THE FEATHER'S
PLYMOUTH ROCK BOOK
By T. F. McGREW
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The Feather's Plymouth Rock Book

By T. F. McGREW

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CONTENTS.

By T. F. McGrew.

Introduction. 4
Barred Plymouth Rocks. 5
Advancement of the Plymouth Rocks. 10
Standard Shape Considered. 14
Barred Plymouth Rock Color. 26
General Needs and Defects. 39
White Plymouth Rocks. 45
Buff Plymouth Rocks. 57
Penciled Plymouth Rocks. 67
INTRODUCTION.

During the years intervening between 1884 and 1889 the relationship existing between Mr. Joseph Wallace and the writer was close and beneficial. During the time he was compiling the data for his series on American Breeds we met frequently and many letters passed between us. Ten years have passed since these books were issued, and it is my pleasure to attempt to complete this work.

The group of American fowls as set apart by the Standard of Perfection, presents what might be called the "money-makers" for the fanciers of to-day. Two very important members of the family have become almost obsolete. We doubt if any meritorious Dominiques could be found in our country, and the Javas are seldom seen. Following, as we often do, the golden phantom, we often pass by the better in our eagerness to possess ourselves of landed wonders. The following attempt to help on the advance of our American effort to produce the best breeds of domestic fowls on earth, we dedicate to our deceased friend, Mr. Joseph Wallace.

T. F. McGrew,
New York City.
CHAPTER I.

BARRED PLYMOUTH ROCKS.

Their Ancestors Traced.

The most important factor in the older of our American breeds, is the so-called American Dominique. Having furnished the proper color and barring for our original Plymouth Rocks, to it should go the honor of having started the American fanciers upon an almost endless task of training, within bounds, the shape and color demands of our Barred Plymouth Rocks. Having the honor of being the original ancestor of the Rock family, the Dominique should have at our hands at least a meagre description. Of four books we have before us—all American publications, from 1845 to 1871—three of them mention the Dominique. By illustration they are shown to have very long, flowing tails; the two main tail-feathers very long and full. The ground-color was light, barred by slaty-blue lines across the feathers; the females rather darker in color than the male. The illustration of same here presented is modeled to suit the Standard and at the same time to show their original make-up as recorded over forty years ago.

Dr. John C. Bennett, in his book published in 1850, tells us that the Dominique was brought into this country by the French, and that they were always very prolific layers, matured early, and stood both inbreeding and cross breeding without deteriorating, proving both their purity and stability of breed char-
characteristics. These qualities are fully upheld by all who write of them. "The Book of Poultry," by Lewis Wright, furnishes the most satisfactory information of our American Dominiques, in the illustration of a pair bred from stock sent over to England about 1870; also by reproducing feathers from both males and females. These feathers show an edging in hackle and wing-bow feather of male, also in hackle of female. This same edging shows itself to this day in some of our male Plymouth Rocks.

Whether these fowls came to this country from some other land or were produced here, we presume will never be known, but these so-called cuckoo colors result from crosses of black and white fowls. These same colors made their appearance in the production of Cochin Bantams in a cross of a Black Bantam and a White Booted. The same admixture of colors produced the Cuckoo Cochins, Dorkings, and Scotch Grays, and when established it is very pronounced in its production. If casting our opinion as to the origin of the American Dominiques we should venture to say they favored the Cuckoo Dorking or Scotch Grays, and may have come from much the same origin.

Black Javas.

The female side of the alliance that produced our Plymouth Rock fowl is admitted to be the Black Java. But little is recorded of them in early poultry books. They are mentioned by Dr. Bennett as the Great Java fowl. As to their color he states, "black or dark auburn-color, with large black legs; they have single combs and are of good size; their plumage decidedly rich." The Rev. H. S. Ramsdell in writing of
the origin of the Plymouth Rock mentions the Javas as having been introduced into Connecticut in about 1840; its plumage black and glossy; its size large; slate-colored, smooth legs; bottom of feet yellow. Thus we find the rich Black crossed with the Barred Dominique as the ancestor of our Plymouth Rock family.

When the Dominiques were crossed upon the Javas, they produced a fowl that Mr. H. Simpson, Jr., called an improved Dominique. In writing of them in 1870, he states that they are an improved Dominique, larger in size and with single comb. The early Plymouth Rock was an enlarged type of the Dominique, having the full flowing tail of both ancestors. The great affinity of the blood union of these two breeds gives ground for consideration. Might not this same Java fowl have furnished one side of the cross that produced the Dominique? And the head and the comb of the Dominique remind one of the Hamburg head and comb. Might it be within the possibilities that the so-called penciled Dutch fowl came here with the early settlers and helped to lay the foundation of the soon-to-follow American breeds? We know full well that the Dominique color is strong and self-asserting. This color is said to have shown itself as quite dominating over the black; at the same time the single comb of the Java quickly won the day. This might indicate a single-comb ancestor for the Dominique. The whole result might incline one to the opinion as above stated.

The Plymouth Rock as produced was a large fowl and rather on the dark order as to color. To improve this a second cross with the Dominique was tried, then a Cochin cross to improve shape and tail-
Plymouth Rocks.

formation. These additional crosses gave to the Plymouth Rock the blood lines of four breeds to battle into submission. These crosses will continue to come to the surface from time to time and show themselves when least expected. Were it possible to know all the mixtures, admixtures, and plans for mating all our fowls, one could calculate ahead, providing he could know individual specimens.

In the production of one of the varieties of Orpingtons, Hamburgs, Leghorns, and Dorkings were used. From these crosses of black and white fowls, some of Cuckoo or Dominique barring were produced. This fact again points to the influence of the barring of the Hamburg as one of the elements in the making of Dominiques as does the tendency toward white in earlobes.
Barred Plymouth Rock Pullet
CHAPTER II.

Advancement of the Plymouth Rocks.

The size and general useful qualities of the Plymouth Rocks attracted early attention and the whole body of American fanciers became more or less interested in their improvement. Many additional or top crosses were made, among them the Cochin cross that endowed them with a seemingly everlasting heritage of bother in the way of feathers on legs. This same fault clings to their albino sport, the White Rock showing the almost immovable damage that comes with an ill-selected cross. Bad color of beak and legs and faulty combs bothered for many years, also bad color of wings and tail. All these faults have been slowly subdued until they are fairly well under control.

One has simply to look back twenty years to fully realize the vast improvements in the entire make-up of our Barred Rocks. The masterly hand of the enthusiastic fancier has guided them into their present position and made them ready for the finishing touch that will surely be placed upon them. No one can feel satisfied in their partial completion. They must be made more uniform in both shape and color. Breed characteristics must be so well established in them that all varieties of the breed will be true Plymouth Rocks. The vast number of types to be seen simply stands as a landmark of their incompleteness.
Plymouth Rocks.

There always has been one type that leaned somewhat to the Cochin formation of cushion and fluff. This we should not consider the better type. For the most useful fowl, we think, the true Plymouth Rock type, as described in the Standard should be the absolute rule. Personal preference should be abandoned entirely in the establishment of the uniform type. This should insure better and more regular form the whole land over. A Plymouth Rock is not a true member of the family unless he has the breed characteristics in perfection. Fine color is not breed formation. Shape over color will, beyond all question, advance the breed formation; color over shape must tend to degeneration of breed distinctions.

Color is their variety emblem; it should be of the most perfect quality and well burnished for display, but a specimen lacking in true breed shape or form should be termed a masquerader, who struts about in our variety colors unadvised of the fact that he is out of his class and should be moved to the any-other-variety class. A determined demand on the part of all breeders for more recognition of the true shape or form would add much to their general improvement. In no other way can perfection of form be assured, for so long as color of any variety outclasses true breed qualities, just so long will the breed be hampered in its advancement to perfection.

We hear the question often asked, why can not the judges come closer together in their work? This is largely due to the fact that we have no absolute rule for shape and color. Ask yourself while looking at a class of several hundred specimens, which specimen is the correct guide for true shape and color? Then consider to what breed the balance belong, for surely
they do not all show the same form, and in some cases
the two extremes are almost as far apart in shape as
a Leghorn and a Java. When breeders, fanciers, and
judges all join hands in one determined demand that
all specimens considered in any class must show the
true characteristics belonging to the breed, then and
only then will we reach a settled perfection of form:
but so long as the present manner is followed of al-
lowing poor shape to be carried through by fine color,
no settled rule of shape can be established.

