De Puy's Popular Poultry Book No. 6.

MINORCAS; ALL VARIETIES.

BY GEORGE H. NORTHUP.

President of AMERICAN BLACK MINORCA CLUB.

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MINORCAS

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BLACK GIANT, Weight 10 lbs.

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ALL VARIETIES.

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President of AMERICAN BLACK MINORCA CLUB.

SYRACUSE, N. Y.,
CLARENCE C. DEPUY, PUBLISHER,
1898.

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PREFACE.

This book is my response to the entreaty of many of my friends in the Minorca fancy throughout America, for a thoroughly *American* book on the subject of Minorcas. It has been written at intervals in the rush of business, but all within hearing and under the inspiration of Minorca voices, both cackle and crow. If the book affords one-tenth part of the measure of satisfaction to its readers, which these beautiful birds have given the writer while the work was going forward, it will be well worth the effort made to produce it.

I wish to thank the members of the poultry press for their kind advance notices of this work and their many appreciative words in regard to the Minorca fowl; and Mr. Sewall for his excellent work on the engravings, and his painstaking to portray the birds so naturally. I also thank the Minorca clubs for their organized efforts in behalf of Minorcas and especially the members of the American Black Minorca Club for their generous vote to allow the use of their ideal cuts in this book. At this date, June 15th, votes have been received from 47 of the 57 members of the club; 41 strongly in favor of having the cuts appear as the club ideals, 1 neutral, and 5 opposing it. As I did not know when I was writing the book, that these cuts were to appear in it, I did not refer to them, and I will mention them now, only as excellent

representations of the Minorca breed. The cock is exactly my ideal of a Black Minorca male and though the hen differs slightly from my idea of a perfect bird, she is, I think, as perfect a composite of the club members' ideal as could be obtained. Her comb is not what I consider strictly fancy, but is just right for cockerel breeding.

The American Black Minorca Club has done much for the advancement of Minorcas, and for this reason, deserves the hearty support of Minorca breeders who are yet outside its ranks.

Last but in no wise least, thanks are due to E. W. Mayman for the White Minorca cut which he kindly furnished, and to the writers of the three excellent articles on the White Minorca variety.

Trusting that this book will help some to a better knowledge of Minorcas and enable many to breed them to a higher standard, I submit it to the public hoping its readers will pass lightly over its faults and use its better parts to their benefit,

Very respectfully,

GEORGE H. NORTHUP.

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IDEAL BLACK MINORCA MALE

IDEAL BLACK MINORCA COCK, as adopted by the AMERICAN BLACK MINORCA CLUB

Loaned for publication in this work by vote of the club members. See Preface for particulars.

HISTORY OF BLACK MINORCAS.

Much, of the earlier history of Minorcas; like that of many other races of creation, both of the lower and the higher orders, has been relegated to oblivion by the ever crowding events of time which claim momentary attention; each giving place to its successor so rapidly that comparatively few are permanently recorded. Beside the fragmentary knowledge of the Minorca of the past, which we have been able to gather, there are some facts, which, though currently believed, are not sufficiently verified to warrant giving them, as a part of authentic history. Prominent among these suppositions, is the idea that the White Faced Black Spanish descended from the Black Minorcas, and the circumstances which support this theory, seem quite credible. The White Faced Black Spanish show a resemblance to the Black Minorcas of the present time, which strongly indicates that both came, originally, from the same race of fowls. And, that that race was identical with the Black Minorcas of to-day is indicated by every trace we have of this valued breed. Beside this, the greater hardiness of the Minorca, still comparing them with the Spanish, makes it probable that it is in them, that the natural qualities of the original Minorcas have been preserved; while in the Spanish, close breeding, for points not altogether natural, has resulted in loss of hardiness.

It is certainly known of the Minorca, that it has been an established breed for more than sixty years, and that its type, for that period of time at least, has been very like that which is still in highest favor among Minorca breeders. As far back, too, as we have any trace of Minorcas, their great laying qualities have been the leading characteristic to commend them to breed-

ers. "They lay larger eggs, and more of them than any other known fowls," has been so long and frequently said of them, as to seem a part of their very name, and the saying is too well sustained by actual proof to be successfully disputed.

Black Minorcas are pre-eminently unique among the fancy breeds of poultry, in having been bred so long with their original type so well preserved. It is, no doubt, because they have been kept in favor by no less considerations than usefulness and hardihood, that this is so. For however excellent may have been the varieties that have sprung from them, popular favor has always clung to the Minorcas in their purity, as an egg producing breed, wherever they have been known.

Though the earliest date of the importation of Minorcas to England cannot be ascertained from any authority that I have yet found, it is known that Black Minorcas were bred in England as early as 1834, and it is very probable that they were brought there direct from the Island of Minorca, the second largest of the Belearic group, which is about 125 miles from the mouth of the Ebro river, in the Mediterranean sea. Some may also have been brought from other Mediterranean ports, but the breed undoubtedly derived its name from the Island of Minorca. The name certainly does not at all fit the character of the fowls themselves, for, to use a current phrase, "There is nothing Small about them." Beside the great number and great size of their eggs, they have the largest bodies of all the non-sitting breeds.

Mr. Lewis Wright says in the *Illustrated Book of Poultry*, "There is more evidence than usual for the source of this breed being truly represented by its name. Mr. Leworthy told us that Mr. Willis, a friend of his, had seen them in Minorca, and the Rev. Thomas Cox, of Castle Cary, informs us on the direct authority of Sir Thomas Ackland, that his father, the former Baronet, undoubtedly brought some from that island direct to England in 1834 or 1835, and kept them for years at Holnicote. It is doubtful if the fowl was not already known in the west of England, but there is no doubt but that one strain did diverge from this ascertained importation, and the breed was for years known and prized in Devon, Cornwall and Somerset, before known elsewhere."

Very few fanciers gave any special attention to Minorcas during the earlier part of their history in England of which we

have any record, and a separate class for them, at the shows, was formerly an exception to the general rule of ignoring their right to figure as exhibition fowls. They were bred for many years in the southwestern part of England, solely for practical purposes. But they are in great favor with English fanciers now, and have been for twenty years or more. In the English show-room also, they are among the most prominent and attractive features.

When the reputation, which the breed had gained in England, reached America, our fanciers began to give them attention and to import them to America. Their English fame so commended the Minorcas to the American fraternity of poultry fanciers and breeders, that it soon became impossible to supply the demand for Minorca eggs. This unexpected demand, co-operating with the lax honor of a few breeders, caused the greatest set-back that Minorcas ever met with; for some, with more eagerness for money than honesty or admiration for the excellent breed, reinforced their Black Minorca breeding pens with Black Leghorns, to supply the demand for eggs. One, who advertised largely as an importer of Black Minorcas, was reported to have put 50 Black Leghorn hens, which he probably bought for that purpose, into pens with Black Minorcas, and it was generally thought that he sold eggs, for hatching, from all together. Such deception could be easier practiced then, than now, for at that time, and until the revision of the Standard in 1889, Black Leghorns were bred with black, or nearly black legs, and disqualified for any other color. Again, when the alteration of the Standard, made yellow, or yellowish black, the correct color for the legs of Black Leghorns, the Minorca market was flooded anew, with as many Black Leghorn "black legs" as could be palmed off on the unsuspecting public by unscrupulous breeders. This diabolical work was much more easily and quickly done than its evil effects could be obliterated; because many who bought these Leghorn-Minorcas, bred from them, and advertised them as pure Minorcas, honestly believing them to be such. The strong Leghorn tendency, still seen in some Minorcas, is due to such crossing, though much of it is bred out by the introduction of genuine Minorca blood. A few of the more sagacious American breeders, kept their Minorcas pure, and seeing in them qualities, which, if preserved would eventually win for them the popularity they have attained, and

foreseeing that any amount of effort, rightly directed, to perpetuate and improve upon the native excellencies of the breed, would be amply repaid, have bred this noble breed, always, to the highest Standard. Such breeders are now receiving a reward, even greater than they could have expected. Minorcas not only hold the first place among all fowls, for being the greatest layers and producing the largest eggs, but they are fast acquiring popularity as a table fowl. The old-time prejudice in favor of yellow meat, is fast being overcome by appreciation of the delicacy of white meat; and the excellence of the Minorca fowl for table use is coming to be generally known and advocated.

