mated to an active, vig-orous cock that is typical of the breed. They are fine layers and the results of the mating should he excellent. Eggs \$3.00 per 15.

Pen No.9-Rhode Island Reds.

This popular breed is a pen of prize winners, and have had a good yard to range and forage. Orders for eggs booked now at \$3.00 for 15.

Pen No.10-S. C. B. Leghorns.



Show Dates Claimed

The attention of secretaries of the coming fall shows is called to the following dates. If any errors are found they will please report the same to this office for correction.

ALABAMA.

Alabama Poultry & Pet Stock Association, Birmingham, Ala., Dec. 5-10. Dr. Elwyn Bal-lard, Secretary; Chas. McClave and Eugene Sites, Judges. Mobile Poultry Breeders Association, Mobile, Ala., Dec. 18-21, 1906. Edw. R. Hayssen, Sec-retary; N. L. Hutchinson, Judge.

ARKANSAS.

Waldron, Ark. Dec. 13-15, 1906. G. W. Brown, Judge; H. J. Hall, Secretary. FLORIDA.

Florida Poultry Association. Mrs. W. H. Miller, Wauchula, Fla., Secretary.

GEORGIA.

Piedmont Poultry Association, Atlanta, Ga. Jan. 23-29, 1907. F. L. Mixon, Secretary; F. J. Marshall, Judge. Atlanta Poultry Association, Atlanta, Ga. Dates and judges not settled. H. F. Reils, Scorptorr.

Secretary.

Georgia-Carolina Fair, Augusta, Ga., Oc 29th-Nov. 3rd. J. W. Killingsworth, Sect. Oct. ILLINOIS.

Elgin, Ill., Poultry Association. Jan. 1 to 5, 1907. F. H. Shellabarger, Judge; W. W. Brit-ton, Secretary. Macomb, Ill. Jan. 7-10, 1907. A. L. Moore, Secretary; Pierce, McClave, Tucker, Fite and Heyl. Judges.

Macono, In. Jon McClave, Tucker, Fite and Heyl, Judges. Bureau Co. Poultry Association, Princeton, Ill. Dec. 12 to 15, 1906. Chas. McClave, J. M. Rapp, Judges; Frank R. Bryant, Secretary.

INDIANA.

Indianapolis, Ind. Feb. 2-8, 1907. Lane, W. C. Pierce, Russell, Rhodes, Campbell and Baker, Judges; E. A. Pierce, Secretary. Thorntown, Ind., Dec. 17-22, 1906. Central Indiana Fanciers' Association. Peter L, Hurt,

Secretary. IOWA.

. IOWA. Cedar Rapids, Ia. Nov. 26-Dec. 1, 1906. O. W. Ilten, Secretary; F. H. Shellabarger, W. S. Russell, U. J. Shanklin, Judges. Dunlap, Ia. Dec. 26-29, 1906. E. R. Cad-well, Secretary; Geo. D. Holden, Judge. Lorimor, Ia. Dec. 13-15, 1906. Geo. Loch-rie, Secretary; F. H. Shellabarger, Judge. Mordezuma, Ia. Dec. 4-7, 1906. J. D. Smith, Secretary; J. L. Ladd, Judge. McCallsburg, Ia. Dec. 11-14, 1906. F. P. Pierce, Secretary; J. L. Todd, Judge. New London, Ia. Nov. 20-23, 1906. F. L. Clawson, Secretary; W. S. Russell, Judge. Villisca, Ia. Dec. 5-8, 1906. F. M. Childs, Secretary; W. S. Russell, Judge.

KANSAS.

Parsons, Kas. Dec. 3-8, 1906. C. S. Forcum, Secretary; Adam Thompson, Judge. KENTUCKY.

Owensboro, Ky. Dec. 31-Jan. 6. Fra Heck, Judge; D. O'C. Dougherty, Secretary. Warsaw, Ky. Nov. 21-24, 1906. W. Pierce, Judge; J. W. Abbott, Secy. Frank

LOUISIANA

Monroe Poultry & Pet Stock Association, Monroe, La., Dec. 6-8, 1906. E. S. Eby, Sec-retary; H. W. Blanks, Judge.

MASSACHUSETTS.

Boston, Mass. Jan. 15-19. S. L. Roberts, Secy., South Attlebury, Mass. Worcester, Mass. Jan. 23-26, 1907. Fred Midgley, Secretary.