We have changed, revised, and made over our
Standard. We disqualified for years our finest speci-
mens for a twisted feather in wing; we write and
quibble about a slight defect in color of eye and ear-
lobe, and allow five or six prizes to be awarded in a
class where often as many different types as speci-
mens are represented within the award limit. All
these can not be right. The fault is as much or even
more that of the breeders than the judges, for we all
encourage it, to a greater or less extent, by not de-
manding the true type. Our opinion is that a speci-
men of inferior form should always be set aside as not
belonging to the breed, no matter how beautiful the
plumage; and in saying this we must not be under-
stood as undervaluing color, for we consider it of
most importance, next to shape.

But few absolute changes have been made in the
standard demand as to shape. While this is the fact
as to the law that guides, many absolute changes and
improvements have been made in the birds them-
selves. Many specimens have been seen that almost meet the
highest ideal of Plymouth Rock perfection, so grand
in both form and color that one must stand and gaze
in admiration. This superiority may have added one
or two points more to their score than is given to specimens much their inferior in all respects. If we have no method of showing due credit for superiority, we surely have power to rebuke inferiority, and its use is our weapon for forcing improvement. Advance the general quality by ignoring inferiority.

Many of the early troubles, such as bad-colored legs and ear-lobes, splashes in plumage, and bad-colored plumage have largely decreased; the color of wings and tails much improved, and the formerly clouded appearance had almost become a thing of the past, until the recent demand for color to the skin over all other qualities took possession of judges and writers alike, whose preferences in this line have again clouded the plumage of the greater portion of those produced, caused by the effort of breeders to secure the style most preferred by those who hung up the red and the blue ribbons. No one should object to any advancement or improvement of color; all should applaud its achievement, providing other more important qualities are not forgotten nor injured in the endeavor to secure the so-called better color.
CHAPTER III.

Standard Shape Considered.

The greatest advancement made in our Standard since its conception, is the placing in groups all varieties, including Bantams, that belong to one breed and the construction of one rule or shape description for male and female of the whole group, thus demanding that but one form will be admitted as standard for all. If this rule should be rigidly adhered to by all, the time is not far distant when we shall have all varieties of each breed so exactly alike in general form that no mistake can be made in placing them. The necessity of the hour is a full understanding of shape requirements as laid down in the Standard for same.

We do not claim to be more expert than others in the matter of Plymouth Rock shape, but do insist that there is great difference of opinion among those who do claim almost infallibility of judgment in this line, taking their own selection of prize-winners as proof of their judgment. Having seen the work of about all the most noted judges, I am prompted to say that I have never seen one that adhered absolutely to a set rule for shape in this breed. In fact, one often sees two or three types in one show with preferences given to all. These facts often bring forth a clamor of disapproval. But, while all these different types have their advocates and admirers, surely no one has
Breast, Tail-Covert, and Back Feathers of a Pair of High Scorers.
Plymouth Rocks.

the right to blame the expert who selects his preference from among them.

That these differences should not exist, all must admit. But they do. The test of the matter is often presented in living illustration when an old and successful breeder is called upon to place the awards, and others quite as successful exhibit their best for his selection. No one has the right to claim superior judgment over others of like ability; but all should unite in the production of standard form within the lines laid down by themselves, and insist that the only one proper shape should be recognized by an award. One must admit the superior ability of those who form our specialty clubs. We must also bow in deference to their wording of the Standard. But, while doing this, we surely have the right to expect that they of all others should adhere to the one only recognized Plymouth Rock shape and teach us by object-lessons both in producing and selecting them in the show-room.

Shape of the Male.

Our Standard calls for a head of medium size, surmounted by a comb medium or under medium in size, with five even and well-defined serrations. To complete the head, the specimen must have the short, stout beak with regular curve; fine, large eye; and well-shaped ear-lobes and wattles. This does not call for a large or small head, but one of medium size. The same with comb; medium or under medium is the demand. Now stop to consider these two very important points. First: How shall we decide just what is medium in size for these sections? It can only be decided by the law of proportion. What might be
Plymouth Rocks.

just the proper head and comb for one specimen would be out of proportion on another. This rule cannot be absolute as to measurement of just what constitutes the proper size for every case. So, it should be considered as an elastic rule to be applied by the law of proportion in each case.

At the same time we can readily understand that a large, coarse head, having an oversized comb and badly-shaped beak, will not fill the standard demand for a Plymouth Rock head; nor will a small, ill-shaped head and comb come within the demand. All can see this to be the fact. If one little side-sprig on an otherwise perfect comb should be cut one-eighth of its whole value, what should be the punishment for head and comb entirely outside of standard description? If a specimen has a head, comb, beak, wattles, and ear-lobes other than called for by the Standard, should it be considered as a Plymouth Rock; or should it be set aside as not belonging to the breed? This is the only way to consider all sections of the Standard, and while its application to the letter would produce a panic in poultry affairs it is the only safe guide to follow in selecting specimens for our breeding-pens.

The illustration above, as to faulty head-sections, should be applied more stringently to other sections: neck, back, body, tail, thighs, and shanks, all medium in length. Now, medium, as compared with what? One must conclude that this means, as compared with other breeds of the American class. These same sections in Wyandottes must be short, back of Java long. This of necessity carries with it a long body. Other sections of the Java, also these sections of the Dominique, are medium as called for in Plymouth Rock standard. Consider the length of back and body of
Plymouth Rocks.

the Java. As compared with this, the Plymouth Rock should be medium and the Wyandotte short. This fact should be a guard against a confusion of Rock and Wyandotte shape. Under these conditions should a barred fowl having a long Java body and back be considered as a Plymouth Rock? Or should one having the short, compact shape of the Wyandotte stand ahead of the proper form? This is the way to properly consider section by section our Standard shape.

The description of back, though plain in its demand, is much disregarded. "Broad, of medium length and rising with a slight concave sweep to the tail." This does not call for a full cushion, nor a long, flat back; but it does call for a broad back, not a narrow, pinched one. It also tells us very plainly as to a slight concave sweep to the tail. This is about as adopted at Indianapolis in 1888. The point for consideration here is, the meaning of "a slight concave sweep." Concaved is to be hollow or rounded. This description calls for a broad, medium length back, having a slightly rounded hollow that gently curves to the tail. No mention is made of any back formation that should encourage a tendency toward a cushion. This tendency should be cultivated somewhat in the Wyandotte, but not in the Plymouth Rocks.

Breast broad, deep, well rounded; this is very short and precise. A narrow breast does not belong to this breed, neither does a shallow, flat breast. The breast must be deep from top of back down to point of keel bone, which must be carried well forward, making the breast full and round, fashioned more like a Dorking than a Leghorn. Plymouth Rocks that have a tendency to stand up like a Game fowl always lack proper
From Back and Cushion of Pullet, Result of Single Mating.
Plymouth Rocks.

breast-formation. There is but the one proper breast and body-formation, so plainly described in the Standard; all others should be discarded as not belonging to the breed. Fluff moderately full. There is nothing in this description of back, breast, and body that leads any one to consider a bird fashioned after the Cochin type, nor will the Leghorn or Game type fill the demand. The true Plymouth Rock shape so plainly defined should be produced and none other considered. Legs, both thighs and shanks, medium in length, neither long nor short. The whole description of the bird calls for a well-formed, compact body, well placed upon strong legs, of medium length, presenting a strong, vigorous action; not a short, inactive fowl, nor a spindling specimen on stilts. A careful consideration of all standard demands is the only proper method for success. Legs should be set well apart, otherwise they have a tendency to narrow the breast. Knocked knees should be considered as almost a disqualification. They are far more injurious in every way than either white in ear-lobe or bad color in plumage. The use of such specimens as stock birds is not to be considered.

Shape of Female.

The standard description for shape of female is almost identical with the description of male. Having paid special attention to this, I shall only call attention to two very important sections of the female—back and fluff. The early standard for Plymouth Rock females, called for the following back for female: "Broad, of medium length, slightly cushioned from center of back to tail." This description favored the cushion formation of back. This was slightly
BARRED PLYMOUTH ROCK FEMALE
modified at Indianapolis in 1888. No change made at Chicago in 1893. The description for back has not been changed since the meeting of 1888. At the revision at Boston, January, 1898, the descriptions of back for both male and female were made the same. The clause demanding more cushion development for female than for male was left out, thus favoring the proper Plymouth Rock back, and discouraging Cochin development. The former description of Plymouth Rock and Wyandotte back-formation for females called for identically the same shape, only the latter was described as short. Today the description is better, but both should be improved and made more definite. Their shape is not alike, and the description should make this plainer.