At the shows the Minorca class is now among the largest. The American Black Minorca Club was formed in 1896 and has greatly advanced Minorca interests. At its last meeting thirty-three new members were added and the prospects are favorable for a larger increase during the present year. It is one of the most flourishing specialty clubs we have and contains many of the brightest minds known to the fancy. The object of the club is to establish a correct idea of what the Minorca is and ought to be, and to encourage breeding it to the highest standard of usefulness and beauty.

"MAMMOTH BELLE, Weight 8 lbs.

MINORCAS, THE GREAT UTILITY BREED.

A great utility breed must naturally combine a greater part of all the qualities of usefulness, for which its kind is valued, and must surpass the average in most of the qualities it does possess, while it should not fall below the average in any which are considered to be of great importance. The fowl to be kept year after year, for practical purposes, is first esteemed to be more or less

profitable according to its greater or less capacity for egg-production. All who know the Minorcas, will agree with me that they are great layers. Careful tests, alone and in comparison with other laying breeds, show them to be such, the poultry press, both American and European, so reports them, and governmental experiment stations add testimony to the same effect. Extracts from different reports of the Canadian Experimental Station, printed by order of Parliament, place Black Minorcas at the head of the list of the most profitable laying breeds of hens both as layers of the greatest number and the largest size of eggs; making mention of Minorca eggs which weighed, six to the pound; also commending them as good winter layers, even in that extremely cold climate. One special test of the Canadian Station was made in December and January, the most unfavorable season of the year, and shows that Black Minorcas won the championship in number of eggs, over the eleven breeds that competed against them, making an average of 22 4-5 eggs for each Minorca hen, against a fraction more than 10 1-2 eggs for each of the other hens in the contest. The different breeds competing were Black Minorca, Brahma, Buff Cochin, Black Hamburg, Langshan, Houdan, White Leghorn, Plymouth Rock, Red Cap, Andalusian, Wyandotte, and mixed hens. A paragraph in the August number of "A Few Hens," shows that our experiment station has established another fact in regard to Minorcas, which the breeders had never claimed, it is as follows: "Prof. Hilgard, of the United State Experimental Station, decided by chemical tests that in nutritive qualities between white and brown shelled eggs, there is but little difference—and that difference in favor of Minorca (white shelled) eggs." But in addition to the superior number and size of Black Minorca eggs, there is another point in which these fowls excel as egg-producers. It is this: they begin to lay at a very early age, and continue to lay profitably, for a longer period of time than any other breed we have. When fed for laying, April hatched Minorca pullets will lay at the age of five months, and it is a common occurrence for July hatched pullets to begin laying in February. From this it would naturally be supposed that they would begin to fall off in usefulness at an early age; but this is not the case, for, the few hens which I have kept to the unusual ages, for hens, of seven and eight years, laid well as long as they lived.

Mr. J. E. Stevenson gives even a more favorable report of early laying than the above. He writes, in *Farm Poultry*, October 1st, 1897, "I have had pullets lay at about three months old, that had been forced as broilers, and had never been out of the brooding house and runs, which are 5 x 12 feet. My breeding pullets usually begin laying at about five months old; the Minorcas usually begin laying a little younger."

Minorcas respond heartily to the care they receive, for though they are excellent foragers, active and ever on the alert for natural advantages that are within their reach; there is no fowl that bears confinement better. Their docile disposition makes them the equal of the Brahma and the Cochin in this respect, and their natural inclination to lay, together with native activity makes them give profitable returns for all the food they will consume instead of laying on fat to their injury.

Hardiness is the quality which ranks next to egg-production in a thoroughly practical fowl, and in this, the Black Minorca greatly excels. Having been bred to preserve its native qualities rather than to establish new and foreign ones, the Black Minorcas seem to have lost very little if any of their natural stamina, a quality with which they are abundantly endowed. Though there is some prejudice against black as a color for the plumage of domestic fowls, the objections urged, signify nothing of importance and we have it from good authority, that the abundance of color pigment, in animal physique, indicates a commensurate proportion of vitality and vigor; also that the black pigment is indicative of a stronger nature than any of the lighter colors. One English Naturalist, speaking of the different varieties of Leghorns and the importance of color breeding, says by way of illustration; that the Blacks are the most economical, are very wild and very hardy; because very near to the natural color. Another speaks of the black leopard and the black rabbit as examples of exceptional abundance of vigor, in which the visible result is excess of pigment. He thinks too that vigor and hardiness are accompaniments of yellow pigment, but perhaps not so much so as of the black. He says: "We are accustomed to think that abundance of coloring matter indicates vigor, richness of blood, and for some years we have maintained that the presence of black pigment communicated to the flesh of fowls a special savor; and we have been equally accustomed to think that the absence

of coloring matter indicates weakness, poverty of blood, anæmia, etc., etc."

This brings us to the excellence of the Black Minorca as a table fowl; whether the presence of black pigment does or ^{not} does not communicate savor to the flesh, it is quite certain that none of the color itself is communicated to the flesh; for the skin and the naturally light parts of the flesh of the Black Minorca are of the most delicate whiteness. And in juiciness, delicious flavor, and tenderness, Black Minorca flesh is seldom equalled and never surpassed. Add to this the fact that the Minorca is a fowl of colossal stature compared with all of the egg-specialty breeds, and no one can fail to understand that it is a table fowl of great excellence. Minorca breeders have been too reticent on this point in the past, but we are waking up to the fact that we have only to call popular attention to the excellent table qualities of this variety, to make the demand far outreach the number which we can supply.

Great number of eggs is always counted a strong point; great size of eggs is often spoken of as being of less account, because eggs are sold by dozens instead of pounds and ounces; but the market poultry-man finds it much easier to obtain customers for large than for small eggs. Even when the price is made five cents per dozen higher, economical people, and those of fastidious taste, find it to their several interests to buy Minorca eggs. The same person who furnishes eggs is the one who is naturally looked to for poultry, thus one who has a good egg-trade has an excellent opportunity to establish a market for his poultry, and where once the Black Minorca chick or fowl is recommended and tried for table use, the preference will always be for that variety rather than any or all of the varieties of yellow color and oily flesh. Butter will take the place of oil and is much more grateful to the taste, but the juiciness and flavor which oily meats lack, cannot be artificially supplied.

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IDEAL BLACK MINORCA FEMALE .

IDEAL BLACK MINORCA HEN, as adopted by the AMERICAN BLACK
MINORCA CLUB.

Loaned for publication in this work by vote of the club members.
See Preface for particulars.

DESCRIPTION OF SINGLE COMB BLACK MINORCAS.

The Minorca shape is a subject which has been much discussed in poultry journals, not so much because fanciers disagreed as because we each failed to make others understand just what we meant. But free discussion through the journals, and at the shows, has established a uniformity of opinion which is sure to keep the breed improving, and for this reason there can be no doubt but that the Black Minorca has only begun to enjoy the popularity which is in store for it, as a result of intelligent and skillful breeding. The frame of a bird or animal of any kind is the first requisite to correct shape. The true Minorca is distinguished for length of bone, firmness of build and loftiness of carriage, which characteristics admit of abundance of flesh, without fatness; and the true Minorca never appears fat. Its muscles are abundant in all muscular sections, but conform to the shape of the birds frame giving it an elegant form rather than clumsiness and permitting its movements to be sprightly and graceful rather than sluggish and uncertain. Added to this, the close lying feathers of the Minorca, give it a more stylish appearance than is shown by any other bird of equal size. For this reason it is a much heavier bird than one would think from looking at it without being acquainted with the breed. The standard weight for Black Minorcas is as follows: Cock, 8 lbs.; cockerel, $6\frac{1}{2}$ lbs.; hen, $6\frac{1}{2}$ lbs.; pullet $5\frac{1}{2}$ lbs. These are about the average weights also, for while many are bred above them, some cocks reaching the unusual weight of 10 lbs. and a few hens having been known to weigh 8 lbs. each, others fall below the standard, especially under conditions which do not favor vigorous growth. With good stock the standard weight is very easy to attain.

