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The LEGHORNS

**WHITE
BROWN
BUFF**

**BLACK
AND
DUCKWING**

RELIABLE POULTRY JOURNAL
PUBLISHING COMPANY
QUINCY, ILL. U.S.A.

THE LEGHORNS

BROWN, WHITE, BLACK,
BUFF AND DUCKWING.

***An Illustrated Leghorn Standard, with a Treatise on Judging
Leghorns, and Complete Instructions on Breeding,
Mating and Exhibiting.***

***CONTRIBUTED TO BY AMERICA'S MOST SUCCESSFUL AND BEST KNOWN
JUDGES, BREEDERS AND EXHIBITORS.***

PUBLISHED BY
RELIABLE POULTRY JOURNAL PUBLISHING COMPANY,
QUINCY, ILLINOIS.

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PRIZE WINNING SINGLE COMB WHITE LEGHORNS.

White King and White Rose, Winners at Madison Square Garden, New York, Jan. 1901. Owned by the White Leghorn Poultry Yards,
Waterville, Oneida County, New York. Painted from life by Franklane L. Sewell.

THE LEGHORNS—INTRODUCTORY.

*A Favorite Family Fowl, That is Equally at Home on the Farm and in the Show Room—A Glance at Their Present Standing, With a Few Remarks on Type and Color—The Standard Down-to-Date—
Browns, Whites, Blacks, Buffs, Duckwings.*

LEGHORNS, figuratively speaking, cover the earth. Take the world over, and Leghorns, perhaps, are better known than any other existing breed. Games may be more widely known, but further than the knowledge that a Game is a Game (and in most minds a Pit Game at that), the average man or woman knows little of its characteristics, inquiry into these points being left to the fancier. On the other hand, go into the smallest village of Europe or America and the Leghorn will be found crowing as cheerily, strutting as proudly, and flying the fence as aggravatingly as here in the center of chicken-dom, and every man, woman and child will tell you these are some of its characteristics and will add with the greatest assurance—"it is the best layer on earth."

There is no doubt that continual selection of this breed for egg production has been the means of placing it at the front in that respect. As a general thing the average citizen, speaking of a layer, has in mind the Leghorn, and knows no other; yet the type of Leghorns differs in each country. If an English bird were placed beside an American production, there would be seen few points of similarity except, perhaps, in color, and this dissimilarity in types of Leghorns is one of the points we are aiming at in this article.

LEGHORN STANDARD—PAST AND PRESENT.

If there is one thing more effective than another in killing the popularity of a breed it is the dissension caused by the varied opinions of judges upon points which are not made clear in the Standard of Perfection. In this particular, Leghorn breeders may congratulate themselves, for, by the efforts of prominent breeders, additions have been made to the Leghorn Standard such as will dissipate many of the foggy elements it contained.

Five years ago James Forsyth, speaking of his favorites, the Brown Leghorns, and of the "weak-kneed Standard," said, "We have too few definite requirements in our standard of Brown Leghorns. The rest is open to the opinions of various poultry judges, which vary materially. For instance, the standard calls for the hackle in the male to be a brilliant or orange red, no preference being given. Which is to receive the cut? That is left to the opinion of the judge. Same in saddle. Wing primaries black, lower web MAY be edged with brown. Is there any objection to stating whether it shall or not? Yes, the judges will fix that all right." * * * "Comb evenly serrated; nothing said about number of serrations," * * * "and so it goes on, leaving as much leeway as possible to the opinion and notion of the judge."

Such criticisms as these do much good if they are backed by action, and judging by the improvement of the present standard those few digs turned up some rich soil. The word "orange" has been struck out of the hackle section of males, leaving it "rich, brilliant red," thereby giving the preference Mr. Forsyth desired; similarly in regard to the saddle. The lower web of the wing primaries MUST now be edged with brown in accordance with that gentleman's wish, and the serrations in the comb, of which he spoke, have been fixed at five. Good kicking, indeed.

Judge Shellabarger four years ago said he was at a loss to know how many points were allotted to color and how many to shape of earlobes, the total value of both being placed at six points, so he had to do the best he could under the circumstances. It is likely the value he placed upon color and shape would not correspond with that of another judge, which fact caused him to add that he was not satisfied with the standard description, and that "breeders and judges are equally at sea when it comes to saying what the shape should be where no description is given in the standard as to form, size, etc."

These are points yet to be settled, as Mr. Shellabarger's suggestions have not been carried out. There are many other additions he suggested, such as allotting a stated value to shape and to color of legs and toes, which now are lumped at seven points, but these things are yet to be accomplished.

At the annual meeting of the American Poultry Association, held at Toronto, Canada, in 1899, some important changes were made in the Leghorn standard. As the revised standard of 1898 reads, "White in the face of cockerels or pullets" in Brown Leghorns is a disqualification. At Toronto this disqualification was extended to include all varieties of Leghorns except Buffs. In the disqualification for "White or Gray" in the plumage of Brown Leghorns a change was made by striking out the words "or Gray," so that Gray in plumage does not now disqualify. The color of the back of the Brown Leghorn female was made to read "light brown, penciled with a darker brown," this change being simply the addition of the word "light." The tail coverts of the female were similarly described.

As we have remarked, Leghorn breeders are to be congratulated upon the improvement they have obtained in the standard.

THE LEGHORN TYPE IS SECURE.

Breeders and exhibitors have not yet that confidence which assures them that so long as they follow the instructions of the standard they are safe to exhibit under any and every judge. The ideals of individual judges is what is causing the trouble, and even at this late date the exhibitor wavers at the thought that his bird may be deemed unworthy of a place, because it is not the judge's ideal. When we consider the many changes the standard has undergone, the many controversies we have read in the poultry press, the opinions of judges, which, as exemplified in their awards, seem to be contradictory, is it any wonder the fancier and exhibitor tremble for his well-considered opinion. Still we have become impressed that leaving out the many little side issues which affect judges' work, there is a wonderful unanimity among breeders, exhibitors, and judges, as to what the ideal type of Leghorn shall be and is. We have good reason for this impression. We thoroughly understand the feelings of a fancier who has endeavored to mold his ideal upon that of acknowledged leaders in the fancy, and who has strenuously guarded against the slightest departure from the standard type of Leghorns, and we think we can increase his confidence, and ease the minds of exhibitors generally, by

drawing their attention to the fact that upon this continent at least the type is really fixed, and that there is no ground for fear upon this main question.

The Reliable Poultry Journal, aiming to secure unbiased opinions upon the shape of Leghorns, obtained from Franklane L. Sewell, drawings of a Leghorn male and female, which embodied the best shape sections possessed by several live models. These drawings were submitted for criticism to prominent breeders and judges, and their criticisms form some of the most valuable material in this book. The opinions are given by men who control the destiny of the fancy Leghorn business and are therefore authoritative. They are not the opinions of a few unknown breeders, but of men who have won at New York, Boston, and the other big shows of the country. Sixty-eight first-class breeders, exhibitors and judges passed judgment upon the shape of the male, and fifty-five upon the female outline. With what result? The following:

THE AMERICAN LEGHORN.

It is clearly proven that notwithstanding prizes are awarded in the show room upon totally different types of the same breed—notwithstanding that varying types of birds in many a breeder's yard have been said to possess the ideal type of the breed, and notwithstanding the fact that these supposed-to-be impressions have caused doubts as to the real type—just so soon as there are no side issues, but open unprejudiced popular opinion, the type of Leghorn is so clearly and so indelibly defined that the horizon of our Leghorn Kingdom is immediately freed from every vestige of cloud, leaving only the proverbial silver lining.

Mr. Sewell's drawing was made for criticism, and received it. The loss of anything so familiar as the sprightly American type of Leghorn could not be countenanced, and a large number of the critics complained of the blocky style of bird that had been portrayed in the male. "Too Minorca-like in comb and tail," was the general opinion, clearly expressed. Forty-five fanciers said the comb was too large in front, or on the whole, and not one dissentient word was written. Think of that—45 to 0 in favor of a Leghorn comb on a Leghorn, as distinguished from a beefy follow-the-neck comb of the Minorca. "Wattles too long," said twenty-two breeders, and no one disputed them; "the earlobes also large," said a majority. Sixteen exhibitors said the neck was either arched too much or was too full, too heavy, and there was no one to object. The sloping Minorca-like back, with insufficient saddle filling caused objections by fifteen writers, and the low tail was weighted down by the testimony of twenty-three, who wished it to be carried upright, as the standard provides; while twenty-seven wished the legs were longer, and less stout. Among the whole sixty-eight there were only six who did not feel disposed to criticize the shape of the bird, and we suspect they refrained from doing so only because of the high opinion they have of the artist's work.

With regard to the female's outline, a similar feeling existed, the general impression being that the back and the tail were too long, the latter not being sufficiently spread. It would serve no purpose to particularize as we have done in the case of the male. One instance is sufficient as the criticisms of the female's shape is published in this book.

In the face of such testimony we have no doubt as to the future of the Leghorn type or shape in America; unity of opinion exists, and even though the surface may at times appear ruffled and obstinate, the undercurrent is strongly set in the one direction.

SINGLE AND ROSE COMB BROWN LEGHORNS.

We believe the Single Comb Brown Leghorn holds the American type better than any other variety. It is still a

little short on the leg, and at times a blocky bird is exhibited, but take the average shows and the Brown Leghorn is easily in front of all breeds in its uniformity of type. It is to be hoped that in the endeavor to get them up in size, which is now prevalent, the sprightly form will not be lost sight of—but in the face of the testimony above mentioned we have no fear.

In color, Brown Leghorns cannot boast a similar uniformity. Males of various shades of hackle color are frequently found in the show room, in addition to which many of them have the lower portion of the neck feathers several shades lighter than the upper. The saddle feathers in such cases are usually off-color, too. Well striped saddles are few, although for years they have been the goal of breeders of the Browns.

In females the greatest contrast is in the back color. The darker birds are more numerous, probably having been bred from cockerel matings. It takes a good judge of color to go through the female class in the Brown Leghorn alley and to select the correct shade. It seems just as difficult to find a well striped hackle on the female as it is to get a good saddle on the male. The stripe of the male saddle when it does appear is usually free from penciling, while the female's hackle stripe is nearly always penciled more or less with orange. We have seen a few birds without the defects mentioned, but the Leghorn world yet offers a remunerative industry to those who can breed them.

The Rose Comb Brown is still behind the Single Comb bird in size, and can well afford to be enlarged even if the increase in size does add a little extra bone to the leg. In breeding for color the difficulties to be met are similar to those encountered in the Single Comb Browns.

SINGLE AND ROSE COMB WHITE LEGHORNS.

The Single Comb White Leghorn, so far as the male goes, follows pretty much the Leghorn type and little objection can be raised to it on that score, but when we come to the female we find in a large number of cases the tail is less spread than in her brown sister. This gives it the appearance of extra length. It would be much improved by being spread, as is the brown; this would also help the shape of the back. The sprightliness of the Leghorn is there all right and the tail will come.

Everybody knows the difficulty of securing a yellow leg on a white bird, but we believe the White Leghorn is not far behind the Brown in color of leg, although in either variety the acquisition of a bright yellow leg is by no means child's play. Such legs are not prevalent, except in the creamy colored whites, where they approach perfection.

The Rose Comb White in shape and size compares with the Single Comb, as does the Rose Comb Brown with the Single Comb Brown. In color the Single and Rose Comb birds have the same obstacles to overcome.

BLACK LEGHORNS.

The Black Leghorn is coming to the front slowly but surely, and its recent advance can be traced to the wisdom of fanciers who have determined that it shall be a Leghorn and not a Minorca.

Fanciers as a body object to establishing two breeds so much alike as to be barely distinguishable. The elimination of White Javas from the standard is a good instance of the strength of this feeling. The Black Leghorns were likely to have received their deathblow upon parallel grounds, and fanciers of that variety have had their work cut out avoiding this obstacle to the realization of their hopes. It was a danger they all saw—the similarity of the Black Leghorn and the Black Minorca, and the wiser among them determined to steer clear of it; they are surely directing their bark away from the troubled waters, but not without opposition from

those who do not see the danger. There are some who have found it difficult to produce an ideal Black Leghorn. They would like to have a Black Leghorn with black legs, because they find it difficult to breed yellow legs without also obtaining white in the flights and sickles. As sure as the Black Leghorn is bred so like the Minorca in legs, so sure is its death in the fanciers' world accomplished. It is difficult enough at all times to avoid the Minorca comb and it is none the less difficult to secure the Leghorn type of body. The distinguishing line can be most clearly drawn by producing the yellow legs. We have seen Black Leghorns exhibited during the past two years that have been Leghorns in shape, Leghorns in comb and Leghorns in legs, and a cockerel possessing these three characteristics was one of the most attractive birds it has been our pleasure to see.

The Reverend T. W. Sturges, B. A., writes in the Feathered World that "Until quite recently they were not extensively bred in England and were rarely seen at exhibitions of poultry. They have been the last of the many varieties of the Leghorn to have separate classes assigned to them at the Dairy and Palace Shows. At the Dairy in 1894 the A. O. V. class to which they were assigned had to be cancelled, as only eight entries were made in two classes. In 1895 there were twenty entries in the A. O. V. Leghorn class, of which I believe seventeen were Black. For the last two years only have separate classes been formed, with the gratifying result that twenty-six were entered in 1897 at the Dairy, and twenty-two at the Palace, and eighteen entries each in 1898 at either show. At the Leghorn Fanciers' Club Show at St. Alban's last year there were no fewer than forty entries of Black Leghorns, probably the best collection ever got together, the number of blacks being in excess of any other variety of Leghorns, and almost equalling the combined entries of the two leading varieties, the white and the brown; and at a local show at Stratford in January, 1899, there were no fewer than twenty-seven entries of Black Leghorns." The reverend gentleman adds that, "During a holiday cycling tour last year in Switzerland, chiefly in the Canton of Zurich and through the Engadine, I saw thousands of Black Leghorns. On inquiring the name of the fowl I was universally told they were 'Italiens.' I should probably be within the mark if I said fifty per cent of the poultry I saw were Leghorns, and that the majority of these were black. They are brought over from Italy in large consignments and sold as egg producers. I don't think many are bred in Switzerland, as I saw very few chickens. They were mostly adult birds kept for the express purpose of egg producing, and fresh batches are purchased each year. There are very few poultry 'fanciers' in Switzerland, but no attempt was made, so far as I could find out, to keep the birds pure. They formed the ordinary farmyard stock, running about with other breeds, and were kept for utility only. There is, I think, little doubt that they are a pure variety of long standing, not a made variety like some other of the minor breeds of Leghorns, and the work of the English fancier lies more in the direction of careful selection than in the introduction of alien blood."

It is left to the American and English fanciers to improve this bird by intelligent selection, and now that the start has been made in earnest, the outcome is assured.

BUFF LEGHORNS.

The Buff Leghorn has a long way to go before it attains the standing of the Brown in the matter of shape. For some years after their introduction the majority of Buffs shown possessed low set heavy frames and large combs. In the males this trouble has been especially noticeable, the Minorca-like comb being present in all its glory, but more or less wrinkled and thumb marked. The lobes have possessed more red than the standard provides for and have been

in many cases extremely rough. The bird, too, has been set upon short legs, so that, although it has approached the Minorca in form, it has possessed a more squatty appearance. The female has been similar in shape with a long body, enormous comb, lobes slightly better than the male, but the tail has been long and closely folded. In this particular the difference between it and the standard description has been more pronounced even than in the White Leghorn. The Minorca comb on the female had, of course the representative front loop.

In recent years fanciers in trying to get away from this low set, blocky, long bodied type of bird have produced a much smaller Buff Leghorn, which is no larger nor longer on the legs than the older varieties. With the foundation of the large body which we have mentioned there was a grand opportunity to keep the size in the Buffs, especially as the color advanced so quickly. We believe the length of leg and the reduction in size of comb could be obtained upon those strains which have not been hurriedly reduced in size, and this, with particular attention to type, would result in a Leghorn that would have an especial advantage over its sister varieties in point of size. We would impress upon the breeder, however, the importance of maintaining the shape and style of the Leghorn even if it is done at the expense of size.

The exact shade of the Buff Leghorn has been a point of contention for some years. It has had, however, in this particular, the advantage of being grouped with several other Buff breeds, and the argument has been carried on generally with all these breeds in the field. It has been a question of what shade governs, and we think the Leghorn has taken the lead in fixing the color during the few years it has been exhibited. Perhaps the closer feathering of the breed gives it a different appearance to that of other buff breeds. Be it what it may, there is no doubt the Buff Leghorn has approached nearer the correct shade of buff and has produced a greater percentage of chicks true to color than any other buff breed has done in the same time, even including the Buff Cochin of long standing.

We think the question of which is the proper shade need not bother the fancier much. It is like gold mining—there is often a doubt as to whether the metal turned up by the prospector is, or is not really gold, but once let the real thing come to the surface and no doubt remains. When the correct shade of buff is once seen there is no doubt as to its genuineness, and when judged without bias, neither cinnamon nor a mealy washed out shade has any standing beside it.

SILVER DUCKWING LEGHORNS.

The Silver Duckwing Leghorns, although showy birds, have not commanded the attention one would expect. Their affinity with the Duckwing Game and similarity of color may account for this. They are seldom shown and little bred. Although the female breast is described by the standard as light salmon, there is a great difference between it and the rich salmon of the Brown Leghorn, the first named approaching the paleness of the Duckwing Game, while the "rich" salmon in the Brown Leghorn's breast is supposed to designate a far darker shade—another opening for a definite expression of color by the standard.

Strict attention must be paid to shape (or type if you like it) in this variety, if it is desired to make it a credit to the Leghorn class.

Take the Leghorns as a whole and we believe they approach nearer to standard typical shape than any other class outside of the Game. This is a feather in the cap of Leghorn fanciers, and it matters little whether that feather be plucked from a Brown, White, Black, Buff or Duckwing Leghorn.

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LEGHORN MALE SHAPE—By Sewell.

Comprising the Best Points of Several Live Models as Illustrated by Franklane L. Sewell for the Reliable Poultry Journal, and Submitted to Sixty-eight Prominent Judges and Breeders for Criticism Based upon Standard Requirements.

LEGHORN MALE SHAPE.

Criticisms of Foremost Judges and Leghorn Breeders on a "Composite Ideal from Live Models," as Drawn by Franklane L. Sewell—A Collection of Opinions that are in Themselves Authority on the Ideal Shape of a Standard-bred Leghorn.

From the Reliable Poultry Journal.

THE following comments on Mr. Sewell's conception of standard Leghorn male shape show that the Leghorn breeders of the country are loyal to their favorites. Notwithstanding the fact that we have more breeders of Plymouth Rocks than of Leghorns, still the Leghorn breeders who have responded to the Journal's request for criticisms of the male Leghorn shape presented by Mr. Sewell exceed in number those who responded on Plymouth Rock male shape by over twenty per cent. These criticisms, to the number of sixty-eight, are submitted herewith.—Editor.

I. K. Felch, Massachusetts, judge and breeder: "The head is not quite large enough and the comb is set too far forward. The first point is not prominent enough; the middle point should always be the largest and longest. Rear point is a trifle too large and long, but if it is reduced the rear flange will be too long. The comb should be slipped back, rear flange shortened, comb elongated in front of first point and first point lowered. Wattles shortened about one-fifth and front of throat and upper breast narrowed a trifle. The fullest part of breast should be exactly in front of the center of wing bow. The tail proper is spread a little too wide. Had it been made with two more feathers and not been fanned out quite so much it would be better. It shows the feathers themselves too wide for the length in the tail proper and there should be at least five side hangers instead of only three prominent ones. Close the tail ten per cent so that it will not appear so wide at the tips of feathers proper. While I should like the leg to be apparently longer, I think if we demand that birds shall equal this one and cut them if they fall short in this particular, it will not be long before the bone will be larger. You know our Leghorns' shanks are really small. Reduce size of hock and leg, which will give greater apparent length. The right leg and hock are a trifle thick; the length is right, I think."

F. J. Marshall, Ohio, judge and breeder: "In regard to the Sewell drawing of the Leghorn male, would say I find but little fault with it. First, the beak seems a little short and the comb runs too far front on the beak. Head a little small. Comb is about right to my notion. Neck good. Back too much on a slant, should run a little straighter back from neck, and be filled in a little more at juncture with tail, not too much angle there. Breast good. Body and wings good, tail spread a trifle too much up and down and a little too long out from tip of wings, which makes the bird look too long from center of breast to rear of tail. However it is the best all-round one we have ever seen."

H. S. Babcock, Rhode Island, judge and breeder: "The Leghorn cock is in many respects admirable. The following changes, however, would bring the cut nearer the standard ideal and nearer the ideal of some breeders, I think: First, comb could be reduced a trifle in height with advan-

tage; second, neck be made more slender; third, thighs a bit longer; fourth, tail more erect. Upon this fourth point I am aware that breeders have been attempting to secure the carriage of the tail somewhat as represented in the cut, but a Leghorn naturally carries his tail very erectly, and the standard demands that it should be so carried. The description, 'Tail large, full and carried upright,' is hardly met by the cut, the carriage of the tail as represented being more nearly like that we find in Hamburgs, though we prefer in Hamburgs a tail less upright than in this cut. I should prefer the wattles not quite so long as represented in the cut, though the standard requires that they be long, and I should also prefer them to be somewhat rounder in outline. I think both of these changes could be made and yet have the wattles conform to standard requirements. While I have pointed out what seem to me to be defects, I desire to express my admiration for the cut, and I am certain that if a Leghorn male exactly conformed to this cut, and had good color, there would be little danger of his being served upon the table to satisfy the cravings of hunger."

F. H. Shellabarger, Iowa, judge and breeder: "In our judgment this is the best outline we have seen. A trifle more concave to the saddle, also a little more development of fluff would break up the shallow look of the outline at the tip of wings when viewed for depth. The tail would stand to be elevated just a trifle and not be out of harmony with the reading of the standard. The wing tips are shown a trifle low. We consider the outline in all other respects up to our fancy as based upon our understanding of the standard."

Theo. Hewes, Indiana, judge and breeder: "There are few better ones, but as we are after perfection we can usually find fault with what we have. The faults I find in this bird are that it is too short on legs, comb too large and coarse, wattles too large, and main tail just a trifle too short. The tail is carried at about the proper elevation, but should have a little more added to it. We want a Brown Leghorn to look active and sprightly and well up on his legs, but they have been running down in size. I am willing to accept a heavier bird than we have been finding, and for this reason find no fault with the large legs and frame of this cut. I think the majority of breeders prefer something on this line, but they will call for a longer leg than this cut shows. We do not want the Minorca comb by any means. We want a small comb, that is, small when compared to a Minorca's, and the serrations not so prominent. The idea that we have to get a larger comb in order to keep up the egg production has about gone its rounds. The selection of the best individual layer for our breeding pens will keep the egg basket full."

D. T. Heimlich, Illinois, judge and breeder: "The only faults I can see in the picture of the S. C. B. Leghorn cockerel are that the front point of comb runs up too high

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STANDARD LEGHORN MALE SHAPE.

An Ideal Leghorn, Illustrated by Franklane L. Sewell, for the Reliable Poultry Journal, under the Suggestions of Sixty-eight Prominent Judges and Breeders—The Outcome of Criticism Upon the Leghorn Male Shape Shown on Page 8.

and is set too far forward, causing it to appear a trifle too large and angular for a Leghorn comb. This section should be nicely rounded over beak, the rear point not larger than the second point from front, as here represented. This, too, would give a better balance to the whole. The wattles seem too long for a Leghorn. The standard calls for a medium comb, and this comb and wattles tend too much to Minorca type."

C. A. Emry, Missouri, judge and breeder: "Comb, too much space from crown of head to bottom serrations. Breast should be more full and prominent. Wings, too small and outer points carried too low. Tail, too narrow at base and carriage too low. The tail on cock, 'Brutus,' suits me better. Legs stand in a very unnatural position, giving bird a twisted look. If right leg was set a trifle back and left leg a little forward, breast and entire bird would show far better Leghorn symmetry."

Charles McClave, Ohio, judge and breeder: "Head, shape good; comb, too heavy and too much like Minorca in size. Wattles and ear-lobes, good. Neck, too heavy, but otherwise good. Back, all right. Breast, outline good. Wings, good. Tail, too far back and not erect enough. Legs and shanks, shape good, except too heavy. General outline good, except too massive and more Minorca type than Leghorn."

Frank W. Breed, California, judge and breeder: "I consider this Leghorn male cut one of the most typical and best representations of the variety yet submitted to the fancy. It does not quite meet the lines of my ideal, but approaches them so closely I hardly feel justified in wishing it altered to any great extent. The blade of the comb is a little wide for depth of serrations, and these same serrations preserve too much of a straight line in meeting it. The most attractive combs are those which, were the spikes cut off at their juncture with blade, would leave us a slightly convex surface, whose lowest point would be at front of blade and vertex at base of third serration, terminating at fifth incision in a slight concave sweep, which would bring the rear point of the blade a little higher than tip of first spike, and merge at the rear in a sharp, convex end, which would gradually lose its strength in its downward course, around the rear of the blade, until it is lost in a straight line running into the head. The forward part should recede a little more from point of beak before merging into first spike. The head is a trifle long. Those ear-lobes whose edge is freest from red and which fit closest to the head are round and saucer shaped. Tail is a trifle overspread and fanned. In furnishings it carries the impression of not being fully mature. Legs are a trifle short and coarse in bone. Taking the bird as a whole he is a trifle stout—were he more slim, it would give him a longer and more airy, sprightly appearance."

George W. Osterhout, Nebraska, breeder of Single Comb Brown Leghorns: "I consider the comb to be poor Leghorn

shape, but a pretty good Minorca shape. It is too straight up in front and looks too heavy. I fancy a comb the shape of Mr. McCartney's ideal in *Reliable Poultry Journal*, except back part of it, which should be nearly like Sewell's, but raised up from neck an eighth of an inch, or possibly a trifle more. Center spike of comb ought to be directly over the eye, as I find it in the majority of good combs. This comb on proof is, to my notion, the greatest defect. I think the head should be just a little deeper, showing about a hair's breadth more face; balance of head all right. I would take just a little off the arch of the neck, for a rather long-necked bird seldom shows quite as much arch as the proof, when standing as erect as in the picture. I would also trim

"Brutus," a Winning Brown Leghorn—Owned by Judd H. Johnson.

[Referred to in the Criticisms of C. A. Emry and G. G. Wheat.]

a little off the breast at about the point of breast bone for same reason as on neck. Outside of these changes, I would be satisfied with him, though his wing might be tucked up a little at the lower end, as it is just a trifle too low, though birds with good station carry their wings a little lower at the ends than duck-shaped birds do. Tail just suits me, though not as high as I read the standard to call for, but just what we are all after."

W. S. Russell, Iowa, judge and breeder: "Comb too large and coarse, extends too far out over the beak, too full in front. The serrations are not deep enough. Head looks a trifle small in proportion with the comb. Shanks are too short, thighs are of good length."

F. B. Zimmer, New York, judge and breeder: "The worst features I note, in this Leghorn cut, are the comb

the wattles and the tail. The comb is too high and too large to suit me, or the standard either, as I understand it. It says, 'Comb, medium size.' The one in the cut savors too much of the Minorca. The wattles are too long and pendulous, they are not rounded enough. The tail should be carried a trifle higher."

Ezra Cornell, New York, breeder of Single Comb White and Buff Leghorns: "The cut is in all respects a good one, that is, it is true to the standard requirements. Any criticisms which I might make are therefore merely personal fancies. This might be, to some of your readers, misleading, but if they will look to the standard they will see

with the heavier draft horses. The tail is also not quite to my taste; it is carried about right and is about right in size, but the lower feathers are too long in comparison to the upper ones. I have before me a cut of a Brown Leghorn cockerel, also one of Mr. Sewell's productions, sent me a few days ago by Mr. George Osterhout, of Nebraska, which I prefer to the one we are considering. He is better in the three sections I have specially mentioned; more nearly in accordance with my idea of a correct Leghorn cockerel."

George O. Brown Maryland, judge and breeder, and ex-president of the American Poultry Association: "Comb

is too large for size of bird; wattles are too long; ear lobe comes too much to a point on the lower side; tail comes out of the back in too upright a way and the sickles, etc., should be a little higher; neck a little too thick; breast not quite full enough."

T. E. Sherman, New York, breeder of Buff Leghorns: "I do not feel competent to criticise the work of so eminent an artist as Mr. Sewell, but this does not exactly suit me in a few particulars. The wattles are a little too long for the width; the comb is a little too high in front, the back part is too low or follows the curve of the neck too much. The legs and thighs are a trifle too stout. Buff Leghorn breeders in the past have had to give more attention to establishing color than to any other thing, but when that is thoroughly established, then 'all other things shall be added.'

William Ellery Bright, Massachusetts, breeder of Single Comb Brown Leghorns: "Mr. Sewell and myself have so often discussed his portrayal of Leghorn type that the following criticisms will not in the least surprise him. My idea of this ideal

Leghorn is this: It has a great many features that are extremely bad and but few that are good. Taken as a whole, it seems to me that if I should ever encounter this bird in real life (and I have seen very nearly its counterpart) I should let him go with that very unique expression of our Bantam friend, Zimmer, 'He's a duffer.' I certainly hope that the Leghorn breeders will take the trouble to explain wherein this so-called ideal departs from the ideal, as the foremost breeders for the most part see it.

"The Brown Leghorn is a bird the characteristics of which provoke as little discussion as those of either sex of any variety that is worth any discussion whatever. Just why this model should be fitted out with a Minorca comb, Pit Game legs or pigeon wings is past the comprehension of one who lives with this breed of birds.

"One of the most catchy attributes of a good Leghorn male is his graceful carriage. There are several things about this model that would take away much of the jaunty air we like to see. The body is not set high enough by a long way.

Brown Leghorn Cockerel, Bred and Owned by Geo. W. Osterhout.
[Referred to in the Criticism by Ezra Cornell.]

that two birds could differ quite a bit and still be standard birds, as, for example, take the comb. What one fancier would class as a large comb another would class as medium size, etc. In this way a bird is more or less severely criticised by different judges. In case of the cut under consideration, I do not fancy its general outline, although it is as near what is called for by the standard as it would be if altered to suit me. The comb's main fault is that it extends too far forward over the beak; such a comb has a tendency to thumb marks and twists. Combs that start back on leaving the head will, nine times out of ten, be better and give the bird a more jaunty appearance. The bird is also too fully developed for a cockerel; he has the form of a well matured cock bird. Many judges are constantly calling for heavier Leghorns. I do not want a little, slim, frail bird; neither do I want a bird weighted down with meat. A Leghorn should have a quick, sprightly, trim appearance; he should compare with the Dorking and other heavily meated table varieties as our trotting or running horses compare

The thighs are buncy and muscular, resembling those of the Game varieties, while the standard calls for slender thighs. Another and perhaps the most glaring fault, is the sharp angle that the keel bone makes with the ground. This gives the back too sloping an effect. With the back sloping as sharply as this one does, it would be impossible to get that concave sweep to the tail that the standard calls for, and though so seldom seen is such a necessity to complete the graceful lines of the bird.

"While the comb itself is one that would be cut lightly, it is not the style to be copied. It is one of the high, slender sort that cannot be depended upon to keep erect itself or to breed combs that would be permanently erect. It has other quite noticeable faults. The front point is too far forward. The last two points do not keep the general direction of the others. A model comb should be lower, firmer, and should not have as much space between the top of the head and the bottom of the serrations. The neck is well drawn. The wings are very faulty. They are not broad enough just below the shoulder and are not carried well, that is, they are not tucked close enough to the body. The tail is in the main very good, but the main tail feathers should be longer and meet the sickles.

"The great misconception of the artist, I think, has been in following too closely what some winners have been and not what they should have been. Very few of the Brown Leghorn males are typical as they might be. Occasionally we see one in the show pens, but we see them even less frequently on paper."

George G. Wheat, Kansas, breeder of Single Comb Brown Leghorns: "The cut is excellent. Breeders of Leghorns may well try to get a few cockerels each year like him; yet I believe there is an opportunity for improvement both in sections and in pose of the bird. The comb is too heavy for the head, both in front and back parts. Make the first two and last serrations deeper, and lower the back projection a trifle; also make the last point a little shorter. Wattles would be better if a fraction shorter. Lobes O. K. Neck and head seem raised a little out of a natural position which, with the right foot placed in front, presents a defiant, 'eager-for-conquest' attitude, which does not belong to the Leghorn. I would prefer a position similar to that shown in the cut of S. C. B. Leghorn cock 'Brutus.'

"Cut away about one-eighth of an inch from the lower part of the body, beginning one-half inch in front of the right thigh and extending backward to about the center of the left thigh. This will give the body the appearance of breadth rather than depth and give the breast a prominent and more rounded appearance. Back good. Wings too small and short. Thighs a little long and heavy. Shanks and feet could hardly be improved. Tail would bear two or three additional coverts."