As to the description of fluff, "moderately full" we think too indefinite. The inclination to increase the abdomen of the old hens with fat and thus show a much fuller fluff than belongs to the breed is not proper, as per the description. A full-appearing fluff is not the proper formation under the Standard. It has no part in the make-up of proper Plymouth Rock form and should not be encouraged. This undesirable amount of abdomen and fluff gives them the appearance of having short legs, and under-body appearance of a smooth-legged Cochin, all of which should be considered as outside of proper form and discouraged by non-recognition in the Plymouth Rock classes.

We copy the following from a letter written by Messrs. Bradley Brothers, of Lee, Mass., for Reliable Poultry Journal's book on Plymouth Rocks:

"Color.—Color may be subdivided into two sections: Color proper, and form of barrings, counting
eighteen and twenty points respectively. Color is found in ground and bar. Pure ground-color is clear, grayish-white or bluish-gray, the same shade all through the bird, both in outer color and under-color, both in flights and tails, coverts, sickles, and all the same shade of clearness everywhere.

"The ground-bars are to hold their color uniform throughout, without merging into or mingling with the dark bar.

"Likewise the color of the dark bar should be as nearly as possible exactly even from head to foot, in flights and tail, coverts and sickles, every bar exactly the same shade as its neighbor. The edges should be firm and of same shade as the center; no mingling or merging and no color shown except pure dark blue. A pure ground-color in males is attainable and gives great beauty even if the bars are a little uneven in the different sections. In fact, it is expected that the outer bars shall be a little harder in color than those underneath. Some judges prefer a hard, nearly black bar; others, a rich, mellow bar, while in ground-color some like a pearly, almost white, and others a more clouded blue. But whatever the degree of color the purity should remain the same. A bird showing this pure color whether it be light, medium, or dark, is, as far as color goes, a thing of beauty; and when the barring is regular, it presents a picture long to be remembered.

"Form of Barring.—Barring to be pure in form, should show its two edges equally distant apart the whole width, and should go straight across the feather or be only slightly curved, all the bars on each feather to be of uniform distance apart and parallel to one another, and all sections to match well together in ap-
Plymouth Rocks.

Appearance of bar. For further requirements see the Standard. Absolutely pure barring is not attainable, hence is not required, but the nearer it is approached the finer the effect, and with this approach the zebra lines are seen. The choicest males show this pure barring nearly perfect on the outside and frequently it is found well developed in the under-color.

"The heaviest color sections are neck, breast, and back. Some judges prefer a pure outside color and will cut lightly for weak under-color. Others admire perfection in under-color and will somewhat overlook a slight outside cloudiness if the under-barring is ideal.

"Form.—Compare the cut of a Cochin cockerel with that of a Leghorn and notice the grand work which the poultry fathers have done in giving our best breed, the Barred Rocks, the large body and market carcass of the former, but with the activity and laying points of the latter. Clasp the Plymouth Rock cockerel by the keel-bone and place the other hand on the back. Are the two quite a distance apart? Then the body is 'deep.' See if the keel-bone is medium in length rather than short. This is to prevent the deep body from being too Cochiny. See if the body rapidly widens as you press from the keel-bone outward at the sides and upward. This is 'broad.' Observe if there is roundness and curve of plumpness to body—this is 'full.' Press the hand against the breast. Does it feel like the end of a tea-cup, or the side of a small pumpkin? If the latter, then it is standard. See that the keel projects enough to make the breast stand out moderately forward in its lower part. See that the back is broad at each end and is medium in length, not short. All these are carcass
measurements and count, exclusive of the thighs, thirteen of the twenty-six points. They are largely determined by the hand.

"The sections of neck, tail, wings, and legs count more for style and typical carriage, but frequently a bird with fine carcass measurements appears lacking in these, from a poorly-shaped neck or tail and, of course, should be cut only in the latter sections. View the bird from the rear. The tail should be spread at the base and well supplied with coverts because it connects with a broad back. Still, wings and tail are medium length to give the large body full support in the air. The neck-hackle is abundant and flowing because it comes down on to a broad back, and the legs are well apart because they are joined to the sides of a broad body. Still, neck and legs are "medium" length, not short, to insure activity and foraging qualities. The only parts where abundant feathering is required are the eminently useful rain-shedding sections, neck and saddle."
CHAPTER IV.

Barred Plymouth Rock Color.

If it were possible to be fully assured as to the composition of the Dominique color, one could start from the foundation and trace it to the present. If originally the Dutch penciled or Hamburg and a black fowl we know the foundation was black and white; if a white fowl on one side and black on the other still black and white; if composed of black and white, why not black and white still? All this argument helps those who advocate color-description being described as black and white to their belief, but in this same line of thought, if the Barred Rocks are black and white, what of Houdans and Anconas? If black and white describes the color of these two varieties it will not make an intelligent description for the Barred Rocks, unless it is our intention to breed them black and white. If it is intended to hold to the same color now called the proper shading for them, plain black and white will not describe it. If the description for color is to be altered or changed, great judgment should be used in the selection of words to describe it.

We do not say, nor do we claim to be able to say what words would describe the color of Barred Plymouth Rocks better than those we have; but, on one point we are well satisfied, which is, that the general public, or better to say the larger body of the breed-
Plymouth Rocks.

ers at large, consider the color about as described in our present Standard, and they will vote almost as a whole in favor of same rather than to have it described as black and white or in words less descriptive of the color than we now have. No doubt but that the placing of the color and the blending of the same give the appearance more or less of blue shading. As compared with a Silver Penciled Hamburg it is not black, nor is it blue when compared with an Andalusian. At the same time, when considered alone, it has the bluish appearance to the mind's eye of the great majority of fanciers, and it would be fatal to change the wording for others less descriptive of the color.

The demand in the Standard for the same shade of color for both males and females, it is claimed by experts, makes it quite impossible to produce them from what is called single matings, or both from the same mating. So few males have ever been shown of the same color as the best females that one might say no sure plan has been discovered whereby they can be produced to any certainty. We have examined thousands of feathers, belonging to both sexes and have seen but few specimens that matched in color. If this can not be accomplished by or under the separate mating plan of to-day, where or how will it be accomplished? Or, must we admit it to be quite impossible, and change our standard to meet the condition?

I have stated before, and still believe that the final solution of the color problem will be found in the single-mating plan, not by following same a year or two, but by careful attention to the selecting of the most perfect colors and mating them together year after
Plymouth Rocks.

year till the proper color is established. This can not be accomplished in a short time. The unnatural conditions brought about by double matings, cross matings and single mating for the past fifty years can not be overcome unless close attention and care are bestowed upon the effort and ample time is given to overcome these troubles and establish a true breeding strain.

We saw as far back as 1885 a strain of Barred Plymouth Rocks that were bred on the single-mating plan, the males and females far more alike in color than we see to-day. The same person that produced those specimens is now at work on the same lines with good success, and another under our influence is making a most satisfactory effort in the same direction. Should their care and patience continue a year or two longer we hope to see more than one blue ribbon won by specimens produced by the single-mating system, both males and females of better and closer shade of color than seen to-day.
From Cushion of Hen and Pullet. Tail-Covert of Cockeral.
CHAPTER V.

General Needs and Defects.

Some two years ago I wrote an article that brought to me letters from all over the country, showing the great interest taken in the subject. This article is partially reproduced below with changes and additions.

"We are often apt to lose sight of the most important factors in matters under our consideration by directing too much attention to those of lesser importance. This may be instanced in considering color in our birds. We might be led to believe that the under portions of color in some varieties constitute the whole bird. While no one can be blamed for having a preference and an opinion of his own, yet when that opinion is made prominently public it has its influence either for or against the question at issue. If the opinion is at variance with the accepted law it loses its influence, from the fact that it has no foundation and can simply be looked upon as a preference for some one theory outside of the standard law.

"We take, for instance, the law which governs the true formation of Cochin fowls. The demands therein set forth are about the same as they have always been, with little change in the general description from that recorded for this class by English breeders some fifty years ago. Under this same description
WHITE PLYMOUTH ROCK MALE
at least four distinct types of birds exist. Even in England we find the very tall, flat-breasted specimen, with the heavy hocks which are so much despised by the majority of our people. They also have the round, compact Cochin with the shorter leg, which is more to our notion of proper Cochin requirements.