The single comb of cock bird should be smooth, straight and erect, deeply and evenly cut with six wedged shaped serrations. It should follow the neck at the back but not rest upon the feathers. Thickness at the base is desirable to keep in an upright position. The pullets comb does not develop until about the time she begins laying. When fully developed it should fall gracefully across the head above the beak, forming a loop at the front, on the opposite side of the head from which the main part of the comb hangs. Held in an upright position, the hens comb should have about the same shape as that of the male bird and may be large enough to hide the eye as seen from a side view, but should rise sufficiently over beak to let the hen have a perfect view in front of her. The hens comb shrinks to less than half its size during moult and sometimes seems nearly to disappear. It does not regain its full size till she is again in condition to lay.

The original color of Black Minorca plumage, as nearly as I can ascertain from the authority at my command, was black with purplish sheen. But breeding with less regard to tint of color and greater attention to other points, caused this variety to drift away, so to speak, from the purple tint, till each of the tints, purple, green and dull black are now seen to predominate in different specimens of genuine Black Minorcas. Fanciers favor the greenish sheen mainly and have done so for several years past. At the last revision of the American Standard this was adopted as the color to breed for, and this action will of course bring it into greater favor than before. In speaking of breeding for the greenish sheen, I do not mean the introduction of any foreign blood to produce it. This, in my opinion is not admissible in any line of Minorca breeding, for no improvement is desirable which must be purchased at the expense of purity. The beautiful brilliant green which is so much sought, can be and has been obtained by carefully breeding from such birds as show the most desirable color, but all of the best strains of Black Minorcas have a strong tendency to revert to the original purple, which appears mainly in what is termed rainbow barring. This barring is considered an objectionable feature in a strictly fancy bird, but these slight variations in tinge of plumage are much more easily controlled by the breeder than most of the fancy points for which we breed, for it seems that the special care of birds during the periods of growth and moult, has a very marked effect on the peculiar tints,

as I shall attempt to show in another part of this work. It is no new idea that color of plumage comes from the interior of the bird and I am convinced, by observation, that breeding for the green creates a tendency, in the hens so bred, to lay eggs with tinted shells, instead of the clear white shells which have been one of the leading characteristics of Black Minorcas. The only way I can account for this is that the green in plumage indicates an increase of yellow pigment, some of which, not unnaturally, is communicated to the shell of the egg. The purple tint shows a predominance of blue pigment, which, applied to the shell, only intensifies its whiteness, the same as the blue pigment used by the laundress increases the whiteness of linen. It is not an invariable rule that the peculiar tint of plumage is accompanied by a similar tint in the egg shells, but my attention has been called to the fact that such a tendency does exist, both by talks and correspondence I have had with other prominent Minorca breeders and by observing it in a few specimens of my own breeding. I approve, as a fancier, of breeding Minorcas for the greenish, sheen because the prevailing popular taste and the Standard favor it, and because it is very beautiful. But we shall need at the same time, to avoid too great a diminution of black. It is not that less color is desirable, but, that the metallic green tinge shall shine out from the apparently polished black surface of the plumage when in such a position that the greenish light can be reflected. The fact that, in another position, a purple reflection is seen, does not necessarily diminish the excellence of color, in fact, such is the color most desired, so that in whatever light it is seen the coloring is smooth and does not appear in barring.

The combs, faces and wattles of Black Minorcas are bright red in color. The wattles should be thin, pendulous, evenly folded and smooth. Lobes, almond shaped, pure white and smooth. Legs, long and the darker the better; but the color of legs changes with age, varying, in newly hatched chicks, from very light to nearly black, the lightest becoming as dark at maturity as the darkest. At eight months old, the best specimens have black, or nearly black legs which generally fade after the bird attains maturity. But the toe nails grow darker, if any change, as the bird advances in age, though probably not more than one in a hundred, pure Minorcas, have black toe-nails at any time in their life, and I do not remember ever having seen a Minorca under one year old with black toe-nails. As a rule their toe-nails are white or horn color.

"GRACE" Rose Comb Black Minorca Hen, Weight 6 $\frac{3}{4}$ lbs.

ORIGIN AND HISTORY OF ROSE COMB BLACK MINORCAS.

The claims I have made through the poultry press and in my catalogue, in regard to originating Rose Comb Black Minorcas have caused considerable comment and criticism, to the effect that the methods I have described could not result as I have said, and that I could not justly claim to be the originator because others have bred birds in various ways, which they choose to call Rose Comb Black Minorcas. I do not mention this with any desire for controversy or to dispute the claims of others, but to omit it would make the history of Rose Comb Black Minorcas very incomplete. The obstacles which they have surmounted and the hindrances they have overcome are as much a part of their history as the progress they have made.

My Rose Comb Black Minorcas are neither sports or crosses but the result of a system of breeding, which it is my purpose to describe. It is because I was the first to breed a pure Black Minorca with a rose comb, that I claim to be the originator of that variety, and as I was the first to cause any mention of them in print (my first description of them appeared in *Poultry Monthly*, Feb. 1891) and the first to exhibit them at a show, I think I am entitled to be considered the originator. Not that the result I have achieved exhausts the resources of nature which have made it possible for me to accomplish what I have, but being the first to so breed them makes me the originator, notwithstanding what others may have done since or may do in the future.

A cockerel which was hatched from one of the first breeding pens of Black Minorcas which I imported, had two side sprigs on his comb. This suggested to me the possibility that a system of breeding might in time produce Black Minorcas with Rose Combs.

My object in wishing to do this was two-fold, first to ascertain if breeding from a bird with a slight variation from the usual type would produce a greater variation of like nature in successive generations until a radical change in the variety was established, beside I was certain that a fowl with small rose comb and correspondingly small wattles, possessing all the valued qualities of the Black Minorca would be a valuable acquisition, especially to breeders in the colder climates where the Single Comb Minorcas have to be very warmly housed to do their best as winter layers and to keep their large combs from getting frosted. If a rose comb fowl had been my only object, there were plenty of rose comb varieties already established. And a rose comb fowl, with the external appearance of the Minorca, could be easily bred by crossing, as several breeders did soon after my first Rose Comb Black Minorca article was published. But any crossing surely ingrafts qualities which are less desirable than those native to the Minorca, while a complete change in the form of comb, effected by a system of mating, shows that there is no end of the improvement that can be made in similar ways, and at the same time demonstrates the great danger of careless mating, by which the breeder may be unconsciously breeding directly away from the results he most desires. I did not resort to any crossing whatever, but beginning with the cockerel before mentioned, I selected the few of his progeny which showed the same defect, to breed from; and there were only a few which showed it even slightly. Each succeeding season only those which approached nearest to the object in view, were selected to breed from. From the third Mating I obtained one hen with a rose comb, not my ideal rose comb or even one as good as the poorest of my Rose Combs now wear, but it was a comb that greatly encouraged me because it assured final success. Three-fourths of the chicks hatched from this hen's eggs had rose combs but they were neither uniform in shape or small enough. From these I selected only the best, and formed with them two pens for the next years breeding.

It was quite difficult and required several years of breeding to reduce the size of comb and establish a desirable shape. At first many of the combs were as thin at the head as a single comb, terminating in several rows of irregular serrations, making the comb top-heavy and causing it to drop over to one side of the

head, and those which sat more firmly on the head were, some of them, as large as Red Cap combs and of many shapes. Some were regular one side and irregular on the other forming a sort of crescent. Others were large and full at the front but only extended back as far as attached to the head; some of these were even hollowed at the back instead of ending with a spike, and some had the appearance of tipping forward over the beak. Another variation was partly rose and partly single, that is either rose at the front and single at the back; or the reverse. These variations have, by careful mating been gradually overcome, and the Rose Comb Black Minorca now breeds as true to comb as the Wyandotte did when first admitted to the standard. Until this result was obtained, I each year killed many birds which I could have sold for large prices had I been willing to do so. I breed only from those which approached nearest my ideal. The chicks selected from the hatch of 1887, four in number, two cockerels and two pullets, were bred in separate pens in 1888. Pullets raised from one of these pens were mated with cockerels raised from the other, and vice versa, for the next years breeding. And my system has since been to keep them divided, and each year to bring the most distant relations together for mating, thus to breed out instead of in. While I was culling from my flocks and rejecting a greater part of each hatch as unfit to breed from, the Rose Comb Black Minorcas were gaining notoriety from other sources, which thought not altogether to their advantage, is as I have already said in part of their history.