George H. Burgott, New York, breeder of Single Comb Brown Leghorns: "This cut is a very good one, and Mr. Sewell deserves much commendation for it. The head is a little scant over the eye, and if a little fuller would make a more symmetrical head. The comb is a little large, the outline fine, with the exception of the serrations, which I

prefer deeper and not as wide at the base. I also would prefer one more serration, counting five, by not counting the first or smaller serration at front of comb. The size of this comb gives it a beefy appearance, and I think all breeders of the Leghorn have worked hard and have succeeded well in decreasing the size of the male Leghorn comb. The wattles I would decrease a very little in length and add slightly to the width of them, which would make a more perfect wattle. Where the hackle approaches the back I would prefer a very little more concave sweep, but would rather leave it as it is than have too much of it. At the point of the breast bone (see nomenclature in standard) the cut is a little scant; a little fullness would add to shape. I would have the main sickles at the point where the ends start to

"Worcester 8th," First Prize Brown Leghorn Cockerel at New York, 1903. Bred and Owned by William Ellery Bright.

droop about one-quarter of an inch higher; perhaps I can make this plainer by saying this point should be the highest part of the outline of the bird's tail. This, of course, would raise the whole tail slightly and bring it a trifle closer to a horizontal line drawn across the base of the main sickles. I would add to length of thigh one-eighth of an inch and to shank one-quarter of an inch. I would jokingly say, we will have to get them sixteen and one-half hands high to suit the boys that pay the long prices. I want to say again that this is a very good piece of work, and I for one wish to extend my congratulations to Mr. Sewell."

Dr. H. W. Dorsey, Maryland, breeder of Single Comb Brown Leghorns: "The Leghorn male cut is good, but it is too thick about the neck. The comb is larger than we are trying to get them. To get smaller combs they should

recede in front and the spike should be above the horizontal line instead of falling below it and hugging the back of the head. It would be more typical, I think, if the tail was even higher than I have made it." [Dr. Dorsey cut the proof in two at the juncture of the tail and body and then set the tail forward on the back five-sixteenths or a little more than a quarter of an inch, leaving the body from rear of shanks to tail the same as it was in original cut. This elevates the tail and shortens the back. He also cut a quarter of an inch from the highest arch of the neck, tapering the cut to the comb and back.—Editor.]

W. W. Kulp, Pennsylvania, breeder of Single and Rose Comb Brown Leghorns: "The cut of the cock is a fine one, but I would take one-fifth from his wattles and one-fifth from the comb, independent of the serrations. The middle serration should be the same height as the base or blade of the comb at its highest point. I would move the serrations backward until the third or middle one was directly over the eye. There is too much comb over the beak and the first two serrations should be cut lower. The last points should be lower than the middle one, giving the comb a beautiful oval. The present comb is low enough in the first two points, but not cut deep enough. I think there is a mistake in saddle. I compared the cut to my living specimens and I find the saddle and tail in the drawing to be of a narrow-backed bird, while the front part of the body is that of a fine broad specimen. The main part of the saddle is at the side of the tail, while on a broad, properly built back it flows sidewise. If the first and second sickle feathers were moved back to where the third feather begins with the saddle carried no farther back it would be nearer perfection. Moving the sickles will lengthen the back a bit, which looks a little short now considering the thickness of neck. The angle of the tail I consider perfect for beauty of form."

S. S. Noble, Illinois, breeder of Single Comb Brown Leghorns: "I consider the cut of the Leghorn male very, very fine, and will not attempt to find any fault with same. The comb does not suit me exactly, being a trifle too far forward and too upright in front and a trifle too far to first point. I call him the finest type of a Leghorn male I ever saw on paper or in life."

C. E. Howell, New York, breeder of Single Comb Brown Leghorns: "The general outline of the bird seems short in proportion to its height, a little more length of back and a trifle shorter in neck would improve it. The comb is high; the fault lies in the distance from crown of head to the bottom of the serrations. The tail, breast and thighs are just my idea. With these few corrections it would suit me."

H. C. Young, Nebraska, breeder of Single Comb Brown Leghorns: "It is my opinion that the cut of the S. C. Brown Leghorn male bird comes nearer the standard requirements than any cut that has been given in any of the poultry magazines. It strikes me as being an ideal bird. If I should make any criticisms I would suggest that the comb is a little too full in front and does not slope quite enough to the first point, and that his legs are a trifle short, and that his tail might be carried just a little higher in order to be in touch with the large majority of the Leghorn male birds."

Charles D. Price, California, breeder of Buff Leghorns: "The drawing comes so near my ideal that I feel incompetent to criticise the same. There are a very few points which do not exactly coincide with my views, such as the legs being a little stocky. Drawing a line through the middle of the comb, at the base of the serrations, I would say

that it is a little straight, nevertheless a beautiful comb, and the head taken as a whole is a grand one. The tail also does not exactly coincide with my ideas, but as I have said before, the bird is so near the ideal that I hesitate to even offer one criticism, and were I to have the birds judged I should be willing the judge should use this drawing as a standard."

C. H. Wyckoff, New York, breeder of Single Comb White Leghorns: "The cut of Leghorn male suits my ideas exactly, for, while being fine in shape and style, it is also highly indicative of strength and vigor."

E. H. Hoffman, Wisconsin, breeder of Single Comb White Leghorns: "I think the comb is too high and beefy and follows the shape of the neck too much. The neck is well arched, but a trifle too thick. The breast and back are good, although I like the back a little longer. This would be all right if the neck were remedied. I like a little more station on Leghorn males, otherwise the cut suits me."

Oliver L. Dosch, Ohio, breeder of Single Comb White Leghorns: "Mr. Sewell has fairly outdone himself in this illustration. With but slight changes in three sections we would pronounce it perfect. In head, breast, back, legs and fluff the artist has followed the standard very closely, but the wings are too small. The standard calls for large wings. The comb is too high, the best birds have lower combs, and the tail is not quite long enough and is spread more than necessary. This style of tail is more often seen on the Brown than the White Leghorn, and to our mind is not the highest form. The back of this specimen is particularly fine. To get females with that slight cushion which is the finishing touch of the Leghorn pullet, we must breed from males which have the standard back, viz., 'with the saddle rising in a sharp concave sweep to the tail.' With this illustration as a guide, the squatty, squirrel-tailed, Game-backed specimens should be forever banished from the breeding pen."

E. P. Shepherd, New York, breeder of Buff Leghorns and secretary of Buff Leghorn Club: "Referring to the illustration of Leghorn male, I beg to say that there is too much beef in comb and wattles; lobe is a trifle too wide, the whole headgear would do a Minorca proud. In Mr. Gallinger's ad in Reliable Poultry Journal Leghorn male's head shows our ideal comb, barring the top of rear part, which is finished off too bluntly, but that may have been caused by an injury to the cut. This ideal cut from back to breast is too thick. Cut away the lower part of neck and upper part of back, making it more concave, and in my estimation the illustration could not be bettered."

George H. Gallinger, New York, breeder of Single Comb Brown Leghorns: "I think this bird a little heavy in comb. Wattles are a little narrow; breast is not quite full enough; wing bow is not covered by breast feathers; shank is a little short. In other respects I think the cut is good."

J. A. Weerts, Illinois, breeder of Rose Comb Brown Leghorns: "Tail is too low. Sickles too long and too curved. This change and the breast made a trifle fuller I think would make the bird as near perfect as can be."

Charles C. Ferris, New York, breeder of Single Comb Brown Leghorns: "Cut of Brown Leghorn male received. He is quite a Leghorn, but he would suit me better if the following changes were made: Blade of comb too wide, serrations should begin farther back from beak, rear points too large. Head and face too small. Earlobe too large; it is

nearly as large as his head. Wattles too long and attached too far forward on mandible. Breast should be fuller higher up. Fluff needs trimming off. Tail too low for standard, but it suits me. Wing a trifle small, and the front should be lowered a little. Thigh too prominent. I would lengthen shank somewhat, but perhaps when fluff was taken out he would be far enough from the ground."

Mrs. B. G. Mackey, Missouri, breeder of Single Comb Brown Leghorns: "It is with reluctance that I venture to criticise Mr. Sewell's ideal shape of Single Comb Brown Leghorn cockerel, and I confess that I should be proud to possess one so near my ideal as the cut sent. But as I understand the standard the comb is rather large, the neck too thick, the back a little short and low, the legs and thighs too thick."

William F. Brace (of Brace & Walling), New York, breeder of Single Comb Brown and Buff Leghorns: "Comb too high in front over bill; it would be better on a Minorca than on a Leghorn. Head too small for size of bird. Lobes good. Wattles too slim, not full enough. Neck too much curved in upper portion. Back good. Wings too upright in position and a trifle short. Tail would be improved if main feathers were shorter and sickles longer, and if it were carried more upright. It would then have the effect of being nearer the body, while at present it appears too far away, making under portion of body too long. Legs a trifle short, and middle toes too long."

August D. Arnold, Pennsylvania, breeder of Buff Leghorns and ex-president of Buff Leghorn Club: "As regards Mr. Sewell's cut of a Leghorn male will say it comes pretty well up to my ideal except in comb, which is a little too high and follows shape of neck a little too much. Breast should be a little more prominent; there should also be somewhat more length to legs."

L. P. Harris, Nebraska, breeder of Buff Leghorns: "I consider the illustration a fine one, but at the same time I consider the comb too large, being too high from the head to the base of serrations. It rises too straight and too high from the beak. The wattles are too long; earlobes are too large; neck is rather thick. Back is fine, as is also breast and body. The tail is my idea of perfection. The wings are carried too low at the points and the legs are too short to be in good proportion to size of body. Toes too long."

George H. Bie, Wisconsin, breeder of Single Comb White and Brown Leghorns: "The comb on this bird is carried too far forward and too high over the beak, and it is too much inclined to follow the shape of the neck. Head too small; does not show face enough. Eye too small. Wattles a trifle too long. Raise the lesser sickle feathers on tail a trifle higher and add a trifle more to the length to shanks, and he will suit me all right."

James McCann, Jr., New York, breeder of Single Comb White Leghorns: "The bird is too short in back; comb too far over bill and too high to where points commence. Wattles too long and slim; legs too stocky, and middle toe too long; in fact, the bird is too blocky to suit me."

John Torrey, Illinois, breeder of Single Comb Brown and Buff Leghorns: "One at the first glance would think this proof could not be modeled to any better advantage, but on studying the proof, I find that his comb runs too high before the first break. The small point is not considered by many to be a point. He has only four points and

he should have five or six with the small one. The neck is a trifle heavy; breast is not quite full enough, and wings not tucked up enough, carried too much on the Sebright Bantam order. Wattles have not the fold in them they should have. Tail, legs, toes and back all right."

M. Bradley, Missouri, breeder of Single Comb Brown Leghorns: "If such a fine specimen can be found fault with, I think the comb is a little too large for the head; also lies too close to neck at back. The thighs are just a trifle short. Yours was a happy thought to get the judges, fanciers and advertisers into a sort of home circle."

J. I. DeLancey, Illinois, breeder of Buff, Single Comb White and Rose Comb Brown Leghorns: "The proof of Leghorn male, executed by Sewell, is to my mind almost perfect. I think the saddle a little short and not quite high enough, and the shanks should be more slender."

E. Bertram Pike, New Hampshire, breeder of Single Comb Brown Leghorns: "As a matter of fact the bird sketched by Mr. Sewell represents, as a whole, very nearly my idea of what a typical male Leghorn should be. I am decidedly in favor of more size in Leghorns than the average breeder has yet attained, and think perhaps a trifle longer leg would not be out of proportion to the body—he has sketched. Your effort to determine, by a consensus of opinion, what the typical bird of each breed shall be, thereby establishing greater uniformity in breeding and a more reliable standard, is most commendable and I trust will meet the success it merits."

W. C. Hunter, Missouri, breeder of Rose Comb Brown Leghorns: "Head too small, too much on the Game order. Comb too large for size of head. Earlobes and wattles good, but somewhat large for head. Head not in proportion to size of body. Back too long and too low, and void of that nice graceful shape and concave of the Leghorn in this section. Tail too low; stands too far back and hangs too low. Same with wings; too low. Legs good, but toes too large; center toes out of proportion."

George W. Brown, Arkansas, breeder of White and Brown Leghorns: "The drawing of the male Leghorn is truly a magnificent bird, with neck, breast, back and tail beyond criticism. The comb extends a shade too far on the beak, legs are perhaps a trifle short, and middle toes a fraction too long; otherwise we consider it an ideal drawing and a model worthy of our best effort to imitate."

E. D. Frock, Colorado, breeder of Black Leghorns: "The proof of Leghorn male submitted is not in my opinion seriously defective in any one section in typical shape as required by the standard, the back being most noticeable. For my ideal the comb is rather too large, of a Minorca size. I prefer under rather than above the average now shown on Leghorns. The lobes are too broad, not enough oval shape; wattles are narrow; breast is hardly full enough; not sufficient concave sweep to back, particularly at root of tail; tail carried too low, but is well spread and has long, well curved, broad sickles; thighs are about as much too long as the shanks are too short; feet too large; middle toe is almost as long as shank. The feathering is close and the bird muscular looking to a nice degree."

W. T. Naylor, Ohio, breeder of Buff Leghorns: "The illustration of the Leghorn cockerel is so near perfect in typical shape for a Buff Leghorn that I can find very little chance for comment. I cannot see where the il-

illustration could be bettered in any point, but if the cut is meant to represent all varieties of Leghorns, I consider the tail carried too low for a White, Brown or Black Leghorn. With all my experience I have never had a Buff to compare in typical shape with the other varieties of Leghorns. I would be pleased to hear from others who are breeding Buffs."

Aeme Poultry Yards, California, breeders of White, Brown and Black Leghorns: "Our criticisms on the Brown Leghorn male are: Comb entirely too large. Lobes twice as large as they should be. Wattles too long and ill-shaped. Neck a trifle too thick. Breast and body too thick and clumsy for a Leghorn. Wings carried too low, too much on the Bantam order. Slant of back towards the tail not high enough; should be a sharp concave sweep to the tail. Fluff too deep. Thighs too thick and shanks too short and thick. Tail carried a trifle too high and sickles curved too much at the ends."

John H. Ryan, Illinois, breeder of Single Comb Brown Leghorns: "His comb is good, wattles a shade long. It will be hard to breed them so long and narrow. His hackle and saddle are all right, with good black stripe. Symmetry is perfect."

W. A. Irvin, Nebraska, breeder of Single Comb Brown Leghorns: "In comparing the proof sent me with other proofs, I find the drawing by Mr. Sewell a great improvement over all others. I, for one, would gladly accept the outline by Mr. Sewell of the Single Comb Brown Leghorn male as typical standard shape."

R. A. Maples, Iowa, breeder of Buff Leghorns: "Referring to the cut of the male Leghorn, will say that it conforms very closely to my understanding of the standard. The comb is a trifle too large; would prefer tail carried more upright, back is a shade long and slopes too much to the tail. But, as a whole, it is the best we have yet seen."

George J. Nissly, Michigan, breeder of Buff and Brown Leghorns: "While the cut on the whole is a good one, yet it does not quite meet my approval in all respects. I think the tail should be more upright. It looks too much like a Dorking. Comb too high in front and serrations not quite deep enough; the middle spike should be the largest, which is not exactly the case in the cut. Shanks should be a little longer. Flight feathers of wing should be carried up a little more under the saddle. The saddle feathers, too, should cover more of the flights. There are a few more minor points I might prefer a little different, but as it is much easier to criticise than to produce anything perfect, I will desist."

O. E. Skinner, Kansas, breeder of Single Comb Brown Leghorns: "Referring to the Single Comb Brown Leghorn proof, I think it represents a bird too long from tail to beak to be my ideal of a Leghorn male. Nor is the back quite concave enough. Tail is carried a little too low."

Walter R. Hibberd, Pennsylvania, breeder of Buff Leghorns: "I am in receipt of an excellent cut of a Brown Leghorn male. As I look at it a little more length of leg and a trifle shorter neck would be an improvement. The back, too, looks long and most too straight. All other parts seem perfect."

H. E. Benedict, New York, breeder of Rose Comb Brown Leghorns: "Mr. Sewell's cut of the male Leghorn is very good. I think he is standing with his head a trifle

too high, as though he were startled by some sudden noise, or had seen something new that he was looking after. That makes his wing too straight up and down. Tail very good, but if the second sickles had been a little higher, also the tail coverts run up a little more, so as to cover up the main tail feathers a little more, it would have suited me better. The wattles are too long and not full enough. (I know the standard says they shall be 'long, thin, pendulous.') The comb I will not comment on, as I am a Rose Comb breeder. Thighs good. Legs or shanks too short; middle toe too long for the leg. The eye does not show up just right, but think the printer more to blame than the artist. Body looks short, but it is the way he stands; as I said before, he stands too erect, and that shortens his body."

James Qurollo, Missouri, breeder of Single Comb Brown Leghorns: "I think the Leghorn male quite a fine looking fellow, but for an ideal I should prefer the comb to be more rounding in front and not quite so full over the beak. Wattles should be a trifle shorter. Breast not full enough. Wings should be a trifle longer."

F. B. Macomber, Michigan, breeder of Single Comb Brown Leghorns: "I have only a few criticisms to make. The neck is too full at back; ought to be more tapering for a Leghorn. Back of wing carried too low down. The lower feathers of tail, in my opinion, are carried too low. I think they should be carried at more of an angle with the body, thus giving the tail a little higher carriage. Other than these defects it is my style of Leghorn. Mr. Sewell has done himself much credit in producing such a fine cut of a Leghorn male. It is the best all around cut I ever saw."

R. W. E. Milliken, Massachusetts, breeder of Single Comb White and Brown Leghorns: "The engraving portrays my ideal as near as possible on paper, and any breeder who can get a good percentage of cockerels similar in shape to this one would be, in my mind, a mighty good man to buy stock of."

D. N. Futrell, Kentucky, breeder of Buff and Single Comb Brown Leghorns: "I consider this a very fair cut of a high pointer. If I could breed 50 per cent as good in shape would think I was doing extra well."

Ed R. Murphy, Indiana, breeder of Single Comb Brown Leghorns: "I would find but little fault with the cut of Brown Leghorn male. His comb is a little too high for the length of it; also fits down a little too close to back of head. Wattles a little too long; tail carried about right. Otherwise about right."

A. C. Keyser, Pennsylvania, breeder of Single Comb and Rose Comb White, Buff and Dominique Leghorns: "The proof of the ideal Brown Leghorn male is excellent. It suits me."

Standard Poultry Co., Missouri, breeders of Single Comb Brown Leghorns: "The only defect, in our opinion, is his comb, which extends most too far over beak and is too straight in front. We think comb should slope gracefully back and center spikes be directly over the eye; cut shows three of the five spikes in front of eyes. Other than the above, the cut is above criticism in our judgment, and Mr. Sewell is entitled to congratulations for his splendid work."

Ionia Poultry Club, Michigan, breeders of Leghorns: "We think the comb should be cut down a little. It is too high. Arch of neck is a trifle too great. The breast outline should begin farther back, just under the wattles, and the

breast should be fuller and more prominent. Back, a concave sweep; tail carried higher; legs longer; thighs not quite so prominent. We think the cut a little too much on the Minorca order."

Kunze & Luhman, Illinois, breeders of Single Comb Brown Leghorns: "The cut is splendid and we cannot see where it could be improved. For an ideal it suits us first rate. The Reliable and Mr. Sewell are doing an inestimable service for the poultry fraternity."

Smith Hodsall, Illinois, breeder of Rose Comb Brown Leghorns: "Referring to the drawing of Brown Leghorn cock by Sewell, it strikes me as being all right in every section except the head, which is a little too small, not quite deep enough for the length. Head and neck set most too far back, making breast too full, too high up. It will, in my opinion, afford a good outline to go by for typical shape if a little width be added to the face."

C. J. Oldfield, Michigan, breeder of Single Comb White, Buff and Black Leghorns: "I consider the cut the

best, in shape, of any cut I ever saw, but for an ideal cut I consider the leg a trifle short and shanks rather too heavy. The comb is fine, but is just a trifle large, and first point is too far forward, giving the comb too square an appearance in front."

M. Mayer, Jr., Illinois, breeder of Buff and Single Comb Brown Leghorns: "If the legs were a little longer this cut would come nearer to my ideal of a male Leghorn than I have ever seen on paper or in the show room."

H. A. Kuhns, Georgia, breeder of Single Comb Brown Leghorns: "This cut is so near my ideal that I will not undertake to criticise it."

J. D. Hunt, Tennessee, breeder of Single Comb Brown Leghorns: "The cut of Brown Leghorn is beyond my criticism. It is simply superb."

Ed Hoffman, Ohio, breeder of Buff Leghorns: "I think it an excellent cut of a Leghorn male, with a few exceptions. Neck is too much arched, breast a trifle flat, and I would prefer to see the wing carried more horizontally."

FIRST PRIZE COCK,
FIRST PRIZE PULLET
BOSTON 1899
OWNED & BRED BY
TENNEY & HARRINGTON
WEST NEWTON, MASS.

First Prize S. C. Brown Leghorn Cock and Pullet at Boston, 1899; Bred and Owned by Tenney & Harrington.

LEGHORN FEMALE SHAPE—BY SEWELL.

Comprising the Best Points of Several Live Models, as Illustrated by Franklane L. Sewell for the Reliable Poultry Journal, and Submitted to Fifty-five Prominent Judges and Breeders for Criticism Based Upon Standard Requirements.

LEGHORN FEMALE SHAPE.

Criticisms of Foremost Judges and Leghorn Breeders on a "Composite Ideal from Live Models," as Drawn by Franklane L. Sewell—A Collection of Opinions That Are in Themselves Authority on the Ideal Shape of a Standard-bred Leghorn.

From the Reliable Poultry Journal.

OWING to the fact that we were obliged to submit the proofs of the ideal male and female Leghorn drawings to the judges and breeders at different times, we were unable, from various causes, to reach as many with the female drawing as we did with that of the male, still we are able to present the comments of fifty-five well-known judges and breeders. We are highly pleased with the interest manifested in these ideal drawings and in common with many of our readers we feel they will be productive of much good to breeders.

I. K. Felch, judge and breeder: "The Leghorn pullet cut is before me. It is nearer nature than any yet offered. My criticisms are, too long from hip to tail; it lacks the last lower feather in tail; too full in upper breast and fluff proper; not full enough in upper or tail fluff, and it wants filling in just in front of thigh to give a concave line to body from forward point of keel to thighs. I should shorten the body of the bird about a quarter of an inch in front of the tail, thus bringing the tail nearer the body. With these alterations I should not cut the bird for shape if judging her."

H. S. Babcock, Rhode Island, judge and breeder: "Mr. Sewell's cut of Leghorn female is, in many respects, admirable. The suggestions I can offer are that the tail does not seem to be set on right. The back is too long, body and fluff a bit heavy, just only a trifle, and shanks not long enough. The defects seem to me to be slight, and I would not object to having a hundred birds of exactly this type, all a rich, pure buff."

F. H. Shellabarger, Iowa, judge and breeder: "The cut of female Leghorn is, in my judgment, faulty in the following sections: First, the comb falls too low along the side of the head, indicating that if placed in an upright position it would be a trifle large. Second, the back, in my way of looking at it, appears to be a little more than 'medium length' and more than 'slightly cushioned.' Third, the tail coverts are all short as to length except those two falling onto the deck or highest main tail feathers. This causes the main tail feathers to look a trifle long at the sides from where the coverts stop. Fourth, the wings as shown do not show the secondaries, but show the coverts from the front edge to the tip. This does not cause any difference except that it does not show how the secondaries should look compared with the balance of the wing."

Theo. Hewes, Indiana, judge and breeder: "Mr. Sewell has given us a very nice cut this time; in fact, I think it is above the average. The only place I find any fault with the female on shape is, the legs are a trifle too short, and body and tail a trifle too long."

D. T. Heimlich, Illinois, judge and breeder: "This is a beautiful picture, and the different sections (with the

exception of too great length in back) are perfectly drawn. In general appearance she lacks alertness. With the head and tail carried higher she would be more in harmony with the drawing presented of the male, and she would then harmonize with the best specimens shown throughout the west in late years."

C. A. Emry, Missouri, judge and breeder: "The illustration of ideal Leghorn female meets my idea of standard description."

Charles McClave, Ohio, judge and breeder: "Symmetry and general outlines almost faultless. Head good; however, a trifle heavy or coarse for Leghorn females. Comb very good, except points incline to curve backward, instead of being straight. Ear-lobes and wattles good, but lobe might be a trifle larger. Neck, length and shape faultless. Back, shape good, except too much concave sweep from center to base of tail. Breast, shape good, but plenty full. Wings good. Tail shape fair, but a trifle too narrow and too high. Legs good; however, if a trifle longer would suit me better. Toes good, but pretty long, considering length of shank. Taken all together, I consider this the best Leghorn cut ever produced. My understanding is that shape alone is under consideration."

W. S. Russell, Iowa, judge and breeder: "Back a trifle long, entirely too much cushion; tail carried the least bit low, and it would appear too long if cushion on back was trimmed. Some may find fault with shanks being too large and short, but I do not consider them sufficiently defective to cut."

Frank W. Breed, California, judge and breeder: "As a cut the illustration is a success. Yet it hardly represents the ideal Leghorn female. In the first place the outline pictures a female of a quiet, subdued disposition, a bird that will always answer the meal call and between times recline in the shade to the detriment of herself and keeper, whereas, the true Leghorn female is all life and activity, her every move and poise being performed with such grace and cleanliness of motion, as she stands erect or glides from place to place, that she seems to flit from point to point with the rapidity and stillness of a breath. Not one of those nervous, coil spring affairs, that from the rustling of a leaf or the doffing of a hat betake themselves to an adjacent county, but, instead, one of those lithe, active birds that can hardly spare the time from foraging to eat the daily allowance, but comes in and greedily bolts down a portion and is away to some secluded haunt from which her voice comes throughout the day as she busily unearths the bug or slug. Such hens lay and keep it up. In individual sections, her comb is too weak at base, allowing it to droop rather than fall gracefully back and downward. Back is too low at shoulders and too straight from shoulders to tail, which suggests the Langshan sweep more than the concave outline of the Leghorn. Tail is carried at about the right slant, but too high. Fluff is

STANDARD LEGHORN FEMALE SHAPE.

An Ideal Leghorn, Illustrated by Franklane L. Sewell, for the Reliable Poultry Journal, under the Suggestions of Fifty-five Prominent Judges and Breeders—The Outcome of Criticism Upon the Leghorn Female Shape Shown on Page 18.

too heavy and loose in feathering. Thighs do not show enough length and are too much concealed by profuse feathering of body. Breast is a trifle deep. Shanks are of nice length, but a little coarse. As a whole the illustration is too loose in feathering, which takes away that trim, sprightly look characteristic of the variety."

George O. Brown, Maryland, judge and breeder and ex-president of the American Poultry Association: "The comb has a wrong fold in it at the high point front, where it turns over, for an ideal. The hen appears a trifle too long on the back, the tail being too much like the Game, too narrow, giving a pinched look at the base. There is a trifle too much fluff, a little too much bulge on upper breast; legs too stout for the size of cut, and just a bit too squatty. While one can discern there is a lack of perfection in a cut, it takes an artist to do the reconstruction—and I am not an artist."

George W. Osterhout, Nebraska, breeder of Single Comb Brown Leghorns: "At first glance Mr. Sewell's ideal cut of a Leghorn female would seem perfect, but if compared with a well-furnished live specimen I find too much cushion at base of tail, and the tail coverts run up too high according to the length of the main tail feathers. The tail, in a live specimen, rises from the cushion with almost an obtuse angle, and the first main tail feathers should not be quite as convex as shown in cut. I find also that a female standing in the position of the one in the cut carries her shoulders higher than the cushion; this would give a longer look to the leg, and I find that as we lengthen the legs of the Leghorns it throws the shoulders higher. But I am ready to accept what the majority of the breeders think the nearest to a perfect shape, and I will try and breed to it, even if not just my own ideal, but I do not want to see an ideal of either male or female that is not somewhere near the shape of the best specimens of either sex."

Ezra Cornell, New York, breeder of Single Comb White and Buff Leghorns: "The cut is, in most respects, very satisfactory; the only criticism I have to offer is in the shape of the back, which I would lower slightly on saddle at base of tail. This change would make it necessary to fill in a trifle on lower edge of tail, where it joins the body. With the slight change which I have mentioned, the cut is, to me, entirely satisfactory."

T. E. Sherman, New York, breeder of Buff Leghorns: "I see but very little to criticize about the female Leghorn cut. If the legs were just a trifle longer, also the neck the least bit longer, and the tail a little fuller at back end on top, it would look better to me."

William Ellery Bright, Massachusetts, breeder of Single Comb Brown Leghorns: "The cut of the Leghorn female which you have submitted is, in my judgment, as good as the male cut was poor. There is certainly a great improvement in catching the Leghorn style. It is, indeed, strange that one artist could draw two ideals, even though one be a male and the other a female, of the same variety with such vastly different characteristics. This representation of the ideal female is marked by the absence of that terrible pitch to the keel bone, the shapely sloping back and the bunched thighs that were such prominent features in the ideal male cut. The wing is also well pictured. With the shape of the wing, body, breast and legs, very little, if any, fault can be found. The shanks and thighs show the slender build of the true Leghorn. The neck calls for a very slight criticism in that the feathers are brought down too far on the shoulders, which gives the base of the neck too thick an appearance.

The breast is well rounded and full, such as I like to see. The wattles do not seem to be heavy enough for the comb and should be the least bit wider. The idea of a perfectly hanging comb is, without doubt, impossible to convey by any one drawing. This one is a very nice piece of work. However, it does extend too far forward on the beak. The above criticisms are of minor importance. The leading points of a good Leghorn female are nicely brought out. The hardest criticism must be made on the tail. This is not heavy enough for the bird. There is an unnatural curve in the two upper main tail feathers and the lower feathers are not of sufficient length to give something of that square top that is so much sought. Altogether, this ideal is worthy of much study by breeders and judges, and it is to be hoped that the breeders of other varieties will succeed in obtaining as meritorious an ideal as this latest study of Mr. Sewell's."

George G. Wheat, Kansas, breeder of Single Comb Brown Leghorns: "This ideal female Leghorn suits me too well to admit of any criticism."

S. S. Noble, Illinois, breeder of Single Comb Brown Leghorns: "The only serious fault I find with Mr. Sewell's ideal Leghorn female is with the tail. Where the tail feathers start he has quite a bend. If the angle of the back continued without a short bend at this point it would be better. It also projects out too far above the cushion. Trim it there, straighten it, also the tail coverts. Add one-eighth of an inch to the legs and she will suit me better."

George H. Burgott, New York, breeder of Single Comb Brown Leghorns: "I will say, referring to shape of the ideal female Leghorn, that while the work is exquisite, there are faulty points. Comb extends over upon the beak too much and is a trifle too high, measuring from where it connects on to the beak to the single point in front that stands erect. It should have one more serration to suit me and it is faulty, the same as the male, in size of serrations, which are too thick and are not deep enough, making the comb have a beefy appearance. Comb also lops too flat, i. e., in the cut it does not have the appearance of a standard Leghorn comb; the points should not reach down far enough to cover the lobe for an ideal. Size of comb about right. Head is faulty, beak too thick and straight, eye not life-like and set too far back. I think wattle and lobe about O. K. Neck a trifle too thick. I would say that the whole portion of the bird in front of a line drawn perpendicularly across the body beginning at the shank should be more elevated. The bird, as she is now, has a frightened appearance, but if this were done it would of course altogether change the outlines, raising that portion in front (head and all) and slightly dropping the back portions, but as it is now the back is too high and breast too low. Tail about right, thighs too thick and short, shanks too thick and about one-eighth inch too long, toes all too long—middle toes are nearly as long as the shanks. However, after all is said, I consider this as fine a piece of work as I have ever seen and it deserves commendation."

W. W. Kulp, Pennsylvania, breeder of Single and Rose Comb Brown Leghorns: "I consider the cut of the hen better than the cut of cock. A living bird as good in every section is a rarity and prized very highly. Sewell is a blessing to the poultry loving public. The bird stands a bit low in head. The neck is short, either caused by the position or intended so by the artist. The legs might be lengthened with profit to beauty. I would prefer not quite so much rise in the back. I think there is more rise in the cut than the standard demands; in fact, it gives no rise at all; 'slightly cushioned' is all that is said about shape of back, besides

'medium length.' Longer legs, longer neck, tail and cushion lowered a bit is my ideal from the standard. Comb would do if a bit less also."

H. C. Young, Nebraska, breeder of Single Comb Brown Leghorns: "In regard to this cut, I think the comb laps too much; points should curve upward more, so as to not obstruct the sight. First point is not distinct enough and is too far forward. Back is a little too flat, tail carried too far back. Lower part of breast too full and not curved enough, but on the whole I think the drawing a very clever one and it does much credit to the prettily shaped Leghorn hen."

C. E. Howell, New York, breeder of Single Comb Brown Leghorns: "The ideal cut of the Leghorn female suits me very well. I have no suggestions to offer as to any corrections."

C. H. Wyckoff, New York, breeder of Single Comb White Leghorns: "The proof of the drawing of an ideal female Leghorn by Mr. Sewell is at hand, and I am very favorably impressed by it. About the only change, if any, that I could suggest would be a trifle more length of body, and a corresponding increase in length of neck. And yet, for a fully matured bird, say two years old, and in good, plump condition, I am not sure that the changes suggested would be any improvement."

E. H. Hoffman, Wisconsin, breeder of Single Comb White Leghorns: "I think the cut of the Leghorn female is a little too clumsy. It does not give credit to the stylish appearance of this variety. I think by taking a little off of the lower part of the breast and also off of the fluff it would give the body a more graceful appearance. The shanks of the legs are too short. These two changes would make a well stationed bird. The neck is also a trifle too thick to suit me. The comb is fair, but would look better if it did not lop quite so far over the eye. The shape of the tail is all right."

Oliver L. Dosch, Ohio, breeder of Single Comb White Leghorns: "To my mind Mr. Sewell's Leghorn pullet is not deep enough in body just in front of thighs. Thighs themselves are too heavy and not quite long enough. The tail seems to be set too far from the body and the upper feathers are curved too much. No rudimentary sickle in a Leghorn pullet's tail for us, if you please. If the tail was carried a little more upright it would fulfill the standard requirements and not appear to be carried so far from the body. The comb is too narrow at the rear. Back and neck good. Breast would be good if it was a little deeper. Earlobe is too large."