"It is my purpose to use the Barred Plymouth Rock as an example to illustrate how the handling of any breed or variety of breed will influence its whole make-up in respect to form and color. The standard description of shape of Plymouth Rocks has not been changed enough in twenty years to make any considerable change of form in any section of the bird. Every one seems to understand fully just what, to their notion, can be called the true Plymouth Rock shape, and there seems to be quite as many notions of form as there are people who express them; but each and every one demands that they must be barred to the skin. The Barred Plymouth Rock, the most useful of all fowls, may be pushed into its own grave by breeder and judge alike, simply from requiring too dark under-color of barring to the skin.

"When it is possible for females that lack size and weight and are faulty in form, to win over others of fine form, size, and color simply because they have the best barring to the skin, it is time to stop to consider whether or not this method should be fostered. When males with fine under-color can win over birds that are their superiors in every other respect than the barring to the skin, the day is not far distant when their popularity as a public favorite will end. The question is: Shall the Barred Rocks be valued on the bars, or shall they stand out as they should, on a clear sea, beautifully adorned by attractive colors of a per-
From Breast of Pullet, Back and Breast of Cockerel.
feet hue, free from all untrue shadings that must come with too much under-color?"

Without contending against any one's opinion or the color description of our Standard, the true beauty of the color of a Barred Rock is its purity. The richer the color of the barring and the purer the light or white of the plumage the more beautiful are the blendings. The almost white color, so beautifully barred with the darker shade as to give the blue and white shading of a female, is the ideal color. We can not hope to influence the masses against this beautiful combination that gives the blending which produces the much-admired blue tint or finish of a modern, up-to-date, rich-colored female. So long as we can hold this desirable style and finish of surface-color, all the barring possible can not injure them; but as soon as the barring begins to cloud the surface-color it is beyond your control and injurious.

The beauty of surface-color of our Barred Rocks has suffered more in the last five years than any of us would like to admit. During this period the desire for under-barring has gained a firm hold upon us. Even under the score-card system the discretion of the handler has been so influenced that under-color receives more consideration than proper form. This is made more plain by the disposition to name the number of bars in each particular section of the specimen, thus drifting unconsciously into a method that places the number of bars over quality, bringing to the surface the undercurrent of the past five years; that is the natural outcome of the tendency to favor and to produce that manner of fowl which proves to be a winner. Judges form public opinion in poultrydom, as do the newspapers and orators in
Chick Feathers.
Plymouth Rocks.

the political world. For this reason the judges are by far the strongest element for and against any condition, and their guidance may, if allowed to lead us wrong, prove a ruin to our highest hopes.

The Sensible Color Markings.—The barring of a Barred Rock, whether male or female, should consist of narrow bars of darker color upon the lighter color: these narrow bars to be close together in all sections, the neck and saddle to be the closest of all, and the wing and tail-barring to be wider and heavier than other sections. The positive demand is that the barring must show the entire length of the feather, except where mostly composed of down, the shade of color to be uniform throughout. This wording calls for barring that shows the whole or entire length of the feather, but it does not demand that the under-barring must be as deep or dark in color as upon the surface. It is quite possible to have the true surface-color, also under-barring of the required construction as called for in the Standard.

To obtain under-barring we must mate year after year birds of the same blood lines that have the best barring obtainable. This will increase the proportion of dark color in the blood of the fowls, the presence of which may bring a brownish blend upon the edge of the lighter color, destroying the close lines between the light and dark colors that produce the bluish cast, obtained only upon closely-cut specimens. The effort to obtain the demanded under-color produces so few females fit for keen competition that many disappointments come to those who strive to have the best. These discouraging results may pull the Barred Rocks down in the scale of popularity, as shown by the largely increasing interest in other breeds.
Plymouth Rocks.

This demand for under-color in males is reducing the number of elegant specimens formerly seen to a limited few of the accepted quality of barring. We are strongly of the opinion that the coming favorite will be Barred Plymouth Rocks, the male and female of an even color, both of the same shade or as nearly so as male and female can be, with under-barring of sufficient strength to uphold and maintain the beautiful blue cast upon the surface-plumage. Some such are seen to-day and are growing in favor with the fancy.

Line Breeding on Single-Mating Plan.—At this time we must depend entirely upon hearsay and theory, for no one has even partially succeeded in establishing any set lines for success under this plan. Experience teaches us that like will produce like, and fully realizing that all stock at hand has the admixture of double matings in its veins, we may select a male and female of most perfect Plymouth Rock shape, both of the admitted proper shade of color, the male just a little darker than the female. For this single-mating plan we shall select at least three pairs to constitute our start. In each we would use the proper colored female, paired with different colored males to test the first season's work. Thereafter the best-colored specimens would be mated together until the bad features of double mating should be driven out and the proper color built up and established as the dominating color.

In doing this we might lose the much-sought-for under-barring. But one of the most attractive varieties would be built up and advanced to a greater popularity. We know it has been said, time and time again, that this can not be accomplished—so was it said that
From Saddle of male, Fluff and Cushion of Female.
Plymouth Rocks.

the Buff Rocks would be a passing fancy. It can be done and will be done, and when complete all will see its value. It has taken almost fifty years to bring the Plymouth Rocks to their present position. We must not expect in a few years' time to undo, rebuild, and perfect upon a new line that which it has taken so many years to establish. It will take time, and he who attempts to produce more perfect specimens upon the new must show at least the patience of those who produced the Buffs and Whites. With the proper beginning as to quality of stock, care in mating, and the keeping of perfect records, the task will be more quickly accomplished than might be expected; for after the first year improvement would be rapid, if the foundation stock were of the best.

The producing of the higher-grade stock on the single-mating plan calls for matings that will produce both males and females of equal quality from one pair. This is what is known as the single-mating system. Some of the most successful under the double-mating system come nearer each year to the single-mating plan. There is no use for any one to claim that as good are produced at this time under the strictly single-mating plan as are produced by following the other method, for the very reason that no one has a single-mating line that can be depended upon to reproduce to a certainty—equal to being depended upon for new blood, or for a certain start. For this reason a new line of blood must be established. This will take time, money, and patience, but we feel prompted in saying it will bring its reward.

The Double-Mating System.—This system of mating calls for females, in each case, that are darker in color than the male. It is claimed that the original
black hen, mated to the original Dominique male, created this condition, and that for all time to come the females will be darker in color than the males. Whether or not this is the reason we can not say, but we all know it is a fact; and to overcome this way of breeding, males of the lighter color are used.

For the production of standard-colored cockerels, males of the most perfect standard color are mated to females that are from one to three shades darker than standard color, as may be the preference or judgment of the breeder and his knowledge of their reproducing powers. This manner of mating should produce cockerels of the proper shade of color for exhibition purposes. The females from the same mating will be too dark for exhibition purposes but should make the very best for producing cockerels another year. Success in any of these matings depends largely on the clearness and evenness of color and barring in both the male and the females. The females from such matings are usually a little darker in color than the females from which they are bred. At times they come entirely too dark to be of any use. To remedy this, lighter-colored males must be used.

For the production of standard-colored pullets, females of perfect standard color and barring should be mated to a male two or three shades lighter in color than they. The greatest care must be given in selecting these males to assure the most perfect barring throughout. An indifferently barred male is almost worthless in any or all of these matings. When these two lines are thoroughly established, experience will teach just which shades of color will succeed the best. Until this experience is gained only two principles can be depended upon: A standard-colored
male to darker females for cockerels; standard-colored female to a lighter-colored male for pullets.

At this advanced stage in poultry breeding it is worse than useless to hope to produce good or even fair exhibition fowls from inferior breeding stock. To succeed under any plan of mating one must have the best possible blood lines to depend upon. It is useless to hope for good results from poorly-bred stock. Good line breeding is as necessary as good individuality; both the breeding and the quality must be in the specimen used.

**The Pea-Comb Plymouth Rock.**

This variety of the Plymouth Rock family was admitted to the Standard at Indianapolis in 1888. After ten years of recognition it was dropped from the Standard at Boston in 1898. After ten years of public favor at the hands of the American Poultry Association, they became almost extinct, proving our long-advocated theory that to be a valuable standard variety more distinctive marks should be demanded than simply the changing of the style of comb, or the removing from or the placing of feathers upon their legs. I copy the following from the pen of Mr. H. S. Babeock, by his permission:

"For several years prior to this date the Pea-Comb Barred Plymouth Rock was bred by a number of breeders, among whom the most prominent were M. A. Bush, of Melrose, Mass., and H. S. Babeock, of Providence, R. I. Mr. Bush, in 1888, retired from breeding poultry and sold his entire stock to Mr. Babeock. Since 1888 the variety has been bred by quite a large number of persons, chiefly men who
WHITE PLYMOUTH ROCK FEMALE
keep fowls for practical use, and has been distributed to all parts of the country.