MICHIGAN.

Ann Arbor, Mich. Jan. 28-Feb. 2, 1907. G. R. Cooper, Secretary; Tucker & Campbell, Judges.

Judges. Dowagiac, Mich. Dec. 5-8, 1906. J. L. Bilderback, Secretary; Frank Travis, Judge. Jackson, Mich. Dec. 4 to 7, 1906. C. W. Kroosz, Secretary; James A. Tucker, Sharp Batterfield, F. W. Travis, Judges.

MISSOURI.

Gordonville, Mo., Dec. 31, 1906, to Jan. 3, 1907. D. T. Heimlich, Judge; G. S. Summers, Secretary.

Secretary. Humansville, Mo., Dec. 11-14, 1906. C. M. Briggs, Judge; L. E. Walton, Secretary. Pleasant Hill, Mo. Missouri State Poultry Association. Dec. 11-14, 1906. khodes and Russell, Iudges; T. E. Quisenberry, Secre-tarv, Slater, Mo. St. Joseph, Mo., Jan. 21-27, 1907. C. H. Rhodes, Adam Thompson and Chas. Heuschle, Judges; E. L. McDonald, Secretary.



M. A. SUMMERS MANUFACTURER

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KENTUCKY SO. CARROLLTON. . .

-11-

FLOOD'S ROUP CURE **CUARANTEED**

Simply put the Cure in drinking water, and the fowls take their own medicine. Flood's Roup Care will cure colds, roup and canker in chickens, turkeys and pigeons. 50e and \$1.00 per package, postpaid. A 50c package makes 50 gallons of medicine. If your fowls are sick write us their symptoms, and we will tell you their ail-ments, and how to cure them. Flood's Roup Care ouly manufactured by W H ELOOD Doot A

W. H. FLOOD, Dept. A, No. 7509 Woodland Ave., Cleveland, O., U. S. A.

-----Hiles MODEL INCUBATORS WILL HATCH AT STATE FAIR. BEST ON EARTH. CAT-ALOGUE SENT FREE FRITH & CO., State Agents, 147 Second Ave. North, Nashville.

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You're the Fellow We're Laying For"

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EVERY GRAIN

In direct contrast to the usual in-mixed

Poultry Feeds

CORNO

Is an absolutely pure combination of the best

grains, free from dirt

and chaff. It is this

distinctive feature that

has placed it so quickly

IN THE LEAD

Its superiority over all other SPECIAL mixed

feeds can be conclusively demonstrated by a short trial. On receipt

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THE FEED THAT IS ALL FEED

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THE OPEN DOOR

Official Organ of the Tennessee W. C. T. U. Should be in every family of the South. May save husband, father, brother or son from a drunkard's grave. Printed monthly for 25c a year.

MRS. M. C. BAKER, Editor R. D. No. 6. KNOXVILLE, TENN.



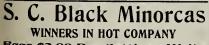
JNO. W. MATTHEWS CEDER OF Black-Breasted Red Game Bantams

Winners at Atlanta, Ga., 1905, 3d and 5th Cock, 2d Hen, 2d Pullet, 2d Pen, in hottest competition. For stock and eggs address 28 ASHBY ST. ATLANTA, GA.

S. C. RHODE ISLAND REDS Reds that are winners. Exclusively bred for their distinct color, laying, utility and show qualities. Some nice cockerels now. Rgg § § per 15, § per 30. Correspondence solicited. **T. M. NESBITT**, 908 South 29th St., Birmingham, Ala.

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Eggs \$2.00 Per Setting. Write WM. LAMBERTS

MADISONVILLE, TENNESSEE "I'll treat you right."



MISSISSIPPI.

The INDUSTRIOUS HEN

Aberdeen, Miss., Jan. 1-4, 1907. F. J. Marshall, Judge; J. W. Eskridge, Secretary. NEBRASKA.

Platte County Poultry and Stock Associa-tion, Columbus, Neb. Dec. 4 to 7, 1906. Thos. W. Southland, Judge; P. J. McCaffrey, Secy. NORTH CAROLINA.

NORTH CAROLINA. Charlotte Poultry Association, Charlotte, N. C. Jan. 14-19, 1907. W. B. Alexander, Sec-retary; G. O. Brown, Judge. North Carolina Poultry Association, Greens-boro, N. C., Jan. 8-11, 1907. J. S. Jeffreys, Secy.; W. C. Denny, Judge. Monroe Poultry Association, Monroe, N. C. T. P. Dillon, Secretary. Jan. 8-11, 1907. Geo. O. Brown and Geo. W. Mean, Judges.