George H. Gallinger, New York, breeder of Single Comb Brown Leghorns: "In studying the proof of the female Leghorn cut you sent me, I find it about right in shape and dimensions. If she were a live hen and I could handle her there might be a great deal more to criticise."

Charles C. Ferris, New York, breeder of Single Comb Brown Leghorns: "The Leghorn female cut would undoubtedly score 100 points by many if she were in the flesh. We all have our own ideals. I give my ideas of this cut not as criticisms, but as suggestions to improvement, as I view it. As in the male, this comb is too wide from head to bottom of serrations, also extends too far forward. Such combs are often thumb-marked and wrinkled, and also apt to form a loop in front like a Minorca's. Head should be carried farther back, giving more arch to the neck. Wing front

should be covered by breast feathers, and upper part should be more hidden by back feathers. In nicely penciled birds it is difficult to see where wing and back meet. Tail should be longer and wider; it looks too 'pinched up.' Cut off the fluff three-eighths of an inch at lowest point. Many birds are cut for short legs when the fault is with the fluff, it being too loosely feathered; or birds being over fat the fluff falls too low. Thigh should be smaller. To me this bird looks too short and heavy for an ideal Leghorn female."

Mrs. B. G. Mackey, Missouri, breeder of Single Comb Brown Leghorns: "The beak in the model is larger and thicker than I find them on live birds, and than I have supposed standard. The comb is also larger than I understand the standard to require. I know there is a tendency to large combs with the fanciers, but for greatest utility I doubt the largest combs being best. The neck is rather thick, the back too high at base of tail, the wings are carried too low, fluff not full enough to give sufficient broadness."

J. A. Weerts, Illinois, breeder of Rose Comb Brown Leghorns: "The Leghorn cut lies before me. I have had it down to the Leghorn pen and compared it with my 'best' and I fail to see anything to criticise. I think she is much better than the male. I may be called a novice with poultry, but I have a few very good birds and I am anxious to learn all I can. These drawings, with the opinions of those who are competent to judge of them, are of more value to us little beginners than whole volumes of descriptions, and I am looking forward with a great deal of pleasure to the coming articles."

William F. Brace (of Brace & Walling), New York, breeder of Single Comb Brown and Buff Leghorns: "My criticisms on the female Leghorn cut are few. If the tail were cut off and set forward on the bird a quarter of an inch it would improve her, I think, by bringing the tail and rear portions of the body near the bird. A few more feathers would then have to be added to the lower part of the tail. There is too much fluff, and the middle toes are too long. Otherwise the cut is good."

L. P. Harris, breeder of Buff Leghorns: "I find by a close study of the cut of Leghorn hen that the body and back appear too long, but if the neck is filled in or made wider at a point one-half inch above the junction of hackle and back to the extent of three thirty-seconds of an inch and tapering each way to a point at the base of hackle and at a point where the concave and convex line of the neck meet, that it would altogether change the long appearance of the back and body, making them appear much shorter. The tail coverts appear much too wide; the comb is much too large and beefy; wattles also too large, but taking it altogether it is a fine illustrations of a Leghorn female."

August D. Arnold, Pennsylvania, breeder of Buff Leghorns and ex-president of Buff Leghorn Club: "As regards cut of female Leghorn, I will say the comb shows a little too high from bill to curve. Neck is too short and heavy. Fluff is too full. Otherwise it suits me all right."

John Torrey, Illinois, breeder of Single Comb Brown and Buff Leghorns: "Comb should have five points; it shows only four; neck a trifle heavy; back too long; tail carried too high; breast too full; body too deep; fluff good; legs are too heavy and toes are too long; otherwise the cut suits me."

James McCann, Jr., New York, breeder of Single Comb

White Leghorns: "This is a grand cut of a Leghorn female. I have no criticisms to make. Mr. Sewell is to be congratulated on his excellent work."

W. C. Hunter, Missouri, breeder of Rose Comb Brown Leghorns: "Comb could be smaller with good effect. Breast is somewhat too full. Back shows too much of a curve from base of neck to tail, making the bird too long and devoid of that sharp concave of the back of the Leghorn. The wings hang slightly too low. The toes are too large, the middle one being out of proportion. All in all the cut comes very near being my ideal."

George W. Brown, Arkansas, breeder of White and Brown Leghorns: "The cut of Leghorn female has been carefully noted, and we can find but one objection. The comb extends a shade too far on the beak and the first spike should be a little more curved. Otherwise we consider the drawing a masterpiece and congratulate the artist upon his skill. In the well-poised head and graceful curves forming back, breast, tail, etc., we behold a model of beauty, grace and symmetry that completely fills our ideal."

W. T. Naylor, Ohio, breeder of Buff Leghorns: "I consider the drawing of ideal female Leghorn by Mr. Sewell a very perfect illustration and I cannot see where the most exacting fancier can find any defects. I must say the proof is the nearest perfection in my estimation of any I have ever seen."

John H. Ryan, Illinois, breeder of Single Comb Brown Leghorns: "After carefully looking over the ideal Leghorn female drawing I have no comments to make other than that it is exactly my idea of what a Leghorn hen should be."

W. A. Irvin, Nebraska, breeder of Single Comb Brown Leghorns: "It would be difficult for me to offer any improvement on the ideal female Leghorn drawing. If we breeders could breed them as good I should consider they lacked but little of being standard shape."

R. A. Maples, Iowa, breeder of Buff Leghorns: "I should pronounce this cut very near perfect, according to my understanding of the standard, with the possible exception that the back is a trifle long, tail carried too low, comb and wattles too large, toes too long in proportion to length of shanks. But all in all it comes pretty close to standard requirements."

George J. Nissly, Michigan, breeder of Buff and Brown Leghorns: "The cut is not my ideal of a perfect Leghorn, though it is sometimes hard to put in words our views of defects. Beginning at the head, I think the comb droops a little too much over the eye. The pupil of the eye should show under the comb, not between the spikes. The neck should be a little more upright. Back too long and too much cushion. Tail too heavy and not sufficiently upright. The tail should be on a level with the eye when the bird stands erect. Wings rather small. Legs too short and heavy."

Walter R. Hibberd, Pennsylvania, breeder of Buff Leghorns: "I have received a proof of the cut of the ideal female Leghorn, and it suits me so well I will not attempt to criticise it."

O. E. Skinner, Kansas, breeder of Single Comb Brown Leghorns: "I am not disposed to criticise this drawing every much, as it about meets my full approval. Would sug-

gest a trifle longer shanks and thighs, a little less droop to the comb, and tail carried more up right. The standard calls for tail to be 'carried upright' on S. C. Brown Leghorn, otherwise it strikes me as being all right."

H. E. Benedict, New York, breeder of Rose Comb Brown Leghorns: "I think Mr. Sewell's ideal cut of Leghorn pullet one of the best I ever saw. The outline is good. The wing is not folded up quite close enough under the breast and body feathers, but that does not hurt her shape. She is good."

James Quorllo, Missouri, breeder of Single Comb Brown Leghorns: "The proof of the female Leghorn, we think, is excellent, and we do not find much fault, except with the tail and legs. We think the tail too short and bunty, the lower feathers, especially, should be longer, and the tail should have more of a square effect; it is too pointed and too narrow at base. One more feather in the lower part of the tail would add to her looks. We think a well-spread tail adds much to the beauty of a Leghorn female. Cushion is just a trifle too full, and the legs are too short for this size bird."

Standard Poultry Co., Missouri, breeders of Single Comb Brown Leghorns: "Cut of Leghorn hen received, and while it is a beauty, in our opinion if the thigh were a little longer it would add to its beauty, making it appear larger and more stylish. We do not admire duck legs on anything but ducks, and we find so many of the Leghorns now are smaller than they should be, and inclined to be duck legged."

A. C. Keyser, Pennsylvania, breeder of Single Comb and Rose Comb White, Brown and Dominique Leghorns: "The proof of the Leghorn female is very good. It suits my ideas."

Kunze & Luhman, Illinois, breeders of Single Comb Brown Leghorns: "We make the following comments on the ideal female Leghorn drawing: She is a fine bird to just take a glance at her, but upon closer inspection we think these corrections should be made. The head is too long, the back is much too long, the tail slants too far back, the fluff is also too full, the thighs are too stout and the shanks are too strong. In other sections she suits us first rate."

Ionia Poultry Club, Michigan, breeders of Leghorns: "The comb is a little too high in front and covers the bill a little too far forward. Shape good except I would like to see head thrown back a little, raising the front half of the bird. This would give a little fuller breast and longer neck, or, commonly speaking, a little prouder appearance. Other than this we think the cut good."

M. Mayer, Jr., Illinois, breeder of Buff and Single Comb Brown Leghorns: "This cut comes so near to my ideal of a female Leghorn that I cannot find anything to criticise about it."

J. D. Hunt, Tennessee, breeder of Single Comb Brown Leghorns: "I think the female ideal Leghorn is as near perfection as an ideal could be, and I certainly endorse the artist as well as the Journal in their efforts to better inform the public."

William A. Penfield, New York, breeder of Single Comb White Leghorns: "The cut of female Leghorn is extra good as a whole, but it is not my ideal in some minor points.

Comb sets too far forward, tail has the appearance of being short, caused by two last coverts being too long, I think. Tail should be carried a trifle higher. This, with more length of leg, would give that jaunty carriage characteristic of the Leghorn family."

Ed Hoffman, Ohio, breeder of Buff Leghorns: "We have very little fault to find with cut of Leghorn female. Tail is slightly pinched at base and legs a little short for size of bird."

A. P. Groves, Pennsylvania, breeder of Buff Leghorns: "I see no fault in it whatever except that its comb might be a little lower in front."

C. W. Beman, New York, breeder of Buff Leghorns: "The cut of Leghorn female is very good in general, and changes I should suggest would be largely a personal preference. I would like smaller and more rounded wattles, and

the front of comb turned over a trifle more in front and not showing the point. The back should be a very little higher, giving the body a more blocky appearance. Tail should spread more and be carried higher. These alterations are suggested with the idea in mind of making the cut an ideal one for breeders to use in breeding and selecting for exhibitions, and these comments are made with reference to Buff Leghorns only."

George H. Ble, Wisconsin, breeder of Single Comb White and Brown Leghorns: "The only fault I find with the bird is that the comb is carried too far forward. Such combs are apt to fail in wrinkles over the beak. Otherwise I consider it the finest model I ever saw, and I would not change it in any way."

Rowe & Broughton, New York, breeders of Buff Leghorns: "The cut of the female Leghorn is way ahead of the male cut, and if there is any criticism to make it would be very slight as compared with the male."

A Winner from the Yards of James Forsyth.

STANDARD-BRED LEGHORNS.

An Instructive Article Upon the Standard Law in Its Relation to Leghorns, by One of Our Most Prominent Judges, Who, Aided by the Well Known Artist, Franklane L. Sewell, Illustrates the Application of the Score Card System of Judging.

By Theo. Hewes, Judge and Breeder.

HERE are a number of books on some of our popular breeds, but the Leghorns have not been given the prominence they deserve, especially by American writers. While the breed is perhaps as well known in this country as any in the standard, it is known more as an egg producer than from a fancy, or standard point of view. I can remember, when a mere boy, stories told of their laying qualities caused me to build great air castles (egg castles), representing what I would do if I could only secure a few of them. It cost money to secure the very poorest of them then, and the best at that time would be very poor as we view them to-day; dollars, too, at that time of my life looked bigger than the full moon, and two of them were always farther apart, so far as my possessing them was concerned. However, the longer one waits for something, the more valuable it becomes in his estimation, so when I did finally come into possession of a few Leghorns, I imagined I was just about at the top of the profession. I can remember that trio well. They were fine indeed. Red Leghorns was the name given me by the person who sold them, and they fitted their name to a nicety. The cockerel had a comb about the size of a round of cheap beef. He had a long, flowing tail, carried very much to one side. His body was set on a pair of very short legs, and his long tail and large comb gave him a strong resemblance to the roosters the democrats wore in their hats just after Mr. Cleveland's second election.

In color he had what we would term to-day a faded-out look. His hackle and saddle feathers were red, without a trace of stripe. His sickles and flights were as much white as black, and his breast was the color of a brown thrush. The fluff faded off red, shading into a lighter color behind. The females were somewhat better. Aside from white in wings and a few gray tips in tail they would pass to-day as scrub Leghorns of the Brown variety.

With this trio to start with, breeders can see that my prospects for high honors in close competition were "dead easy." I became so much interested in these world-beaters that I could think or talk of little else. Finally, some one who had heard of one or two other breeds suggested that I invest in a standard and learn more. I did so, and began comparing my birds with the standard description of Brown Leghorns, and I could find no Red Leghorns in the book. I found by a close study of this work that the standard makers had made a serious mistake. That book did not near fit my birds, and of course I knew my birds were right, for the breeder who sold them to me had told me they were! About this time a Mr. Todd, of Ohio, sent me a circular, and it dawned on me that my Leghorns were not quite "up to snuff," so I concluded to purchase a few more. The price asked by Mr. Todd turned me around twice before I could alight, but finally I settled down to earth and sent him the money. The birds came, and they were Brown Leghorns in all the name implies. They were grand in shape, color, comb and lobes. In looking back now over these many years, and comparing that trio with the show specimens to

which I have awarded prizes in the large shows, I cannot recall three better birds. Let it be said to Mr. Todd's credit that it is doubtful if at that time any fancier surpassed him in the breeding of this famous variety.

If Mr. Todd could breed such birds, how did he do it, and why could I not breed them as well as he? To do so meant study. I must take the standard as a law and study nature as a model. I believe in the eight years that I bred the Single and Rose Comb varieties, no man in America ever gave them closer attention or studied harder to find out what an ideal bird should be, not alone of the Brown varieties, but of all the varieties of the Leghorns, and I would as soon judge this class now in a big show as any breed in the standard. Leghorns are shy, and usually wild, but they are alert, active, always on the lookout, and as a commercial fowl for egg production they stand at the head of the line and can be depended upon to take their share of the mortgage off the farm.

The White and Brown Leghorns were about the only ones heard of at the time of which I write, but the sub-varieties were known to a few. The average breeder had seldom heard of them, and few if any had seen them. Of the new varieties added since then, the Buffs are to-day perhaps the best known, and in some respects are the superior of the others. Especially is this true in size.

JUDICIOUS INBREEDING—MATURE MALES.

My own experience in breeding the Leghorn, and in fact all other breeds, has convinced me that the only road to success is by way of judicious inbreeding. I have followed it to a certain extent in all varieties, and in looking back now over the best specimens that I have ever produced, in each and every instance the stock that produced them was closely related.

Another very important point in breeding is this: Select males to head your pens that are at least eighteen months old. Many good birds are produced by breeding from cockerels, but you take a chance every time one heads your pens. I will ask the breeders to look over their own flocks and see which male produced their best chicks last year. It does not matter what variety—this rule will fit them all. If any one bird produced better stock than the other, is it not a fact that this same male molted out in better shape than any other male in your yards? That is why I emphasize, "Head your breeding pens with males at least eighteen months old." I will give a few plain instructions that I believe will help every amateur to improve his breeding stock. It does not matter what variety of chickens he may be breeding, the results will be the same.

Select about five or six of your best females from this year's mating, turning them out of your breeding pens not later than June 15. Let them have unlimited range and be sure that no male is with them. At the same time that you liberate them give your best male bird the run of the pen they were in, and see to it that no females are with him. About July 20 mate these birds again, and from August 1 to

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LEGHORN MALE STUDY.

CHART No. 1.

Designed by Franklane L. Sewell Expressly for this Article to Illustrate the Application of the Standard of Perfection.
The Distribution of Color In all Sections of the Body is here Portrayed, and
the Shape of a Leghorn Male Outlined.

10th set all the eggs they will lay. This will give you a hatch about September 1, and just as soon as you can, select the pullets from the cockerels. Kill the pullets or separate them, and allow the hen that hatches the chicks to run with the cockerels just as long as she will, which usually, at this season of the year, will be late in winter. Give the cockerels careful attention and the warmest house you have, and see to it that they are never in the company of a female during the first season.

These birds will molt about August 1 the following year, and if they molt good you can count on their being good breeders. If they molt bad, discard them at once. Keep these birds until February, or until they are eighteen months old, and keep them entirely away from the females until you are ready to use them in your breeding pens. Then you have strong, vigorous males that are away above standard weight, that are molted as cocks, yet show more like cockerels, birds that you can depend on as breeders of show birds.

The reason I suggest that you keep these birds past the molt is this: The best bird you have this year may molt into a scrub as a cock, and if he does, you can depend on it that he has not produced you a bird of any consequence, unless it be strictly in the form of a sport, taking all the good points from the dam rather than the sire; but if he molts well as a cock, he has the blood in him not only to reproduce good feathers on himself, but on his offspring as well. If every breeder in the country will follow this eighteen-month system of mating males, my word for it his stock will improve in size and his yard will contain more prize specimens than ever before. Inbreed to eliminate defects and stamp perfection on your strain. Watch your fowls closely and study nature if you expect to make a successful poultry breeder.

THE LEGHORN MALE.

We will now take up the charts. I call the breeders' attention to Chart 1. We see here an outline, not alone our ideal, but we state frankly that we believe it is the best profile of a Leghorn ever produced by any artist, and Mr. Sewell is entitled to the thanks of the fanciers of the country for this picture. It is true Mr. Sewell worked according to some suggestions, but he has made it far better than I hoped for, and knowing as I do the desire of Leghorn breeders to improve the size of their birds without injuring their symmetry, I feel that we are showing in Chart 1 a picture that every fair-minded breeder of America can use as his or her ideal, and judges in discounting for defects can find no better chart from which to work.

Chart 1 represents what you may expect in the male by adopting the eighteen-month system of breeding, to which I referred above. The distribution of color is portrayed in this chart, which is intended to represent perfect feathers called for by the standard for the Brown Leghorns, or as near as the same can be shown without a color plate. The hackle shows the stripe tapering to a point near the end of the feather. The black and red do not intermingle, but show clear and distinct. The saddle shows the same elegant color, and is the strictly fancy point in this breed, but one that is seldom met in the show room. By referring to your standard you will see every feather of this chart just as the ideal should be, and as we are pleased to note, many of our up-to-date breeders are, on the whole, producing them.

We shall first take up the question of defects in the Brown Leghorn male, and remind the reader that the same shape is called for in all varieties, and whatever we may say here in regard to shape of the Brown will not be repeated in describing others, as the discounts are alike in all the varieties.

SYMMETRY, OR TYPICAL CARRIAGE.

This section came near being obsolete at the Boston meeting of the American Poultry Association, but was afterwards allowed to remain in the standard and can be used or ignored by the judges, as they see fit.

Had the association gone far enough at this time to rearrange the scale of points for these different systems of judging, it would no doubt have carried some weight with it, but in their haste they omitted to do this, and until it is done the judges who score a fowl without considering this section are making a farce not alone of the standard, but the score card as well.

This section is valued at eight points, and the bird to be perfect in symmetry must not only be perfect in all sections that go to make up symmetry, but all these sections must be joined together, so that the entire outline is one symmetrical whole. Perfect symmetry is seldom met, but there are times when we meet it in this breed. I recall a White Leghorn cockerel that won first at the great St. Louis fair in 1897, that could honestly pass without a discount in this section. The points generally affected and those often discounted I will now call up and give a valuation as the judges do when scoring.

Breast too full, and not showing well-rounded outline (see Chart 1), cut from one-half to one, as in degree. Neck too short and too straight—cut one-half. Feathers too short at base of neck, making a break where it joins on to the back—cut one-half. Back too long and too narrow—cut one-half to one. Tail carried too high—cut one-half to one and one-half. Tail too short—cut one-half. Legs too short or too close together—cut one-half to one.

The length of leg on the Leghorn has very much to do with the symmetry of the breed, as a short leg does not fit the Leghorn in any way, and no matter how symmetrical they may be in other sections, it spoils them in the estimation of the up-to-date fanciers, and the value of the bird is hardly above that of its market value, so far as the fanciers themselves are concerned.

I do not mean by this that we should have a leg under our Leghorns like a Black Red Game, or others in the fancy Game classes, but I do mean that we should have our bird well up off the ground so that the bird carries itself alert, looks active and sprightly, and is well balanced. While there is no doubt but the section of symmetry has been abused in the scoring of fowls by some judges, the same can be said of any other section of the standard, and when symmetry is intelligently applied, there is no section in the standard that means as much (not alone to the breeder but the buyer and seller), as that one section, and a careful study of it by both the breeders and judges is absolutely essential to make the score card of real value to the amateur or professional breeder.

SIZE.

The section designated size is valued at ten points, and while there is no written description as to just what the size should be, it is understood by the judges that small, diminutive birds of this variety should be severely discounted, and in order to impress upon the minds of readers the importance of this section I wish to call special attention to chart No. 1, as we have tried to portray in this cut not only an ideal outline, but as near as we can put on paper the proportionate size of the Leghorn male. In discounting on size the judges should take into consideration the age of the specimen and see to it that young or immature birds of either sex are not classed among the winners. When specimens of this kind come under their hands they should be cut from two to four points on size, the same as they would be discounted with a weight clause. There was a strong argument

in favor of the weight clause for the Leghorns by the revision committee, and it is a question now whether this move would not have been a step in the right direction. However, if judges will use good judgment in discounting size, the aim of the association will be obtained and we will find in our Leghorns a well-developed, symmetrical breed.

CONDITION.

This section is valued at five points and refers to the health and condition of the specimens. Under this heading, broken plumage and filthy specimens should be severely punished. Nothing adds so much to the attractiveness of a poultry exhibition as clean exhibits; not only clean coops, but clean, well-groomed birds as well, and when exhibitors are careless in this direction they should be punished, and discounts under the head of condition is the proper place to make the cuts. Aside from broken plumage and careless cooping, defects that would come under this head would be unhealthy specimens, or birds that the exhibitors have care-

lessly allowed to run in filthy quarters until their legs have become scaled over by parasites. The cuts usually are, birds slightly out of condition, one-half point; birds showing signs of roup, one to one and one-half; scaly legs, one and a half to two, as in degree; male birds with torn combs or wattles caused by fighting, one-half to one. Any specimen so badly diseased as to endanger the lives of other specimens on exhibition should be disqualified and ordered out of the building at once.

HEAD.

This section is valued at four points and in shape should be short and deep and in color a reddish bay. It is seldom we discount for color in this section. If we do at all it is for a slight ticking of grey on the head of females, caused usu-

ally by feathers being constantly injured by males in the breeding pen. For this defect the cut is one-half point. In shape where the head is too long, following more after the Game style, the cut is one-half to one, as in degree. If beak is too long and too straight cut one-half to one; face full of puffs or wrinkles, one-half to one.

COMB.

This section is valued at ten points, and is without doubt the most important section on the bird, so far as fancy points are concerned. It has no commercial value. I presume you could not sell 100 pounds of them for twenty cents, but a bird without a comb and without a good one, too, would not be worth ten cents a dozen to the fancy breeder. We refer our readers to Chart 1 and to the illustration, "A Symmetrical Head," and ask them to study the combs carefully. Here you will find combs that fill the standard requirements, combs that are symmetrical and in harmony with the birds they adorn. Such combs would pass without a cut, and would, if properly mated, stamp themselves on the progeny. The sketch, "A Symmetrical Head," is made from the cockerel that was considered by the leading eastern breeders to possess the best type of the Leghorn head at the last Boston show. Mr. Sewell has this to say regarding it: "I am sending you an outline of the head of what was considered by many experts to be the most symmetrical Leghorn in the Boston show of last winter. This was a very fine headed bird for one of so large a body, and possessed probably as small comb and wattles as the leading Leghorn fanciers would like to see on their show specimens. A Leghorn comb can be too small to look well. They want no stinting of color in these gay head-dresses which they wear. We are always looking for the best models, and for this very reason have not missed a New York or Boston show in the last ten years. It is through the comparison of the best that breeders see where to improve. The publication of these two heads will offer a good opportunity for study from two of the very best models we ever met."

In Fig. 2 is shown a comb that is an abomination, and one that no fancier would tolerate on his breeding males, as no good could come from it no matter how careful he might be in the selection of the females. To start with, it has no even serrations. Some are too high, while the majority are too low, and it has a bad thumb mark on the side; it follows the head over too far and is poorly balanced, being too thick behind. This comb should be cut two and a half points for extra serrations, one-half point for thumb mark on side, one-half point for poor shape in rear, and one point for uneven serrations, making a total of five points, or fifty per cent of the entire comb.

In Fig. 3 is found just such combs as are often met in

the show room, and when the bird has unlimited range in the open air this style of comb makes a very fair showing, but confine the specimen for a few days, or place it in the foul air of the show room for one day, and it goes all to pieces. It is too thin to support its weight and as soon as the bird gets the least bit out of condition it falls over to one side, or twists. The serrations will drop in either direction and the comb when viewed from above reminds one of a withered flower. This comb should be discounted one point

for extra serrations, one point for being too thin at base, and one-half point for the serrations turning over at the top. The standard says that all Single Comb varieties should have five distinct points, and one-half point is discounted for every serration over and under five.

In Fig. 4 we find another defective comb, one quite often met in the show room. The serrations are all even and well balanced, but there are too many of them, and the rear of the comb

winds up wrong, showing serrations where there should be none. This comb should be discounted one and a half for extra serrations, one point for the twist in front, at least one-half more for the way it winds up in the rear, and one-half more for poor shape, comb being too long and too high.

While on this section I shall also consider the Rose Comb and will now call the attention of the readers to Fig. 10. Here is shown an ideal comb for this variety, and I wish to call special attention to it, both for the benefit of the breeders and the judges, as there is a difference of opinion among judges as to what actually constitutes a perfect Rose Comb for the Leghorn. It will be seen that the comb is directly on a line from point to rear of spike and the only rise on the surface is that portion directly over the crown of the head. It will also be seen that the spike is separated and not a continuation of the comb proper as in the Wyandotte. The rear of comb is elevated and does not follow the shape of the head as does the comb of the Wyandotte. You will notice also that the comb proper is covered evenly with small corrugations, making what our English fanciers would

term a finished surface. In Fig. 10 is shown the correct comb for Rose Comb Leghorns.

In Fig. 8 is shown a comb that is defective in every way. It is too large in front, the spike following the shape of the head like the Wyandotte. This comb is uneven on top and has a deep seam through the center. Such a comb should be discounted two points for general shape,

one-half point for being too wide in front, and one point for hollow in center.

In Fig. 9 we find a comb that is too narrow and one that is wider at rear than in front. It is not evenly serrated and shows a hollow in front. Such a comb should be discounted

one and a half points for general shape, one point for hollow in front and one point for poor serrations.

WATTLES AND EARLOBES.

The section embracing wattles and earlobes is valued at ten points and is divided into four for wattles and six for lobes. In scoring it is subdivided again, especially so in the lobes, allowing at least three points for color. While this section is one that has no commercial value, next to comb it is the most important section of the Brown Leghorn. A poor earlobe is one of the very first defects that a painstaking fancier will discard from his breeding pens.

I will now call the reader's attention to chart No. 1 and ask him to look carefully at this illustration. There are several points in connection with this bird to which I want to call special attention, especially to the shape and size of the earlobes and wattles. Here is a bird that is rightly proportioned in every respect, and you will note that the earlobe is small considering the size of the bird. These were my instructions to Mr. Sewell, as we have found that in breeding an earlobe that is too large we invariably run a lot of red around the edges, and unless we are very careful will run white into the face, which is one of the disqualifications in this variety. The old standard says, "White in the face of cockerels," and the present standard says, "White in the face of cockerels or pullets," so you see how important it is to guard against any defects, or we are liable to breed disqualified specimens.

In Fig. No. 2 we show wattles and earlobes that are wrong in every respect. The wattles themselves are too long, are poorly folded, and one of them a trifle longer than the other. Such a wattle as this should be discounted at least one point. The earlobes are uneven, showing a rough surface, and as a rule, look lumpy and unsightly, and should be discounted as least one point for shape, and as a rule, a lobe like this will be discounted from one-half to one and a half on color.

In Fig. 3 we have another faulty earlobe and wattle; however, they are even in length, but they are poorly folded and hang like two independent sacks and should be discounted one point. That part of the earlobe which shows in Fig. 3 should be discounted at least one-half point in shape, as it is hollow in the center and shows too far down on the neck. Altogether it is built on the make-shift order.

In No. 4 we have a wattle that is fairly good in proportion, not as good as it should be, but better than those in Figs. 2 and 3. This wattle should be discounted one-half point, as it rounds up "pat" at the bottom and rounds poorly under the lower mandible. The earlobes in this specimen have a tendency to run under on the neck, have an uneven surface, are not properly rounded out, and aside from this show almost one-half red. This should be discounted one and a half for shape and at least two for color. A point of importance to a fancier in selecting a male good in this section, would be an earlobe about the size of an ordinary pearl button, or more accurately describing it, about the size of the thumb nail and almost the same shape. Do everything in your power to reduce the size of this section, both on the

male and female, as in so doing you are not only breeding away from the defects, but from disqualifications as well.

NECK.

The neck is valued at seven points; three for shape and four for color, and as a rule the neck is good in shape. If there is any defect at all it is usually shown in the plumage being a little too short at the points of the shoulder, caused by the bird not being in full feather. The standard says, "Long, well arched, with abundant hackle flowing over the shoulders." In color this section should be a rich brilliant red, with a distinct stripe extending down the center of each feather, tapering to a point near its extremity, the red to be free from black.

There is one point to which I would like to call attention here, and that is the description "tapering to a point near its extremity." Get this point fully fixed in your mind that the black must not run to the end of the red, but must stop with the red extending beyond and to a point, the black coming to a point inside of the red. We will now call your attention again to Chart No. 1 and ask you to study well the lay of the feathers in this chart. Remember this is intended to represent an ideal bird, or as near as we can represent it with the two colors, black and white. But, to further help you in this direction we have inserted a full page chart of feathers which we will describe one by one. By referring to the chart of feathers it will be seen that No. 6 is very good indeed, however the shaft in this feather is red where it should be black; but taking it all in all it is as near a perfect feather as we could pick up at the time we were having the chart made. Feather No. 7 shows practically the same defect, with a little lighter shade of under-color. Each of these feathers should be discounted one-half point. Feather No. 8 shows black only on one side of the shaft, or in other words the red and the black mingle to the shaft, making a sort of smutty color. A hackle with this color throughout should be discounted one point.

In Feather No. 9 we find a hackle entirely too light, failing in the dark under-color, also failing almost entirely in the black striping. A neck like this should be discounted two and a half points. In Feather No. 10 we have a feather resembling No. 8 in many respects; however, the color is not so good, as it is more or less washed out with the red, and the under-color is very poor—in fact, such a feather as this would never breed a show specimen of the male sex. From such a neck, if properly mated, the breeder might get some fairly good females, as the extreme color used to produce males is quite often too strong to produce a nice shade of brown in the opposite sex. This we call up later in describing the females and will give it more space at that time. Cuts on shape of neck are usually made on a neck that is too straight or too long. In either event the cut is one-half to one point, as in degree. If the feathers are too short, not being fully developed, making a break at the junction of the neck and back, the cut is from one-half to one, as in degree.

BACK.

The back is valued at seven points and is sub-divided into three for shape and four for color. This section should have a higher valuation, especially so in shape, as it is one of the most important sections on any part of the bird, and without a proper proportion of points allowed it is impossible to make your penalties as severe as they should be for a defective specimen. Since we have but three points to the shape we will have to make our cuts in proportion to the number of points allowed by the American Poultry Association. And, right here let me say to the reader, when you criticise judges for light cuts on serious defects, stop to

think a minute, look at your standard and see if the judge had a right to cut more than he did.

The writer has been quite often criticised for making cuts that the critics imagined were not severe enough, when in reality he had gone past the limit and was giving the score card instead of the bird every benefit, and until the standard is well understood by the breeder and every section thoroughly familiar to him he will not be competent nor capable of criticising the work of the judges under the score card system. The back of the Leghorn should be of medium length, the saddle rising in a short concave sweep to the tail. One of the very serious defects in Leghorns, especially in this section, is the length of the back. We quite often find a specimen that is diminutive in every point, with a back from one to three inches longer than he should have, or in other words, a back that spoils the symmetry of the bird.

I again call attention to Chart No. 1. Study this chart and look well into the detail, not only of the length of the back, but of the breadth of the back between the shoulders and of the concave sweep as it rises to the tail. This back does not rise up with gentle slope, like the Brahma, nor is it heavily cushioned, like the Cochon; but it comes up uprightly, making a sharp concave. If the back is too long, the cut is from one-half to one and one-half points; if too narrow, showing a weakly constituted specimen, the cut is from one-half to one and a half; if feathers are very black in concave sweep to tail, the cut is from one-half to one; if saddle feathers are short, not falling well over the side, the cut is from one-half to one. In color this section is just as important as the hackle and the standard description of one answers for the other, with the exception that the formation of the feather is different. In the saddle we have a feather broader, and the long saddles (or as Mr. Felch puts it, the "side hangers") much longer. There is probably no one section in color in this breed that has been given as close attention by the fanciers in the past ten years as the striping in the saddle of the males, in which we find specimens so near perfect that it is almost impossible to discount them under the score card system of judging.