"In searching for its origin the writer has received hundreds of letters showing that in various flocks, at sundry times and in divers places, pea-combed chickens have appeared, the parents being single-combed, thoroughbred Plymouth Rocks. These fowls were so kept that a cross was impossible, in some cases being the only variety upon the place or in the immediate vicinity. The testimony was simply overwhelming in favor of the assertion that the pea-combed birds were just as pure in blood as the single-combed ones, and hence they were regarded as a 'sport' of the Single Combed Plymouth Rocks. A 'sport' they have been called and perhaps justly, though there appears a possibility of considering them a reversion, for it appears from considerable testimony that the Single Comb Barred Plymouth Rocks had in their veins a decidedly mixed blood. For example, Mr. I. K. Felch declared in an article, written about the time the Pea-Comb Barred Plymouth Rock was admitted to the Standard, that a certain breeder of Single Combed Barred Plymouth Rocks, acting upon his advice, had bred into his strain the blood of the Light Brahman and that when the Light Brahman blood had been reduced to one-eighth the resulting birds were winners. Again, a prominent breeder of Barred Plymouth Rocks told the writer that he had personally crossed into the original Essex strain a Black Red Pit Game, in order to give more vivacity to the fowls and then had bred out the strictly Game characteristics. It was also learned that another prominent early strain had in its composition the
blood of the Dark Brahma, and it is well known that the Black Java used in the making of the original Plymouth Rocks was an Asiatic fowl, and all Asiatic fowls have a tendency to produce pea combs. Inasmuch as the Brahmas, Light and Dark, are pea-combed fowls, and as Pit Games produce all manner of combs—single, rose, mab, strawberry and pea—and as all Asiatics have a tendency toward the production of the pea-comb, it is impossible that the comb upon the Plymouth Rock is due not to sporting, which means the production of an entirely new character, one not possessed by an ancestor, but to reversion, in this instance affecting the comb only of the fowls. But to one or the other cause, either to sporting or reversion, the pea-comb of the Plymouth Rock must be referred, for no immediate cross for its production was ever made. The Pea-Comb Plymouth Rock is as pure in blood as its single-combed ancestor; it is a Plymouth Rock and nothing else.

"After the writer had succeeded in introducing the Barred variety he produced a Pea-Combed White Plymouth Rock in the following way: He was breeding the White Plymouth Rocks with single combs at the time and a friend of his, Mr. F. B. Butts, of East Providence, R. I., purchased of J. C. Harris, of Venango, Penn., a setting of White Plymouth Rock eggs. In the brood hatched from these eggs was a strapping, big, handsome cockerel with a pea-comb, a clear case of sporting if the White Plymouth Rocks have no pea-combed blood in their veins. Mr. Butts gave this cockerel to Mr. Babcock. This was the second Pea-Comb White Plymouth Rock the writer had ever owned, the first being a sport from the barred
birds of Mr. M. A. Bush—a beauty, white as the snow, but which unfortunately died before he left any stock behind him. The Butts' bird was crossed upon the writer's Single Combed Whites and Pea-Combed Barred females, and the white chickens with pea-combs were preserved and bred together, producing the Pea-Comb White Plymouth Rocks."
White Plymouth Rocks.
CHAPTER VI.

WHITE PLYMOUTH ROCKS.

Their Origin and General Improvement.

I submit for your consideration the words of the secretary of the American White Plymouth Rock Club, with reference to the origin of the White Plymouth Rocks, believing his words to be well selected and complete:

"As a general rule, statements regarding the origin of any particular breed of fowls are susceptible of criticism, and in many cases a thorough and exhaustive investigation only serves to bring to light conditions which make positive assertions generally an unwise policy. This state of affairs exists more particularly as regards the time and place of origin when considered as affecting Plymouth Rocks, and for this reason the statements made in this brief article will be such as are absolutely beyond contradiction and which are really facts that will not admit of argument. The White Plymouth Rocks are, in the common acceptation of the term, 'sports' from the Barred variety. By this term is meant that from the mating of Barred Plymouth Rocks there results in the progeny a white fowl which is simply and truly a White Plymouth Rock, and can not consistently be called anything else, although an effort was made at one time to have them designated in the Standard
Plymouth Rocks.

as White Birminghams, etc. This claim regarding their origin has been assailed from the time of their introduction to the present date and will perhaps never be accepted by some writers (?) and friends of other breeds, but the utter lack of foundation of the anti-sport argument is clearly demonstrated when the underlying facts in the case are considered. It is conceded that the American Dominique, the Black Java, and the White Birmingham were used in the make-up of the Barred Plymouth Rocks. There were probably other breeds used also, but these, we know, were the ancestors of some of the foremost strains. It will, therefore, be seen that the birds from this mating would necessarily, in accordance with the laws of nature, occasionally produce in the progeny a solid white fowl, deriving color from the White Birmingham cock and possessing the characteristics of all three breeds. Such a result is to be expected. It is an illustration of the truism that 'we can not get away from our ancestors.' It will have to be admitted that the 'sport' theory, as regards certain other breeds, has been advanced to limits that are entirely out of reason, and in most cases the claims of this nature made for some breeds are visionary in the extreme.

"If white progeny ever resulted from black parents it is properly termed albinism and it is a condition not to be desired, for the reason that it carries with it a lack of stamina and a generally weak and inferior condition in all respects. The throwing of white sports by Barred Plymouth Rocks is not an altogether uncommon occurrence, and is explained as above, the cause being the white fowl used in originating the Barred Rocks. This reversionary tendency is
Plymouth Rocks.

oftener found in the crossing of the Essex strain of Barred Rocks with other strains, but is liable to be found in any flock. The writer has been told by Mr. I. K. Felch, Judge H. A. Bridge, of Columbus, Ohio, and Mr. H. S. Babcock, of Providence, R. I., that they have had white 'sports' from Barred Plymouth Rocks. The veracity of these disinterested gentlemen can not for one moment be questioned, and their names are mentioned in this connection for the purpose of showing the falsity of the statements sometimes seen to the effect that white sports always appear in some remote location, or in the yards of some breeder unknown to the fraternity.

"The first breeder of prominence to place them before the public was Mr. Oscar F. Frost, of Monmouth, Me. The 'sports' which were the foundation of Mr. Frost's strain were hatched in his yards in 1876, and were the result of a mating of the Essex and Drake strains of Barred Plymouth Rocks. They were carefully mated and only the pure white progeny selected for breeders, till in a few years Mr. Frost had a large number of beautiful white birds that were the exact counterpart of their ancestors, except in color, and an exhibit of them at a bird-show in Boston, in 1881, attracted wide-spread attention. In the meantime other parties had been experimenting along the same line and the future prospects of the fowls were so bright that unscrupulous breeders began to introduce foreign blood in order to supply the demand which by this time had developed to large proportions. In a short time the Eastern States were flooded with specimens that were everything but White Plymouth Rocks, and white fowls of all conceivable shapes and sizes were palmed off on the public as White Rocks.
Plymouth Rocks.

To this condition of affairs is attributed the stand taken by many persons at that time that they were not 'sports' from the Barred variety. The result was that the justly-earned standing and reputation of the White Plymouth Rocks were well nigh injured beyond the point of recovery, but thanks to the honesty of Mr. Frost and other reputable breeders, the breed was preserved and propagated in its purity, and when dishonesty and misrepresentations had run their course, the genuine Plymouth Rocks were still in the land and ready to make a fresh start in the race for popular favor.

"The credit for their introduction in the West properly belongs to Mr. S. M. Williams, of Monroe-ville, Ind., in whose yards the first specimen appeared in 1883. Mr. Williams was then a breeder of Barred Plymouth Rocks, and had the reputation of breeding as good birds as could be found. When the first white chick appeared, he was very loth to make the fact known, and quickly disposed of it. However, the persistence with which they appeared in the progeny of the fowls mated to a certain cock-bird led him to give the matter some thought, and resulted in his establishing a strain which he called the Empires. Previous to their introduction by Mr. Williams the White Rocks were comparatively unknown in the West. They were first exhibited at Ft. Wayne, Ind., in 1886; also at Chicago and Cincinnati in the same year. By this time they had begun to create the same favorable impression in the West that the Frost strain had in the East, and their entrance to popular favor was accompanied by the same conditions that had to be contended with in the East; namely, the foisting upon the public of all kinds of white fowls
Plymouth Rocks.

under the name of White Plymouth Rocks. The White Javas, White Dirigos, White Erminettes, Snow-flakes, Puritans, and other cross breeds furnished a regular Klondike for their breeders, and again the name of White Plymouth Rocks suffered a set-back from which it took some time to recover.