Immediately after my first Rose Comb article appeared in *The Monthly*, many wrote me desiring to buy some of the Rose Combs or their eggs, but I refused all offers. I did not begin to offer either for sale till the spring of 1894, and previous to that time no Rose Comb eggs or fowls had left my yards except two males which were sold to parties who used them for cross-breeding, and one setting of eggs which I gave to a friend, who kept every bird hatched from them till after I began to sell Rose Comb eggs. That first article also drew out comments through the press. During the fall following its first appearance, Mr. J. W. Caughey, Pittsburgh, Pa., sent me two clippings from different numbers of the *Ohio Farmer*, one of which was a review of my article written by himself, and the other an answer to, or criticism of Mr. Caughey's. I give both here in the order that they were published:

"HEADLIGHT" 1st prize R. C. B. Minorca Cock at New York, Feb. 1998.

"DASH" 2nd prize R. C. B. Minorca Cock at Madison Square Garden, New York 1898.

ROSE COMB BLACK MINORCAS.

There is hardly a new breed of fowls that comes into favor that does not find some one to improve or alter the original stock and obtain a variety that his neighbors do not keep. This sometimes means considerable in profits to him who improved and brought them before the public. The Rose Comb Black Minorca is a counterpart of the single comb variety with the exception of the comb, it being a rose comb. The objection by many breeders to the large combs of the Minorca fowls was one point that suggested the idea of improving this point in them. The cold winters did much damage to their large combs. The result was the production of the rose comb variety, the outcome of much careful study and theory in a practical demonstration of the crosses made to accomplish it.

The start was first made with a cockerel with two side splits on his comb, being out of an imported pair of single comb birds, and but a very few of the chicks produced showed this defect. But each season by selecting them carefully, a strain was finally established that has faithfully bred the rose combs in wonderful accuracy. As yet no stock or eggs can be had of the breed, the owner preferring to continue another season so as to fully establish a strain that will give entire satisfaction right along. It is best to wait the severest test before buying them. J. C. W.

ROSE COMB BLACK MINORCAS.

In *The Farmer*, of Sept. 5th, 1891, J. C. W. describes a new breed of fowls—Rose Comb Black Minorcas—and tells how they were originated. Some wide-awake, ingenious fellow, selecting an imported Black Minorca cockerel, with two “side splits” on his comb, and mated with a Black Rose Comb Leghorn hen, or some other of the rose comb breed.

Do not tell the readers, Mr. J. W. C., that this cockerel was mated with a Single Comb Black Minorca hen or pullet, and the results of such a mating followed up by inbreeding, produced a strain of Rose Comb Black Minorcas, or they will think you are prevaricating in the interest of some one who is working up a BOOM. Experience teaches us that nature does not do her work just that way. Her work is not done by piecemeal. If she starts

with "side splits" she is liable to produce "side splits" or revert to the original; but not in order to get rid of the unsightly "side splits," place on the heads of her progeny of such a mating, a neat, little rose crown.

No, sir. If nature intends to crown the Minorcas with roses, she will do it direct and not through one or two "side splits." It requires no greater effort of nature, nor is it a greater miracle, to put a rose comb, direct, on any bird, than it does to put on a single comb with "side splits." J. W. C. ought to make the claim that Rose Comb Black Minorcas are sports from the single comb varieties, of which "they are the counterpart in all save comb;" then methinks people—the fraternity at least—would the more readily believe the claim. Nature would no more exert herself in producing a "sport" in comb than she does in producing a "sport" in color. We are a firm believer in the theory that she will and does produce "sports" in both comb and color, having long ago bred and reared chicks which, in color, we know were "sport." We are also familiar with the Rose Comb Minorcas, both white and black, which we term pure sports. The first we ever saw was a White Minorca cockerel from eggs imported in 1886 from Mr. Hanna, an English breeder, of note. When this bird was about two-thirds grown a mink made a meal of 'him, but he had grown large enough to show that he was a true White Minorca—a sport in comb only. As Mr. Hanna in answer to my inquiry whether he was breeding some rose comb variety of fowls in close proximity to his White Minorcas, says: "There are no rose comb fowls nearer than two miles of me that I know of, and if there were I would know of it."

The same year, 1886, a setting of Black Minorca eggs was procured from a prominent breeder in this country, eggs in every respect similar to Minorca eggs. Of the setting of thirteen eggs, eight produced chicks. Seven of these chicks were ordinary Single Comb Black Minorca chicks, while the other was a white rose comb chick, the very counterpart, when matured, of the White Minorca in all save comb, which was as perfect a rose as years of careful selection and mating would likely produce. But, is this chick a Minorca? It most certainly is, and if it were not for the rose comb any and every person would pronounce it a pure Minorca. The breeder from whose yards this bird came, in answer to the question as to whether he had any Rose Comb

White Minorcas, or knew who had, says, "no—do you?" He further stated that there was no possible chance of any other breed except the Single Comb White Minorcas getting in the yards with his Black ones. As soon as this chick was old enough to begin laying she was mated to a Single Comb White Minorca cockerel, from imported stock, and the chicks from this mating were either white or black, with both rose and single combs. By judicious selection and mating a strain of each has been established that will breed as true to comb as almost any other variety, especially so of the whites. If they were not pure Minorca, in blood, there would be some of the progeny from any mating that would revert to the blood of the ancestry from which the rose comb came.

A. E. W.

Wyandot Co., Ohio.

Mr. A. E. W. shows by his article that he was willing to brand the statements of another as untrue, because that person claimed to do things which he thought impossible, without giving any good reason for thinking them impossible. His theories had been exploded in advance by my Rose Comb Minorcas, and their later developement has proved that he was wholly mistaken in regard to what Nature will or will not do. I do not doubt the honesty of what he claims of his own birds but as his first Blacks were a year or two later than mine they do not interfere with my claims of origination.

Four other breeders crossed Single Comb Black Minorcas with other breeds and called them pure Rose Comb Black Minorcas. Three of them advertised eggs for sale from these matings, and sold them at from 50 cents per egg down to whatever they could get in exchange for them. I investigated the breeding of all these and obtained good proof that all three were using cross-bred stock. Then one breeder claimed to have *imported* Rose Comb Black Minorcas, I immediately wrote the gentleman in England from whom his stock was said to have come and received this reply:

NEWCASTLE-ON-TYNE, ENG., Jan. 10, 1894.

To GEO. H. NORTHUP, Esq.,

Raceville, Wash. Co., N. Y., U. S. A.

Dear Sir:—Regarding Rose Comb Minorcas, you have been

misinformed. There has not been any breed at Newcastle-on-Tyne; in fact, there is none in Europe, that I am aware of.

With kinds regards,

Sincerely yours,

ALFRED W. THOMPSON,

Mr. Thompson is a naturalist of much note, who is patronized by breeders, sportsmen and fanciers throughout the world.

When two cross-breeders of so-called Rose Comb Black Minorcas attacked me through the journals at different times, I exposed some of the trickery of one in *Poultry Keeper*, June, 1893, and of the other in *Poultry Monthly*, June, 1896, p. 187, also in *American Poultry Journal*, Feb. 1897, p. 48. It was in earlier numbers of these journals that their attacks appeared. I do not know that any of the breeders mentioned are pretending to breed Rose Comb Black Minorcas now, but progeny of some of the stock they sold as such, is still advertised.

Notwithstanding all the drawbacks they have had to overcome, the Rose Comb Black Minorcas are now a valued and valuable variety, and their present owners may be considered fortunate in adopting them early as there remains no doubt about their future popularity.

The first exhibition of Rose Comb Black Minorcas, ever made at a show was at Gloversville, N. Y., Dec. 1891, when I showed ten birds, old and young, and won every prize offered. There was no competition. The year following I showed thirteen birds, (twelve old ones, all above standard weight,) at the N. Y. and N. E. Fair, and in Jan. 1894 I showed a full class at Saratoga, N. Y. Since that time the Rose Combs have been found in many of our shows. Four breeders showed them at New York, Feb. 1898, the strongest class yet seen together. Rose Comb Black Minorcas always attract much attention, are greatly admired and bring high prices when they are sold, as the demand for them greatly exceeds the supply. I know of no variety which promises so great profit for the investment as they, nor any way that money can be invested with so good prospect of large returns as in well bred fowls of this variety.