In feathers Numbers 3 and 4 in the feather chart are to be found about as near perfect saddle feathers as it is possible to get them. The only defect that can be discounted is the striping in the center of feather, or in other words, the part of the shaft running red, and when you cut a back like this one-half point you are making it a very serious defect. In feathers Nos. 1 and 2 we have specimens that are not dark enough, failing almost entirely in the black striping, making the back when viewed from above look like a sort of cherry red, or more after the color of a Black Red Game. A back in color like feathers Nos. 1 and 2 should be discounted two points. In feathers No. 5 we have a better feather, but one that is far from perfect, as the striping shows only on one side of the shaft, and even then is not clear and distinct. This feather should be discounted one point.

It is well to remember in breeding males that if we expect to produce a large percentage of exhibition cockerels we must breed from a male of good, strong striping in hackle and saddle. Be careful, however, especially in the hackle, to see that the end of the feathers do not blunt, having black in the outside edging, making a large, black smut or collar around the neck, as this is one of the very serious defects and one that will receive a cut from one to two points in the hands of a competent judge. You will find it impossible to get a nice striping in the long feathers of the saddle, such as is shown in the feather chart in feathers Nos. 1 and 2, as you can in the shorter feathers shown in feathers 3 and 4, but you must breed with the aim of getting these long feathers striped in proportion if you expect to get a perfect saddle on the cockerels.

BREAST.

The breast is valued at ten points and is divided into six for shape and four for color. In shape it should be round, full and carried well forward. Here is a description that differs from that of almost any other breed in the standard. The phrase, "Carried well forward," I believe, is not understood by either the breeders or the judges. I have noticed the criticisms of some of the best cuts along this line, and I find that breeders as a general rule do not understand this as the American Poultry Association intended they should understand it, and I again call attention to Chart No. 1. The description of most breeds says, "Deep and well rounded," but in the Leghorn it says, "Carried well forward." Get this idea well into your head, and remember that a Brown Leghorn male to be well shaped in the breast is not deep in front like a Plymouth Rock or a Wyandotte, but is rounded up, and, as a Game man would say, "Tucked up closely under the throat."

Discount for crooked breast bone is quite often done in this section, while it should be done in the body section, as the breast bone proper is a part of the body, and that part that crooks or turns over is usually well down between the thighs, hence the reader will notice that we omit that part in discounting this section in shape. If the breast is too narrow or too flat, the cut should be one-half to one and one-half points, as in degree. If deep down, giving the section more of a Dorking appearance, cut one point. If it falls in, not showing a nice rounded out appearance, cut one point. If stopping too abruptly, not carried up well in front, the cut is one-half.

In color the breast should be black, and as a rule this section is good in color, but occasionally there will be a trace of red striping or lacing on the feathers, and such should be severely discounted. If only a slight trace of lacing on a few feathers, the cut should be one-half point; but if the breast shows a mottled appearance, it should be discounted from one and one-half to three points, as in degree.

BODY AND FLUFF.

This section is not so very important in a Brown Leghorn, for, as a rule, it is passed as perfect and in the majority of cases it would be hard to find it defective enough to justify a discount. There are six points allotted to it—three for shape and three for color. In shape the body should be of medium length, tapering from front to rear and closely feathered, with fluff rather short. In this section I will take up the matter of crooked breast bones, for in this breed, regardless of the fact that they are very light and alert, and quick on their feet, we find crooked breast bones as often as we do in the Asiatic or American classes. I have been asked often if a crooked breast bone will breed the same defect. I hardly think it will, but at the same time I do not believe it to be a good policy to mate up birds with this defect year after year. I have noticed that some strains of Brown Leghorns are more apt to have this defect than others, and I am rather led to believe that there has been some carelessness in the breeding to such an extent that it has become hereditary. Where the bone is slightly turned, the cut should be one-half point. If it is crooked so as to make a deformity the cut should be from one-half to two points, as in degree.

In color the body should be black. If any signs of mossy or red colored feathers appear, the cut should be from one-half to one, as in degree. The fluff portion of the bird should be rather short, and in color, black. As I have said, this section is usually good in color, but occasionally you will find a bird that is down behind, out of shape to such an extent that the symmetry of the entire specimen is injured, in which case it should receive a cut of from one-half to one. If color fails (as it does sometimes in body and breast, with

the red feathers running around) the cut should be from one-half to one, as in degree.

WINGS.

Wings are valued at eight points and are subdivided into four for shape and four for color. As a rule this section is good in shape. Defects that are usually found are, wings not properly folded, and broken or damaged feathers. A damaged feather in the wing of a Brown Leghorn is severely punished by the judge, as it more than likely covers a multitude of sins. If a broken feather should appear, the tips being broken at the ends, the wings should be discounted from one-half to two, as in degree. If poorly folded, failing to tuck up close to the body, the cut should be from one-half to one, as in degree. In color, the bows should be a bright red, the front edge black and covered by the breast feathers. The primaries should be black, the lower web edged with brown; secondaries, black, the edge of the lower web a rich brown sufficient to secure the wing bay of the same color; coverts, greenish black, forming a well-defined bar of that color across the wing when folded. There is no more handsome wing on any bird than on the Brown Leghorn if it is properly bred. The bay and black, with the defined bar across, makes a pleasing study in colors.

Another point about the Brown Leghorns to which I wish to call special attention of the breeder is this: The breaking off or pulling out of feathers in the wings of specimens that are being placed on exhibition. It is true that you can fool the judges by doing so, but you fool yourselves a great deal worse than you do the judges, from the simple fact that you breed from a bird that should have been disqualified, and the next year you have your trouble for your labor, as the chances are ten to one that many of the offspring will breed with this same defect. There is so much "faking" in preparing birds for exhibition that I would gladly vote to eliminate all color disqualifications, allowing more points to the sections that were defective in this respect, and cutting them so severely that birds with off-color would soon be relegated to the rear.

The claims made that the letting down of the American Poultry Association on its color disqualification would injure the breed, I do not believe—never did believe. It has not hurt other breeds, and I do not believe it would hurt the Brown Leghorns, for no up-to-date breeder wants them defective, and whether it is a disqualification or not, they will breed just as hard to get rid of the defects as they would if it were thrown off the table and declared worthless. Then again—a slight injury to the wing at the time the feather is in its embryo form is liable to discolor it and disqualify a specimen that ordinarily would be perfect in color.

The defects that are usually found in the color of wings are poor wing barring and the mingling of black with red on shoulders, giving the bird a kind of smutty appearance on top. If the bird has a smooth, even surface on neck, wing bow and back, but the feathers a variation of color on wing bow from that of the other section, it should be discounted, and with a mixture of any other color than red, it should be discounted from one-half to one and one-half, as in degree. If any sign of white appears in the primaries or secondaries of cockerels, the bird should be disqualified. I do not mean by this that judges should take a microscope, or strain their eyes to find this defect, but at the same time if the defect is clear there is nothing left for them to do but throw them out.

TAIL.

Tail has a valuation of eight points and is subdivided into four for shape and four for color and it is a section that is very valuable to the fancier from the fact that it seldom passes without a discount of from one to one and one-half

on shape alone. The Leghorns are very flighty, and as a rule soon become "coop-tired" on exhibition and hold their tails in a careless manner as compared with their carriage in the yards. The Leghorn male that is inclined to be the least bit high in tail in the yard is almost sure to carry it perpendicularly or a little bit forward out of perpendicular line when on exhibition. A squirrel-tail is an abomination on any bird, and in no breed more than in a Leghorn. Still it is one of the defects that the breed is subject to and one that breeders have constantly to guard against. I should prefer a tail down at an angle of about 85 degrees, something of the form of the Minorca, believing that from such a specimen we get, not only our most handsome show bird, but by far our best breeding bird.

Mr. Sewell has well pictured this section in the chart (No. 1). Here you see a well-balanced specimen, with tail at the proper angle, the sickles and coverts showing just as they should on the perfect specimen. This is my ideal in a Leghorn tail. If the tail is carried too high, somewhat on a perpendicular line, the cut should be one. If short in coverts, as is quite often the case, showing only the tail proper, the cut should be from one-half to one. If one sickle is missing, cut one; if both are missing, two. If the tail is carried past perpendicular line, making almost a squirrel tail of it, the cut should be from one and one-half to two and one-half. If the tail is carried to one side so as to be out of straight line, the specimen should be disqualified.

In color the tail should be black, and in this respect it is seldom defective. If any white appears, the specimen is disqualified, except in old birds, and that we have described under the head of disqualifications, where a certain amount of white is allowed at the base of the sickles of the cocks, and when such white does appear, the discount should be one and one-half points for color alone.

LEGS.

Legs and toes are valued at seven points. Here is one section of the breed that is not subdivided and the judge must use his own discretion in cutting for color and shape. In color, the legs should be yellow; toes, yellow or dusky yellow. In shape the thighs should be of medium length, and slender, the shanks rather long and toes straight. If shanks are too short, giving the bird a dumpy appearance, the cut should be from one-half to one; if too heavy, giving the bird the appearance of the Dorking, the cut should be one. If the toes are crooked or turned around, as is often the case, the cut should be from one-half to one. If they fail to show a rich yellow color on shanks, the cut should be one-half to one. If an ashy or light color appears, caused sometimes by an alkali soil, the cut should be from one-half to one and one-half, as in degree.

THE LEGHORN FEMALE.

Chart No. 2 illustrates my ideal of the Leghorn female. The shape will answer for all of the varieties. In markings we show the ideal feathers for the Brown Leghorn. The only alteration we should suggest that would improve the shape of the bird would be a trifle more length to legs. Consider the picture carefully as it stands. Place your hand over the legs and feet and then look again at the body, and I believe that you will agree with me that a little more leg would add to the beauty of the outline. In markings Artist Sewell has undoubtedly done the finest piece of work for this variety ever put on paper. The nice, seal brown shown on the back, wings and tail is as near perfect as black and white can be made to produce this effect. We will take up the female in sections, and go over them similar to our treatment of the male, eliminating symmetry, however, as the cuts in that section on the male variety will answer just as well for the female.

SIZE.

As we have before explained, this section is valued at ten points and it is vastly important that breeders of Leghorns should understand that it is one of the very important sections of the breed. In Chart No. 2 we have tried to show a bird that is up in size, carrying itself sprightly as a Leghorn should, with the weight equally divided in all parts of the body, making a symmetrical outline and conveying to the reader an ideal of the Leghorn as it should be. When breeders are careless and place on exhibition a narrow, contracted, diminutive specimen, they should suffer for their carelessness, and the judge who fails to cut for size when puny little specimens are placed on exhibition is failing to do his duty in that direction.

CONDITION.

Condition is so well described in the description of the male that a repetition of same would be of no benefit to the reader.

HEAD.

The head is valued at four points and is subdivided into two for shape and two for color. In shape it should be short and deep, and smaller than the male. In color, it should be brown, edged with lighter brown. In Chart No. 2 is shown an ideal head in every respect. The head is deep enough through from top to bottom; is long enough to be symmetrical, and has a nicely curved beak and that sprightly intelligent look so characteristic of this variety.

Where the head is too long or gamey the cut should be from one-half to one point; if narrow through from top to bottom, cut one-half point. If the beak is too long, failing to show a nice curve, the cut should be one-half point.

COMB.

The comb is valued at ten points, and like the same section in the male, is one of the most important so far as fancy points are concerned. In Chart No. 2 is shown an ideal comb as described by the standard—five distinct serrations, comb falling all on one side of the head, nicely folded, with the front serration slightly elevated. From this kind of a comb a fancier may expect to produce prize specimens. However, I will say while on this section that if one is breeding for cockerels alone, a comb that is stiffer at the base and more upright would probably give better results for the male side; but if breeding for females, one must have a nicely shaped, smoothly folded comb, as shown in Chart No. 2.

In Fig. 5 is shown a comb that is quite often met in the show room, and from outside appearances there are some good features about it. It is loose on the head, however, and is just as liable to fall on one side as on the other. It does not seem to have any special position. A comb of this shape may be on one side of the head to-day and on the other side to-morrow, and perhaps the third

day it may be lopped, showing on both sides of the head similar to the Minorcas. It has too many serrations, the points themselves are too long, and the position on the head almost blinds the fowl. This comb should be discounted one point on general shape, a half point more for the extra serration and a half point more for the points of the comb being entirely too long.

In Fig. 6 we have another very poorly formed comb, one that is stiff and upright in front, falling too far over to the rear, and falling on both sides of the head. This comb

LEGHORN FEMALE STUDY.

CHART No. 3.

*Designed by Franklane L. Sewell Expressly for this Article to Illustrate the Application of the Standard of Perfection.
The Distribution of Color in all Sections of the Body is here Portrayed, and
the Shape of a Leghorn Female Outlined.*

should be discounted two points for general shape, one point for lacking sufficient serrations and a half point more for the rear portion falling too far forward.

In Fig. 7 we have a comb that is an abomination to the breed and one that I regret to say is too often met in the yards of Leghorn breeders. It looks more like a poorly constructed piece of fancy work, where the edges have been torn or worn out. Such a comb as this will only prove a disappointment to the breeder and should be cut at least four points for general shape. It has a double twist, falls on both sides of the head and lops from left to right and from right to left. There are enough serrations, but they are not evenly divided. In fact, the entire outline is wrong, and if cut from four to four and one-half points it will not be discounted too severely. A specimen showing a comb like this should be discarded from the breeding yards and used only for meat, for the fancier takes chances every day he keeps the bird in his yards.

In Fig. 13 is shown an ideal comb for the Rose Comb varieties. Such combs as these are very rare, but they are what the standard calls for, and though we cannot expect to make a great deal of progress in breeding this fancy point, no matter what variety of the Leghorn one is breeding, whether the Brown, White, Buff or Black, the description of this section is alike, and the importance to the breeder in securing the best has the same weight.

WATTLES AND EARLOBES.

Wattles and ear-lobes have a valuation of ten points, and while they are not so important on the female as on the male, they are of enough importance under the present standard to bear close attention in making selection for the breeding pen. Study carefully the lobe as illustrated in Chart No. 2. There is shown a small lobe, smooth on top, carried in the proper position, and pure white. Such lobes are scarce, but it is from just such lobes that one may expect to produce his prize specimens. The old standard disqualifies for white in the face of cockerels, but the present standard disqualifies for white in the face of cockerels or pullets, and by breeding from a large ear-lobe, one that is poorly folded, full of wrinkles and creases (such a one is shown in Fig. 5), one is very liable to get the white to extend past the lobe and into the face of the pullet, thereby disqualifying the bird.

Fig. 6 shows a lobe which is not even. It is small at the top and broad at the bottom, with a crease in the center, while Fig. 7 shows a lobe that looks very much like a lump of fat. A lobe such as is shown in Fig. 7 almost invariably has an edging of red around the top, and like the head which it adorns, should be thrown out and never used in the breeding yards.

6

7

13

Where the lobes are too large and uneven, but still holding good in color, the cut should be from one-half to one point. A lumpy lobe, like the one shown in Fig. 7 should be discounted at least one point for shape. The ear-lobe shown in Fig. 6 should be discounted one and one-half points on shape. In color, the lobe should be pure white. If only a trace of red appears, the cut should be one-half point. If there are red streaks through them, going in around the edges and running up into the face, the cut should be from one-half to one and one-half point. If over half of the lobe is red, the specimen should be disqualified.

NECK.

The neck is valued at seven points (three for shape and four for color), and in Chart No. 2 is shown the division of color in this section. The standard description is, "Rich orange yellow with a black stripe extending down the center, tapering to a point near the end of the feather and conforming to the shape of the feather." I have found in breeding this variety (and I believe the Partridge Cochins breeders in producing prize specimens have run up against the same obstacle), that it is next to impossible to get a nice striped hackle on an even surface colored female. In getting a nice seal brown on the back, wings and coverts one is very apt to run a little penciling into the neck, and it is a question in my mind whether it would not be better for the American Poultry Association to change the wording of this section, allowing the neck to be penciled and holding the rich orange yellow on the surface, paying less attention to the black striping. My own experience has been that specimens of this type will produce the best females.

In shape Chart No. 2 shows an ideal section. The hackle feathers are long enough and finish up in a perfect outline, still not too long, as is often the case with specimens that show a heavy cape around their neck. If the neck is too long or gamey, the cut should be from one-half to one point. If too straight, failing to show a nice arch, the cut should be one point. If there is a break at the junction of the neck and the body, caused by feathers not being long enough, the cut should be from one-half to one point, as in degree.

In color, if the black centers are slightly penciled, the cut should be one-half point. If the red extends into the center of the feather, failing to show black, as is quite often the case, the cut should be from one-half to one and one-half points, as in degree. If the black runs to the lower end of the feather, failing to show the nice lacing on the outside, the cut should be from one-half to one point, as in degree.

BACK.

This section is valued at seven points and has only three points allowed for color, the other four going for shape. In shape it should be of medium length, with a slight rise to the tail. In color the web of the feathers on the surface should be brown, finely penciled with darker brown (the lighter shade predominant), the effect producing soft brown tints with no shafting perceptible in the feathers. That part of the feather not exposed on the surface should be brown, shading into a slate in the under-color or fluffy portion of the feather.

I think a better description of this section, instead of saying "That part of the feather not exposed to surface," would be to describe it thus: Brown, finely penciled with a darker brown, the lighter shade predominant—this to cover all parts of the knitted portion of the feather. By "knitted portion" I have reference to that part of the feather that is woven closely together, the rest of the description being for the downy part or under-color.

If the back is too long or too narrow, the cut should be from one-half to one point. If too short, giving the bird a

dumpy appearance, the cut should be from one-half to one point. If it fails in rising where it joins on to the tail, the cut should be one point, and if too heavily cushioned (much after the style of the Wyandotte) the cut should be one point.

In color, if any red or brick appears on the surface, the cut should be one point. If shafting appears on the feather, giving the surface an uneven appearance, the cut should be from one-half to one and one-half points, as in degree.

BREAST.

This section is valued at ten points, and is divided into six for shape and four for color. In shape it should be round and full; in color, a rich salmon, shading off lighter under the body and free from shafting. In Chart No. 2 is shown an ideal shaped breast. If the breast is too narrow or too full, the cut should be from one to one and one-half points, as in degree. If failing to show a nice rounded out appearance, the cut should be from one-half to one point. If not deep enough through from point of shoulders to keel bone, the cut should be from one-half to one point. In color, if the salmon shows a sign of shafting on the feathers, the cut should be from one-half to one point, as in degree. If a black or brown edging appears on the end of the feathers, the cut should be from one-half to two points, as in degree. The color of the Brown Leghorn female's breast is usually good, and as a rule is seldom discounted. The defects that do appear are those that I have described as shafting, or brown edging at the end of feathers, and when this appears it should be severely discounted.

BODY AND FLUFF.

This section is valued at six points and is divided into three for shape and three for color. In shape the body should be of medium length, deep and plump, the fluff rather short and more developed than in the male. In color the body should be a light brown and the fluff an ashy brown. In color it is seldom that this section is discounted, as it is almost invariably good. Occasionally a trace of the brown edging will show (as described in that of the breast), and when this is met it should be discounted from one-half to one point. In shape, if the body is too narrow, failing in the nice plump appearance characteristic of this breed, the cut should be from one-half to one and one-half points. If the breast bone is crooked, turning over slightly and one-sided, or turning at the end, as is often the case, the cut should be one-half to two points, as in degree.

WINGS.

Wings are valued at eight points, and are divided into four for shape and four for color. In shape they should be large and well folded. The word "large" as used here refers to a large wing for the size of the specimen. Not a large, ungainly wing, as might be interpreted, but the Leghorn being a sprightly fowl, very alert and quick on the wing, it is more developed for the size of the specimen than in any of the American or Asiatic breeds. When the fowl is in repose the wings should be nicely folded against the sides. If the wings fail to fold as they should, showing a kind of a droopy appearance, the cut should be from one-half to one point. If the feathers are broken or twisted, the cut should be from one-half to one point. If the ends of the feathers are broken off or missing, as is often the case in the show room, the discount should be from one-half to two and one-half points, as in degree. Judges must deal severely with these defects, as quite often it is the case that a feather has been broken to hide a disqualification, as white disqualifies.

In color the primaries should be slaty brown, the outer edge slightly penciled with lighter color; secondaries brown, the web evenly penciled with a lighter brown; coverts same

color as described in the back. It is seldom that we find a perfect colored wing, especially on the surface. As a rule they will show a brick color running down on to the shoulders and well on to the center of the wing. Then, again, one is quite likely to find on some of the darkest specimens a tendency to a black or smutty edge of brown along the lower feathers. Should this black or smutty edging appear, the cut should be from one-half to one and one-half points, as in degree. Where the brick or red color runs on the surface, the cut should be from one-half to two points, as in degree.

TAIL.

The tail is valued at eight points, four for shape and four for color. For shape I refer to Chart No. 2, and for description of shape I quote the standard—"Long, full and carried well up, but not upright." The Leghorn is a fowl that is always on the move. It is alert, quick to perceive danger, quick to go when it hears it, and while the tail should not be carried perpendicularly, it should be carried at an angle of about eighty-five degrees. Chart No. 2 shows the tail in its proper proportions.

A well-balanced Leghorn tail has seven feathers on a side. It is seldom that one can find a well-shaped tail with over eight feathers or under six, and as a rule seven feathers on a side give the best balanced and most symmetrical looking specimen. If the tail is carried too high, on a perpendicular line or even in front of the perpendicular line, the cut should be from one-half to two points, as in degree. If too short, giving the specimen a dumpy appearance, the cut should be from one-half to one and one-half points; if feathers are missing or broken, from one-half to one point.

In color the tail should be dull black, excepting the two higher main tail feathers, which are penciled light brown. The coverts should be brown, penciled with a lighter brown. In fact, the color of the coverts is identical with the color of the back. The two main tail feathers add to the beauty of the specimen by being penciled, as you then have a nice seal brown from the neck on to the end of the back and tail. If any brown appears in the main tail aside from the two main feathers, the cut should be from one-half to one point, as in degree. If the two main tail feathers fail in showing the nice penciling, the cut should be from one-half to one point. If brown tips appear on the end of feathers with a sort of gray shading, the cut should be from one-half to one and one-half points, as in degree.

LEGS AND TOES.

Legs and toes are valued at seven points. In shape the thighs should be of medium length and slender; the toes straight. In color the plumage should be an ashy brown; shanks, bright yellow; toes, yellow, or dusky yellow.

In Chart No. 2 the size of the legs is rightly proportioned, but the thighs should be a trifle longer, so that as the judges term it, there would be a little more daylight under the specimen. With this exception we would pass them as perfect. When legs are too short, or too long as the case might be, the cut should be from one-half to one point. If standing too close together, giving the bird a narrow and contracted appearance from a front view, the cut should be from one-half to one. If the knees bend in behind, giving the specimen a knock-kneed appearance, the cut should be from one to one and one-half.

In color the legs should be rich yellow, and if they fail in this section, showing a spotted or ashy color, the cut should be from one-half to one point; if bleached out, giving them a flesh color similar to the Dorkings, the cut should be from one-half to three points, and if they fail entirely in showing yellow the specimen should be disqualified.

THEO. HEWES.

BROWN LEGHORNS.

A Prominent Judge Goes Deeply Into the Shape and Color Question from an Exhibitor's and a Breeder's Point of View, Discusses the Penalty for Prevailing Defects, and Advises How to Avoid Them.

By F. H. Shellabarger.

BROWN LEGHORNS are too well known to need any detailed account of when they were first introduced to the American fanciers, but we are told by those who claim to be authorities that they originated in Italy, in a place called Leghorn, and from that city they derive their name. We are also told that the original Leghorn was of the White variety; that from them came sports, and that in fact all the different varieties of Leghorns owe their origin to the White variety. If this be true, we shall be able to show further on in this series of articles where the Browns at times breed objectionable color, which will tend to verify the above statement in favor of the White variety being the original Leghorn.

TYPICAL CARRIAGE.

We first wish to call particular attention to shape in judging the male Leghorn. By reference to page 61 of the American Standard of Perfection we find the schedule of sections with values allowed each. We are instructed to begin with typical carriage, which has a valuation of eight points. That being the case, one must first consider the different sections that go to make up typical carriage. We find the aggregate value of points placed on the different sections that go to make up shape to be about forty-four points, counting four points for shape of wattles and earlobes (there being ten points allowed for both color and shape), and allowing on shape three points of the seven credited to legs and toes.

We therefore find that typical carriage sustains a value equal to a fraction better than one-fifth of the value placed on all sections that go to make up shape. Hence in scoring we discount the defects in shape first. Then if we have cut the specimen two and one-half points or less in the various sections of shape, we cut typical carriage one-half point. If we have cut three points and not to exceed five we cut typical carriage one.

HEAD.

We would now call attention to "Brutus," owned by J. H. Johnson (page 11). Beginning with shape of head, our standard calls for the head short and deep, with a value of four points for shape. By referring to Brutus we see the beak is a trifle long and should be cut one-half point. The beak should also be straight with the center of the head when viewed from in front. A beak that turns to one side, or one in which the upper mandible fails to close on the lower part the entire length and in some cases forming what is termed a cross beak, is a serious fault, in fact it is deemed of sufficient importance to disqualify. By referring again to Brutus we find the head looks to be too narrow up and down, and the standard calls for the head to be deep. For such a defect the cut should be one-half point. The face of the Leghorn male should be free from folds or wrinkles, and where such defects appear the cuts should be from one-half to one, according to degree.

COMB.

The next section to consider is comb, with a value of ten points. It should be either single or rose. If single, it should be of medium size, perfectly straight and upright, should be firm on the head, free from twists, side sprigs or excrescences. It should be deeply serrated, having five points, and should also extend well over the back of the head, but show no tendency to follow the shape of the neck. A comb that, when viewed from in front, shows a part of the same shape as the letter S, is termed a twisted comb and is severely dealt with. A comb lopping over to one side disqualifies. The same also applies to Rose Combs, and where a specimen in Rose Comb Leghorns fails to show a spike at the rear of comb, the same being a natural defect, the specimen is termed disqualified.

To return to Single Comb Browns. We stated the comb should be of medium size and in this respect many persons are at a loss to understand what is meant by medium. We understand it to mean medium in size as compared to the combs usually found; not as small as would be termed the proper size for a Plymouth Rock, and on the other hand, not as large as would be termed the proper size for a Minorca, but between the two. We call attention to comb on Brutus. It extends a trifle too far forward on the beak and shows too much height above the head to where the first serration joins the base of the comb. There also is a slight tendency for the back of the comb to conform to the shape of the neck and we think there is also too much of the comb back of the eye. In scoring we should cut such a comb one point. We do not wish to cast any reflection on the artist, or the breeder for whom this cut was made, and will say that as we understand it the cut was made to represent a bird from nature and not one absolutely perfect.

We find in the standard that the comb should be free from side sprigs. When sprigs appear on a comb the cut is one for each sprig. We think it far better for poultrymen not to use such specimens as breeders, for when side sprigs appear in a flock if one is not very careful the defect will soon become prevalent. To be on the safe side it is best to discard all such breeders. There are many forms of defects found on combs and scarcely any two are defective alike so far as the place wherein the defects occur, and to attempt to describe all the different styles of combs and various forms of defects would require no small amount of time and space. To conclude this section we would suggest to breeders that in selecting a male to breed a comb should be chosen that is perfectly upright and firm upon the head and is thick enough through at the base to hold itself upright.

WATTLES AND EARLOBES.

Wattles and earlobes are valued at ten points, but we are at a loss to say just what per cent of the amount is for shape, as both color and shape are valued together, but we think that to allow four points of the ten to shape of wattles and earlobes would not be far out of the way. Leghorn

wattles should be long, thin and pendulous, yet are not always found up to this description. Where they are not of an equal length, or where they have folds, or bunches on them the cut is from one-half to one and one-half points, as in degree.

Ear-lobes should be smooth, thin, free from folds or wrinkles and fit close to the head. Where they show rough on the surface or have folds or wrinkles the outs are from one-half to one. We are not fully satisfied with the standard description of shape of ear-lobes and think the shape could have been mentioned in the standard as heart or egg shape. Breeders and judges are equally at sea when it comes to saying what the shape should be where no description is given in the standard as to form, size, etc.

NECK.

We shall next consider shape of neck which is valued at three points. It should be long and well arched with abundant hackle flowing well over the shoulders. If the neck is short the cut should be one-half point, or if short and not well arched, one point, or if the two former defects as mentioned appear, and the hackle fails to cover well down onto the shoulders, causing a break in the outline of the shape of the neck at the juncture of the back and breast, the cut should be from one to one and one-half.

BACK.

Back is valued as to shape at three points. It should be of medium length with the saddle rising in a sharp concave sweep to the tail. Saddle feathers should be long. Where the back is long the cut should be from one-half to one, or where the back slopes from the center to the tail as in B. R. Games the cut should be from one-half to one, as in degree. Crooked or roached backs disqualify.

BREAST.

Breast is valued at six points. It should be round, full and carried well forward with breast bone straight. The defects in shape of breast are lack of fullness, and flat, not round. For such defects the cut is from one-half to one and one-half, or where a crooked breast bone occurs the cut is from one-half to one, according to degree.

BODY AND FLUFF.

Body and fluff are valued at three points as to shape. The body should be medium in length, tapering from front to rear. Keel bone straight, fluff rather short. Where the body is very narrow, or where it is long, or should it appear very short, the cut should be from one-half to one. What we said as to breast bone, where the same is crooked, would have properly come under the section of body, and is styled keel bone. This defect is very often caused by the birds roosting when immature on small perches, or those having sharp edges, thus causing the bone to grow crooked. Very frequently breeders will allow the chicks to roost on the tree limbs, as they will take to a high position just as quick as they can fly up, and are then safe from various kinds of varmints that could get them if on the ground. Crooked keel bones are very often caused in that way and suffer a cut of from one-half to one point in scoring. The fluff is very seldom cut as to shape, yet some cases occur where it is very scant and should be cut one-half point.

WINGS.

Wings should be large and well folded. For this section we have a value of four points. The word large, as we understand it, refers to the size of the wing when opened out. Where the flight feathers are inclined to show narrow and short, the cut should be one-half point. Where flights are badly folded and are carried (when wing is closed) outside of the secondaries, the cut is from one to one and one-half points. When broken feathers in wings are found,

if but one feather is broken and the shape otherwise is good, we cut one-half point and mark the score card on the line of wing "broken," but where there are broken feathers in both of the wings, and they are the same feathers, just opposite, we cut from one to one and one-half for such defect. For a clipped wing where only one is clipped, and the opposite wing is all right as to shape, we cut two, but where both wings are clipped, the specimen is disqualified, for it is unnecessary to cut the wing feathers of both wings in order to prevent a bird flying. All that is necessary is to clip one wing if no better way can be found to stop them from getting out. The reason for the severe penalty is that when both wings are clipped the feathers are all gone, and some objectionable color may have gone with them. We want to see the feathers in one wing when color is to be examined, and if one does not wish to sacrifice a cut of two points on shape of wings, we say do not clip the wing, as it mars the shape just the same as to clip off a part of the comb.

TAIL.

The tail, as to shape, is valued at four points and should be large, full and carried upright. By referring to Brutus we find the tail is a trifle low and should be cut one-half point. The tail should not be carried forward of a perpendicular line drawn from the roots of the tail. Where such is the case the specimen is disqualified for what is termed squirrel tail. We advise breeders to be careful and not breed from such a bird, nor show such a one in the show room.

The tail should also stand straight with the head when viewed from in front, as a tail that leans to one side, when the specimen is determined to carry it in this position, is known as a wry tail, and this is also a disqualification. The sickles, or what may be better understood as the two highest and longest feathers of the tail, should be long and well curved. Where they are short and not well curved the cut is one-half point, or if one is gone the cut is one point. If both are gone, two points. Or if the main tail feathers are broken and some are missing the cut is from one-half to one. Where the coverts are scanty and fail to fill up against the main tail the cut should be from one-half to one, as in degree.

LEGS AND TOES.

Legs and toes are valued at seven points, which include both shape and color. If we allow three points to shape we certainly do not value them too high, for when we read the description, as given in the standard, we find the shanks and thighs are both mentioned. The thighs should be of medium length and slender; the shanks long. Nothing is said as to shape of toes, nor the number there should be on each foot. Where we find the thighs and shanks short, causing the bird to look somewhat ducklegged, as to length we cut from one-half to one; or where the hock joints are very close together causing the specimen to stand knock-kneed, while the legs extend outward and are well spread at the feet, the cuts are from one to one and one-half points. In the case of scaly and rough legs, the cuts are from one-half to one and one-half, and the bird is subject to a cut in the section of condition. As we have stated nothing is said as to shape of the toes, yet we understand they should be straight, well spread and four in number on each foot. The shanks and toes should also be smooth, entirely free from feathers or down. Where such appear on the shanks or feet the specimen is disqualified.

SIZE.

We have omitted to consider the section of size, which has a value of ten points. The Leghorn is not subject to a weight clause, but is to be determined by comparison. The object of this section is to keep such breeds as come under this section up to about a certain size and not allow

them to become dwarfed and run down in size. Neither are they expected to reach a size that would give them weights equal to the American breeds. In scoring, when the specimen is inclined to be small, the cut is from one-half to three points, according to size. We might further say that in case of a tie if one has been discounted for lack of size and the other is passed as being up to the ideal of the judge for size, the one so passed on size is to be the winner.

CONDITION.

We would also call attention to the section of condition, which is valued at five points, and refers to the state of health a fowl may be in as well as beauty of plumage. Where the comb and wattles show a very pale color, indicating that the specimen is affected in some way with disease, the cut should be from one-half to one; or when the head is swollen, caused by cold, the cuts should be from one-half to one. Where the comb and wattles are badly swollen from being frosted the cut in condition should be from one to one and one-half, according to degree. Where the plumage is badly broken up and shows no luster, the cut should be from one-half to one. In case of very rough and scaly legs or corns on the bottom of the feet, showing neglect and improper care, the cuts are from one-half to one and one-half.