"The genuine White Rocks were not to be downed, however, and they again survived the handicaps placed upon them, and for several years have been bred in their purity until now they are found in the yards of thousands of breeders, and are proving their fitness for the position they occupy—that of being the best all-purpose fowl we have today. It will be some time, however, before the evil effects previously mentioned will be entirely eradicated. But breeders are becoming educated to know what constitutes a White Rock, and we do not find near so many specimens now with backs and tails approaching the Leghorn type, and with willow legs, which are an indication of White Java blood. The breed is now in a position where counterfeits can not injure it, and we predict that it will at an early date receive the consideration to which it is entitled. To all persons who in the past have not had success with the White Rocks we would earnestly say, do not condemn the breed until you have given it a fair trial. Your birds may not have been pure bred. Counterfeits of all things are usually very undesirable, but a counterfeit White Plymouth Rock is, more than any one thing, to be despised. You will not be disappointed if you try White Plymouth Rocks that are White Plymouth Rocks, in fact as well as name."—Frank Heck, New Albany, Ind.

The writer saw the first lot of White Plymouth Rocks produced, in the yards of Mr. Williams, of
Plymouth Rocks.

Monroeville, Indiana. From that time to the present I have paid special attention to their advancement; and no one saw the organization of the White Plymouth Rock Club with more pleasure than I, for I recognize in them the guardians of their future. Under their patronage true Plymouth Rock form will be advanced and adhered to. The smooth-legged, Cochin-formed females will not have the preference. I mentioned this when writing of the Barred variety. At the same time I consider it of sufficient importance to be repeated under each variety, but more especially so in connection with the Whites, so that it may be quite impossible for a Single Combed White Wyandotte to win as a White Rock. Their different breed characteristics should be so fully developed that the shape of one could not be mistaken for the other; the establishing of same should be the most important mission of all those who are interested in the two breeds.

In handling the White Plymouth Rocks three very important features must be looked after; namely, size, true Plymouth Rock shape, and color. We consider size of the greatest importance in all white fowls. With it should go health and vigor. White fowls of all kinds are naturally more delicate than those of stronger color. Either the high or vigorous constitution carries with it some tint in the plumage, or else the presence of the yellow or creamy tint in plumage adds strength and vigor to the specimen; for of one fact we are assured, that the specimens having the rich-colored beak and legs usually show some tint of a yellowish shade in parts of the plumage, and with it usually comes the greatest vigor.
Plymouth Rocks.

In considering size, bone formation should be well considered. A good, strong shank is quite important, denoting strength and plenty of bone. The true breed shape should be present, or the specimen should be discarded from your mating. It is the wildest folly to countenance poor shape in any member of a pen of White Rocks, for if that feature is lacking, the whole value is gone, for such a specimen is a nondescript, of no value, and is sure to bring lasting injury to your flock. Better by far have three specimens of perfect form than thirty of moderate quality. Like will produce like, or its inferior. If of only moderate quality, none but the best can be counted upon to give the highest quality of stock and to be assured of this they must be line bred.

White as a color is quite as difficult to produce as any of our variety colors. When we come right down to the fine point, only a few specimens are seen that are anywhere near pure white; the majority have the yellowish cast among the plumage, and many of them have more or less a sprinkling of black. Usually those showing the sprinkling are the whitest in feather. I quote below from my own former statements as to white color:

"We have digressed from our immediate subject for the purpose of showing the importance attached to color and to the science of producing certain desired shades. To return more properly to what we have in mind (and doing so in the natural order under which it should be considered) we will take up the subject beginning with white. As we are treating of color, it may be justly claimed that we should not treat of white, since in its purity it is practically the absence of all color. What it is in fact does not
Plymouth Rocks.

affect the question under discussion, for in poultry breeding it is accepted as color in many varieties of our domestic fowls. But how many of us know what true white is? Very few have seen it in its purity, such as can be found only in a substance that has been bleached, as paper when it comes from the bleach-tubs, so very white that it dazzles and almost blinds the eyes. On exposure to air and light it begins at once to become tainted in its purity and assumes color, or, at least, the first indication of color. So with white fowls—the quality which produces the yellow beaks, legs, and skin will taint the quills of the feathers with a yellow pigment which gives to the pure white a creamy or yellowish cast. This taint in the color, under influence of the air and sun and light, changes to yellow the surface which often hides a pure under-color. With age and the action of the sun the taint becomes more marked, for in this case the tendency is not to fade out so long as the yellow pigment is kept to give the proper shade to beak, legs, and skin. The desired combination is not a natural one. It is forcing nature and consequently must entail work, for at every step we are met with the tendency of the beak, legs, and skin to fade or of the plumage to lose its purity.

"Take any breed or variety of white fowls, and for years breed in line for white beaks, legs, and skin, and you will find it easy to produce birds of pure white plumage, so free from anything foreign that little, if any, bad color will show in their feathering. When this is obtained, it shows the most total absence of color in their system, other than what is furnished through the blood. This, I believe, is the only way in which the pure and unchangeable white can be ob-
BUFF PLYMOUTH ROCK MALE
Plymouth Rocks.

tained. The purer it is and the freer from foreign substance the less it will suffer from the action of the sun and light. As long as the pure white plumage must be influenced by color of legs and skin, only a limited number of good specimens can be produced, and these only by the greatest care in shielding them from the sunlight and its glare. Where the yellow pigment exists, the tendency of discoloration is so great that to maintain the white in its purity demands constant care, an instant of neglect being sufficient to undo all the work of many months.

"Notwithstanding all the work that has been done and is still being done to produce pure white plumage with yellow beaks, legs, and skin, no one has as yet been able to so control these two colors as to keep the color of the skin from influencing the plumage, though, of course, there have been many cases of partial success, running from the very lightest taint to all the different degrees verging to yellow. Neither has any plausible theory been advanced as to how the same can be accomplished other than by shielding from exposure to the sunlight. In the majority of specimens raised during one season it is almost useless to strive to obtain perfect white, but it is well to select the very best and to give them complete protection from direct sunlight. It is even safer yet to confine them in quarters where even the reflection of the glare of the sunshine can not reach their plumage.

"This is probably the hardest problem which the fancier has to solve, and instead of trying to guide nature in the channel which circumstances make a logical way, he strives to go against the laws of nature and compel that which has been proved to be in-
Plymouth Rocks.

compatible: that is, to produce a pure white fowl in a specimen that is required to have yellow pigment. The result is nothing more than the natural blending of colors which are kept in dangerous proximity. We are by no means prepared to state that the producing of fowls with white plumage and yellow beaks, legs, and skin is an impossibility, but it must be borne in mind that producing is not even half the battle. The aim must be to obtain the qualities desired so firmly established in the specimen that reproduction will not be a matter of doubt but an assured fact, and that no extraordinary care shall be needed to avoid the discoloration which at this writing is the bane of every breeder of white fowls.

"In everything there is a right and a wrong way, and if you wish to produce perfectly white plumage you must avoid the source of your trouble; in other words, remove as much as possible that which is responsible for the tainting. This you will find in the quills, whence it is absorbed from the yellow skin. Select for breeders the purest white-plumaged specimens you have, pure white in quills, with beaks and legs very pale in color, using these as the foundation on which you are to build your pure white strain. From year to year select your breeders on the same lines, and in the course of time you will establish a true pure white plumage, accompanied by very pale-colored beak, legs and skin. In no other known way can pure white plumage be produced with any certainty. There are certain laws of nature that can not be overridden (at least for the present, with our limited knowledge), and it does not look as if the producing of white plumage with yellow beaks, legs,
Plymouth Rocks.

and skin comes under that class. Only the future can prove the facts in the case, and if the past is to be taken as a criterion of the future, but few of us will live to see the problem satisfactorily solved.'
CHAPTER VII.

BUFF PLYMOUTH ROCKS.

Their Origin, Ancestors, and Improvement.