"TORO" Weight 10 lbs.

SELECTION AND MATING OF BREEDING STOCK.

To make any line of breeding a success, the breeder needs to have his object clearly defined, that all his efforts in selecting and mating may be directed to that end. If Minorcas are to be bred for market purposes only, the selection and mating of the breeding stock can be much different than if the breeder wishes to combine exhibition with market requirements. Breeding for market purposes alone, requires attention mainly to size, vigor, and hardiness. As these points are indispensable to good exhibition birds it is not necessary to treat these two lines of breeding separately. Any points which are valuable to the fancier, are desirable also to the market man who has fine fowls to select from, but he who must buy his stock, from which to supply the market, can save himself much in the original cost by buying with reference to his object alone and disregarding such points as are merely fancy. All true fanciers will sell stock that will answer the market-man's purpose well, at much lower prices than they demand for their finest exhibition specimens, as birds defective in fancy points are undesirable in their line of breeding. There is no strain of any variety however perfect, but produces many birds which are not as good as its best, that is not as fine in fancy points, but which are just as desirable for all practical purposes.

Among those breeders who attempt to breed exhibition birds, I think more failures result from ignorance of the principles of mating, and inability to estimate and appreciate the value of certain points in the birds from which selection is to be made, than from any other causes. It has been my experience that the choicest specimens are the most profitable to breed exhibition

stock from, regardless of price. Though it is an important fact that accidental defects, such as frosted combs or scars left by fighting, need not cause a bird to be discarded for breeding, as such faults cannot be transmitted by heredity to the offspring. Natural defects and constitutional deficiencies alone are to be avoided on this account. The best bird to breed from is the one that comes nearest to perfection and has at the same time a creditable lineage for generations back. Such birds are valuable to the owner and expensive to the buyer, and if they cannot be afforded, it is quite safe to breed from a fairly good bird whose pedigree is known to be reliable; but a really fine bird of inferior ancestry is not fit to breed from in any case, for fancy points or egg-production. Individual excellence and ancestry are the two important considerations in selecting stock, but the fact that variations occur in the progeny of the same fowls is evidence that individual excellence alone is not sufficient to insure good results in offspring. This applies to all breeds as well as Minorcas, and all general principles of the selection and mating of Black Minorca are equally applicable to the Whites.

Nothing can be more striking than the production of my Rose Comb Black Minorcas, to illustrate the important effects that the various principles of mating produce on the offspring, being as they are the result of straight breeding from the Single Comb variety, without cross-breeding or the introduction of any other blood. The success achieved fully demonstrates how a variation, defective or the opposite, may be emphasized by successive matings either intentional or careless; or may be eradicated by the application of correct principles, at the option of the breeder, in the selection and mating of his breeding stock.

In my description of Single Comb Black Minorcas I did not follow the details of comb, etc., as closely as I would have done, had I not intended to touch upon these points again in this article. The comb of the male bird should be straight and erect, thick at the base and tapering evenly to the edge, set firmly on the head so that it cannot easily become bent and so that it will naturally hold its erect position. It should be free from thumb-marks, dents and excrescences, and should come forward about half way between the nostril and the end of the beak. The comb should be cut with six wedge shaped serrations, the deepest extending to about one-half the depth of the comb. This is what

I consider a perfect comb and, though I have seen many combs which were very nearly perfect according to this description, I do not remember having seen any which did not, in some particular, deviate from it. The same is true of the bird as a whole. It is impossible to find a bird which is perfect in all sections. It is only by having an ideal and breeding as near to that ideal as possible, that we have been able to obtain such uniform flocks as we are now producing, and it is only by continuing to so breed, that we can expect to improve them farther. The comb of the hen, to conform to the description already given in the description of Single Comb Black Minorcas, must be much thinner and more pliable than that of the cock. The sex governs this, to a great extent, but not wholly, therefore there is danger of getting combs on our females too stiff, fleshy, and without the desired loop in front, when we breed too strenuously for the ideal male comb. The faces of both male and female Minorca should be wholly red, the lobes of both wholly white and almond shape, plumage the same in color in both sexes except that the brilliancy of the male is more intense. Thus the comb is the only point for which two matings are at all desirable. A medium mating from which the sexes will be more evenly ballanced, with regard to comb, is preferable to separate matings for males and females, but as the latter is favored by some, I will describe both. To make the descriptions more vivid and to show that they are wholly practical, I will refer to the engravings in this book, and describe some matings in which the birds so represented, figure either as progenitors or progeny.

Black Giant, shown by the frontispiece, had a comb which was never known to bend or droop, yet it was a little thinner than the ideal for male comb prescribes. To have mated him with females with very thin exhibition combs would, no doubt, have produced a very high grade, and a large percentage of fine exhibition female combs, but we could not have reasonably expected good male combs from such a mating. The females, with which he was mated, had excellent shape of combs but a little thicker than is desired for strictly exhibition hens. From this mating many prize winning males and females were produced, among which were the cockerel in 1st prize breeding pen at New York show in 1896, the 1st prize cockerel and 1st prize pullet at Northampton, Mass., the same winter, Toro and Eleganta. For

last two see engravings which show combs for both male and female as near perfect as I have ever seen, that of Toro being more than an inch thick at the base. Had Toro been mated to females with combs like his dam or similar to the mates of Black Giant, the male progeny would probably have been free from weak or drooping combs, except for accident or lack of nourishing food, while the females from such a mating would have been very faulty in combs, and many of them disqualified. The solitary fault in Toro's build is that his legs are just a little too short. To overcome this in his progeny and keep the sexes ballanced with regard to comb, he was mated to females very similar to Eleganta in all respects, though, of course not akin to him. It will be noticed that Eleganta's comb is all that could be desired in an exhibition hen, and that she has legs to correspond in length with the size and build of her body. The same points of excellence were conspicuous in the hens mated with Toro. The results of this mating were excellent birds both male and female, of which Mammoth Belle shown by photo-engraving, is a striking example; being a hen of massive frame proportional length of legs, elegant shape though not photographed in her best position, excellent in head and all fancy points; a hen of practical Minorca type for all purposes of usefulness and beauty. A cockerel and pullet from the same mating were in the 1st prize breeding pen at the New York show in 1897 and another cockerel won 1st in single class at the same show. The 1st prize hen at the great Boston show in 1898 was also from that mating. It is a notable fact that, in these two cases, similar results were obtained from quite different methods of mating; for in the first, the undesirable thinness of cock's comb was over-ballanced by opposite defect in the combs of hens, while in the latter the two extremes of perfection were brought together. It is my opinion and the same is well sustained by experience, that the latter matings would not have been so successful, had Toro been bred from a long line of special male matings. Or, had Black Giant been produced from a long line of special female matings, I doubt if a son of his could have worn such a comb as that of Toro.

Notwithstanding that a single mating for both sexes is preferable as a rule, and usually more progressive, there are times when extreme matings for special objects in either male or female are highly desirable for one or two generations. Though the

same, followed indefinitely, must result in almost total loss of the opposite sex as far as exhibition points are concerned. When, through ignorance or careless breeding, Minorca hens have acquired faulty combs, too small and lacking the correct loop and flexibility, a most wise mating to establish a better type of comb in their progeny, would be a well-bred male with large, drooping comb, the thinner the better, even to the point of falling over like a hen's comb, but it ought to be correct in outline and serrations. The progeny of this mating could then be mated to a male with large comb of medium thickness, which should produce some excellent birds, both male and female. A plan the reverse of this would correct the opposite extreme.