COLOR OF MALE.

HEAD.

The color of the plumage on the head should be a dark reddish-bay. Where it is found to be of a lemon color, the cut is one-half point. The beak should be horn color, and is very seldom found defective. The eyes should be bright red. Where they are both of a grayish color the cut should be one-half point, or, if one eye is of a grayish color and the other is of a reddish-bay, the cut should be one point.

The color of the face is frequently found faulty. It should be bright red, yet in Leghorn cocks white will make its appearance, and while it is not a disqualification when found on the face of cocks, yet it is a defect and subject to a severe cut of from one-half to two points, as in degree. White appearing in the face of cockerels or pullets is a disqualification, and of this we wish to say that the standard does not mention that there must be a certain amount of white in the face before the bird shall be disqualified, but simply puts it white in the face. We infer if there is white in the face not larger than a common pin head the specimen should be marked out. The white usually appears just above the ear-lobes, or, in other words, it will appear to crawl over into the face from the ear-lobes, and in some cases we have found it under the eyelids, where it did not show when the eyes were open.

EARLOBES.

We next consider ear-lobes. We find they are valued at six points, and if we allow two of the six to go for shape we have four left for color. To be standard they should be white, or creamy white. Where small red specks appear, if only very few, the cut should be one-half point; if one-fourth of the surface shows red, the cut should be one point. If one-half is red, the cut should be two points; if in cockerels or pullets there is more than one-half red the specimen is termed disqualified.

NECK.

The feathers of this section should be bright red, with a black stripe extending down the center of each feather and tapering to a point near its extremity. We have before us a neck feather which has the perfect stripe; the lacing is also perfect on the lower half of the feather. The stripe tapers to a point near the lower end, while the upper half

of the feather is devoid of the red edging and shows black on the edge of the feather. The under-color is also good, being dark slate. In scoring such a hackle we would cut one-half point, inasmuch as the lacing of red does not extend the entire length of the web of the feather. Where the stripe and lacing are good, and the under-color, which is the downy part of the feather, is gray, we should cut one point, or if the stripe shows a tendency to gray, with light under-color, cut one and one-half points.

A second feather we examine from the hackle is very nearly devoid of the black stripe, the black showing only for a short distance from the point end of the feather and gradually merging into what we term a cinnamon colored feather. It is also a trifle light in under-color with the lacing running too much to a lemon color. For such defects we should cut two points. Should the feathers lack the black stripe and instead show the full web of the feather a cinnamon color with a trifle of lacing of a lemon color, such as the standard calls for in hackles of B. B. R. Game, and the under-color is light, we should cut from two to three points, as in degree.

The full value allowed to color of neck is four points. We would advise breeders of this variety not to use a male for a breeder showing no stripe in neck feathers or one that runs very light in under-color, for if such males are used it will only be a matter of a little time until the characteristics of the original Leghorn will be found cropping out and white will begin to show in wing-flights and secondaries and at base of sickles in tails.

Still another defect in color of hackles, and one that is quite often seen, is that the orange-red lacing fails to extend around the point of the feather, causing the point or tip to end with the black. For such a defect the cuts would be from one-half to one point. To breeders of S. C. B. Leghorns we would say, be careful to select a male to breed from that shows a well striped hackle, having a greenish lustre, being well laced with an edging of brilliant red with good dark or slate under-color extending to the skin.

BACK.

Color of back is described as being the same as that of the neck, yet a standard colored back is not often seen, though it is a section of great beauty in Brown Leghorn males when fully up to standard description of color.

A feather lying before us shows what we term standard color in saddle feathers with a black stripe, showing the greenish sheen or metallic luster, and is laced the entire length of the web along both edges and around the tip with red. The under-color is slate. We are unable by the half-tone process to give colors in this breed as we would like to have done, for it is impossible to show colors other than white and black; consequently we are left to a description in words.

Another feather we have taken from the saddle. It is devoid of the black stripe. It has what we call a cinnamon-red from one edge to the other, is also light in under-color and would be cut two points. In case of such surface color and very light under-color the cut would be from two and one-half to three, as in degree. Four points being allowed to color of back, where the shaft of the back or saddle feathers show a cinnamon color, which should be black, the cuts are from one-half to one point. To those not familiar with the term shaft, when used in describing feathers, will say it is the stem or quill part which extends the entire length through the center of the feather.

BREAST.

The color of the breast should be a rich black, yet it is sometimes found defective by being mixed with brown or showing a lacing of brown on the edges of the feathers.

The under-color, which should be dark slate to the skin, is very often light in color. Where either or both of these defects appear the cuts are from one-half to two and one-half, as in degree, four points being allowed to color of breast.

BODY AND FLUFF.

The fluff should be black, yet is frequently fringed with brown and the under-color showing light, which should be dark, is subject to a cut of from one-half to one and one-half as in degree.

WINGS.

The standard color is, bows rich red, front edge black. The bows or rose, as we would prefer to term them, usually follow the color of the hackle and saddle, except that the entire web of the feathers on the wing-bows should be red. The edge of the wings, or front part, so to speak, is not always found to be black, and is sometimes found to be a mixture of brown and black, running over from the same color on the breast. Where the specimen shows this mixed color on the front edge of the wings the cuts are from one-half to one, or, if the bows are not a rich red, from one-half to one. We should substitute for the word rich red, a glossy red. The primaries should be black, the lower web edged with brown. We should not want to breed a male that showed no bay or brown on the lower web of primaries.

Primaries are to be cut one and one-half points for white showing at the base or quill end in cocks and should the white exceed one-half inch the specimen must be disqualified, while in cockerels the smallest amount of white disqualifies. Gray spots or tips of feathers in wings showing gray will be found in some specimens. For such defects the cuts are from one-half to three points. Gray, being a mixture of white and black, is considered a very serious defect, and where clear white appears in wings, except at the base of the primaries in cocks, the specimen is disqualified.

TAIL.

This section we find has a valuation of four points for color, and should be a glossy greenish black. Gray tips are sometimes found on feathers, and copper-colored bars cross the feathers, or brown shows on the base of main feathers and on coverts. Where gray tips are the only defect the cuts are from one-half to one, or where slight gray appears and the copper barring is prevalent the cut is from one to one and one-half points. Where the last two defects mentioned appear and brown or light under-color shows at base of the tail feathers the cuts are from one and one-half to three points. The sickles (the two highest and longest feathers in the tail) should also be a greenish-black, yet in some males white will show up at the base of these feathers. Where the white exceeds one inch, counting it lengthwise of the feather, the specimen is disqualified if a cock; where the white does not exceed one inch the defect is to be cut one and one-half points. In cockerels any portion of the feather being white disqualifies.

LEGS AND TOES.

In this section we have both color and shape combined, with a valuation of seven points. The color of plumage on the thighs should be black, yet we find it at times mixed with brown, or the feathers fringed with brown. Or sometimes we find them fringed with gray. Where such defects occur the cut is from one-half to one, as in degree. The shanks should be a bright yellow, yet will show on some birds a tendency to a flesh color. More especially is this true of adult birds, and for such defect we cut from one-half to one and one-half points. Where color of shanks shows no tendency to yellow the specimen would be disqualified. Toes should be yellow, though a dark shading on the upper

part is allowable. Defective color on toes usually follows defective shanks and both are included and discounted accordingly, as above stated. Any feathers or down on shanks or toes is a disqualification.

BROWN LEGHORN FEMALE.

I call attention to the cut on the opposite page of a female Single Comb Brown Leghorn which we submit as one that, in our opinion, is a very good ideal, yet I do not suppose it will suit all. It may be criticised by some on account of the shape of the right leg. Some others will, no doubt, perceive that just as the artist went to take her picture she lifted the right foot into the position it now occupies, and as a consequence we shall not consider it a fault as to shape, since it was the intention of the artist to have it as it is.

HEAD.

We find it should be in shape similar to that of the male, but smaller. Where the head is long and narrow, as found on Games, the cuts are from one-half to one point. The beak is also to be included with the head, and while no mention is made in the standard as to the shape of same, it is usually understood that it should be straight with the center of the head when viewed from in front, and of medium length, with upper mandible fairly well curved.

The face should be free from folds or wrinkles. These latter mentioned defects are not often found, yet where they appear the cut should be one-half to one.

I next invite your attention to the color of the head. The standard describes the color of the plumage as "brown, edged with lighter brown." On some specimens we have found the color to be almost black. In such cases we cut from one-half to one, or, should the color appear very light the cut is one-half. Color of the face is also included, and should be bright red. About the only defect in the color of the face is that white will appear, in some cases, more especially in old hens. Where such a defect is found we cut from one-half to one. In pullets it is a disqualification.

The eye is also a feature that is always to be considered. It should be a bright red, as described in the standard. We think the description would have been better to say, "eyes, reddish bay." Where they are of any other color than bright red, we are expected to discount them at one-half cut. If they vary in color one point is the penalty. The shape is seldom found faulty unless an eye is out. In such case we cut one point.

COMB.

Single, of medium size drooping to one side, free from side sprigs and evenly serrated, having five points. By referring to the comb on our ideal we notice that the first serration is shown to be upright, which no doubt some would criticise, and we mention it on that account. In our opinion it should have been turned over slightly with the others, forming an arch at the front of the comb, but this is optional.

I shall mention some of the defects as found in judging the combs of some of the females in this variety. One very common defect is found in the front part. Instead of rising over the beak and forming the arch with the serrations all falling to the same side, the front part will fall across the head, as does the comb on a Minorca female, thus forming a loop. Where the comb is, in our judgment, perfect in other respects, we cut for such a defect one point, but in most cases where such defect occurs the comb is inclined to be too large and is subject to a still greater discount. We then cut from one and a half to two points. A comb that is also perfect in shape, yet is upright or fails to fall to one side, we only discount one-half point. Some may differ with

"LADY FLORENCE."

Bred by James Forsyth, Riverside Farms.

[Referred to by Mr. Shellabarger.]

This was one of Mr. Lee's best works. It splendidly illustrates the well penciled, even, brown back and wing surface required on a Leghorn female. The shading which is so naturally defined was prevalent ten years ago but is now considered undesirable. The pen work of Mr. Lee was admirable, in fact so "correct" was it as to be almost unnatural. The evident bareness is, in present-day sketches, relieved by a background, and that fact together with the more true-to-life tendency in poultry illustrations may well be attributed to this "Sewell" period.

me on a straight comb female, but there are very few breeders of this variety if they will select females with combs fairly upright as breeders and mate to a male with a medium sized comb that is straight in front and well serrated who will not find an improvement in the combs of male birds over those bred from females that have combs larger and which fall on opposite sides of the head.

Combs falling to one side of the head, as described in the standard, are all right on the females in a mating where one wishes to produce standard combs on females, but in breeding we must study to mate so as to produce standard birds, and in order to do so must keep a close tab on the breeding stock. In making this statement as to combs, there may be those who will differ with me, but I care not for that. My opinion is formed after having bred Single Comb Brown Leghorns for eight years. These pointers I offer as to mating for best results.

To return to defective combs, will say, where double serrations are found we cut one-half point for each. The back edge of the comb is frequently faulty, having an irregular outline with a kind of a sawtooth appearance. For such we cut from one-half to one, as in degree. Side sprigs are found on some combs and are subject to a cut of one point each. Birds possessing this defect are unfit for breeders, if the aim of the owner is to breed for standard birds.

The color of the comb should be bright red and is seldom found otherwise on a specimen that is in fairly good condition. Where the color of the comb is such that it should be discounted, the specimen is out of condition and better off out of the show room. Yet there are cases where they will get out of condition in shipping to the show or after they get to the room, and in such cases the cut would be only one-half point.

WATTLES AND EARLOBES.

Wattles should be thin and well rounded. Where they are uneven as to size, or are not well rounded, or where they are not smooth, and show folds, the cut is from one-half to one and one-half. Ear-lobes represent a greater value than wattles and should be smooth, thin, free from folds or wrinkles, and fit close to the head. Where they are rough or show folds or wrinkles the cut would be from one-half to one. Off-color in ear-lobes is the most common defect. Where they show red spots, if very few and small, the cut is one-half point; if one-fourth of the surface is red, the cut should be one; if one-half red, two points; if three-quarters red, three points. In pullets more than one-half red is a disqualification.

We find the color mentioned in the standard to be "white or creamy white," and in this description we infer that a pure white lobe is preferable, yet we are not to discount the color where they are creamy white. We usually find on the specimen that shows a good yellow skin and shank this creamy tinge to the ear-lobes, and on the other hand we have found some females with ear-lobes chalk white with a flesh colored shank and skin which debars from competition, as we shall show further on. We mention this matter for the benefit of those who may not understand as to the color of ear-lobes.

NECK.

The neck should be long and well arched. Where the neck is very short, or if straight and not well arched, or the feathers do not fill the outline at juncture of back, causing a hollow, the cuts are from one-half to one and one-half.

Color of neck plumage, orange-yellow with a broad black stripe extending down the center of each feather, tapering to a point near the end of the feather and conforming to shape of the feather. Females in this variety, that are not subject to a cut for defective color of neck plumage, are few and far

between. We find some of the defects are as follows: The outer edging of the feathers in some cases shows a reddish tinge, more after the color of the necks of males. Especially is this true of the color found on the front part of the neck. Where such defects appear we cut one-half point. There is still another common defect, i. e., the yellow color does not extend clear around the lower part of the feather, which ends with black and very much mars the desired effect. For such defect we cut from one-half to one. The black stripe mentioned in the center of the feathers is seldom found where it is not subject to discount. Under the standard revision of 1888 we had the description of the stripe given the same as in the present standard, except that it allowed that the same might be slightly penciled with golden brown. This penciling, we venture to say, is found on ninety-nine Brown Leghorn hens out of every hundred, taking them as found the country over. We find then that this is a very common defect. Where there is penciling of brown in the stripe we cut one-half point, or should there be a stripe on each side of the shaft of the feather showing a yellowish or buff color, we cut one point. Of this latter defect we advise breeders to be careful, as it is such color in females that gives us the off color in the hackles of males.

BACK.

Shape should be of medium length and slightly cushioned. We find on some females a tendency, the same as found in Games, to a sloping back showing no cushion. For such defect we cut from one-half to one, as in degree. A crooked or roached back disqualifies. A back that appears very long, or one that is very short, we cut from one-half to one. The web of feathers should be light brown and finely penciled with darker brown. The defects are usually that the color is quite dark, showing but little if any of the light brown. For such defect we cut from one-half to one. We understand that the entire web portion of the feather should show those two shades of brown, but we often find the lower one-fourth of the web to be very dark, with no penciling. The shaft of the feathers in a great many cases will show a light color, much lighter than can be termed either a light or dark brown. For this defect we cut one-half point.

BREAST.

We next consider breast, which should be round and full. We find there is a valuation of six points allowed to breast for shape. In many cases the breast will be found flat and not well rounded out at the sides. For such defect we cut from one-half to one and a half, as in degree. Color of breast should be a rich salmon, shading off lighter under the body. In some cases we find the web of the feathers penciled with dark brown, or we find them very light. In some specimens there is found a tendency to show a lacing on the edges of the feathers. For such defects we cut from one-half to one and a half.

BODY AND FLUFF.

The body should be of medium length, deep and plump. Where the body is very long or if it be short, or narrow through and not plump we cut from one-half to one. Should the fluff be very scanty we cut one-half. The plumage of the body should be light brown, while that of the fluff is described as ashy brown. In some specimens we find the fluff too dark, while in others there is a tendency to run too light. For either of these defects we cut one-half point. We omitted to mention in shape of body that where the keel bone is not straight the cut is from one-half to one. We think this should be included with breast, as most judges discount a crooked keel bone and put the outs with breast shape. But in the standard it comes under the head of body.

WINGS.

Wings should be large and well folded. Where they are small when opened out and not up to the average size, or if feathers are broken or have been pulled out, or where they are not properly folded when closed, the outs are from one-half to two points. A wing is not perfect in shape where a part has been cut off, no more than as though one would cut off a part of the comb or any other section. A great many persons appear to think that because they have clipped off a part of the feathers of a wing to keep the bird from flying, it should not be cut for defective shape in scoring, but when we come to carefully consider this matter no section that would otherwise have been perfect should be so considered when a part is gone.

The primary or large flight feathers are described as being "slaty brown, the edge slightly penciled with lighter color. Secondaries, brown, the outer web finely penciled with lighter brown." We think the reading of the color for secondaries should have been "outer web finely penciled with dark brown," instead of light brown, as the same color, in our opinion, should be called for on back, wings, coverts, and on outer web of secondaries. We find on the outer web of secondaries of some females what is called a brick color, yet as there are several colors of brick, we shall call it a pale red. We also find it on wing coverts. For such defect we cut from one-half to one point, according to degree.

We also find grey spots in primaries on some specimens; also grey tips to some of the feathers. Where such defects occur the cut is hard, as in such defects we are approaching close to the line of a disqualification, and must cut from one-half to three points, according to the degree of defect. Where white appears in any part of the plumage the specimen is disqualified. We do not have any exceptions in the standard for white in the plumage of the female, and only in males in the sections we mentioned in our article on color of males.

TAIL.

The tail should be long and full and carried upright. Where the tail is not carried well up, or if part of the feathers are gone or broken off, or where the coverts do not fill well up against the tail, causing the main tail feathers to look long and naked, we cut from one-half to one and one-half. A tail that is carried forward so as to approach the back of neck, is termed a squirrel tail and is to be disqualified. Where the specimen persists in carrying its tail to one side, as viewed from in front, it has a wry tail, but it must

be decidedly wry in order to disqualify the bird. If the specimen is given full liberty and is not cramped in a small coop so it can take a natural position, we can ascertain whether the specimen is or is not wry tailed.

The color of the main tail should be a dull black, except the two highest feathers, which should be penciled with light brown. The coverts should be light brown, penciled with dark brown. We find at the base of the main tail feathers on some females a penciling of brown, and on some we find the coverts lack penciling, or we may find on the tips of the main feathers some grey. For such defects we cut from one-half to one and a half.

LEGS AND TOES.

We come next to consider legs and toes. Thighs should be of medium length and slender; shanks long and slender. We believe it is a fact that fully seventy-five per cent of the Leghorns are too short when it comes to length of thighs and shanks. There are but few breeders who have given them careful consideration who will not say that a fine specimen is greatly deficient when put on the average specimen's short legs. We also, as a rule, find that those with short shanks are not slender but rather coarse. We cut for such defects from one-half to one. Or if the hocks are not fairly well apart, or if there is a tendency to what is called knock-kneed, with the former mentioned defects we cut one and a half.

The shape and number of toes are not mentioned, yet we find four toes are the characteristic of the breed for each foot. We also presume they should be well spread. Where they are crooked we think they should be discounted from one-half to one, according to degree of defect.

We find the color of plumage on thighs should be ashy brown. They are sometimes tipped with dark, and in some cases with grey. Where such defects occur we would cut one-half point.

The color of the shanks and toes should be a bright yellow, but in hens we very frequently find them faded and bleached out until the yellow does not show much. In such cases the cut is from one-half to one and a half. Where they show no tendency to yellow the specimen is termed disqualified, and should any feathers, no matter how small, or should even down, appear on the shanks or between the toes, the same is a disqualification.

F. H. SHELLABARGER.

MATING SINGLE COMB BROWN LEGHORNS.

The Double Mating System Strongly Advised—Details of Shape and Color for Male and Female Breeders—The Question of Size Advanced—Large Combs, which Follow the Neck, Deprecated.

By T. F. McGrew.

WE PRESUME there is the smallest number of high class specimens produced each year in Brown Leghorns, in proportion to the total number bred, of any of our standard fowls. The high finish of the few really meritorious specimens should put to shame the countless throng of less favored members of this beautiful and valuable variety. Females are seen in the show pen of such moderate size as to tempt one to call them Bantams, and their reputation as egg producers has not advanced to keep pace with new competing varieties; this is certainly a shortcoming that should be remedied, and no doubt will be, as many are moving to their improvement of form and feather.

One feature most deserving of attention in this breed is size. Our standard allows but six points out of one hundred for the size or weight section, in our American and Asiatic breeds, but for the Mediterranean class we allow ten points or one-tenth of the whole scale of points. If size is of so much more importance in a Brown Leghorn than a Brahma why has it been so neglected, or is it to be supposed that size with Leghorns means small size?

This feature of the general make-up of the Leghorn should have our first attention, and by care in selecting the very largest females only as breeders we can build up the size and add vigor to their constitution, so giving them renewed power for a greater egg production. Brown Leghorn females should weigh at least five and one-half pounds. We have seen birds of good quality weigh as follows: Males, seven pounds; females, six and one-half pounds each. Such Leghorns are a credit to their race and should be encouraged on all sides. If it is our intention to be guided by the laws of our own creation, we should encourage more size in the Brown Leghorn fowl.

Formerly it was claimed that the Leghorn was as large as an egg-producing fowl should or could be to stand the strain of their great activity and carry the weight and assimilate the quantity of food needed to sustain them and the process of egg production. A full acquaintance with the Minorca, Black and White, the Ancona and Andalusian, members of the same family, shows the possibility of the Mediterranean fowl to have both size and egg-producing qualities. Those who favor the Minorca claim for them even greater egg-producing power than is present with the Brown Leghorn. Records that have been published prove that fowls having considerable more size are their full rivals in filling the egg basket. These statements are made simply to show that the smaller size is not necessary to a better egg production.

The method to follow to improve the size of our Brown Leghorns is to use as breeders the largest hens obtainable, as the greater size comes largely from the female. This is not an admission that small males are as useful as large ones, but a medium size male bird with large hens will produce larger offspring than the larger male with the smaller females. By selecting the largest hens obtainable we have the advantage of both size and maturity. It is no longer a

debated question, as to whether hens or pullets are best for producing valuable stock. The decision has long since been cast in favor of the hen.

The round, full breast and the development of abdomen is a feature of the greatest importance in a Leghorn. By this we do not wish to be understood as referring to the ill-proportioned or over-developed abdomen as seen on some over-fat hens of the larger breeds, but the well-proportioned abdomen of an active egg-producing hen. The body and back of the Leghorn is medium in length as compared with a Minorca. In the male the breast should be round, full and carried well forward; in the female also the full, round breast is demanded, showing the importance of same in the breed. In selecting hens to advance or increase the size pay special attention to these sections and do not select the short coupled hens. There cannot at this time be any possible danger of having them too long in body, for but few can be seen that come fully up to the demand of medium in length, so no danger is possible at the present time of having too much length of body if all other proportions are correct.

Another great help to increased size is to hatch them early and feed for bone and size, the greatest growth possible should be obtained during the first four months. Their natural tendency is to lay early, or, in other words, when young. Many of them lay at five months old, and for this very reason they should be fed for size prior to this time. Those that make the largest growth will most likely be slower to lay. These should be selected for future breeders to improve size.

At all times be fully informed as to which of your flock are the largest egg-producers, and make this one of the requirements in selecting the hens for the breeding stock; work hand in hand for both increased size and egg production, for both can be improved at the same time. It is quite as important that the male should be from egg-producing lines as for the females. The attention paid to the increased milk and butter yield of our cows has shown the great influence of the sire in this direction. Why not the same influence of the sire in egg-producing offspring?

COLOR REQUIREMENTS.

A rich, brilliant red for neck, back and saddle in males, rich orange yellow for neck of females, is the standard requirement at the present time. With this the female must have the rich salmon breast. The hackle and saddle of male should be plainly striped with black; it is quite useless to object to this, and place yourself as an obstructionist in the path of improvement. Well do we remember when it was necessary to disqualify for same to get rid of clay-colored breasts in Partridge Cochins, and while the new standard has set aside a large number of the so-called old-fashioned style of Brown Leghorns, those who know the full value of their existence guard their presence with care.

The former standard allowed orange red in hackle and saddle of male and with this it was quite natural to secure good neck color in females, but it will be found utterly impossible to produce good, high-class Brown Leghorn females

by using a standard-colored male in the breeding pen. They can and will be produced under the double-mating system.

HOW THE MALES ARE PRODUCED.

To produce the best quality of color in Brown Leghorn males, according to the rules of the present standard, and at the same time avoid white or gray in any part of plumage, requires a special mating the description of which will plainly show the impossibility of producing to any certainty both males and females from such a mating, at the same time the union as described will plainly show its ability to produce good colored males.

While it is simply a question of color we have under consideration, it may be to the advantage of some to mention a few guiding features as to the selection of the male. There are some features of comb often lost sight of in Leghorns. These points are—medium in size and with no tendency to follow the shape of the neck. A Minorca comb is just the opposite. When judging a large class of Leghorns a short time since, an owner said, "I see you don't like big combs on males, and that you are against combs that follow the neck." "No," said I. "The standard, not I, opposes them." Too many such points are overlooked by breeders who allow a preference to prevent their following the law.

The comb of the male bird selected for producing males must in every particular point, as nearly as possible, conform to the description in the standard. The earlobe should be of good size, fine shape, very smooth and white, and fit close to the head, with no wrinkles. It should be as flat as possible. A perfect head, comb, wattles and earlobes is of great importance, and should be as perfect as possible, and a bird that has many shortcomings in these sections should not be used as a sire. Back, tail and wings should set in perfect conformity, and breast should be prominent, round and full. The body must be nicely poised upon shanks of the proper length. The standard says rather long, but this does not mean stilty or game length of legs, but rather long if compared, with a squatty Leghorn.

The color of neck, back and saddle should be the same even shade of rich brilliant red; as you bend the head back and move the hackle plumage over the back to the saddle no perceptible difference of color should be present. The hackle and saddle should be very plainly striped with the most perfectly shaped greenish black stripes that taper to the point, the red about the stripe free from shading of any kind; wing bay and wing bar bright and prominent; shanks as rich a yellow as can be obtained. The color of the Black Red Game leg in the days of the so-called Earl Derby Games was yellow, but they had very light under-color and white flights usually. To have a black red positively free from even gray in plumage, must influence the color of leg, which is plainly shown in our Brown Leghorns as the dusky yellow that is allowable on toes, creeps slowly up the shank.

FEMALES FOR THIS MATING.

The females to be used in this mating must be very dark in color, the neck color as much of the reddish shade as can be obtained; the stripe in same as dark and prominent as possible; the whole body plumage, including the breast, the same dark brown color. No salmon breast is found upon the females that are used most successfully in producing the standard males; the under-color of some of these females is almost absolute black, and the surface color rather a brownish black, which shows the opposite to the wording of the standard for females. This very dark shade extends through almost the whole web of the feather and is simply powdered over with a showing of a lighter shade of color, the whole

Style of Leghorn Female Advocated by Mr. McGrew to Increase the Size and Egg Production.

Note length of back and development of abdomen—Legs are coarse.

surface color of female, including breast, is many shades darker in color than would be allowed for the back color of a female in the show room. The color of flights, secondaries, and main tail feathers, is considerably darker than standard color, if almost black, so much the better. This style of female is the key to success in the production of high class prize winning Brown Leghorn males.

The comb of the female used in this mating for best results must stand erect—no turning to either side—and the points and serrations should be nicely proportioned and of the standard number. A smooth, even, upright comb of this style on the female used in the mating for males helps considerably in the quality of the offspring's comb. The males and females from these matings should be carefully toe marked and used only for producing males, for they will

most certainly destroy the color lines of any female producing strain into which they are introduced.

MATINGS FOR FEMALES.

The real beauty of the high-class standard bred show specimen of the Brown Leghorn female is her true breed characteristics and the soft, even shade of color when found in perfection. These true colored specimens are becoming scarcer each day, the result of the tendency for higher color in the males and the absolute law as to color disqualifications, as stated by us many times. We too often lose sight of the perfection of finish on a most beautifully colored bird in our unyielding desire to disqualify for one or two off-colored feathers; bad color or even poor color is passed with a discount, but the most exquisite colored specimen is utterly annihilated if placed in the show pen by one who has overlooked a few off-colored spots. Just how to produce Brown Leghorn females with this attractive finish of color is the problem under consideration. Believing as many do the utter impossibility of producing both males and females of the present standard color from one mating, the only method to be followed is to have the separate matings for each, and in following this method build up a strain of true pullet producing Brown Leghorns. This can be done if care and judgment are used in the selection of our foundation stock, and in doing this we must guard against the disqualifications for shanks other than yellow, and white or gray in any part of plumage.

THE FEMALES FOR THIS MATING.

For producing females select hens or pullets of the most perfect standard color through and through; see to it that your neck color is as true as possible; see that the orange yellow border is quite free from any shading of foreign color—if quite free from penciling of any kind it is most desirable. The producing of neck plumage free from penciling is quite a task; see to it that the stripe in same is well placed in the center of the feather; that it has the proper taper and ending near the point of the feather. There are plenty to be found that are fairly good in this respect; cast them aside for the almost absolutely correct neck plumage; better trust for a start to one or two that are right than to waste time and trouble on flocks of fairly good ones.

The body plumage, including back, wing bow and coverts, one even color, very finely penciled with a darker shade; the shafting of the feather absolutely unseen; the body some lighter in shade than the back; the whole surface to be free from any shading or cast of a reddish brown or any color other than the proper standard shade. The shade of color and penciling of primaries, secondaries and main tail feathers should be perfect. The breast should be a rich salmon nicely shading off to a lighter color under the body. As to the color of back, etc., we find many opinions as to just the shade of color meant by the wording of the standard. There being so many shades of brown found among Leghorn females one is at a loss to say just the word to describe the shade intended, but the provision that no unevenness of color shading or shafting be allowed, will confine the color to perfect evenness of shade, and that shade the same color as the shaft of the feather. This being considered, the shade of color must become a matter of preference within the radius of the rule—"Light brown, finely penciled with a darker brown, the lighter shade predominating."

The head and comb of the female selected should be as handsome as possible, the comb should hang gracefully to one side, the front spike standing erect. The comb must not be large and heavy, like that of the Minorca. It must be medium in size and finely formed; earlobe smooth, thin as possible, of good size, perfectly white and fitting closely to

the head; free from any sign of red; face free from any white. The use of hens that have no sign of white in face helps to insure the absence of same in the progeny. White in face comes with age to all Leghorns; many pullets that show no sign of it at eight months old often have it before they are a year old. The use of matured birds showing no signs of white helps to lessen its tendency.

To lessen the chances of white or gray in plumage the use of specimens having good solid under color is of advantage, at the same time the darker the under color the deeper will be the shade of surface color. The richest shade of surface color often carries with it the lighter shade of under color. All these points should have consideration in advance, for they all have influence on the future offspring. As to color of shanks, it is quite noticeable that they are gradually growing darker each year. The only way to improve this is to select the best to be found with specimens having the other necessary features above mentioned.

THE MALES FOR THIS MATING.

The selecting of a proper male bird for this mating necessitates, first of all, the absolute certainty that he comes in line from good standard colored females and not from the dark colored matings used for producing males. The color of hackle and saddle should be of orange red, the back much paler in color than the standard shade, the less prominent the striping of hackle and saddle the better. Wishing to secure the orange yellow in neck of females guides one to the use of the nearer shade to same in the males. Good head qualities are most desirable in the male; a tendency in comb to lop to one side is of advantage when such help is needed in your females. The under color of plumage in the male can be considerably lighter in shade of color than is demanded for producing males, a tendency to gray in neck and saddle under-color, shows the absence of the deep dark color so positively demanded in the standard colored male and this lighter under color has a tendency to soften the surface color of your pullets, but must not be too much indulged in for fear of affecting the flights and under color of females produced. Such males usually have more perfect color of beak and shank, which is quite a help in improving the color of these sections in your females, a feature that claims some advantages when under consideration in the show pen. No feature in their make-up carries more influence in their favor than a beautiful head and bright colored shanks and every one who looks upon a specimen that has these two features to the degree of excellence, remarks at once as to their beauty, showing the influence they have on all observers. It will be found quite a task to hold the yellow color of shanks and gain the brilliancy of color demanded in males, for which reason it is quite important to take all advantage possible under these special matings to improve same.

LINE BREEDING A NECESSITY.

Very close records must be kept in the handling of your stock under these methods, so as not only to know the strain to which each belongs, but the sire and dam of each individual, must be known to continue to improve, both shape, size, color and markings. This knowledge gives you the advantage of knowing the very individual that has produced the quality desired, and guides you with greater certainty to improve each year.

The day may come when the Brown Leghorn female will have the penciled breast, as with the Partridge Cochins. This will not be as hard to obtain as the salmon breast. Its adoption would remove some of the hardships of their production, and at the same time take from them one of their striking beauties.

T. F. MCGREW.

BREEDING SINGLE COMB BROWN LEGHORNS.

A Successful Lady Exhibitor Gives Details of Mating, Especially for Saddle Striping on Males—Line Breeding the Only Way—The Double Mating System Advocated—Desirable Shades of Color in the Various Sections of Males and Females for Cockerel and for Pullet Matings.

By Mrs. Robert Waldron.

ALTHOUGH this article is to treat mainly the above subject, I cannot resist the temptation to say a few words in favor of the breed, and to correct an idea that so many people have about their "wildness." I frequently hear people say, "I would like them, but they are so wild; you cannot get within ten feet of them." This may be true of the average mongrel, and perhaps of many thoroughbreds, but in the latter case I am sure it is the fault, some way, of the owner. While it is true that they are by nature a shy, nervous breed, with care they can be made as tame as any other breed, while still retaining their quick motions or very active habits. The one thing necessary for that result is never to frighten them. Go into their pens quietly, and if you can pick one up without chasing it, then pet it a little and set it down again, carefully, you will soon find you have their confidence. When I go into my pen among them I often find it difficult to walk without stepping on their feet, they crowd around me so. Some individual birds always put themselves in my way, and seem anxious to be handled, and act as if they liked to be petted. By stooping among them, I have often had five or six snuggled close around my knees at once, standing passive without being held, each waiting her turn to be stroked and handled.