The fact that one is of royal birth will give him great advantages. At the same time, there is magic in a name well applied. Such a magic has saved the Buff Rocks from being cast aside. The first of this class that came to my notice were far inferior to a Rhode Island Red of the present day, but the name carried with it respect, which encouraged their admirers to work for success. Early in the eighties we advised the use of Buff Cochins upon White Rocks. Had we at that time known the real qualities of the Rhode Island Reds, we would have advised the use of the Rhode Island Red Single Comb males upon the White Plymouth Rock females, showing very yellow plumage. This to-day we think would produce them in a few years; but such a course would be useless at this time, from the fact that so many real meritorious specimens are present to select from.

This variety is an outside production forced upon the Plymouth Rock family as a member of its household without its sanction. For quite a while it was an unwelcome guest, now a well-received member and a credit to the breed of its adoption. I shall relate their origin as given in the official catalogue of the club:
Plymouth Rocks.

"Origin of the Buff Rocks bred by J. D. Wilson.

"For lack of an article on the origin of the Buff Rock I will take the liberty to give Mr. J. D. Wilson's letter to me, explaining his strain in particular, to the Buff Rock breeders, as I think it will be of interest to all.

"Dear Mr. Denny: In reply to your inquiry, how my strain of Buff Plymouth Rocks originated, I will briefly tell you. I found in a relative's yard a male bird, being a cross between the American type of Buff Cochin and Light Brahma that possessed all that could be desired to breed to. He had a beautiful, even golden surface-color, clear hackle, small comb, red lobes, perfectly clean legs, and weighed twelve pounds. I selected two of the best females with the best feathering on legs and greatest length of tail-feathering and containing very even surface-color. The result of this mating was far beyond my expectation. This was in 1888 and I have carefully selected the best in my judgment each year until now they are breeding as true to name as any other variety of the Rock family.

"I have been written to a great many times as to their origin; have, however, refrained from giving it, as a knowledge of their exact breeding could not aid to hasten on their popularity. It was from the very first exhibit that the popularity of this beautiful buff-colored bird won the admiration of the fancier and their sterling qualities will continue to hold them at the front.

"A perfectly solid male Buff Plymouth Rock throughout is certainly phenomenal in my experience. I have succeeded in raising only one such. However, customers are constantly writing out descriptions of
such a rare bird, wanting to buy at a reasonable price of five dollars—not wishing to pay a fancy price for such. Of course, they are very ignorant of the breed, or they would not expect so much for a trifle.

"You will now know that Rhode Island Red blood does not constitute the make-up of my strain.

"My first exhibit was made at the World's Fair, '93, making a clean sweep, and their creditable showing won the Buff Plymouth Rock recognition to American Standard of Perfection. Since, they have won first prizes at many of our leading shows, also first prizes, silver cups, and medal at the leading English shows. Trusting this may be of interest to you and many other successful breeders, I am very truly, (Signed) J. D. Wilson.'

This description of their origin gives us an idea of their foreign make-up as to the Plymouth Rock family. It might be well to state that the White Plymouth Rock and Rhode Island Red bloods were also used in their improvement. These combined produced a fowl that, like all cross-bred stock, proves to be a very prolific layer. There can not be any theory advanced as to why they should continue to be better egg-producers than others of the same family. As to their proper color, I submit below my opinion on buff color as published in the Poultry Monthly, of Albany.

True Buff Color.—It must be smooth, even, and not mottled. The surface ticking most undesirable. All specialty clubs that guide the future of our buff varieties should stand firm for the Standard demand for true buff color, therein described as "Surface-color throughout one even shade of rich golden-buff, free from shafting or mealy appearance, the top-color of
male and neck of female showing the metallic gloss luster, under-color a lighter shade, as free as possible from all foreign color; other things being equal, the specimen showing the richest under-color shall receive the preference."

One has simply to study the wording of this description to discover that it fully describes the demands for true buff color. Consider the meaning "one even shade." This does not describe a specimen having different shades of color in neck, back, wing-bow, and breast-color. Four or five shades of color on one specimen will not fill the demand. Even two shades is outside of the rule. Of whatever shade of color, it must be one even shade, to meet the first demand.

The next and most important part of the color description are the words "rich golden-buff." This is not a pale lemon nor an orange-color; neither is it red, nor reddish-brown; but simply a rich, true buff of golden hue, free from red, pink or brown. The only shade we have in metal or made color that approaches the description is pure gold as used by the dentist, and some of this has a tendency to the copper-color, while others shade toward brass. Some have the notion that the pale, thin lemon-color, so weak in under-color that the white shows through, is the true color. This will not do for either show or breeding purposes.

These two sections teach us that the color must be true and even; neither of several shades nor so thin of color as to show white ticking. From the latter always come white wings and bad under-color, with a tendency to white in tail-plumage. It must be perfectly even in color all over, and true golden-buff.

The next important demand is, "free from shafting
or mealy appearance." The shafting may come from the quills of the feather being either of a lighter or darker shade than the web of the feather. Mealiness is a mixing and mottling of lighter and darker shades in the web, and is one of the most undesirable features possible to encourage. Better end its possibility for injury with extermination.

The top-color of males and the neck of females should have the bright, metallic luster that is indicative of health and high condition. The lack of either lessens its luster and deadens the color of the whole plumage. Under-color has great encouragement in color description, and is of great importance; but it should be noticed that under-color should be of a lighter shade than surface-color. It must be remembered, in considering a very light-colored bird, that under this description its under-color would be very light.

The tendency for a year or two is toward pale, unpronounced,.washy color for buff males. This is an error. Such specimens can be produced by mating a very red bird to a straw-colored white female of the same breed. It points to weakness of color, and is not what the Standard demands.

Another mistake is the effort to get rid of all black or shaded colored feathers in tail at the expense of wing-flights and under-color. Have had our attention called to specimens with no other color than buff in tail. Close attention to wing-flights and secondaries of such specimens usually displays a weak, mealy appearance. The gain in tail is lost in wing and under-color. The natural hiding-place for the excess of color or weakness of same seems to be in the most extreme parts of the body. White comes to our black-
Plymouth Rocks.

...est specimens on the tips of flight-feathers, and in the toe-feathering of all dark-colored birds. The black shading of all buff fowls hides itself naturally in the same locality. It can be corralled as simply a shading of main tail-feathers, and there it should be kept.

Our effort to have solid-colored buff, pure and free from all foreign color, is quite commendable, and when accomplished should be applauded; but remember, under-color must not be lost sight of, for it is the foundation of solid surface-color; and while many cling too closely to the too-much-under-color theory, a moderate shade of under-color is quite necessary.

Have heard it said that it should be quite as practicable to produce a pure buff fowl as a pure white one. Who has produced any number of pure white fowls? When one is so produced without any trace of cream or straw shading, its advent is heralded well over the land. Quite as many pure buff fowls are produced as pure white ones. When speaking of white fowls, remember that cream or straw-tint is the same to them as the black shading is to buff ones.

No shade of color known to fowls is as hard to produce in perfection as true buff; no shade of color produces an equal per cent of bad colored specimens, considered from the standpoint of the show-pen; no color has had one-half the consideration, nor has any color stood the criticism it has; and under all this double demand for far more excellence of color than in any other, an equal proportion of good colored specimens of buffs are produced in all buff varieties to the same proportion of other colors.

The one stumbling-block to their greater perfection is the great diversity of opinion as to what is the proper shade of color. This has been so from the ad-
vent of the so-called Yellow Shanghais, and will continue for all time; for as yet no accepted shade has gained absolute possession of the mind's eye of even a majority of our judges, who, in the active service, do more to mold opinion than all others besides. No one can take to himself the claim to be the absolute authority, for the shade selected by each is his rightful opinion, the holding of which should have due respect.

It is our consuming desire to have the buff fowls outrank all others as guides to greater perfection of color. We are not alone in our anguish. The Barred Rocks and Brown Leghorns are tossed upon the waves of color contention, and the change of judges in the Brahma classes proves the unsettled problems of fashion in shape and color.

There can not be much doubt but that the same blood, to a large extent, flows within the veins of the majority of both the Plymouth Rocks and Buff Wyandottes of the present day. While these are disputed points, a careful study of all the facts finally leads one to the above conclusion.