Most selections of breeding stock are based on the idea that "like produces like" and this is true as far as may be, but creatures which have two parents cannot be exactly like both, unless the parents are alike, and this is not desirable for the vigor of the offspring, only so far as the parents conform to the true standard of the breed they represent, for any abnormal feature occurring in both parents is quite likely to be intensified in the offspring to an inordinate degree. Now as the characteristics of the ancestors for several generations back are likely to appear in some of the young of each succeeding generation, it is impossible to select parent stock, however perfect themselves, that can be depended on to a certainty, to transmit *only* desirable qualities to their progeny. Therefore in selecting breeding stock, great care should be taken that each bird has a good lineage, which qualification combined with correct mating will have more influence on the offspring than individual excellence could have, lacking good pedigree or proper mating. But for best results and largest percentage of fine exhibition chicks all three must be combined. It is a good practice for a breeder to select from his flocks as they are growing up, chicks which he thinks will make the best breeders for the coming season. He will, of course, sometimes be disappointed in a bird when it is fully developed, but the practice will make him familiar with all the points of his birds, and is a great aid in mating when the time for that work comes; for it is necessary to consider all the points, giving due attention to *each* in proportion as it is more or less important. Many incorrect matings are the result of putting too much stress on one section. For instance, some seem to think that if a Minorca has perfect

comb and lobes, it must be an ideal bird, even though it is defective in nearly every other section. Others make color a specialty to the sacrifice of everything else, and I am sorry to say that some who pose as judges are too much of that opinion. To be a successful breeder, one must not indulge in hobbies with reference to the separate qualities of his breed, though he ought to make the *perfect type* of the breed his hobby. He needs to know all the standard requirements of his chosen variety, and to be able to recognize the merits and faults in each section when he examines a bird; and it requires a practiced eye to be able to do this. I am often asked to inspect critically, birds which their owners consider almost perfect on account of good comb, lobes, plumage or a combination of all three which they think their birds possess, but I find a large majority of such fowls faulty and seriously so, especially in the shape of different sections, evidently because the breeder has overlooked the less conspicuous points in them and in the birds which produced them, probably through ignorance of some important points which are required in really superior birds. As it is the object of the fancier to have all of his breeding stock as near perfect as possible, and at the same time have them properly mated, he should select from a large number, which are the same blood, as many females as he wishes for one pen, taking care to have them as uniform as possible. As all cannot be perfect, it should be his next object to overbalance any defect that may exist in his females by selecting a male that is specially strong in the points where they are lacking, giving preference to females that are similar even in their defects, so that the male selected for one will be equally suited to all. As the male constitutes one-half of the breeding pen, much more importance attaches to his excellence than to that of any *one* hen in the pen. As so much depends on the male, one or two of the *same breeding*, as nearly like the first choice as possible should be kept in reserve, to take the place of the first if for any reason he cannot fill it satisfactorily, and for a large pen of females, two males of *same breeding and characteristics* can be used alternately, a day at a time, to good advantage. In selecting and mating it should always be remembered that Minorcas have gained the position they occupy, by merits of usefulness in which they are superior to any other breed of fowls, which qualities may be summarized as follows: They are the

largest non-sitters known, they lay more eggs summer and winter than any other hens, and their eggs are larger than those of any other breed. These qualities naturally belong to them and can easily be retained and improved by careful mating and breeding, but breeders cannot afford to feel so confident as to forget to breed for these qualities of usefulness, and the external points which accompany them together with other desirable points of appearance. Length and depth of body and scantiness of fluff are indications of good laying qualities in Minorcas, and should not be overlooked in making selections for the breeding pen.

"ELEGANTA" Weight $7\frac{1}{2}$ lbs.

HATCHING AND REARING MINORCA CHICKS.

It is a prevalent idea that chicks must be hatched very early in the season to make the best show birds, but I do not concur in this opinion in regard to Minorca chicks except for the early fall shows. Chicks hatched any time before June 20th are early enough for the winter shows. I once hatched a cockerel June 27th which won 1st in pen, at the Madison Square Garden Show the following February, in strong competition. Another hatched even later, in July, won 1st as cock at $1\frac{1}{2}$ years of age at Battle Creek, Mich., in a strong class of sixty birds, and received an official weight of $9\frac{3}{4}$ lbs. To make such records, they, of course, need the best of care and every possible advantage to keep them always at their best. As already stated, earlier birds are better for the early shows, but the earliest, pullets especially, are apt to get past the pink of condition for exhibition, from continual laying before the time of the winter shows. I have seen excellent pullets beaten by really inferior ones which were in prime condition, just because the better ones had gone out of condition from prolonged laying. The best plan to have Minorcas laying all the year around, is to hatch some early and others as late as September. These latest will not begin laying till about April unless they are forced for laying, and they will continue later the next fall while the earlier ones are moulting.

It is not important whether Minorca chicks are hatched by incubators or hens, but when hatched it is very important that they receive proper care. There is probably no need to give the details of what proper care is, as my readers will undoubtedly be persons of experience in the care of poultry, both old and young.

Those who are not, need a good poultry journal to keep them constantly admonished. Minorca chicks do not require different care from chicks of other breeds, for they are very hardy and will thrive where any other chickens can and under the same treatment.

Many, who are not acquainted with Black Minorcas, expect them to be wholly black when first hatched. In this they are nearly always doomed to disappointment, for it is very unusual to see a pure bred Black Minorca chicken which is wholly black. They are partly black (sometimes smoky black) with light colored down around the eyes and under the neck and body and at the end of wings. When they first feather out, some of them show white feathers in the breast and wings, but the white generally disappears except from the wings, before they are six weeks old. The color of legs and feet vary, from nearly white to black when chicks are first hatched, but I have noticed that the chicks which have lightest feet and legs and the most white in plumage when young, are often among the blackest and best of the matured fowls. Some have argued that the second moult after maturity reverts to the chicken color, but this has not been demonstrated in my experience, and my observations convince me that there is no likelihood of such being the case, except from some special cause. Some of the causes for change in color will be treated under "Preparation for Exhibition."

The great principle to be kept in mind, in rearing chicks, is to let nature do the work of development without hindrance. We are, of course, hindering nature and defeating natural law, if, while we deprive chicks of full liberty, we fail to provide constantly and abundantly for their needs. We must confine them somewhat, to protect them from harm, and in so doing we make them dependent on ourselves for sustenance. Such rapidly growing creatures as Minorca chicks need a great deal of nourishment, but there is danger of ruining them by allowing them to over eat. For this reason they need to be fed very often, not less than five times daily, for the first two or three weeks of their life, that they need not get too hungry at any time as hunger will cause them either to over eat or so weaken them that they will not eat at all. Exposure to cold and dampness, and filthy quarters also hinder their development, and it is of greater importance than is generally supposed, that chicks are kept

steadily developing throughout their whole period of growth to make them capable, when matured, of their best, either for practical or fancy purposes. I once had a striking example of this when I hired two different persons to rear chicks for me from eggs produced from a very fine pen of Black Minorcas. As both had eggs from the same pen, there should have been no great difference in the quality of the chicks, especially in points like color, which are supposed to be controlled by heredity. There is no doubt but heredity does control all points to a great extent, but the following shows how the course of nature can be perverted after the chicks are hatched and while they are growing. In the instance referred to, I gave one person one hundred eggs, the other only twenty-six. The twenty-six eggs were set about ten days later than the one hundred. All of the eggs hatched well, but the chicks in the larger flock soon began dying off from lack of care till only twenty-seven of them were left alive. Some were accidentally killed from the smaller flock, but they were well cared for and at four months old, twelve fine chicks were brought to me as the product of the twenty-six eggs. Of these twelve, the pullets averaged in weight, about four pounds each, and the cockerels weighed from four to five and one-half pounds each. The twenty-seven chicks, which I received at the same age, four months, did not average more than three pounds each, cockerels and pullets together. This lot had their tails and wing feathers broken and mussed from being crowded in small quarters to roost, with a large flock of old fowls, and were dwarfed every way from lack of nourishment. I gave both flocks the best of care after they were brought home. The twelve which had received good care while young, kept on developing and made large strong birds, several of them prize winners, and not one of that flock had feathers other than black when matured. None of the other flock grew to the usual size and most of them had dull colored plumage and very many of them had gray feathers in wings and tail, in fact, I had more off color in those twenty-seven chicks than I ever had in a flock of one hundred chicks before or since. The impoverished condition of their systems made them unable to produce sufficient coloring matter for their feathers, and the time had passed when the perfect development of their bodies was possible. In other words, they had matured before development was completed. No one could have thought

that the two flocks were produced from, the same pen, but such was the case and it shows the importance of keeping chicks steadily growing from the time they leave the shell till they are fully matured. I would not be understood to mean that care alone can produce fine chicks from inferior ancestry but that the best blood and the best care must be combined for the best results.