In writing the above I have been having my pullets in mind, but even my cockerels are not wild; they are easily caught, and when caught do not show much fear. Once get a Leghorn pullet tame (and really it has often been a surprise to see how little it takes to tame some of mine), and they seem tamer, and more like pets, than some of the larger breeds. Then they are such beautiful pets, and so pert looking, with bright eyes peeping up at you from the shelter of their blood-red combs. Who would not love them?

BUY THE BEST AND PRACTICE DOUBLE MATING.

The breeding and mating of Single Comb Brown Leghorns is a study that may well engage all one's powers of observation, reasoning, and deduction; yet I am asked to set it all down in black and white, just how, and why, and when—"particularly my method of producing the saddle striping in the male." The inference is delightfully flattering, and as the human mind from time immemorial has been susceptible to flattery (particularly the feminine mind, it is said), I have no resource but compliance, so far as in me lies.

To begin, then, at the beginning—You must first have birds worth mating and breeding from. This is fully as important as the catching of the hare mentioned in the famous recipe for cooking it. Years of careful and most painstaking breeding by those truly gifted in that line, together with scientific study of the principles involved, have placed within our reach a stock which will reproduce certain well-defined characteristics. With so much already accomplished, it would be folly indeed not to avail ourselves of that which the best of the world's fanciers and breeders have provided for us. Therefore I say, first get the best that is to be had.

Do not waste time and money trying to get it cheaply, though as a matter of fact a bird at a long price may be the cheapest in the land, if measured by his worth as a breeder, and the foundation of a strain of exhibition stock.

Let us suppose, then, that you have begun by buying only a few choice birds, or, what I think for the amateur is better, a sitting or two of the choicest eggs that the best breeders will sell you. If they have an especially good mating for which they ask a dollar or two extra, do not hesitate to buy if only you have confidence in the breeder.

The first question that arises is that of double or single matings. Is it best to try to produce top notch birds of both sexes from the same pen, or to mate widely differing types in two separate pens, expecting your best males from one mating and your best females from the other? From the standpoint of experience, and all information at my command, I say you must practice double mating. The single mating economizes room and is a simpler method of breeding, but it is not yet a practical success in producing winners of both sexes. I have produced an occasional prize winner in the male line from a mating which also gave me fair to good females, yet I know that these results came from the differing types of females in the pen, which made in reality a double mating, though only one male bird was used. When I can see 95-point birds of both sexes produced from one and the same pair, then I shall rejoice in the success of the single mating; until such a time I will pin my faith to the double mating as long as I wish to produce exhibition specimens.

COCKEREL MATINGS.

In making up your pens study well your birds with the aid of your standard, which you ought to have by heart, as far as your specialty is concerned. What says the standard as to the comb of the male? Has your best male bird a comb approaching this ideal? If not, he must be extra fine in other respects to overcome his lack of this. A cockerel breeding male must have striking merit in his comb. I would rather breed from a bird having a four-point comb than one having six or seven points. With a well-shaped four-point comb your cut in the show room may be only one-half on comb, but the added size and weight of two or three extra points is liable to cost you another half point besides the increased tendency to lopping of comb. I have a theory—mind, only a theory—that it is easier to breed an additional serration on a comb than to get rid of one.

If your male has more or less points on his comb than he should have, be more careful to see that his mates have the correct number, as far as possible, consistent with other qualities. If we want medium sized, stout, straight, and erect combs on males, the females that are to produce them should have small, straight and erect combs. The standard type of female comb will not do at all, and should only be accepted when overbalanced by pronounced excellencies in

some other section. The law of averages applies all through, and you must strive to overcome deficiencies and defects in the male by excellence in the corresponding section of the female, and vice versa. Apply the same rules in turn to the shape of the head, and to its other appendages; eye, shape and color; beak, shape and color; wattles and lobes, shape, size, color and texture.

Next comes the neck, one of the most important sections to be considered in breeding for beauty of the male. The standard demands rich, brilliant red, with a distinct black stripe running through the center, and custom demands that the black have a lustrous green sheen, same as the standard color for the breast of the male. To a male bird coming as closely as possible to this color of neck, mate females which had male ancestors also noted for excellence in this section. Also see that the females are themselves as well striped as possible.

The illustrations of male and female hackle feathers shown herewith may assist you in selecting the right kind of birds. [The illustration referred to is shown on page 31. The full-page plate represents feathers plucked from Mrs. Waldron's birds.—Editor.] Of course these feathers are more perfect than you can hope to find, except on the very best and highest priced specimens, and even on those you should not expect to find all feathers of the same degree of excellence.

Here, again, I wish to impress upon you the folly of failing to avail oneself of the results of long years of patient and loving labor and study, which have brought this section to so high a degree of perfection in the best exhibition males. doubtless you can "breed up," as others have done, but think of the wasted years. Secure a foundation stock that will give rich and quick results.

The back of the male is of a rich and brilliant red in surface color. On the best specimens you will find the beautiful black centers in the back feathers, the edges being rich and brilliant dark red and the feathers overlapping in a way that makes the back of the bird present an even red surface color, extremely beautiful in richness and brilliancy. The standard gives no separate description of back and saddle feathers further than to say "same as the hackle." The downy portion of the feather in this section, as in all others should be of an even, clear and rather dark slaty color, thus conforming to the standard definition of under color. For females in this mating I prefer those having the darkest possible under color, backs very much darker than standard color, and a little shafting, or even more than a little, will do no harm. As for the surface color of the back, I have not found any females too dark for cockerel breeders if only the color is clear. The saddle of the male is of the same color and striping as the hackle. The difference is in the shape of the feathers, the saddle feathers being longer in proportion, and more slender and graceful in their outlines. Few are the breeders who have had any notable success with this section. Why, I cannot say. It does not seem to me that there can be any greater inherent difficulty in producing a well-striped saddle than a hackle of the same quality, so it must be, I think, that not the same degree of attention has been given it in the past history of the breed. However, the fact remains that while good to fancy hackles are now the rule in the show room, the number of well striped saddles is very small; hence the increased value of really fine specimens. The feathers shown here are from hackle, saddle and back of "Eli," an unusually fine cock, and a remarkable sire of cockerels. This bird and five of his sons comprised the half dozen males shown by me at Cedar Rapids, Iowa, January 15-20, 1900, of which favorable mention was made in the *Reliable Poultry Journal* for March of that

year. It is needless to say that "Eli" is not for sale, his value as a sire is too great.

In mating to produce the striping in the saddle of the exhibition male one must be governed by the same general principles laid down in mating for standard requirements in other sections. However, it being admitted in advance that excellence in this section is more rare than in any other, the logical conclusion is, that one wishing to produce fine saddles must pay greater attention to selecting birds for their known breeding quality in this direction. As I have shown, without a male at the head of the pen of strong breeding, and reproductive capacity, your labor will probably be largely in vain. Having such a male bird at the head of the pen your females should be of the same ancestry, if possible, but not too closely related. Here the great advantage of line-breeding comes in, but that is a topic that only incidentally has a bearing on this subject, being of equal importance, no matter what you breed. It is enough to say in passing, that if your stock is the best you can get, you have already secured the advantage of line-breeding. It then depends on yourself to hold that advantage, and improve on it if you can.

The saddle of the females should be very dark, and in this section I do not care so very much for penciling. Indeed, if I were going to formulate a standard for the saddle of females for cockerel breeders, I think it would run something like this: "Saddle feathers to be of a dark seal brown shade, with more or less penciling of a somewhat lighter shade, feathers having a tendency to show black centers; no objection to heavy and distinct shafting; under color to be as dark a slaty color as it is possible to obtain, so long as it is clear, and free from any tendency to streaking or smuttiness."

As to the remaining sections of the male, I do not know of anything calling for especial consideration, other than to conform as closely as one can to the standard; so I think we may dismiss this branch of the subject, and take up the one of pullet mating.

PULLET MATINGS.

In this I follow the same rule as in the cockerel mating, selecting my breeders carefully for their individual excellence, and always with as much weight given to ancestry as to the visible points. Other things being equal, it might be more correct to say I would consider ancestry of first importance—a most careful balancing of defects, by corresponding excellence on the other side of the mating, must again be insisted upon. On no account mate two birds that have like defects in corresponding sections. You simply double the tendency to reproduce those defects, instead of halving it, as you should do. Having noted these general principles in which the mating for exhibition females is the same as for males, let us consider the points of variance. In comb we note the first wide differing of ideals. The comb of the female has of course the same number of points or serrations, but where the male gets a cut for any slight tendency to turning or lopping of the comb, the female should have a comb distinctly lopping to one side, evenly and gracefully, yet firm; erect at the base, and just as erect at the base in front, as is the comb of the exhibition male. This is the way the best judges interpret the standard.

In this mating the comb of the male may be too large for an exhibition male, and too thick at base, too thin at top, and may have a decided tendency to lop (to one side only); indeed, I prefer such a comb in the male for breeding pullets, but do not like a crooked one, or a badly shaped one, as for instance, one having bad thumb marks, or badly shaped or indistinct serrations. In the neck section the female will be good, if a high scoring specimen. Better

hackles on females are greatly demanded, and steady improvement is being made. The male, in this section, may have much lighter color than would be needed for cockerel matings; indeed, the color of the male, all through, at least the surface color, should be much lighter than for a cockerel mating. In the color of the wing bow of females you must guard against "brickiness," or in other words, too much red. If your females are fine they will not show this much, that is to say, the better they are the nearer they will have wings like back, all alike of that soft, even, velvety light brown, finely penciled by a darker shade of brown. This is the standard requirement, though I have elaborated it somewhat to correspond with customary interpretation of judges and fanciers. Any excess of dark color in the male may defeat the purpose of your mating. The brilliant, dark orange red wing bow, so desirable in a male for a cockerel mating, is not wanted in the pullet mating. A softer and lighter color is better, one shading more toward golden brown. This applies also to the back of the male. Then, when we come to the saddle, as we do not wish to produce a stripe in the female, we prefer not to have any in the male breeder. Of course we can scarcely hope to find a good bird in other ways that shows absolutely no stripe in his saddle, but the best specimens from pullet matings will show but little and that, in most feathers, only faintly outlined. The tendency to a light golden brown is desirable here.

As to the females for this mating, it will pay to examine most carefully the entire backs, wings, saddle, and tail coverts. Select those that are penciled well and evenly in all these sections, and remember that the penciling should run down to the fluffy part of the feather, at which point the color should change abruptly to a clear dark slate of the under color. In the breast of the female look for a clear rich salmon color, as evenly laid on as possible, not too dark, neither too light, nor too red. In many otherwise good birds there will be a decided tendency to a shade too dark, and red, in this section, especially in the upper part, and extending along upon the neck and throat. Guard against this as far as you are able.

TYPICAL SHAPE—UTILITY AND BEAUTY.

In regard to shape, carriage and station, I would advise careful study of the ideals illustrated by the leading poultry artist, Mr. Franklane L. Sewell, and published in

this book. When you have these ideals photographed in your mind, and always with you, judge your breeding specimens by these ideal types of male and female, and approach them as nearly as you can. If you cannot do this, have the ideal cuts handy for reference, when you are mating your birds.

A few words on a subject on which I think there is widespread misapprehension. Beauty and utility, within reasonable limits, go together. The Brown Leghorn stands in the front rank as an egg producer. I am glad to be able to say that my most beautiful and highest scoring pullets have almost invariably been my best layers. This proves that the standard requirements, evolved from the thought and experience of hundreds of breeders, are based on reason and common sense, and shows in marked degree the value of breeding and selection with a view to special excellence in the way of egg production. It also proves the eminently practical construction of the American Standard of Perfection.

In the near future, trap nests, individual egg records, and more careful pedigree breeding will no doubt produce greater results than ever before in the closer wedding of fancy and utility. The public will appreciate the importance of this painstaking labor, which cannot be done without adding somewhat to the expense of breeding, and to the cost of choice birds bred in this manner.

In closing, let me say that I hope nothing written here will discourage any one, or give the idea that this breed is more difficult to handle than many others. In an article of this kind one must go much into detail, and I have tried to show the ends to be sought in mating, and have wished to hold up the ideal, the one hundred point bird, to your view, but as this ideal bird has never yet been produced in any breed, do not be discouraged when you do not find them for your matings. Get the best you can and mate them as well as you can.

When buying stock, remember that two pairs of really valuable birds are actually worth more to you as a foundation than two dozen of just ordinary good ones. Your flock, if mated and handled right, will be worth several times as much at the end of two or three years with the two pairs as with the two dozen inferior birds. "Get the most you can for your money," but let this apply to quality, not quantity.

MRS. ROBERT WALDRON.

THE SINGLE COMB BROWN LEGHORN.

Observe Closely the Characteristics of the Breed and Study Each Generation—Single Mating Preferred, Although it is Acknowledged that for Present Day Show Requirements Double Mating is Necessary—Breed for "Quality Before Quantity."

By W. W. Harrington.

HAVING been a breeder of the Single Comb Brown Leghorn since 1876, I not only have had experience, but a chance to profit by close observation during these twenty-four years of constant breeding and mating for best results. It may be interesting to the readers of this article to know how I started when the "hen fever" struck me, for it did strike me, and that so hard that I have never been able to shake it off.

It was in the spring of 1876 when a friend of mine had a similar attack, and his has been just as lasting, for to-day he is a prominent breeder and exhibitor. He purchased a sitting of eggs from a noted breeder of S. C. Brown Leghorns, and as I had a broody hen it was agreed that I was to hatch the chicks and get half. I can tell you it was then that great care was taken to get the best result possible and you can imagine my surprise and delight on the twenty-first day to find thirteen strong chicks. In a few weeks my friend came and, blindfolded, picked out six of the chicks. We both were successful in raising them, and in the fall we made our first exhibit, winning everything on chicks at two fairs. From that time until now I have had the same fondness for the Single Comb Brown Leghorns. They made a lasting impression, and the chicks that we exhibited then come up before me as though it were only a short time ago.

Beginning in the small way that I did gave me an opportunity to study every characteristic of this variety. As my motto was then, so it is now—"Quality Before Quantity." I kept within bounds and only raised what I could handle to good advantage and give the best care possible. I thought I knew it all then, but as I continue to breed them I find there is still something to learn and a study to be made with each generation. Without doubt the Single Comb Brown has the largest number of admirers of any variety in the Leghorn class. Why is this? I think it is because their brilliant plumage and upright carriage make them fascinating to any lover of pure bred stock, and besides this they have the qualities that make up a profitable fowl. You can get size when you breed for it. They mature very early, laying in many cases when three and one-half months old, and although they are not considered a great success as a table fowl I have had some fancy prices returned for broilers. When cared for and housed as they should be the egg basket is always full. You must not expect any hen to lay in a house where everything is frozen solid and she has to use all her food for animal heat. Put them in a warm, sunny house and you will find that pleasure and profit are not an unknown quality with this variety.

Little change has been made with the Browns for the past ten or fifteen years, except in the plumage of the male bird. Bringing out the striping in saddle and back, to match the hackle, is the most prominent, but is it to be considered an advantage when, if bred for the show room, you are obliged to use the double mating system, which adds more care and close attention? However, if we would keep up with the procession we must breed what there is a call

for. If the cry is for stripes in saddle, stripes we must have regardless of the result, although I must say that I think single mating will produce a far greater number of satisfactory specimens than can be produced from the same number of eggs under the double mating, and will give better satisfaction to those purchasing eggs for hatching, especially those just making a start. If beginners are not up on mating (double system), or are not informed when the eggs are shipped that eggs marked so and so are from cockerel mating, and that the females hatched will be only suitable for breeding males—if this is not explained there will be many complaints that the stock runs very uneven, or the females will be culled out altogether as being too dark. How can we expect good results from using a method known to perpetuate undesirable qualities? With the "old style" single mating none of this is necessary, for in breeding from a well mated pen, chicks, both male and female, all come a nice, even color. Is not this more desirable, labor and room considered, than when one has to mark all the chicks and keep a set of books to know about the matings? Even if we have gained a few stripes on the back and saddle like the Partridge Cochin male, which I admit is a very beautiful bird, why not on the other side have the color of the female correspond to Partridge Cochin female, and not call for the very fine penciling and the salmon colored breasts? Why change either when the Single Comb Brown Leghorns were beautiful as they were—why should we sacrifice the good qualities and Leghorn type just to get the Cochin coloring and extreme size? Females that will weigh from four to five pounds, and males six to seven pounds, are all we should ask for, and I hope for the good of the breed we shall go back to the single mating for our coloring for both sexes.

The methods I have used to produce exhibition specimens successfully under the present standard are as follows:

For a mating that will produce exhibition males, I select the largest females possible of good type, with short back, a full tail, carried low rather than high, a small, smooth comb free from wrinkles and standing firm and nearly upright. For color I select a dark shade coarsely penciled; hackle a rich orange, striped to the skin; under color dark; breast full and somewhat penciled. These I mate to a male strongly and compactly built, full breast, concave back, tail carried well off, and for color a rich brilliant cherry with clear metallic striping in hackle and saddle, with good under-color. Avoid breeding from a male with smutty or cloudy hackle and poor under color.

To get our females I use medium size birds, never small, of true Leghorn type, well up on legs; color, a soft, even brown free from shafting or brick in wings; hackle clearly striped; fine in head, comb falling well over. The male we select for these is of a brilliant cherry, free, or nearly so, from striping in saddle, but strongly and clearly striped in hackle, very full tail, good length of leg, a comb low and smooth over beak and running well back over head.

Other breeders may differ from my ideas, but I can only

say that I have been successful with my matings, and can raise birds that hold their own in the show room and win their share of blue ribbons.

Finally, I would say, to raise winning specimens it requires something more than being mated properly. "Build your house first, paint it afterwards." Care is everything. A free range with plenty of animal and vegetable foods that they may be kept growing and feather quickly, will work wonders toward developing exhibition specimens. Do not expect to raise ninety to one hundred per cent of prize winners, for it is impossible, and you are liable to be disappointed. Stop and compare the breeding of poultry for ex-

hibition with that of the trotting horse. Take a stallion with a record of 2:10 and breed to him twelve or fifteen well-bred mares. How many, if any, of this raising will ever enter the 2:10 class? Why, then, should we expect every chick that we hatch to win a blue ribbon for us? If they did we would have nothing to work for, and all interest would soon be lost. If fifty per cent of what we raise are good salable birds, and ten per cent fit for the show room, I consider it a very satisfactory mating.

I remain a well wisher for the best interests of the Single Comb Brown Leghorn.

W. W. HARRINGTON.

A MODEL FROM NATURE THE SINGLE COMB BROWN LEGHORN.

Form, Style, Size and Vigor Receive Recommendation—A Preference for Size, but Not Coarseness—The Single and Double Mating Systems Combined to Produce Show Specimens.

By William H. Barksdale.

I AM a fancier of poultry because of my love for nature and the desire to watch and learn her mysterious ways. I selected the Single Comb Brown Leghorns because I believed them to be nearer to that production of nature, the wild fowl, than any other variety. I also think them the most beautiful in form and color. A naturalist, or rather ornithologist, was visiting my yards a few weeks ago and seeing a Brown Leghorn fly upon a shelter near by and crow, said: "That bird is nearer the form and color of the wild chicken than any other I ever saw." This cock had been on free range all his life and was accustomed to work for what he had to eat, the exercise giving him health and vigor and developing the muscles as in the wilder bird.

The Leghorns are the workers; they are the producers, and will give better returns from the same food than any other breed of fowl. They are to the fowl family what the Jersey cow is to the cow family. As they are so like the wild fowl, we should place them as nearly as possible under the same conditions. I think an ideal place for a breeding pen of say one male and ten females is a yard of not less than one-half acre, one-third of which should be shade, native forest trees being the best. These trees cover the ground with leaves in which the birds can work and scratch for worms in summer and during the winter, except when the ground is covered with snow. One-third should be in grass that is frequently mowed to keep it tender, and the remainder should be cultivated ground that should be frequently plowed. Nothing pleases a Brown Leghorn more than to scratch and wallow in mother earth. If they have free access to plenty of dust at all times they will keep absolutely free from lice. No arrangement of the yard is better for young chicks than the above, as the exercise they get will develop their bodies and keep them strong and healthy. It is by keeping the birds close to nature in the breeding pen, and during their growth to maturity, that we are able to approach nearer to perfection.

For the yard and breeding pen described above I like a house ten by twenty feet, one-half for the roosting apartment and one-half in an open scratching pen. The house should face south, with window three by three feet in roosting room. The open scratching pen gives them plenty of fresh air and sunshine during the winter, both of which are great invigorators; it also affords protection from the cold

winds. I like a tight floor raised about eighteen inches above the ground, under which the birds can go in cold weather and have access to dust at all times.

I think the most common mistake made by new breeders is they start with too many in the breeding pen. I would rather start with one hen that would score ninety-five points than with six that would score ninety-three. I would rather raise a dozen first-class birds than a hundred second-class. I think a beginning should be made with two or three hens. One can soon learn to distinguish their eggs, which should be set separately and each chick marked. By this means more satisfactory information can be obtained in one season than in a half dozen years of hap-hazard mating. By keeping a record of the chicks for several years, one can mate intelligently and when the birds are put together it can almost be told to a certainty what the results will be.

In mating I do not believe entirely in either the single or double matings, but in a combination of the two. I would select a male of good size and style, as near perfect as I could get him by the score card. He should have good hackle and saddle and be of standard color, and by standard I do not mean too dark. If the male is a dark bird it will be hard to get females of the required shade. To this male I would mate the best exhibition hens I could procure, and if I wished to get some males with especially heavy stripe in hackle and saddle I would put in a few rather dark hens, but guard against getting the matings too far apart. In all the matings the following points should be given prominence in the selections, viz., size, form, style and vigor.

Many breeders, and judges as well, go off after the feathers of the bird and lose sight of the shape. Study the Standard of Perfection not only in the abstract, but learn to apply it, and by this means it can be fixed in the mind. Although the standard describes no limit as to the weight of Leghorns it offers a premium on size by awarding ten points to this section. I like as minimum weights, six pounds for cocks, five pounds for hens and cockerels, and four pounds for pullets. While believing in these as the lowest weights I would not increase any of them more than one pound as a maximum. We must not get them too large, as they will become coarse. In the above limits we have a bird that will lay an egg as large as the American classes and be of practical service for the table.

W. H. BARKSDALE.

SINGLE COMB BROWN LEGHORNS.

SINGLE COMB BROWN LEGHORNS.

History of Their Development—Uniform Flocks Bred Thirty Years Ago—Judges Differed Then More Widely Than Now—Old Style Leghorns Described—Factors That Have Brought the Brown Leghorns to Their Present Excellence—Changes in Scale of Points, Shape and Color—Ideal Leghorns of To-day.

By Arthur C. Smith.

[From the Reliable Poultry Journal.]

I AM very glad to furnish the readers of this book with whatever knowledge has come within the scope of my observations during the twenty years that I have been a breeder and exhibitor of this ever popular variety, and those facts which I picked up during the few years previous. It was the ambition of my boyhood to own the best Brown Leghorns that any one owned and therefore I began to study them as seen at the shows in my locality, about 1880 or a year or two sooner.

I have also recollection of a fine flock of these fowls that was kept on the next place in the early 70's. These may or may not have been "diamonds of the first water," but they were uniform as a flock. The females were medium brown in color, but the males were rather light red or yellow in hackle and saddle. These birds were in general appearance much the same as those of the early 80's. They were large in body, short in legs, and heavy in combs. Briefly put, the general tendency during the past thirty years has been to develop a dark red, even colored male and a finely penciled, seal brown female. This, so far as color is concerned, may be said to be the goal of our ambitions. To trace the revolution of the modern Brown Leghorns, step by step, but simply in outline, will be the aim of the greater part of this article. If some of the older exhibitors would give us a treatise on this subject, considering the years covered by each standard as a period of flight of steps in the ascent to perfection, and each year as a step, it would form an instructive and interesting work.

THE OLD TYPE OF LEGHORN.

The type then was certainly different from the type of to-day, but the male has not changed to so great an extent as the female. Judges differed in their opinion in those days much more than they do to-day, therefore, the winning specimens often showed a great variety of types.

The males of the early 80's were as a rule very much lighter in neck and saddle than those of to-day. A male without a pronounced yellow saddle was the exception. Still, it is a fact that other things being equal, the darker male usually won. There was at that time as now, a constant leaning toward darker color and there appeared occasionally a male as dark as those of to-day.

But with all the changes in the type of the male, they are comparatively small when considered with the changes made in the type of female. This sex had hardly outgrown the appellation of Red Leghorn, which was applied to it from the very first. The breast was rather reddish salmon. The wings were red, or bricky, as they were called and the neck weak in striping, while the back and wings showed prominent light shafting and the penciling was much coarser than it is at the present time.

THE OLD STANDARDS.

The standards of 1875, 1879 and 1883 are practically identical and call for a long, well arched and well hackled neck, the hackles being a rich golden bay, striped with black. This is substantially the language in all these standards, but like some phrases in the present standard, it is capable of an

elastic interpretation. The necks were, as a rule, darker than the words "rich golden bay" would imply, the top being darker than the base.

The wording of these standards on back is, to say the least, peculiar and leaves us in doubt as to just what is meant. The reading of this section is: "Very dark red, approaching black on the lower parts, each feather striped with golden bay." This certainly reads as though the standard makers intended to get very dark red feathers with broad golden bay shafts. The males of those days did show what would to-day be considered very broad shafting, but it hardly amounted to a stripe even in the most pronounced examples. That the black-striped saddles were in vogue and found favor as early as '82 or '83, perhaps before, is certain. The writer secured a male as early as '83 or '84 that was so strong in that particular as one could be, and it was purchased of Tait and Baldwin, which firm had won largely at the National show at Worcester in 1883. This bird was a large six-pound, vigorous fellow and the results of his influence is often noted in the flock even now.

THE DARK CRAZE.

The language of these standards shows plainly that an even colored bird, that is, one the same shade of red in hackle and saddle, was not desired. The birds were much darker at the top of the neck than at the base, and rather darker on the back and wing bow than on the saddle. The dark birds grew in popularity during the 80's until they reached a point where the red was so dark that it could scarcely be distinguished from the black. Most of these birds were still some shades lighter at the very base of the hackle.

This lack of contrast in the two colors gave the birds a dingy look and a reaction followed.

This was before the days of double or special matings for either sex. Each mating was supposed to produce good males and females, and while some did produce good males and poor females and vice versa, it was merely accidental and far from being the result of any design or foresight of the breeder.

It was but natural then, that while the males were growing darker the females were also and, as that is their tendency in a dark line, they became very dark and were, as a rule, coarsely penciled. They were not much in disfavor, however, for a time, and I have seen females almost black score 93 to 94 points. Light shafting was still prominent in the back and wing, but the latter did not show as much of the red as formerly. About the happiest result of the "dark craze" or "black craze," I was about to call it, was that we were permitted to see a very few males of that seal brown plumage, free from shafting and also free from the reddish or bricky shadings that were ever so distasteful.

REACTION AGAINST DARK BIRDS.

The reaction against the "crows," as some called them, had been growing and became a strong movement during 1886-1888. Several men had been breeding from both lighter males and females all along, and previous to these dates had

received some recognition, but they were now in a fair way to obtain reward for their firmness and perseverance. The movement for lighter males halted at the "middle ground," but that for lighter females went farther and we had our "penciled with a golden brown" standard. That meant that the lighter markings of back and wing should be of a yellowish brown shade. This style of a female became very popular. The shade of color on the back and wings outweighed everything else. Coarse pencilings, light shafting, red wings, weak hackles, poor combs, light or dark colored legs were all admissible so long as that one thing desired—a golden brown penciled back—was present. In other words, just as we were on the road to the handsomest and most admired type—a seal brown, free from shafting in back and wing and clear salmon in breast—the standard makers allowed themselves to be pushed too far by popular clamor and, in the opinion of the writer, went even farther than the popular demand.

These golden brown females were "the thing" for several years and for a time the orange red males lost none of their popularity. A growing dislike of the lighter color at the base of the neck was soon apparent to the best breeders, and even surface color was sought by the most progressive. "I do not like that light ring at the base of the neck," was a phrase applied to many a bird of unquestioned merit. In deference to this demand for an even colored bird, the last standard was made to call for a dark, rich red, having one shade of red in hackle, saddle, back, shoulders and wing-bows, or in all red sections.

DOUBLE MATING A NECESSITY.

With the demand for colored males, there still remained the preference for the golden brown female. This dissimilarity of popular types in male and female is responsible for our double matings. They came as an absolute necessity when light females and dark males were winning under our best judges. It should not be forgotten that the practice of double matings became universal when the breeders realized that light females and dark males could not be produced from one mating.

There soon came a change in the popular idea of what a model female should be. Breeders realized after five or six years' work with the golden brown penciling that the standard, by binding them to one precise and exact shade of color, barred out some of the most taking and desirable females. Be what they might in shape, in color of breast and neck and in penciling, they seldom would win without that one feature of overwhelming merit—a golden brown back. This one quality outweighed everything else. Good penciling, rich yellow legs, a nicely striped neck, a splendid head and grand shape were as nothing when compared to a golden brown back. The breeders gradually realized the absurdity of this position. A change was demanded which should recognize fine penciling of two, and only two, shades of brown in back and wing, thereby eliminating that lighter shafting and placing on equal footing all shades of brown, so long as each was a soft, rich brown.

CHANGES IN SCALE OF POINTS.

The scale of points has changed somewhat. Now a good hackle and saddle will sell a bird, but then only five points were allotted to each of these sections, while the comb counted fifteen points and the wattles and lobes were regarded as equally important. The growing importance of color can be seen by following the changes in the scale of points. In the scales of 1875 and 1879, comb, wattles and lobes counted fifteen points each, while the head counted seven. This gave a total of thirty-seven points, over one-third the total valuation of the bird, to the head alone, while the important

color sections, viz.: Hackle, saddle and wings, were given only fifteen points, both for shape and color. Symmetry, size and condition counted thirty points more, thus leaving but thirty-three points for the shape and color of the entire specimen. The standard of 1883 revised that considerably by cutting the combs, lobes and wattles down to ten points each while condition and size were cut to eight and five points respectively. Neck and back were raised to seven points and wings very properly to eight points. This scale has remained except that in 1888 shape and color valuations were divided and in the last standard five more points were given to size, these being taken from head, symmetry and condition.

IDEAL LEGHORNS OF TO-DAY.

What the Brown Leghorn of the future will be remains to be seen. The present ideal in males is a dark, rich red of the same shade in all red sections—an even surface colored bird with strongly striped neck and saddle, yellow legs that are what the name implies and a good, five point comb, free from those hideous thumb marks and wrinkles which are more objectionable than too many or too few serrations. Such a bird is and will be popular. The shade of black in breast, wing-bar, tail, body and fluff should be a greenish black. The purple shade should be carefully avoided as it is associated almost always with minute bronze bars across the feathers, which if present are most pronounced in the wing-bars and coverts of the tail. This is an objection that has been much overlooked in past years, but one that is certainly meeting with great disfavor at the present time.

The female has been pretty well described in a previous paragraph, but the bird that has the seal brown shade on back and wing is to become the popular favorite, even if it has not done so already. Any suggestion of red on the one side or of grey on the other will not be tolerated for a moment by a true student of this variety. It is, or should be, a Brown Leghorn. Grey Leghorns we never had. Red Leghorns we did away with long ago.

CHANGES IN SHAPE.

Thus far nothing has been said of the change in shape during all these years. There seems to be a general tendency in all breeds to grow smaller and Leghorns are not the exception to the rule, but rather a close exponent of it. The Leghorns of the early 80's were many of them large in body, but shorter in legs and coarser in head than those of to-day. They gradually, but somewhat rapidly, decreased in size until they became so small that in 1890, or about that time, a concerted movement was started to increase the size of this variety. This met with success and in a few instances was overdone to so great an extent that some strains lost all semblance to Leghorn shape, being too long in body and too flat on the back for typical Leghorns. Such are valuable as breeders with smaller strains of well formed birds, but the extreme size that destroys and makes Leghorn shape impossible should be discouraged.

You may ask, "To what do we owe the improvement in Brown Leghorns?" To just two things. First, the standard is now just what the breeders want, and, second, the judges are men who have bred these birds. Formerly every show hired three judges, one for the American class, one for the Asiatic class and one for pigeons. The remaining classes had to take the judge that finished first. Exhibitors suffered much from these well meaning but incompetent men. It is only within the past four years that a Brown Leghorn breeder has been selected to judge a show of such magnitude and importance as the Madison Square Garden show. The result has been far reaching in aiding the establishment of the true type.

A. C. SMITH.

LEGHORNS—BROWN AND BUFF.

*Double Mating, Which is Necessary in Breeding Brown Leghorns, May be Dispensed With in Breeding Buffs—
How to Obtain Striping in Saddle and Hackle of Brown Leghorns.*

By William F. Brace.

THE Single Comb Brown Leghorn, one of the old standard breeds of fowls, has been growing in favor of late because the size has been increased to such an extent as to remove them from the semi-Bantam class and place them among the useful varieties. In undergoing this change they have lost none of their characteristics nor departed from the regular type, but have become more stylish being better up on legs and finer in head points, with less of the beefy combs, such as one used to see. The present style of breeding, demanding in males the metallic stripe in hackle and saddle, and in females the soft, even brown backs, with well-defined hackles, makes it necessary to use double matings. To an amateur this is somewhat discouraging, as he may procure eggs from some well-known breeder, which will throw some off-colored chicks, and he will say he has been swindled because of the uneven coloring. Experience will soon teach him that he can not obtain both sexes from one mating, that is, birds fit for exhibition.