While dwelling upon the subject it is natural to mention all the Buff varieties. Science in handling them has only had a partial show. Two extremes of color are at fault with all of them—the too-red, with black tails; and the too-pale, with white under-color and a tendency to lacing in hackle and ticking on wing-bows. Of all the Buff varieties the Buff Leghorn females have the most perfect breed characteristics. All these breeds and varieties can be improved in color by adding a little under-color to the lighter-colored birds, thus building up the color from under the surface, and in this way driving away the lacing
Plymouth Rocks.

and ticking from the surface. The removing of this weakness in surface-color by strengthening from the under-color will enrich the shade and not bring blue or black into the wings or tail. Do not work for too much under-color. Have just a little improvement each year, so the surface-color may absorb and distribute the color through and through evenly, and thus promote evenness of shade. A pure, even color, though a little reddish in shade, is better than an uneven shading of any color.

Trueness and evenness in color must be the first consideration when deciding on color, and it is just as easy to have the color even in one shade as in the other, both being a difficult problem. It is quicker by far to build up the lighter shade than to drive the black from the wings and tail and the red from the surface of the darker specimens. The formation of the Buff Rocks must be trained within the lines of Plymouth Rock breed characteristics. Too many adopt the plan of overlooking defects in form if the color is right. This is a policy that will eventually prove the downfall of any variety. The secret of success with White Wyandottes lies in their having strong breed characteristics. If the sub-varieties of any breed become popular, their continued popularity depends upon their true breeding qualities.

The success in handling any fowl depends upon the close study given to the question of quality. Only quality can bring continued success. We may gain some popularity by purchase of winners, but this is of short duration. The producing of a line of specimens showing a family resemblance is the true test of merit, and by this alone can we gain lasting reputation. To do this the record of the hen as a producer
BUFF PLYMOUTH ROCK FEMALE
must be known. The day has gone by when we can depend on our ability to guess the mother of a specimen from the reason that we think they look alike. Some certain method must be adopted that will tell us beyond doubt what hen laid the egg. One good method which would enable us to a certainty to decide on this question, is to either breed in pairs, or use some other reliable means to discover which hen in the pen laid the egg.

Shape Considerations.—The only way possible to gain good standard shape in our young stock is to have it present in our breeding fowls. No matter what color variety we may select as our preference it must ever be borne in mind that each and every variety of all breeds must have the same shape or form. The specimen cut set forth as the emblem of Plymouth Rock form—as selected by the members of the Barred Rock fraternity—should be an identical likeness of that preferred by those who favor the White and Buff varieties. Breed characteristics should be the same in all, but so long as there is any question as to this just so long will there be confusion of opinions.

When selecting mating stock, all specimens that do not have most excellent shape should be discarded. No matter how good the color, if shape is bad the specimen should be discarded. At the same time, the best color possible to obtain in the specimens having the finest shape should be striven for. Perfection of form in all varieties should first be striven for and added to this should be perfection of color. It is by far an easier task to gain color than it is to regain shape. On every side we see new varieties, distinguished by their color and the shape is fairly good. Seek for shape first and build up the color afterwards.
Plymouth Rocks.

If good color is obtained and poor shape the chances are that color will be lost in the effort to gain the better shape.

In all matings it should be remembered that color influence comes largely from the male, while size is influenced more by the female; both having influence over all that pertains to the general make-up. To be assured of fine, large specimens, large females should be used in the breeding-yards. It is also true that very little dependence can be placed on a male having inferior color; and under no conditions should inferior specimens be made use of with the hope of getting superior chicks from them, for it can't be accomplished. It is too much against the law of nature.
PENCILED PLYMOUTH ROCKS.

Ardent fanciers who have the greatest admiration for the Plymouth Rocks have originated two penciled varieties, one of which is called the Partridge Plymouth Rock, the other Silver Penciled Plymouth Rock. These are Plymouth Rocks in form, the one having the color and markings of the Partridge Wyandotte, the other the color and markings of the Silver Penciled Wyandotte. Some of the strains of these two varieties have been built up through crossing several other varieties. Many of them, however, have come from the single comb sports from the Partridge and Silver Penciled Wyandottes.

To be successful in the handling of these the very best colored specimens must be selected and mated for the same color results that must be obtained in the Wyandottes of the same name.

The Java Fowl.

The modern or present day Javas are bred in two varieties, the black and the mottled. The black is said to have originated in Missouri in 1852 or thereabouts. As they are now bred they are fashioned somewhat after the Plymouth Rocks, having longer backs, flowing tails, and dark or black shanks, which have a tendency to a lighter shade as the fowls add to their age, bottoms of feet yellow. The Mottled Java is of a broken or mottled black and white throughout the black predominating, shanks and toes of a dark color mixed with yellow. Some of these have almost the same color of shank as have the
Plymouth Rocks.

Houdans and Anconas. The Mottled Javas originated in the early seventies, the result of a cross of a large white hen with a black Java male.

Jersey Blues.

Jersey Blues are mentioned among our earlier records of American fowls, and are the result of a cross between the great Malay and some of our domestic fowls. The Malay of early day did not have the distinct black-red colors of the present. The hackle, back, and saddle of the male were of a pale reddish-yellow, the body and tail-color black. This fowl crossed upon our native stock produced a rather long-legged coarse fowl that was only valued as a medium-grade market fowl and poor egg-producer. Their color is recorded as of a black cast. One would conclude from their general make-up that there was some of the early-type Black Spanish in their blood. The original Jersey Blues weighed about twelve to sixteen pounds per pair.

Blue fowls have come from Dark Brahma and Black Spanish crosses. The Brahma, like the Malay, is of Asiatic origin. Blue fowls have come from the Black Minorcas. The same result has come from other like crosses. So we are led to conclude that some clean-legged black fowl was part of their make-up. Most natural to conclude it must have been either the Java or Spanish, both of which were known in New Jersey at an early day. The absence of the white ear-lobe would point to the Malay-Java cross. The Jersey Blues, as we now see them are a large, heavy-bodied fowl, favoring a Spanish-Java cross. They have dark eyes, dark beaks and legs. The color of
the male is slaty-blue for breast and body, the feather laced around the edge with a darker color; top-color very dark bluish black, the tail same color. The female is the same slaty color all over, neck and tail a shade or two darker than body color, each feather laced same as breast of male. They have single combs and red ear-lobes. The Jersey Blue is quite like the Blue Andalusian in color and marking. It is considered larger. They lay a brown colored egg of a very rich flavor and are above the average as to the number laid each year. They are a fine, large, vigorous fowl. Their greatest disadvantage with us is their dark beaks and legs.

The blue-laced fowls come from the cross usually of white and black fowls. The Andalusians, the Jersey Blue, and Blue Langshans are all marked alike. The Jersey Blues, even at this late date, throw some chicks having feathers on their legs, showing the presence of some feather-legged ancestor.

Rhode Island Reds.

No new breed of fowls has attracted more attention and gained more popularity in so short a time as have the Rhode Island Reds. When they first attracted attention there were single comb, rose comb, and pea comb varieties. The rose comb and the single comb varieties have become quite popular; the pea comb has almost disappeared from public attention. The single comb variety was admitted to the Standard February, 1904. The rose comb variety is asking for admission under several separate names. The origin of the Rhode Island Reds is claimed to be an admixture of Asiatics, Red Malays, Red Cochin Chinas,
Brown Leghorns, and finally some Plymouth Rock and Wyandotte blood. As we now have them, the single comb varieties are much like the Plymouth Rock in shape; the rose comb variety more like the Wyandotte, color of plumage, top-color of male rich brilliant red. Main tail feathers and two main sickle feathers black or greenish black, shanks and feet yellow, the breast color of the male red, but not so rich nor so brilliant as the top color of the male. Plumage color of the female throughout should be one even shade of color about like the breast color of the male. It is called golden buff. We think that it is better described as a light snuff brown; black tails and black ticking in the neck of the females is permissible. In fact the Standard calls for black or greenish black main tail feathers, but states that females of equal value in all other respects, the one without the ticking in the neck shall have the preference.

The Rhode Island Reds have greatly improved in the last few years; large classes of them are shown at the winter shows, and they have many enthusiastic admirers. Without question they are fine egg-producers and splendid market poultry.

Since the establishing of a Standard that is very rigid in its descriptions of type and color for the Rhode Island Reds, there has been great improvement in them, and they bid fair to become one of the popular American varieties. It has been stated of them that they gained their reputation upon their economic merit. Farmers who keep and rear them in great numbers claim that in size, length and fullness of breast, they are fully the equal of any of the American varieties. Their distinctive color places them in a class entirely to themselves.
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