PREPARATION FOR EXHIBITION.

Throughout the preceeding articles it has been shown that the preparation of birds to successfully meet strong competition in the show room, begins with the ancestors and follows the history of the bird to be exhibited, down to the moment when judgment is passed upon him. When a really excellent bird has reached maturity and shows points in all sections sufficiently meritorious to entitle him to a place among exhibition specimens, the further preparation consists mainly in preventive measures, therefore, in this connection, the casualties, which are likely to unfit our birds, for showing at their very best, are the subjects which interest us most. To prevent birds from becoming unprepared for exhibition, is, in my estimation, the best way to prepare them to show well. Lice are among the worst enemies of fowls and lice should not be tolerated at any time.

During moult, great care should be taken to let that process go on, without interruption, from the beginning till the birds are fully fledged. The more steadily the new feathers grow from the time they first start till they are fully grown, the more beautiful the new plumage will be, and the moulting fowl can no more produce fine feathers from a depleted system than can the growing chick. Any neglect or accident at this critical season, may cause injury which cannot be repaired at show time. I am convinced that much of the barring, which so annoys fanciers of solid colored birds, is caused by sudden changes, in surrounding conditions or care, which alternately check and start the growth of the feathers. I have demonstrated this to my own satisfaction by means of experiments with different foods. It is also evident that exposure to sudden changes in the weather is likely to pro-

duce the same effect at the moulting season. I have found that sulphur in the food helps to brighten the plumage, but I cannot recommend its general use because, unless very cautiously given, it impairs the appetite and causes emaciation and susceptibility to cold and may thus result in much harm. Sun-flower seed, flax-seed and oil meal, fed in small quantities, help to give gloss to the plumage and are harmless. I am still investigating the subject of plumage color, and expect soon to ascertain principles which will greatly aid the breeder in controlling the peculiar tints of black birds *which have been properly bred*, by special care and feeding.

Anything which injures a pin-feather is likely to make that feather white or partly white when grown, therefore every precaution should be taken to avoid fighting and all disturbances among the moulting flocks during the moulting period. There are cases, though they are rare, of black feathers becoming white after they are fully grown. The exact cause of this is not known, but it is supposed to be an external injury of some kind. I have observed several cases of this kind; one, in particular, was a Brown Leghorn cockerel in a fine flock of that variety from which, I was engaged by the owner, to select the finest specimens for a show at which he wished to exhibit. The cockerel referred to, was among those which I selected, and he won first prize in strong competition, under one of our most competent judges. The following February I was again engaged to select and mate several breeding pens for the same gentleman to breed from the coming season. I selected the same cockerel to head a pen of Brown Leghorns and he was then in excellent color throughout. The following June, having business in the town where these birds were kept, I called on the owner again and was surprised that one of the long sickle feathers in the tail of the Brown Leghorn cockerel which I had so much admired was now nearly all white. I was told that it had begun at the end farthest from the body, and had gradually changed till it was now as I saw it. The owner said that if he had bought that cockerel, he would have thought that feather had been colored before he received the bird and the color had faded or washed off, but as he had raised the bird he knew that the change of color was wholly a freak of nature or the result of some unknown cause.

Too much exposure to the hot sun or wind and rain after being housed through the winter, sometimes ruins the earlobes by causing them to blister or chap, and finally peel, which leaves more or less red in them according to the extent of peeling. This makes the chance of winning much less and may ruin the bird for show, though it does not injure him at all for breeding.

Occasionally anointing the shanks and feet with carbolated vaseline will preserve their color and keep them in a clean condition. Plenty of exercise is necessary to keep birds in health and vigor which is essential for exhibition. For about two weeks before the birds are sent to a show, they should be separated and receive special care and feeding, and a tonic should be added to their drinking water, for which the following formula is the best I have used: two gallons of water, one gill of sulphuric acid, one-half ounce quinine, four ounces cheyenne pepper, one pound sulphate of iron. This must be kept in a bottle or jug. One tablespoonful of this mixture to two quarts of drinking water is about the right proportion. Give also a daily allowance of raw lean beef and some green vegetable food like apples, cabbage or onions. Let their apartments be freely littered with straw to keep them clean and scatter all whole grain in the straw to make them scratch for it. Feed only a little at a time and often to keep them working. If Black Minorcas have been properly kept till show time, their plumage cannot be improved by washing. A damp cloth or sponge to remove the dust will be sufficient. Should the comb appear less firm than it ought, it may be improved by frequent bathing in a strong decoction of white oak bark.

Just before putting the birds in the show pen, their combs, faces, lobes, wattles and feet should be thoroughly washed and dried. After washing, the combs, faces, and wattles should be rubbed over with a little camphorated oil, and the legs anointed with vaseline.

The finest Minorcas that were ever bred can be easily ruined by neglect, but the best of care cannot transform a scrub to a fine exhibition bird. To be successful in the show, Minorcas *must be* first *well bred* and all the time, well cared for.

WHITE MINORCAS.

The White Minorcas are like the Blacks in shape and general characteristics, differing from them only in color and size. Their plumage and beaks are white, legs pinkish white and they do not average quite as large. At different shows where I have judged, I have found some White Minorcas which were up to standard weight, but the greater number, fall a little below it. I consider them among the very best of all white breeds of fowls. Their owners invariably speak of them in the highest terms of praise as being excellent in all points of usefulness, except for sitting, and a very satisfactory variety to breed.

As I have never bred the White Minorcas and wish to give them due credit, I have solicited, for this work, articles from three White Minorca breeders whose writings in the journals have greatly interested me. I know these three have been imminently successful in breeding and exhibiting the White Minorcas. Each has favored me with an excellent article which altogether cover the subject so thoroughly, that for me to add anything would be superfluous. Mr. E. W. Mayman of Sauk Rapids, Minn., kindly furnishes the cut of White Minorcas, and sends as his article, one which he had previously written for the *Pacific Poultryman*.

ROSE COMB WHITE MINORCAS.

A few specimens of Rose Comb White Minorcas have been exhibited at shows where I have judged, and a pair of them were shown at New York last winter. The owners of all I have seen have called them sports and said they were yet in the experimental state. I hope they will be bred till they become a distinct and valued breed, but as yet they are too few and their history too limited, to make an article in regard to them either profitable or interesting.

BY MRS. J. G. OSBORNE.

Strange as it may seem we have here a valuable breed of fowls very much neglected by the raisers of pure bred poultry. At least in looking through the advertising columns of our numerous poultry journals we find very few who sell this noble breed. The White Minorca is not a new breed of fowls and its true characteristics should be well understood, but it seems by the various opinions expressed concerning them that their good qualities are not very generally known. While at first glance one might mistake the White Minorca for the White Leghorn, yet in the market or egg basket the difference is plainly discernible as both in size of body and eggs the Minorca is by far superior to the Leghorn. That they are good layers of large white eggs,

the female not inclined to incubate except in rare cases, that they are active and mature early is true.

We have been up and down in the poultry business for the last ten years with this breed exclusively, and of anything and everything that is classed under the name of "chicken" we esteem the White Minorca the highest. They are first to crow, first to cackle and lay, first and last at the nest all through life and a bird that is outstripped by none other among the pure breeds in the race for gain and profit. I am willing to acknowledge being somewhat prejudiced against black fowls and this may have something to do with the thought that the White Minorca is superior to his black brother, but even the most ardent admirer of the blacks will admit that a White fowl will sell better on the market than a black one, and here we have at least one point of superiority. The type of the White Minorca is a very large comb, large white earlobes, long wattles, with a long square body, straight back, rather heavy in the rear underneath, medium length of legs, and tail of medium size with no approach to the "squirrel" shape. The breed is capable of good size, large enough to please any reasonable breeder, and if bred for the true characteristics are graceful and handsome. Although some breeders have complained that the Standard weight was too high and have been in favor of having their weight reduced, yet by proper mating and management we have been successful in raising hens, pullets and cockerels up to and above standard weight and hope soon to announce eight and nine pound cock birds. The aim should be for the best stock as breeders, then give them proper care and the result will be most satisfactory.