The important feature in connection with the accompanying feathers is the distinct striping of the male, and under-color of hackle and saddle, which extends to the skin without trace of white, also the fineness of penciling and correct shade of the female feathers. The striping on hackle and saddle of this male extends or terminates near the end of the feather. On many strongly marked males the striping reaches the end of the feather, which is not desirable.

The white in under-color of hackle, so often found on fine looking males in the show room, is very objectionable and should be cut severely by the judges. Many people wonder why such fine looking specimens do not win a place in the show room. Great care should be exercised in the selection of a male for breeding purposes to guard against this serious defect.

The female feathers show an even color from hackle to tail, also extending over wings, all of one shade, free from shafting and brick color. The Brown Leghorn female is the most difficult of all Leghorns to bring to standard requirements, with the correct shade of brown and absence of shafting, accompanied by the fine penciling which is so much admired. Only the true fancier will devote time and energy to bring about these desired effects.

Haphazard matings cannot be indulged in with any degree of certainty. Breed only the best specimens, even if you are obliged to cut the females down to a small number in each pen. When the art of photography reaches that degree of perfection where color can be reproduced, it will establish in the minds of breeders the correct standard shade.

The Buff Leghorn (the latest addition to the Leghorn family) has made even more rapid strides in the last four or five years, and at the present time is fast approaching the Browns in style and popularity. The color has been the most difficult problem to solve, but that has been overcome to some extent, and more attention is being paid to the style

and shape, and they are improved in head very materially. In reading the show reports the scores are almost equaling the table fowls. As layers and table fowls they have no superior. Many of the prominent breeders are striving to make the color of both sexes as near alike as possible, thus

Feathers from First S. C. Brown Leghorn Cockerel and Hen at Chicago, 1900. Bred, Owned and Exhibited by William F. Brace.

avoiding the double mating system. This can be easily done by breeding those which have very even surface color (avoiding all tendency to red) with very strong under-color extending to the skin.

The profits which come from the production of strictly high grade stock are surprising to many who think "a fowl is a fowl." However, any person who really has a love for the business, and will devote sufficient time and energy to it, will soon learn that all first-class specimens will find ready sales at prices ranging from \$5 to \$25, and occasionally the \$50 mark is reached.

WILLIAM F. BRACE.

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JOURNAL

ROSE COMB BROWN LEGHORNS.

ROSE COMB, BROWN LEGHORNS.

Prolific Egg Producers—The Question of Size—Details in Breeding for Exhibition—Influence of Female Parent in Producing Combs—Length of Legs—Get the "Upstanding Kind" of Leghorns.

By W. W. Kulp.

I HAVE been breeding the Rose Comb Brown Leghorns since 1884. That spring I bought two sittings in May, one from a yard five miles north of me, the other from a man living three miles south. The northern yard was very small, with no grass whatever, and contained about fifteen birds. The man south of me had no yard, but kept his Leghorns in a building six by fifteen feet. He gave them no litter, and every neck was entirely bare of feathers. I tell these details because they proved to be two of the most remarkable sittings I ever bought. From each sitting I hatched twelve chicks. Every one grew to maturity, and each sitting consisted of six cockerels and six pullets, and some of them would be first prize winners to-day, as I remember them. The best cockerel died of roup in December or January. This was my first, but I am sorry to say not my last, acquaintance with this monster of poultry keeping. But I am thankful that it has no terrors for me now.

I was then doing a market business in poultry, but had decided to work into standard-bred poultry as fast as I could. My father always believed in good stock, and made a good income from poultry. Several years before I took the stock in hand he raised some fine Barred Rocks. A breeder came and bought all the pullets at one dollar each. I thought if that is what can be gotten for pure stock, why raise mixed? Then the next year a neighbor who was breeding the Asiatics and Silver Wyandottes and Barred Rocks, put an advertisement costing two dollars in a farm paper. From that advertisement he sold sixty-two to sixty-three sittings of eggs at one dollar per sitting.

To a boy, the one dollar a head and the sixty-two or sixty-three dollars looked very large, I tell you, and when my health gave way completely, a year or so after that, and I took the poultry fever in earnest, I decided to work into standard-bred poultry. I selected the Rose Comb Brown Leghorns as one variety. Let me say right here that I started with too many breeds or varieties, and had to drop several of them in order to make a success of any of them.

As all fowls are kept for income, and the Leghorns' specialty is eggs, I will write a little about this before I take up form and feathers. I am sorry to say that I have not many egg records. That the Rose Comb Leghorns are good layers I know, for I have fed them and gathered the eggs, winter and summer, for sixteen years, and I also know that a Leghorn egg costs only about one-half what an egg from a large breed does. I do not need an account to tell me whether a pen is doing well, if I gather the eggs the year around.

Another point: Of late years I produced breeders and eggs for hatching altogether, and do not feed for eggs during the fall and winter, preferring to have them lay during the hatching season and save their vitality for these eggs. My early pullets, hatched the latter part of February and early in March, begin laying the latter part of July and in August. From then on the pullets lay their eggs where they are raised, for I do not move them into their breeding yards until about December 25th to 30th. If they are laying then the moving will stop them for a couple of weeks. If a record is

wanted they should be housed before they start to lay and forced right along.

I put six Rose Comb pullets in a building one year on January 5th, when the first one laid. The building was ten by eighteen feet, with no yard. I did not let them out for five months and twenty-five days, and in that time I gathered just six hundred eggs. I was young at the business then and did not feed to make a record at all. I just fed them well. I know I could do much better now. During this past January I wanted some eggs and in seven days made them increase their yield nearly five hundred per cent.

Last summer I had a pen of twenty-one Rose Comb hens running with a few pullets. In the next house were thirteen Barred Rock pullets. I found that the thirteen Rocks required almost the same amount of food the twenty-one Leghorns did, and in a ten-days' count the Leghorns laid five more than twice as many eggs as did the Rocks, and my Rocks are good layers, too. To sell eggs at the price I do I must have good layers. We see by the above test that a Leghorn egg costs less than one-half as much as a Rock egg. This was in June. In April the Rocks would have laid more. When you come down to facts it seems to be as Mr. C. E. Howell says, "A Leghorn is so profitable as a layer that you can afford to give or throw away the body." But the Leghorns are increasing in weight, and when the hens dress four pounds each, the market value of the carcass will be no mean part of the Leghorn as a utility fowl.

One thing I feel sure of, and that is, the larger the bird, the more it will eat and the more each egg will cost. The period from egg to maturity will also be lengthened. It can not be otherwise. I favor and try to breed so that the cockerels, when developed, will weigh five pounds and the pullets four pounds each. I have several five pound Rose Comb cockerels and four-pound pullets, and they are large, making a fine appearance. To get these weights you must pay attention to width of back. Part of the weight must be in width. I have seen many Single Comb Brown Leghorns that were tall enough to weigh five pounds, but they had only the width of a three-pound cockerel. A Leghorn pullet weighing three pounds is a fair-sized bird. If below three pounds, when they are well developed, I would call them too small. A three-pound pullet will at two years make a four-pound hen.

I think that in the Brown Leghorn we have combined grace, beauty, and usefulness to a higher degree than in any other breed. I am well aware that all breeds are beautiful when bred close to perfection. I cannot look at the fine specimens shown at New York without wanting to breed them all, but in the Browns we have so much in so little.

The Rose Comb Browns may not be quite so showy as the Single Comb Browns because of their low combs, but the advantage of the low, fleshy comb has made them popular in the northern states, although they are also bred in the south perhaps to as great an extent proportionately as in the north, considering all breeds north and south. My sales of eggs from Rose Combs have been greater than from Single

Comb Browns up to the last two years. Now they are about the same. The entries of Rose Comb Browns are steadily increasing at the shows. The New York show contains large classes each year. For some years females have been shown equal to Single Comb Browns in color, and males also, for Cyrus 1st was cut only one-half point on color at Cleveland, Ohio, and Cyrus 2d scored 93½ after being cut 1½ for a little gray in one wing, caused by clipping the wing, then pulling it to get it into the show.

One thing that has discouraged breeders has been the rose comb. The stock during the first ten years after being admitted to the standard (which was in 1883, I believe) bred combs too large, and too far away from the head. They would soon topple over, but that fault is pretty well remedied, although some combs still grow to be too large. I have been measuring a few combs that I think nearly right. I find a cock's comb that fits close to the head and seems about the right size for looks is one and seven-eighths inches wide in front, two and one-half inches long. The comb should taper to where the spike starts. The spike should be a long one, and extend straight out on a level with the top of the comb. A Rose Comb should be covered with small points on top. A smooth comb is a defect. The cock having the comb here described weighs about five pounds and was behind a "blue" at New York. To reproduce it I want his mate to have a comb flat on top, seven-eighths of an inch wide, and one and one-half inches to spike, with a straight spike three-fourths of an inch long.

I should like to have shown a cut of this cock, but after trying five exposures, some at home and two in a photograph gallery, I gave it up. I find it is very hard to get a good, true likeness of any Leghorn, and this cock is the most nervous chap I ever tried. In the pen he is quiet, but will not stand for his picture. In mating for good combs, or in fact, any section, I would rather have a female first-class than the male if I could only have one first-class, for I find the chicks follow the mother in almost seventy-five per cent of the progeny. I think here is where good results are often lost. A first-class male is selected, but not enough attention is paid to his mate, or mates.

To a beginner, if a bird has a good comb he will hardly look farther, but after some years he will learn there are other important points. Color is usually considered the most important part of a Brown Leghorn, and I think about the hottest place a judge gets into at a show is where a bird has extra fine color but is not so good in shape, while another has extra fine shape and fair color. Each thinks he has the best.

The shape of the body back of the legs is an important

point to the eye. The fluff should extend beyond the legs, giving us a balanced and symmetrical body. I would like to show it in its beauty in living models; also the style where the body seems to come to an end right back of the legs. If you have no male with this shape—the long fluff—but have the upstanding kind, mate him to hens having a full saddle rising to the tail. I at one time mated a high-tailed cockerel to such a hen and every male had the shape of the hen and but one pullet had the cockerel's shape. One had the hen's, and the others were in between the two. In color this sire striped dark. The dam was medium dark only. The edge of the cockerel's hackle and saddle was light red. All the cockerels were only medium to very light, with not much striping, while all the pullets had a dark ground color, penciled rather light, as light as the mother, but had two pen-

cilings where she had one. This mating produced show pullets while I wanted show cockerels. She had the shape and comb and was medium dark.

Of late years the great point to be gained seems to be black stripes in hackle and saddle. The black edged with a bright, rich red is beautiful, no doubt, and should first be bred in the neck to perfection. What I mean is, do not sacrifice hackle for saddle, for you can see the hackle, both the black and golden red, one hundred feet away, while the black of the back can only be seen right by handling. The neck being arched prevents the feathers from lapping enough to cover the black, while the standard back makes a concave sweep and this laps the feathers until only the red shows, making practically a solid red saddle except when handled or viewed very close.

The proper mate to use to a dark, metallic striped hackle and saddle is a female having solid or al-

most black stripe in neck. Edge color should go to the end of the feather or you will have a smutty hackle on your cockerels. I should prefer a plain saddle with a beautifully edged hackle, the red color extending to and around the end of each feather on the cape to a perfect saddle, with the hackle only red on the upper part, the cape or lower part being black, both the edge and center. I would advise this: Never give up a good hackle and fair saddle for a fair hackle and good saddle. I have seen it done often in the Single Comb Browns, but I was also glad to see our best judges favor the best hackle in preference to the best saddle.

The pullets from a dark cockerel, and his mate to reproduce him, are always bad in breast color. It is impossible to hold a salmon breast and produce the black stripe in saddles. In Single Comb Browns, lots of the pullets will get breasts like their backs, and I know it will produce the same in Rose Comb Browns. But if the standard and the buyers

An "Upstanding" R. C. Brown Leghorn.

demand a striped saddle, we will have to put up with dark females.

White is a great source of trouble between the buyer and the seller of eggs for hatching. Very few stop to consider that white is simply the absence of color. It can be and is hereditary, but it can and is just as often produced by other causes, and blamed by the buyer to the seller's stock. The color of the feathers is deposited by the blood. If the chick is kept on limited range, or is ill fed, it will fail to make the color nearly as good as if fed properly. If a feather is bruised or fails to break the skin at the proper time, it will come with a white tip. This can be easily proved by injuring a stub just coming through, especially the stub of a flight feather.

I have been doing a little measuring to give definite information in regard to length of legs. A Leghorn should have a length of leg to correspond to the length of its neck and tail. If short in legs it is out of proportion. I find five-pound cockerels should have five and one-half to six inches of daylight from the bottom of the feathers to the ground right between the legs. One that is six and one-half inches is fully as high as it should be. You will find by taking the bird in your hand and placing a foot-rule against the breast bone down along the leg, stretching it to its full length, that a bird measuring ten and one-half inches is tall on his legs. I have them that go to eleven and one-half and I consider that plenty tall enough.

The standard colored Brown Leghorn female in perfection is a model in both shape and color. In color she should be brown all over, except the neck. It should be a golden color, with a black stripe down the center of each feather. I do not remember that I ever saw one of that kind with a brown back. If the hackle is black centered, the ground color of the feathers is black also, and you have black, metallic black, and brown for your color; while if the hackle has some penciling in the centers you can have the back a dull black, called brown, and you want it penciled with those small, golden-brown dots, so small and the dots so close to-

gether that if you step back six to ten feet, her back and wings will look like a soft, velvety brown. You can not see a particle of black, and here you have the true Brown Leghorn and the shade that is the most beautiful and the shade that wins. Such a color of back and wings has been produced in the Rose Comb Browns, practically free from shafting, that is, free from a shaft that is colored a lighter shade than the ground of the feather.

The male that should be mated to such a female will be of the same shape as the male described, with the comb the same. The lobes of all breeders should be clear white, smooth and oval in shape and fit flat to the head. The face should be free from white. The color of the neck of the male should be golden with black center on the cape and as far in and up the neck as you can get it. Wings should be in color a dull brown, the duller they are the less brick there will be in his female get. The saddle on top should be as free from black centers as possible. The centers should be brown. The edge should shade lighter down the sides, have a golden cast, dark under color for all breeders. Legs should be yellow and of proper length. Tail carried low and full.

With such a mating you are sure to reproduce the best females. For one mating take such a male, or one a little darker, and mate him with light show females, part of the pen to be dark females, and you will get dark males from your dark females.

To-day I know there are hundreds breeding Rose Comb Browns who keep them just for eggs and beauty. They select them because of the non-freezing comb. I would say, "Come to the show with your stock." It will pay you in pleasure and money. Breed the best you can and keep at it. I will add a word about yarding. I know that hundreds give up Leghorns because they cannot keep them in a common yard. I have only two pens with eight-foot fences; the rest are of four-foot wire. But I clip short every bird in them, leaving a feather on one side to preserve the shape. It does not spoil their looks.

W. W. KULP.

AN "OLD-TIME" ROSE COMB BROWN LEGHORN.

ONCE a person has the "poultry craze," as it used to be termed, he always has it; it never leaves! The writer had an attack nearly a quarter of a century ago. It was the year before silver was "kicked out," coinciding with the salary grab, etc. This is not to be a political article, but the terrible ordeal of currency contraction and consequent appreciation of the dollar of account, beginning in earnest about that time, was what compelled me to look to other sources of income than those to which I had been accustomed to look for the support of myself and family. That is why I write thus.

First I was called "looney" for investing ten dollars in Single Comb Brown Leghorn eggs. I got to be quite a fancier in my own estimation, but here in Maine the winters were quite a drawback, and so I studied up what I concluded would prove the desideratum—a Rose Comb fowl, and named them first the "York Fowl," but after a couple of years' trial I concluded to call them the Rose Comb Brown Leghorns, and had I time, Mr. Editor, and you could spare the space I would go upstairs and bring down about fifty pounds of old poultry papers and quote from them a few of the clips and cuffs I got for assuming to "get up a new breed" of fowls.

Why, the first time I attempted to exhibit a pair of Rose Comb Brown Leghorns at the great Maine Poultry Exhibition, held in Portland, the secretary, Fred Fox, had to call a meeting of the directors together, at which meeting it was

decided I could not exhibit Rose Comb Brown Leghorns, as there were old breeds enough and we "might better improve them" than help along any new varieties. But they finally permitted me to show a pair, which I sold to an editor of a poultry paper. Then began a "war on paper," and I was most mercilessly "sat down on" during the seventies, but had the satisfaction, after sending eggs or fowls to nearly every state in the Union, to see Fancier Brown and Fancier Jones et al come out with big head lines advertising "Imported Rose Comb Brown Leghorns," etc., etc., and they must have been quite honest about it, for about twenty-five leading fanciers clubbed together and sent Mr. Fred Ayers, of Connecticut, across the waters to Leghorn, Italy, and along the Mediterranean Coast. After a six-months' fruitless search for Rose Comb Brown Leghorns he returned as he went—an honest man—for he soon published a book (which many of your readers may have seen) entitled "The Quest of the Leghorn," in which he said that there were no Rose Comb Brown Leghorns in Italy or elsewhere excepting those raised in America.

So this was a great boom for my adventure, but fancy breeders stuck to the pretty but stamina-killing white ear-lobe and got the Rose Comb Brown Leghorn admitted to the standard, so I bred from my best layers only, regardless of ear-lobes, until 1885, eleven years ago, when I sold my little farm at South Hollis, Maine, where I was postmaster for eight years and began village life, but if I had stuck to the chicken business it would perhaps have been quite as well for me.

T. C. McDANIEL.

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SINGLE COMB WHITE LEGHORNS.

WHITE LEGHORNS FOR EGGS.

A Farm Where White Leghorns, Called the "Business Hen of America," are Used Exclusively—Quarters and Rations—Incubators Do the Hatching, Brooders the Brooding.

By H. J. Blanchard.

THE man who has decided to go into the poultry business has usually made up his mind which branch he wishes to follow, and if it be egg farming, with the sale of breeding stock and eggs for hatching, he will make no mistake in selecting the Single Comb White Leghorn as the breed he will keep.

As there is said to be a "difference in ginger," so there is also a decided difference in White Leghorns. When line-bred for the show room they are seldom the large, hardy, persistent layers that they are when selected and properly bred for egg production, but when bred with the latter view, standard qualifications need not and should not be neglected. Indeed, some of the finest show Leghorns ever seen were from yards where breeding for market eggs is a specialty.

Whether it is best to buy a breeding pen or buy eggs and hatch and raise a foundation stock, is an open question which must be decided by the person and pocketbook.

The building of houses for chickens and laying hens is an important matter, and should receive the most careful attention. Our houses are sixteen feet wide by twenty feet long and seven feet one inch high for single houses, with peak roof shingled, straw-filled loft, and board floors with basement three feet high for a scratching shed. Our double houses are forty feet long, divided across the center by a tight board partition; otherwise they are the same as the single houses. Houses from one hundred to four hundred feet long have many things in their favor, but we think they have more disadvantages and so do not advocate or use them. Poultry houses should have light enough, but not too much glass, and should be warm and dry in winter and cool and well ventilated in summer.

USE INCUBATORS AND BROODERS.

In running a poultry farm of any considerable size incubators and brooders are a recognized necessity. Select a first-class incubator, even if the price seems high, as a cheap, poorly made machine is worse than useless, and many a beginner has given up the poultry business in disgust at the very outset because of the antics of a poor incubator.

The brooder is of even more importance than the hatcher. A novice can bring out a reasonably good hatch in a good incubator, but he will need all his skill and the best brooder he can get to raise a good percentage of the chicks. The thing of prime importance in a brooder is plenty of heat well diffused; the next, ventilation. We prefer the piped sectional indoor brooders, as they are easy to clean and operate and will accommodate a large number of chicks. In long rainy spells or cold weather the indoor brooder is much preferable, as chicks can be cared for easier and get exercise inside the house, where they are warm, dry and comfortable.

Our brooder floors are kept covered with dry sand, and house floors with chaff, cut straw, etc., where the chicks are early taught to scratch for grains.

The chicks' food for the first few days consists of granulated oatmeal, with clean water slightly warmed for drink.

Small pneumatic drinking dishes are used, that prevent drowning of chicks and keep the water fairly clean. Good, sharp grit, of some kind is kept before them. The chicks are now gradually led on to a diet of johnny cake, composed of ground oats, corn, and wheat about equal parts, oat hulls sifted out, add one-third part bran, moistened with sour milk or buttermilk, with soda and salt added as for the table. If no milk is to be had we put a little high-grade prepared meat in the cake before baking. When very young the chicks are fed five times daily, then four and finally three times. When very young we begin feeding the chicks green clover cut one-eighth of an inch long and continue as long as we have material.

When the weather is mild and the chicks are two or three weeks old they should be allowed outdoors in a yard adjoining the brooder house, and as they get stronger and more familiar with their run they can be allowed free range during good weather. After the chicks get used to the range it is best to allow them perfect liberty when possible, as they grow faster and stronger and usually make healthier, better stock, with a constitution strong to resist disease and render the bird a better layer or breeder.

When the weather is warm and chicks large enough the brooders are removed and the chicks taught to go on the roosts.

Then we heave a great sigh of relief and say "Our troubles are now over." But this is true only in part, as the young stock must still have careful attention and feeding. Cracked corn and wheat are now the principal grain foods, and once a day a mash is fed composed of ground oats, corn and wheat bran, with a little oil meal and prepared meat thoroughly mixed while dry; the whole is then moistened with sweet skimmed milk or water, in which a little salt has been dissolved.

Feed only what they will eat up quickly.

The cockerels should now be kept separate from the pullets, as both do better by themselves.

As cold weather approaches the pullets, now beginning to lay, should be separated into flocks of fifty or less, so they will become familiar with their house and yard before winter.

At six months of age a large share of the pullets should be laying.

FEEDING WINTER LAYERS.

In cold weather our routine of feeding is a very light ration of mixed grains; corn, oats, wheat and buckwheat or barley about equal parts, fed in the morning, scattered in a heavy straw litter on the floor. About an hour later the hens are given water, slightly warmed in coldest weather, and cabbages or mangel beets cut in halves and placed on the floor.

The exercise of scratching for the light grain ration in early morning warms the birds and as they are active nearly all the forenoon in picking at the cabbages or beets they are hungry and in the best of condition for a big dinner of the warm mash.

This mash has for a base, ground oats and wheat bran

about equal parts, to which is added cornmeal, old process oil meal, and prepared meat (the dry article).

Several times a week boiled potatoes or turnips are included.

The oil meal and dry prepared meat in the chick's mash has been increased very gradually in quantity until at the laying age they are taking a full ration of it. About four o'clock in the afternoon the fowls are given a liberal feed of the mixed grain, scattered in the litter as in the morning. This feeding should be early enough in the afternoon so the hens will have an hour or more of daylight to work it out of the litter, but in case they do not get it all they will be at work again in the morning.

Care must be taken to give a very scant ration of grain in the morning. The last food keeps them busy at work until night, when they go to roost with a full crop, warm, tired and happy.

In winter the fowls are furnished a bath of fine road dust placed in a large box in a sunny spot in their house,

and in using this they keep themselves free from lice. We are never troubled with lice (mites) in our poultry houses, as they are kept clean and well ventilated.

A strong argument in favor of artificial incubation and brooding is that with ordinary care the chicks will be free from lice.

You have now hatched and raised your chicks and the pullets are laying. If you are careful and methodical in your business you can soon build up a good trade in fancy table eggs, guaranteeing each one to be new-laid.

If you have a good strain of fowls and are successful in their selection and breeding you may now begin in a small way at first to advertise stock and hatching eggs for sale. Ask a fair price for your goods and then always give good value for money sent you.

It may be discouraging for a while, as people are loth to send money to an unknown breeder, but persevere and you will become known and sales will increase if you deal fairly.

H. J. BLANCHARD.

1ST COCKEREL NEW YORK 1903
1ST PULLET NEW YORK 1902
2ND HEN NEW YORK 1903
BRED, OWNED & EXHIBITED BY
D. W. YOUNG - HIGHLAND - N. Y.

First Prize Winning Single Comb White Leghorns at New York; Bred and Owned by D. W. Young.

LEGHORNS—WHITE AND BUFF.

"Type Makes the Breed," Size Adds to the Value—Standard Requirements Treated in a Masterly Manner Suggest Occasion for Deep Thought—Looking to Nature for Instruction in Breeding Buffs—Too Much Importance Attached to Undercolor—Wild Birds as Subjects for Comparison.

By Ezra Cornell.

IT WOULD seem an easy matter to tell others how to breed exhibition White Leghorns, but I find it otherwise. The whole story seems to be told when you have said, "Mate your best exhibition males with your best exhibition females." Theoretically, that is all there is of it, and would probably leave nothing more to say if our best exhibition birds were perfect and had been bred from perfect specimens. But where the rub comes, is that our birds are never either perfect or alike—every bird has its faults. They may be slight, but still they exist. It is these faults, perhaps, added to those of the mate, and as like as not accentuated in the offspring, that make all the trouble. If White Leghorns had been bred true to the standard for centuries and were a product of nature, it would be a comparatively easy matter to perpetuate standard characteristics without the faults, but as they are a production of man's genius, they have a strong tendency, as have all our domestic fowls, to revert to their natural or original state. It is for these reasons that those traits which we consider faults are so persistently cropping out.

How to keep your birds up to the highest state of perfection is a problem which presents itself with each year's matings. You must study the standard, study the ideal cuts, and learn to know exactly what is wanted—then study your birds. Never breed from a bird having a serious fault, or mate birds that are faulty in corresponding sections; if you do, the fault will probably reappear even more prominently in a very large percentage of the offspring. Another important thing and one that must not be neglected or slighted is to know that your birds are well bred and to know the faults that were greatest in their ancestors. You might get an extremely fine specimen which was produced by chance; that is, bred from inferior birds, but such a bird is not, as a rule, a good breeder. Good stock birds are only produced after years of careful breeding—after mating specimens of the finest standard types for a succession of years. In this way and in no other will the desired traits become well fixed and reproduce with any degree of satisfaction.

The best White Leghorns I have known have been produced by standard or single matings, that is, exhibition males and females have both been produced from the same mating. There is no necessity to resort to double matings unless it is to produce slightly better lobes, but this is too insignificant to repay one for the extra trouble and expense.

Our birds must, first of all, be true to type, as it is type that makes the breed. To get birds correct in shape, you must learn what the correct shape or type is, and there is no better way of learning this than to study your standard, also the ideal cuts. Do not believe that the tail should be carried low or well back, because some breeder or judge happens to have gotten such an idea and publishes an article setting forth his notion as a fact. Refer to your standard and see what it says and, as a rule, you will not go far wrong if you follow it.

Let us consider size. There is no fixed size required, consequently there is a vast difference of opinion as to what the correct Leghorn should weigh. Personally, I prefer the

females to weigh five pounds, and the cocks to weigh six and one-half pounds. There is not much difference in the weights of the hens and pullets at the time of our winter shows, but the cockerels have not then attained their full weight; they are somewhat slower in filling out, the heavier layers are slower to mature, are poorer layers, and are almost always of a poor type. Many will undoubtedly consider these large weights, but they are about the size of the best birds seen at New York and Boston. I have seen Leghorn hens, both in Whites and Browns, at New York weighing six and one-half pounds, and I saw one Brown Leghorn cockerel which weighed eight and one-half pounds. Such birds are of course extreme and are undesirable.

Next take the head, the most essential feature of which is the comb. This must be good, especially on the Whites. No matter how good your bird is in other sections, he will not pass muster either as an exhibition bird or as a breeder if his comb is bad. A Leghorn comb should be of medium size, not large, as many seem to think. The female comb should be firm on the head and stand perfectly erect in front, including the first point, the rest of the points falling gracefully to one side. Such combs as this are by no means common; in fact, too little attention has been given to this particular. With such combs as these on the females you will have little trouble producing good combs on the males.

Another important point is that the front of the comb should not extend forward on leaving the head. If it does, you will have too much material and will get small folds commonly called "thumb marks," which are unsightly and should be avoided. The present standard calls for five points. In this I think it is too severe. If a comb is otherwise good I think it makes no difference whether there are five or six points, and you can not tell at a glance which number a bird has; but if there are only four, or if there are eight, you will notice at once that there are too few or too many. It is not my intention to advise any breeder not to follow the standard as nearly as is possible.

The earlobes are the next important part of the head, and are by no means easily produced by single matings. If you get good, well enameled lobes on the females you are likely to get males with white faces, whereas if the face and lobes of the male are good, you will probably get poorly enameled lobes on the females. The earlobes of the males rarely remain good as the bird advances in age; they almost invariably become rough and slightly specked or streaked with red, or else the bird becomes white in the face. The latter is by all odds the least desirable. The white face is very displeasing in appearance and is something I would not have. You will frequently get cockerels which will never go white in the face, but which possess lobes that are indistinctly outlined. Such birds are usually considered to have white faces, whereas they have not and never will have and should of course be less severely criticised than those which have that failing. I like cockerels to have a fair sized, round, well enameled lobe—one that will almost always show a little red in older age, and females with rather poorly enameled lobes, which are not too prominent. Females with lobes

of this kind will produce good lobes on the male offspring, and will themselves pass muster in the show room, with but a slight cut.

A pure white plumage throughout is demanded, and from the way this subject has lately been taken up a person would almost be led to suppose that heretofore breeders had not made a proper effort to produce white birds, but I assure you that many have been doing all they could in this direction.

During my first year as an exhibitor, pure white birds were not uncommon at New York, but a rich yellow shank and beak were never to be found on those pure white birds. One of the most successful birds I have ever owned—a win-

**"Lady Dainty," a First Prize Single Comb White Leghorn.
Bred and Owned by Chas. J. Fogg.**

ner of three firsts at New York—never had even so much as a yellow tint to his shanks. He was pure white—plumage, shanks, beak and all, but he won. Then the reaction set in and a rich yellow leg was demanded and soon appeared, but with a creamy tint to the plumage.

I have seen birds with yellow shanks and white plumage, but I have never yet seen a pure white bird with the rich, deep yellow shank and beak—such a colored shank and beak as is wanted and such as we should have on all young stock. Many claim this to be a possible combination; may be it is, but I have never seen it, and I have seen most of our best eastern show birds of recent years, and have been a careful observer of them. By mating pure white birds you will in a very short time entirely lose the color of the shanks and beak, and in order to restore this color you must use a bird with the deep, rich yellow shanks and beak and a creamy tint in the plumage. By a creamy tint I do not mean a straw-colored bird, a yellow bird, or a brassy bird. I believe in sticking to the rich, deep yellow shanks and beak, and then get as white birds as you can.

Personally, I prefer young White Leghorns with the creamy tint and rich yellow shanks and believe them to be

the best and the correct color. The creamy tint in plumage is merely condition and not lack of good breeding. Take a flock of pullets showing this tint very distinctly and after they have been busy laying eggs for a year or two, without once stopping to recuperate by setting, you will find that they are white enough; the creamy tint will have altogether disappeared with loss of vigor; the shanks and beak will also have lost their deep, rich yellow appearance, and will have become a much lighter shade. If these birds were white to start with, they will have become white throughout—shanks, beak and all. Old birds immediately after molt also show this creamy tint in plumage, but soon lose it as the feathers ripen, or, as we call it, harden down.

If the creamy tint was not condition, it could not disappear or change as it does, and I consider it entirely wrong for judges to cut a bird for color as they always do when shown in this condition. If they cut at all it should be for condition and nothing else. An old bird showing this tint (that is, soon after molting) is not in good show condition and should be cut, but a young bird should have this tint when in the very pink of condition, and should not be cut either for color or condition.

In the winter of 1892 and 1893 I purchased the best eight White Leghorn males and the best fifteen females I could find, at a cost of \$345. These birds won every first and second prize at the New York show of that year, and at once gave me something to advertise and the foundation stock of my present strain. With this number of birds I was able to make a sufficient number of matings to enable me to continue without once going outside for new blood, and I consider this the only safe and satisfactory way of breeding. There might have been a better way of starting, but if I was to start again it would be in pretty much the same manner, or as near to it as my means would permit.

My experience with Buff Leghorns has been entirely different. I came into possession of my first Buffs more by the result of circumstances than through any real desire at the time to breed them. They were an inferior lot of birds, but I kept them and gradually became interested in the breed. I bred and exhibited them five years before I was able to win a single first prize with them at New York. It probably cost me more to improve these birds than it would to have started as I did with the Whites, but on the other hand I undoubtedly got a good deal of experience in breeding them that I would not otherwise have gotten, so it is a question, after all, which of the two ways of starting is, in the long run, the cheapest and best for a beginner.

What I have written on Whites relates equally well to Buffs, excepting of course the reference to color of plumage. First let us see what the standard requires for the female plumage. "Surface color throughout one even shade of rich golden buff, free from shafting or mealy appearance, the head and neck plumage showing a metallic lustre of the same shade as the rest of the plumage; undercolor a lighter shade as free as possible from all foreign color. Other things being equal, the specimen showing the richest undercolor shall receive the preference."