NEW YORK.

Philmont, N. Y. Dec. 4-7, 1906. G. J. Anderson, Secretary.

OHIO.

Cincinnati, O. Jan. 15-19. T. J. Foy, Secy. Greenfield, Ohio. Dec. 31, 1906, Jan. 5, 1907. Lee W. Devoss, Sccretary; D. J. Lam-bert, Judge. Lima, Ohio, Jan. 2 to 5, 1907. Ed. Helser, Secretary; Judges J. E. Gault and C. E. Cram. Mount Vernon, Ohio. Second week Decem-ber. Geo. H. Brown, Secretary; Ira C. Keller, Judge

Mount Vernon, Ohio. Second week December. Geo. H. Brown, Secretary; Ira C. Keller, Judge. McConnelsville, Ohio. Dec. 18-21, 1906. Frank Sheridan, Secretary; T. E. Orr, Judge. Oak Harbor, Ohio. Jan. 15-18, 1907. N. H. Blecker, Secretary; Chas. E. Cram, Judge. Painesville, Ohio, Jan. 9-11, 1907. D. J. Lamberts, Judge; Ira M. Crowther, Secretary. Ravena, Ohio. Dec. 19 to 24, 1906. H. A. Beck, Secretary; J. E. Gault, Judge. Sidney, Ohio, Jan. 8 to 12, 1907. Earl Lee, Secretary; Judges J. E. Gault and C. F. Cram. Springfield, Ohio. Jan. 28-Feb. 2, 1907. Albert Seitz, Secretary; Ira C. Keller, Judge. Toledo, Ohio, Jan. 24 to 28, 1907. A. T. Baker, Secy.; Judges J. E. Gault and others.

OKLAHOMA.

Enid, Okla. Jan. 8-12, 1907. Fred Roy Ziller, Secretary; C. A. Emry, Judge. Oklahoma City, Okla., Dec. 12, 1906. T. E. Shaw, Secretary.

PENNSYLVANIA.

Scranton, Pa. Jan. 14-19, 1907. A. W. Close, Secretary; Drevenstedt, Pierce and Stanton, Judges.

SOUTH CAROLINA.

Charleston Poultry Association, Charleston, S. C., Nov. 5-10. T. J. McCarty, Secretary; F. J. Marshall and Geo. O. Brown, Judges. Greenville Poultry, Pigeon and Pet Stock Association, Greenville, S. C., Jan. 15-18, 1906. W. G. McDavid, Secy.

TENNESSEE.

TENNESSEE. Middle Tennessee Poultry Association, Co-lumbia, Tenn., Nov. 27-30. R. S. Hopkins, Secretary; F. J. Marshall and W. F. Maury, Judges. Chattanooga Poultry Association, Chattanoo-ga, Tenn. W. F. Maury, Secretary; Geo. O. Brown. Judge, Dec. 12-15, 1906. Franklin, Tenn. Jan. 7-12, 1907. T. M. Campbell, Judge; E. C. Truett, Secretary. Greenfield Poultry, Pigeon & Pet Stock As-sociation, Greenfield, Tenn. Dec. 27 to 29, Silas L. Johnson, Secretary; R. E. Jones, Judge. East Tennessee Poultry Association, Knox-ville, Tenn., Dec. 11-14, 1906. John T. Oates, Secretary; F. J. Marshall, Chas. McClave, Judges.

Secretary; F. J. Marshan, Judges. Madisonville, Tenn., Nov. 14, 15. R. F. Hudson, Secretary. Tennessee State Show, Nashville, Tenn. Jan. 14-18, 1907. F. J. Marshall, C. H. Denny, C. H. Hansen, Judges. J. A. Murkin, Jr., Secretary. Secretary. TEXAS.