CEDAR GLEN POULTRY FARM, Fabius, N. Y.

BY E. W. MAYMAN, IN PACIFIC POULTRYMAN.

During the eight years that I have bred the White Minorcas I have from time to time made dilligent inquiry as to their true origin, and sought information from breeders of this now popular fowl, both in England and America. It is of course understood and admitted that their origin was in England some ten or twelve years ago, and that their advent in America was one or two years later. That 'originally they were a sport from the Blacks

all of their fanciers and patriotic advocates seem to agree. The idea of producing a white fowl from the blacks of the same breed and characteristics no doubt suggested itself from the black fowls throwing dingy black stock, and more strikingly still, from the Blacks producing so many chicks with white wing feathers. This will occur from the best of stock, for breeders of Black Minorcas have not failed to notice a mixture of yellowy white down in the newly hatched Black Minorca chicks, and later, when feathered, white feathers in the wings, and often tail feathers tipped with white. These, however, usually disappear when the youngsters moult their chicken feathers, a black feather usually supplanting the white. Yet doubtless those white foreign feathers suggested the idea that by inbreeding systematically a white fowl could be produced; and in some way, doubtless, an enthusiast produced the now famous White Minorca. Or it might have been by pure accident, for I have in my yards at the present time—from a hatch in June last from Black Minorca eggs—two White Minorcas, a cockerel and a pullet, the cockerel having but three black feathers in the wing coverts. A friend of mine who breeds Black Minorcas solely, enjoyed a similar freak—if freak it may be termed—from his birds in 1893, producing therefrom three White Minorcas, a cockerel and two pullets, which afterwards won second premium at Minneapolis, January, 1894. So, whether their origin was by some ardent enthusiast or by a freak of nature, I have up to this writing been unable to ascertain; but as we find “a man amongst men,” they truly are “a fowl amongst fowls. Yet, as with other varieties of breeds, they have doubtless been improved in size by the infusion of other blood—this to meet the weight clause in the “Standard of Perfection.” Such improvement takes time, money and patience, and the genius of the fancier is often greatly taxed when failure at several attempt stares him in the face; but not to be denied his object of passion, by careful study and selection in time he arrives at success. The results are, that we now have in the White Minorcas a fowl that anyone who has tested their merits can vouch for as being the foremost as egg producers, and being arguer than the Leghorn are not to be despised as table fowls. The standard weight of the White Minorca is: Cock, 8 pounds; cockerel, $6\frac{1}{2}$ pounds; hen, $6\frac{1}{2}$ pounds; and pullet, $5\frac{1}{2}$ pounds. Whilst this weight cannot be maintained throughout, yet by

careful selection in the breeding stock an average percentage of standard birds will be the result, providing, of course, that proper care and attention has been given them. The true aim of the ardent Minorca fancier is, a typical Minorca, and to such breeder and fancier we recommend intending purchasers, for the true intrinsic value, the elegance and beauty, are only to be found in the typical breed or strain. The true type of the White Minorca is identical with that of the Black, having a long, squarely formed body, well rounded at or near the neck, broad back with a tendency to be flat, terminating at an angle at the tail. The comb, as in the Black, must be fairly large, firm and evenly serrated, with from five to seven spikes, and carried erect, whilst in the female the size of the comb is usually regulated and conforms to the size of the fowl, turning over to one side, with serrations in proportion to the male. The comb of the male should extend well on the front of the beak, which has a tendency to balance and hold it firm, and by extending well over the head, tends to give harmony and elegance. The earlobes should be moderately large, smooth, free from folds or wrinkles, and pure white, free from tinges of yellow or red, one-half of which is a disqualification. The face and eyes are a coral red. The face should show no signs of white whatever, which is a disqualification. The wattles should be long and even, conforming in length to size of comb, giving a more graceful appearance to the fowl, which is always readily noticed, being so striking in contrast with the snowy white plumage. The legs and feet, which are white or pinkish white, should be set firmly on the middle of the body, and should be stout and set moderately wide apart, which gives the fowl a bold, dignified appearance. The tail of the White Minorca, as in the Black, is set well back and carried moderately up, not to spread too much and carried straight, giving no appearance of wry-tail.

White Minorcas mature early, growing very rapidly for the first eight or nine weeks, and I firmly believe that up to this age their development is more rapid than that of any other breed. With White Minorcas as described, together with vigor and activity, we have a fowl pleasing to the eye as well as to the pocket-book. To keep them vigorous and full of activity, as with any breed, careful mating is of the utmost importance. In the first place, it is largely to the interest of intending purchasers

of whatever breed, to secure their stock from breeders of some reputation, and by following the rules of mating them as the seasons come around, taking every precaution not to use inferior stock because they may be possessed of such. Therefore, do not be afraid to cull your breeding stock well; then vigor and activity, together with all other combinations characteristic of the fowl, will surely follow, and for the pains and severity of culling you will surely meet with success. The White Minorcas are a non-sitting breed, and are very prolific layers, their eggs being moderately large and pure white. There are few birds if any, that rival them in the production of eggs. This fact having become sustained and widely known gives them a reputation worth having; hence they are fast becoming popular, being much sought after by fanciers who are alert to business, as well as by farmers who are seeking a practical fowl, gaining a business record on a business principle.

Enjoying the reputation they have attained, their popularity is bound to increase. We believe their qualities continue to increase, which knowledge is appreciated by their admirers, and it is doubtless the earnest endeavor of many who fancy and breed them to establish flocks that will prove profitable and achieve success in the show room, which prominence together with printers' ink, will eventually bring to their owners patronage from a wide field.

SAUK RAPIDS, MINN.

BY C. W. JEROME & CO.

In this brief article, it is not our purpose to trace the history of this notable breed of fowls, but rather to speak of them as they are bred in America to-day. They have been much longer known and appreciated in England than in America, and were first brought here from that country. The Minorca fowls now stand at the head of all varieties, for egg production, while at the same time they keep pace in other points of usefulness, their meat being fine grained, juicy, and of delicious flavor.

They are hardy, and easily raised by either natural or artificial means, but if natural mothers are employed, they must be "adopted" ones, as the Minorcas are non-sitters.

The chicks mature very rapidly, and begin to lay at an early age, and none can excel them as prolific layers of large, white eggs, at all seasons, for if warmly housed, and properly fed, they are excellent Winter layers, and with plenty of litter to scratch in, they will take as much exercise as they need, and bear confinement as well, or better than most breeds.

The true, pure Minorca is the *best* Minorca, requiring no crossing of foreign breeds to enhance its value. Such a cross would invariably decrease their egg production, which, after all, is the most valuable trait of the White Minorcas, and the one which should be most carefully propagated.

The American type of Minorca conforms more closely to the ideal egg-type than does the more sluggish English bird, and wherever they are bred principally for *beef*, much of their beautiful shape and symmetry of contour will be destroyed, and by making them more sluggish, will soon affect their egg production.

It is the sprightly, active Minorcas that furnish the large white eggs in such quantities as to render them more and more popular with practical, every day poultrymen, and making it exceedingly difficult for breeders of the "egg type" of White Minorcas to supply the rapidly increasing demand for these fowls which are both beautiful and profitable in the highest degree, to the farmer as well as fancier.

There is no more beautiful sight among fowls, than a well bred flock of White Minorcas, with their large, bright red combs, pure white plumage, and sprightly, graceful movements, adorning alike the city lot and country homes, while at the same time, they supply the epicure with eggs and meat of the finest quality and flavor. Those who once get a good strain of White Minorcas seldom wish to part with them, or exchange them for any other breed.

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When I could no longer exhibit at the shows without competing against my customers, I ceased to exhibit, and have not entered a Single Comb Black Minorca in competition, since the winter of 1889,—but since that time, have made a specialty of breeding show birds for sale and furnishing eggs from which such can be hatched. I have reared and sold some of the most important 1st prize winners in nearly every state in the Union, beside successfully exporting to many foreign countries.

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