The best buff color to be found to-day is on the Buff Leghorn females. No other breed of Buffs is so absolutely free from all foreign color or possesses a more even shade of Buff. The Buff Leghorns have more of a metallic lustre than the other Buffs, which gives them a slightly different appearance, but it is due to their having harder, closer fitting feathers. Many breeders have been much retarded in getting a fine plumage by laying altogether too much importance on under color. They would have been, in many cases, far better if they had never considered under color at all. A bird with a smoky or foreign under color should be

discarded, but aside from this it is hardly worth considering. The best Buff Leghorn females I have ever seen, both for exhibition and breeding, have had the lightest under color. The standard says, "Other things being equal, the specimen showing the richest under color shall receive the preference." (The word "richest" is usually translated in this case to mean darkest). This may be all right, but be absolutely sure that other things are equal before giving a deep under color any preference or consideration.

Leghorns have comparatively hard, close fitting feathers. In such feathers the coloring matter always concentrates in the surface or harder part of the feather; this is according to nature and you cannot change it. Look at some of our most highly colored wild birds—the Scarlet Tanager, the Oriole, or even the Canary, and you will find an under color which appears white in comparison to the surface. Take these same brilliant feathers and lay them in the sunlight over a darker under color and you will deaden the color. The rays of light pass through the surface plumage, and on striking the light under color are reflected, much intensified, which gives the plumage its extreme brilliancy; whereas if the rays of light on penetrating the surface were to strike a dark under color, they would be absorbed and the surface color deadened. There are three ways of deepening under color, all of which are undesirable in the case under discussion. First,

by deepening the surface color, which is merely overloading the plumage with coloring matter; second, by loosening up the feathers and getting a more fluffy plumage; third, by getting a mealy surface, which is nothing more or less than a separation of the primary colors which combine to make buff, and which must be thoroughly blended if you are to get a good buff. That I have just written applies especially to the females; the males have a deeper under color, but it is not so apt to be solid. Cockerels are sometimes found with some white in under color of hackle, which, as the bird grows older, will probably appear on the surface. A male bird should have sound under color. This is important, although it makes little difference whether it is light or dark. The shade will, as a rule, correspond with and depend on the shade of the surface color. Many of our best Buff Leghorn males for stock purposes have a rather dark, a smoky color in the hidden web of the main tail feathers. Many seem to think that this is essential, although I can see no reason for it; some of my birds have it and some have not. I am unable as yet to say whether it is of any importance or not, but if a bird is otherwise good, I care but little whether or not he has a slight smoky cast in the hidden web of the main tail feathers. The best Buff Leghorns I have owned and known have, like the Whites, been produced by standard matings.

EZRA CORNELL.

SUCCESS WITH SINGLE COMB WHITE LEGHORNS.

IN OUR judgment, the first element of success with any breed is a love for the breed, combined with a knowledge of the characteristics of the breed and an appreciation of its weak points. Our favorites, the Leghorns, have been highly praised, very highly, and they deserve it; but let no beginner take up this or any other breed, thinking it combines all excellencies and that he can raise one hundred per cent of choice exhibition birds.

We have recently seen a number of articles on the line of the old adage, "Honesty is the best policy." We believe this is true, but there should be a higher motive for honesty than simply the money it will bring us. We are inclined to believe that the fanciers of America are above the average citizen in their regard for honesty, but we are also confident that there is a chance for our improvement in a love for the right. We can best advance the interests of our favorite breed when we are strictly honest in our description as well as in our business transactions.

In our own experience with Leghorns we have found many obstacles to overcome and at times some obstacles that well-nigh overcame us. We commenced with this breed in 1876 with a strain of Single Comb White Leghorns that were excellent in some respects, but that had very large combs, larger in many cases than a winning Minorca of to-day. By taking pains in selection and in our purchase of new blood we were soon able to get rid of this "beefy" comb; but we still find plenty of care necessary to produce combs approaching perfection in both sexes. Another drawback with us for several years was the tendency to yellow on backs of males. This, too, by careful breeding, we were able to largely overcome. The squirrel tail is another fault that has annoyed many a Leghorn breeder. And right here let us give a warning to be careful in the selection of new blood. It often happens that a breeder will purchase a male for new blood that is, apparently, a fair specimen of the variety, when really he is entirely unfit to breed from. The only safe way, unless buying from a breeder of whose stock we have positive knowledge, is to mate our new bird with one or

two choice hens and carefully note the quality of the chicks produced. If satisfactory, we can then use the cock and his offspring in our matings for the next season, but if the chicks show bad faults likely to injure our strain, we can then discard both the cock and the few chicks produced from him without serious loss. This may seem like a year's waste of time, in some cases, but better by far do this than breed into your flock a fault that will take years to overcome.

Great care is necessary in the selection of breeding stock. First see that the blood lines are good, then that each individual specimen placed in the breeding pen is not only free from any glaring defects, but good in all points. It pays far better to breed from half a dozen hens that are all extra choice than from a flock of ten or fifteen that contains a few choice hens and several very ordinary specimens.

Select a male that has a comb as smooth as possible on the sides, evenly serrated, not projecting too far in front nor following the shape of the neck behind. A bird with good red eyes, a well-shaped, pure white earlobe and without white in face. He should have legs of good length and bright yellow in color. The standard reads, back of "medium length," but better use a male with back a trifle long than one too short in back, that carries its tail forward of the vertical line. Color, "pure white throughout." This is perfection; but if we expect to approach this, we must select both male and females as near a clear white as possible, both in web and quill and especially must the male be free from straw color on hackle and back. The hens should be large and well shaped and good layers and as great care should be observed in the selection of hens with good head points, good legs, good backs and tails as in the selection of the male.

With our pens well mated with choice stock, we may hope that we are started toward success. But we can truly succeed only by giving the breeding stock the best of care, the young chicks constant attention from the shell to the exhibition hall and by a continuous and judicious use of printer's ink, accompanied by a purpose to give every customer good value for his money.

C. J. OLDFIELD.

ROSE COMB WHITE LEGHORNS AS EGG PRODUCERS.

The Experience of the Writer Induces Him to Uphold this Variety as Well for their Beauty and Sprightliness as for their Early Maturity and Egg Producing Proclivities.

By B. G. Smith.

HEREAFTER we shall devote our two farms to the raising of Rose Comb White Leghorns and White Wyandottes. All our time and energy will be devoted to these two grand varieties. We have kept Leghorns many years, and this final decision is not an experiment, but a conclusion reached after years of study, hard work and experience which tells us that the R. C. White Leghorn is well worthy of our choice.

The Rose Comb White Leghorn certainly gives satisfaction to the most fanciful of fanciers, to the man of wealth as well as the man of lesser means. If the right stock is first obtained, no fancier can want more than this beautiful bird. Snow white plumage, bright red comb and wattles, clear white earlobes, bright red eyes, yellow legs, and a fine light carriage, showing favorably on the green lawn or in show room. What variety can bring in more of an income to the laboring man than the R. C. W. Leghorns? They are ex-

ceptionally hardy, are easy feeders, good workers, and are naturally clean, strong and healthful. It is seldom that any sickness comes to them, while in the cold northern climates their low combs are not easily frozen and they are the best of layers of large white eggs.

The young are easily raised and mature quickly. I find them of good size, and the laying qualities are above the average Leghorns. They commence laying early in the fall and never let up until old age overtakes them. This is putting it pretty strong, but as I say to my wife during the molting season, "Did you ever see anything like it?"

Each year we take special pains to mate up the best layers of the previous season and in eight years have them entirely under our control. To this method of mating we attribute our success in obtaining increased egg production from our Rose Comb White Leghorns.

B. G. SMITH.

R. C. WHITE AND S. C. BLACK LEGHORNS.

*Breed for Both Utility and Beauty—Contrary to Usage the Male is Said to Control Shape and the Female Color—
Pedigree Breeding—Birds that "Score 100 in the Shade."*

By P. H. Edwards.

IN BREEDING the Leghorn, as in any other breed of fowls, or in fact, any kind of stock, keep two things in view, practical utility and show room beauty. I place utility first, as without size, strength, and vitality, you cannot hope for show birds that will reproduce themselves. Build on a foundation of vigorous health, select as good specimens otherwise as possible, and success is yours.

Do not start as cheaply as possible, and do not pay fabulous prices for stock you know little or nothing about. Do not buy indifferent stock and expect to breed up to something fine; you may do it in time, but it will cost you more than to buy good ones at the beginning, not counting lost time. Breed from the largest stock you can get. Always set the largest pure white, perfect shaped eggs. I have set nothing but the largest eggs for years, until at the Colorado Springs Poultry Show last winter the hall superintendent said my pen of R. C. W. Leghorns laid the largest egg of any bird of any breed in the show room.

Breed from a female that is long in body, neck, and leg. Comb fine and even on the head, and in size to conform to the rest of the bird, and from a male that is compact, with full breast; tail carried low, heavy plumage, legs long; comb and head the very best you can obtain, as upon this depends in great part the shape of comb and head of your chicks.

Select the male first for shape, second for color; the female, first, for color, second for shape; but have both qualifications as good in each as possible.

In color, either White, Buff or Black, select the bird with the best under-color, other things being equal, and with the desired color in the shaft feathers of tail and wings.

In the white bird look for a blue white, not creamy white, in the shaft feathers.

Breed from mature stock, it will give you stronger chicks, and you can tell before you use a bird in the breeding yards whether his or her color will stay with them after the molt or leave them after the first year.

Keep a record of all stock; then by knowing just what mating produces the best chicks, you know where to go for more of the same kind. My experience teaches me that in order to obtain what you want you must breed from the description of bird that suits you.

My first attempt with Leghorns was in 1893, at which time I had the S. C. Black variety. In 1894 I produced a yellow legged, black hen, the equal of which in color of legs and plumage I think was never seen outside of our stock. She went through the show room year after year, always winning first, up to the last Mid-Continental show at Kansas City, Mo., when she was shown with one of her sons, a

yellow-legged cockerel, each winning a first prize in a large class.

In 1895 I first exhibited a R. C. White Leghorn, winning extensively at Colorado Springs. The next year I bred from the same stock and was successful in the show room. The next year I bred from a bird that won as cockerel and as cock. Last year I bred from birds sired by first cock at Madison Square Garden, New York, 1897, and again the produce won.

Mr. P. H. Edwards' Winning R. C. W. Leghorn Cockerel.

It will be seen that to breed winners I bred from winners, and I never failed. Like will produce like the same in poultry as in other things, and if your stock of birds will not hatch uniformly you have mongrel blood somewhere, and the way to do is to find it by single mating, then throw it out. If it is in all your stock, throw them all out, and buy from some one who can prove to you that he has what he claims—thoroughbred stock that will produce its kind.

The illustration herewith is of a R. C. White cockerel that has won first every time he has been shown. By the way, whenever any one tells you they have a bird that scored away up to one hundred and then some in the shade, just ask them who were the judges. For there are judges and judges.

P. H. EDWARDS.

RELIABLE POULTRY JOURNAL

SINGLE COMB BUFF LECHORNS.

BUFF LEGHORNS FOR SHOW AND TABLE.

Keep Back of Comb Clear of Neck—Inbreed to Fix Desirable Characteristics—Temperament of Birds Depends Much on Attendant—Details in Breeding for Exhibition.

By William H. Bushell.

JUST a few words to the beginner in breeding Buff Leghorns. First get good stock or eggs from a reliable breeder for your foundation. If you start right you will go right. In mating up your pens for breeding, first pick out a good male bird with an even golden buff surface color with some bronze feathers in tail color, the bird to carry tail rather low; comb as near five points as you can get it, with broad base and standing erect, back of comb to be well clear of neck; lobes white and as free from red as possible; also a good yellow leg and the bird to stand well up on his legs. We cannot get all the good points in one bird, but we must get as near as we can and then make up the defects with the females. I like to breed from birds with clear buff wings, and hackle clear golden buff clear down to the skin, then you may expect good young stock and you will not be disappointed. In picking out the females to go with this male get them as near an even color like the breast of male, with good combs and lobes and yellow legs; wings clear buff, but if you are breeding to a light colored male some dark bronze in wing feathers will do all right, in fact it is best to breed both ways; in using two pens a person can do that. Now the females to go with the dark-tailed male may have the tips of tail feathers a very light buff, almost white. I like a good, deep under-color in females, and in the dark male a very strong under-color. In using females with some very light buff feathers in tail tips I keep the smut away and produce the rich golden buff. When you have a pen of good old birds keep them to breed from and save some of your very best pullets each year to breed from after they are a year old, then you will get good, strong chicks and eggs that will hatch in the incubator. By the way, that is the way to hatch chickens and beat the lice, but you must still go further and raise your chickens in a brooder. So many people make the fatal mistake of giving the chicks over to the hens to raise; do not do it. We have not had to use any kind of louse destroyer now for two years, and my birds are free from lice. We do not let a hen sit on a nest over night, but provide good dust baths for them, and they will take care of themselves. If you have a good male bird that just suits you and you want to stamp his good qualities upon your flock, breed him back on his pullets, even to the third generation. I have the finest male bird I ever saw, and have refused a very high price for him several times; he wins first money wherever shown; he is just a grand bird, and I have bred him back to his pullets to the third generation, and his get have always won their share of prizes and the top prizes at that. This year is a

surprise to me and all the breeders who visit my yards. The young stock are even in color with good Leghorn shape, and very few culls. We cannot get enough culls for our table. Some people claim that Leghorns are wild, that you cannot keep them inside a ten-foot high fence; I keep mine inside a four-foot fence. It is the people who handle the birds that are wild. Go among your birds quietly and feed them out of your hand little knick-knacks. Teach them from the start that you do not intend to hurt them, and do not try to catch them to show to everybody who comes your way. If you take a stranger into your yards with you, you go first and take some food they are fond of, and get your chicks all around you and show the people how nice and tame your birds are.

Now a few words about Buff Leghorns as winter layers. I consider them the best winter layers we have had. To get eggs in winter, in the first place you need a good, tight house and plenty of room for them, with a scratching room partitioned off, and a dust room. I give fifty pullets a house eight by twenty-four feet, divided into roost room, scratching room, and dust room. I renew the straw once a week in the scratching room, and I do not let my birds go outdoors all winter. After they are housed a week they stop fretting and start to laying. If you let them run out every good day, and shut up stormy days it keeps them restless, but to keep them shut up all the time, they lay regularly. We feed wheat in the morning and raw vegetables at noon and a mash of coarse beans and oats and some wheat, mixed with a pint of meat meal to fifty hens. This we scald at noon and feed at night. We scatter a few handfuls of millet seed in the straw once a day, also feed some alfalfa hay or clover twice a week, and give warm water to drink. One thing I do like about the Leghorn pullets is, the more you fuss with them in the winter the more eggs you will get. I do not think you can get a Buff Leghorn pullet too fat if you will see that they keep their food eaten up clean. You need not worry about not giving them a light feed at noon. My observation is with them if you want eggs feed for them and keep the house just warm enough so the pullets' combs will not freeze, and my way to do that is during extreme cold weather, shut off the dust room part; that makes less room for the birds to keep warm. Just a word about the table qualities of the Buff Leghorn. They are not surpassed except by the Indian Game. You will never tire of their meat. We can use them three or four times a week and still be chicken hungry for the next one.

W. H. BUSHELL.

BUFF LEGHORNS FOR EXHIBITION.

A Warning Regarding the Principal Defects of this Variety—Shun White in Plumage—Even Surface Given Preference Over Undercolor by Intelligent Judges.

By Frank H. Hawley.

TO MY MIND the first and most essential thing that will lead the beginner to successful breeding of high-class Buff Leghorns is to know what a good Leghorn is. This cannot be learned from the standard alone. One must attend the poultry shows and see the birds themselves, ask the owners of the prize winners to take them out and show their fine points, then study your standard and compare these birds with the standard requirements. We should all have some definite object in view toward which we are working; form some ideal, which you are sure will win in any company, and then set to work to breed these winners. To do this in any reasonable time, my advice to the beginner would be, buy the best stock you can get, buy something that has been bred along a certain line for a long time. Have that line of breeding as near what you want to breed as possible and then stick to that strain. Do not mix up half a dozen strains to introduce "new blood," for you will surely get a nondescript if you do. Do not be afraid of inbreeding the first year or two, and if you get good results from a certain pen this year, keep that pen intact for next year and add a few of your best, strongest pullets to this same pen. Of course good common sense must be used in the selection of these pullets, and it must not be kept up too long. The above rules apply to all breeds, as well as Buff Leghorns.

In breeding Buff Leghorns there are a few points that the beginner should be very shy of, for when they are once introduced into a flock they are very hard to eradicate, such as white in wings and tail, bad combs and lobes, poor shape, stubs on legs, blue legs, etc., etc.

I have found that I can produce better birds from a male showing dark in wings and tail than from a bird showing

white in these sections. If you will mate a male and female each showing a little dark in both wings and tail, not black, you will stand a chance to produce chicks almost clear in these sections, but if you use birds showing white you will surely have white in wings and tails. Beware of the long white quills in wing feathers.

Under-color is a fine thing to have on all birds, but do not think that under-color alone will make a bird win. It is the soft, even shade of surface color, whether dark, medium or light, that takes the eye of the intelligent judge as well as the fancier. Such a bird should win, other things being considered equal, even though not so strong in under-color, over a mottled, blotchy surfaced bird that has very superior under-color.

It is very important to mate together birds of the same color, that is, if you have a light male bird do not mate very dark females to him, and vice versa, for you are sure to produce mottled birds by so doing.

Nothing adds more to the appearance of a Leghorn than a fine, bright, shapely comb, and if this section is given proper attention in breeding, the combs are easily controlled. It is a sad fact, but nevertheless true, that no two judges have yet been able to agree on what is true buff color. So long as this is true, the breeders are in a measure at sea, and all that we can do is to have our own ideal, which should be as near a combination of all the judges' ideals as possible. The study of how to produce the proper buff color on birds with clear wings and tail, is very fascinating and how to hold it after we get it, is another interesting problem. Too much cannot be said in favor of the Buff Leghorns, as they are a grand breed and have come to stay.

FRANK H. HAWLEY.

MATING BUFF LEGHORNS FOR COLOR AND SHAPE.

By Aug. D. Arnold.

THE origin of the Buff Leghorn is not known to a certainty, but we have pretty good evidence that they originally came from Denmark, and whatever make-up they may have, we know that in Leghorn characteristics they want nothing.

To the fanciers of England belong the credit of taking up this variety first, that is, from a fancier's standpoint. The most prominent of these English fanciers were Mrs. Lister-Kaye, George Payne and Messrs. Geffekin & Field. It was left to the fanciers of America to perfect the Buff Leghorns, and our birds are now far ahead of those of England.

Perhaps no breed or variety of fowls ever had so much opposition as had the Buff Leghorn when first introduced to American fanciers, but to-day they stand on an equality

with their cousins, the Whites and Browns, and score just as high in the show room. The improvement made in this variety since their advent to this country has been phenomenal. No one has noticed this more than the writer, who introduced the first of the birds to the fanciers of America, and has bred and exhibited them for nearly ten years.

The first birds of the variety that ever set foot on American soil were imported by the writer in the fall of 1890. They were put on exhibition for the first time at the Hagerstown fair that fall, and later on at Madison Square Garden, New York. Some fanciers took a fancy to them and predicted a warm place for them in the hearts of the American fanciers, while others saw fit to say all manner of evil against them; quite a number of our leading fanciers, how-

ever, took them up, paying high prices for stock and eggs, and were willing to accept what was on hand as foundation blood. Most of the birds imported at that time were of uneven color, and possessed as much white in tails and wings as they did buff. Many birds had blue, and others willow legs. By a few years' breeding we succeeded in getting black in tails instead of white, which was preferable at that stage of the breed, and in a few more years a great improvement was noticed in color of wings and tail, also in leg color, so that to-day there are some specimens that come near perfection. Much work is still on hand, however, for the progressive fancier along the line of improvement.

We find very few real good combs in this variety, especially in males, while we find some strains that are off in leg color. We have noticed this particularly where under-color is ignored. If you would keep the rich yellow leg and skin, watch the under-color closely. Short legs, squirrel tail, and under size, all must be kept out of our flocks; yet as regards size we do not believe in breeding a Leghorn up to the size of a Minorca. A fair-sized Leghorn is what should be sought after. Great care should be taken so that two light birds may not be mated together, and always keep in mind the "cotton tails," which the Buff Leghorn was so apt to sport when first introduced to American fanciers. It is much better to breed dark birds together than light ones. Good results can be had from mating medium colors together for a season or two, but it is safe to keep on the dark side. As good a mating as we know of is a lot of females dark buff, with a male one shade darker. When we say dark buff we do not mean red, but a medium dark.

The beginner should aim to get his start in any variety from an experienced breeder, one who has made a study of a breed, knowing that culls from such a breeder are worth more to breed from than the best birds from the yards of a breeder who has had very little experience in the variety he wishes to take up. He will also need to learn that off-colored chicks will come from the best of matings no matter how much experience the breeder has had. This is as it should be, for if every bird raised should happen to be a perfect bird, the fancier's work would soon be at an end. The scarcity of the diamond has much to do with its value.

The shade of buff that is called for by the standard is what so few can comprehend. Even judges seem to differ on this point. In our minds the shade of buff is not of such

great importance, as long as it does not prove either of the two extremes. A medium buff is what we should strive for. Evenness of color, too, is of the greatest importance; all sections should be one even shade.

Very few persons who now have the pleasure to look at the beautiful Buff Leghorn as it appears in our leading shows have any idea of the cost, patience and time it has taken to place them in the position they now occupy in the poultry world. Pardon us for saying we have spent a small fortune to get this breed before the fanciers of this country.

A New York Winner; Owned and Bred by Aug. D. Arnold, Illustrating the Heavy, Blocky Style that Formerly Prevailed Among Buff Leghorns.

We have paid out many hundred dollars for birds we imported, having paid over \$800 for eight birds from the yards of Mrs. Lister-Kaye, of England, besides buying a number at prices running from \$30 to \$75 per head, and nearly one hundred breeders additional, none of which we got for less than fifteen dollars per head.

In conclusion we will say all real fanciers should be proud of the success that has crowned the efforts of the fanciers of America in improving and getting this valuable variety of the Leghorn family so near perfection. We shall ever feel proud of the honor of introducing the beautiful Buff Leghorn to this country. AUG. D. ARNOLD.

BUFF LEGHORNS.

Methods Adopted in Breeding for Color—White Said to be Less Undesirable than Black—Undercolor Extra Strong Foretells Red in the Produce—Surface Color of Greatest Importance.

By E. G. Marquardt.

IN BREEDING Buff Leghorns the first important point to consider is your means to procure the parent stock. If you have the cash to invest, in a pair or trio of No. 1 birds from a reputable breeder, you are all right, especially for the first season, but if this all important factor is lacking you must get the best birds you can afford. To persons so situated a little of my experience might be a help and benefit.

I have read much about mating for buff color, especially that which was written by our Buff Cochin and Buff Rock breeders, and to all appearances they prefer the black to the white in plumage.

This is where most make a great mistake. Buff Leghorns were never bothered much with black in plumage, mostly white, and by judicious selection they have been bred to a soft, even buff without a trace of black, white or mealiness, nor do cockerels show red wing bows. One of the best cockerels I ever raised was sired by a cockerel that had a tail which was intermixed with white. This bird scored ninety-four points as a cockerel by Judges Shellabarger and Russell at two different shows and was only cut one point on plumage. He also won second at Chicago in 1898 as cock, and was only cut half a point on color of plumage by Judge Pierce, losing on comb, which met with an accident, and this bird has almost invariably bred me solid colored chicks.

I believe it can be safely said that the Buff Leghorns of to-day are the best buff breed in the standard and breed closer to the ideal buff color. Take for instance the class of one hundred and one birds in Chicago in 1898. It was considered by most judges the finest colored buff class in the show and was the admiration of all buff breeders.

Under-color should not be lost sight of, although I do not think it is nearly as important as surface color. In male birds a good medium under-color is what we want, as too much will, as a rule, run to red in chicks. Pullets with a soft, even shade of surface color are preferable to mate to

such males. Under-color can be two shades lighter than surface. Such birds will give you a good percentage of buff chicks.

Extreme matings I do not approve of. It is true you get a few good birds for show purposes, but most of the females have salmon-colored breast and cockerels are red, and to sell such birds to a customer I consider a great wrong, as they will invariably throw chicks the color of the parent stock. In all my ten years of experience I have been practicing the standard mating and can say it has given me the best results, especially so in the last three years.

Shape should not be lost track of, this being forcibly brought to mind when we see so many cockerels with such high tails. This can be overcome in one season by using a cockerel with very low tail, the lower the better. Chicks from such a bird will be O. K. even if some of the females have high tails.

Too much cannot be said in favor of Buff Leghorns as layers. I have had some grand egg yields from them, and their large chalk white eggs find a very ready sale on the market.

In conclusion, let me impress it upon the minds of amateurs—do not be tempted to use too many females in your breeding pen, rather one or two very good hens than six or twelve just medium.

I have raised fifty-five chicks from one pullet in a single season and most of the pullets were laying by Christmas, and from such a number, or even half, you can choose a pen or pair that will pay you for all your trouble and expense.

You might say, well, am I not inbreeding? Yes, you are, but you are also establishing a strain of birds that you can rely upon and when you mate such you know just what to expect by selecting the healthiest and strongest, best colored and shaped, from year to year, you raise a race of winners that will win for you in any battle.

E. G. MARQUARDT.

LEGHORNS AT AN ENGLISH SHOW.

By Sharp Butterfield.

IN THE Leghorn class at the Crystal Palace Show there were eleven Brown Leghorn cocks and cockerels, and twelve hens—any age. We have seen, these last few years, several articles written on the size of our American Leghorns. Well, they are not quite as large as the English. I will describe the latter, both Brown and White, as they are much the same in shape, style and carriage. The combs on both males and females are much larger and coarser than we desire. The male comb lies close to the head in the rear. The best comb I saw would be getting off easy with us if cut two or three points. They are very like the Minorca comb, but larger than the majority of Minorca combs on this side of the water, and not so good. The

American standard requires good combs in proportion to size of bird, hence the difference between a Leghorn and Minorca. The wattles and earlobes are more of the Minorca type, in fact, the whole body and tail are far more like a Minorca than an American Leghorn. They are comparatively shorter on leg than the American, very straight in back, and quite small in tail. The color of the Brown male's neck is a lemon or lightish straw color. Very few of them show any striping on neck, and I saw none with striping on saddle. The saddle feathers are much the same color as our American birds, less the striping. I leave your readers to put their own value on an English Leghorn male.

The females are much more like what we want in color

of body, wing surface and back, and if they had smaller, neater combs they would certainly be a great acquisition in color for our breeders for pullet-breeding. The necks of the female are very pale lemon, and I do not know that I saw one with anything like a distinct black stripe in neck hackle. I examined some and found them very gray in wing and some with two inches of white on flights. Some of the winners at the Palace had not down but feathers between the toes. I have thought, and still believe, that our standard has been too severe on Leghorns in its disqualifications, hence the smallness of size in American Leghorns, as compared with the English, but while American Leghorns are smaller, they have their distinctive features and you could not show them as Minorcas by simply changing the color of leg. They are too dissimilar in shape, leaving size out of the question.

It would be a long, long time before American breeders would be satisfied with the color, comb or shape of an English Brown Leghorn male. The White Leghorns are a little longer on leg than the Browns, otherwise they are the same in every particular except color. One prominent exhibitor said to me, "How would these birds suit the Americans?" I told him we would call them Yellow-legged Minorcas. Said I, "Could you not show them as White Minorcas and win, if they had white legs?" "You bet I could," he replied. Your readers will see pretty clearly what the English Brown and White Leghorns are as compared with the American. The other varieties of English Leghorns are much the same in size as the American. They have the Pile, Black, Buff and Duckwing, all of which were better represented than the Browns and Whites.

SHARP BUTTERFIELD.

New York Prize Winning Buff Leghorns.

BLACK LEGHORNS.

By R. E. Haeger.

BLACK LEGHORNS were first imported from Italy in 1872 and admitted to the standard in 1876. Although not bred extensively until the last three or four years, still they are forging their way to the front, and I see no reason why they are not equal to any of the other Leghorn varieties, while in some things I think they surpass all others. Their plumage being a black throughout, does not soil as easily as that of any other color. Unlike most black fowls, they are fine for table use, dressing yellow, and the flesh being of fine quality.

As to fancy points, the Black Leghorns are exactly like the Browns and Whites in symmetry. The plumage should be a glossy black, although we find a great many a dead black, which should suffer a cut for color. Breeders should be careful of color of eyes, because I think Minorca blood has brought in not alone dark eyes, but also black shanks, coarse heads and shape of body. What would Franklane Sewell think of a Langshan with a bay eye? Although judges do not cut as frequently as they should on color of the eyes, still I think it is of great importance.

Another question among the admirers of this variety is, color of the shanks. When first admitted they were to be yellow, but finding they could not get as bright a yellow as they wished, this was changed to the black. Then again they were changed to yellow, or yellowish black, and that is what the standard now calls for. In regard to this argument, I will say that I do not try to breed yellow shanks, first, because I do not think a solid yellow shank belongs

with a black plumage. None of our other black varieties call for yellow shanks. Then why call for them on Black Leghorns? Second, because I know that nine-tenths of yellow-legged Black Leghorns either throw off-colored feathers while chicks or when they molt out as fowls. The best of them will do this, and that is my principal reason for not trying to breed yellow shanks.

I hold that the only color, and the proper color for their shanks should be a yellowish black. I do not mean by this that they should have a slaty black, but a bright yellowish black on the shank, with the upper side of the toes and the lower side of the toes and feet a pure yellow. By breeding the shanks and toes this color, we can keep the plumage and other sections where they belong.

I think this question ought to be brought before the judges as well as the breeders, for a careful consideration, as hardly two judges cut alike on the color of shanks. I have score cards by several of the very best judges, and only two, so far, have taken a yellowish black as standard color. Some would cut half a point, while the next one would cut one and a half points. Now, while the standard calls for a yellow or yellowish black, I cannot see why a yellowish black is not as near perfect as yellow, but there are judges who do not think that way.

I would like to hear what the judges, as well as breeders, have to say about this, as it should be settled, so breeders may know what to aim for in breeding, as well as to know what to bring out in the exhibition room.

R. E. HAEGER.

ENGLISH LEGHORNS.

From the Fanciers' Gazette, London, England.

THE subject of this essay is a very attractive one to me, and I believe it will be found equally so to a very large section of the poultry fanciers of this country, for the Leghorn is a breed that has taken a very strong hold here since its introduction, over twenty years ago, both for its usefulness and also ornamental qualities. The two varieties (Brown and White) are what may be considered the original Leghorns, and were for years the only recognized colors till the recent desire sprang up for varieties and novelties, of which I must not, of course, treat here, as no doubt they will have their turn in your capital essays. First, then, to the Browns; and here let me remark that, as a matter of course, many of my suggestions that relate to general Leghorn points need not be again repeated in Whites.

First, then, the Brown cock or cockerel for cockerel breeding. Pay strict attention to the fact that you have a perfectly erect sound, evenly serrated comb, with sufficient substance at the base to carry it in its present erect condition, and in this and all other breeding pens be careful that it is a Leghorn, and not a Minorca comb; and, if opportunity offers, do not fail to carefully inspect the parents of any bird you may be inclined to breed from—either male or female. [By reference to the article entitled "Leghorns at an English Show," on page 72, where the present type of English Leghorn is described, it will be seen that notwithstanding the warning given by the writer of this essay, the Minorca style of comb is yet prevalent in England.—Editor.] For cockerel breeding, too, it is wise to lay plenty of stress on brightness of color, and large, smooth lobes; do not, by any means, allow a hackle that is not clear in its striping, and, above all, sound in color. I need hardly add that the bird should have good carriage and style, nicely carried tail, and clear, bright yellow legs. Hens, for the same purpose, should be finely and nicely penciled, and of a nice light brown color; if a little red in wing, a thing so objectionable in show pullets, they will be all the better for this purpose, as it adds to the richness in their sons' color. The combs should fall evenly on one side, and be careful that they are of good size. This is

perhaps more important for cock than pullet breeding.

Let your cockerels be less bright in color, and of the darker type, large in comb—which, however, must not be coarse, and the serrations should be nicely cut; the striping of his hackle should be broader than in the cock breeders, and the bird of a generally finer type throughout. Here, too—and, in fact, in all cases—do not fail to consider the quality of the lobe. The hens should be large-combed, bright, clear-legged birds, and any tendency, either here or in the cock breeders, to dark feet should be studiously avoided, for it is an objectionable feature, and one that is sure to be reproduced, and, to my mind, detracts fearfully from the looks of an otherwise handsome bird in the show pen. These birds, quite differently from the cock breeders, should be perfectly free from red in wing, or if not possible to get such, then have as little of it as you possibly can.

In Whites the amateur may obtain better results in the way of both sexes from one breeding pen than it is possible to do in the Browns, though I very much doubt whether it be possible for him to do as well as if he mated separately. Pay attention to all the general Leghorn characteristics, as described in my notes on Browns; and further, see that your cock bird is free from straw color on his back and saddle hackles, and that both he and his wives have a good depth of color in their legs, as there has in many strains become a tendency to paleness in leg, brought about probably by the efforts to keep the plumage as pure in color as possible; for while I do not agree with some who assert that a canary tint is correct in a White Leghorn—and I do much prefer a pure white color—I must admit that it is preferable to have a faint tinge of yellow color in the plumage combined with a lovely yellow leg, rather than the pale, washy legs one sometimes sees exhibited. In the breeding of Whites, those who can find trees and such like natural shade, or failing this, who provide artificial shade, will be wise to avail themselves of it, and cannot fail, especially in a strong season when we get "first a shower and then a shine," to reap great benefits therefrom; for, in my opinion, it is such a season as above described, rather than a tropical summer like that of last year, that stains an otherwise white bird's plumage.

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