Temple, Texas. Dec. 11-14, 1906. Mrs. W. E. Matthews, Secretary; H. B. Savage, Judge. Dallas, Texas. Jan. 8-12, 1907. F. J. Marshall, S. B. Lane, Judges; Elbert Beemon, Marshall, S. Secretary. Dec. 3-5, 1 Tyler, Texas. Dec. 3-5, 1 Clung, Secretary. VIRGINIA. Dec. 3-5, 1906. Allen Mc-

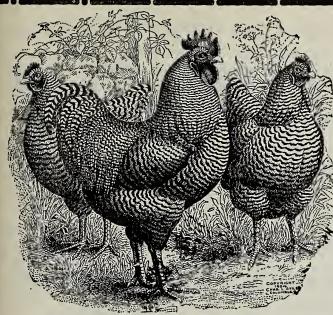
Harrisonburg, Va. Dec. 4-6, 1906. G Brown, Judge; C. O. Hunson, Secretary. Geo. O. WEST VIRGINIA.

Clarksburg, W. Va. Feb. 5-8. T. E. Orr, Judge; W. H. Lewis, Secretary. WISCONSIN.

Oconomowoc, Wis. Dec. 7-13, 1906. Chas. Behrend, Jr., Secretary; J. A. Tucker, H. Van-slow, Judges. Oshkosh, Wis. Feb. 1-7, 1907. J. F. Irvine, Secretary; Chas. McClave, J. A. Tucker, Judges.







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For this reason and with these facts known to the entire South, I will say without fear of contradiction, I have the

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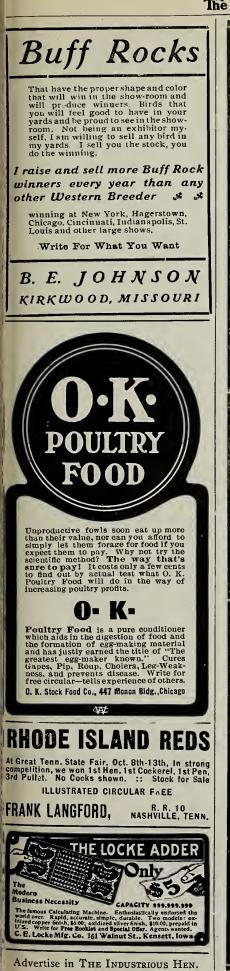
At Huntsville, Ala., December, 1905, I won ck. 1st; ckl. 1, 2, 3, pullets 1, 2, 3, pens 1, 2, with F. J. Marshall, Judge. I can and will furnish winners for any customer for the coming season. I can furnish cocks, cockerels, hens or pullets fit to show in any competition. Will make prices right, with quality considered, will guarantee satisfaction or your money back. Write your wants and mention the dear HEN.

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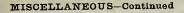
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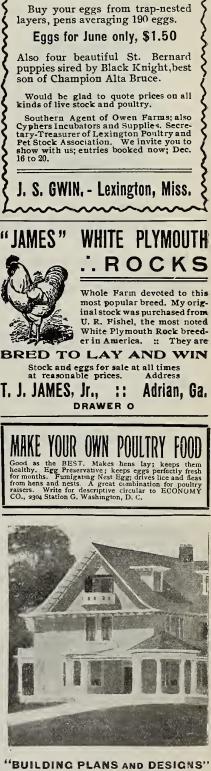
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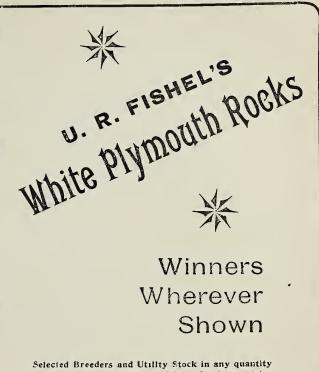
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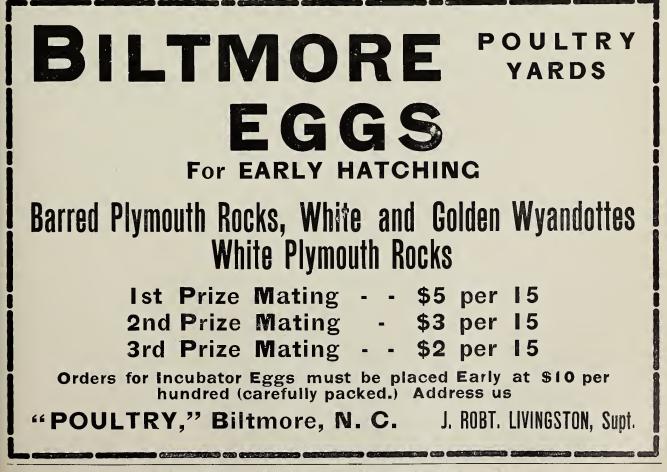
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