

forever as he has done, breeding some hundreds in order to select a few good matched pairs. But if any one were to ask him whether he expects to find among his chickens any with *single combs*, he would at once say, No! With other than yellow legs? No, again, decidedly. Now, why is this? That is the question with which we left off.

The answer is as simple and evident as can possibly be. The yellow leg and the pea comb have been regarded each as an absolute *sine qua non* in the Brahma breed, and hence for many generations birds which did not possess them have never been bred from. It was not formerly so even with the comb, for I can remember myself seeing very fine single combed Brahmas even of the dark variety, years ago. But for many years now the rule has been imperative, and *not one single link* in the chain of succession has been lost, in breeding from pea-combs only. Hence every generation has added to the stability of this point, till it is now so fixed that hardly a single comb could be found amid hundreds of chickens. That point is sure; and any amateur who bred from any given stock, single combed chickens (more than a stray one very rarely; for a breed may occasionally 'sport,' as it is called, almost any thing) would at once infer that he had been imposed upon with impure blood. But if our fancier considers carefully his own proceedings, he will find that as regards his general breeding he has not gone upon a similar invariable system. The first year he breeds, while various faults can be easily enough found amongst his various chickens, he finds probably some one fault peculiarly so; it may be want of leg feather, or streakiness, or light breasts in his pullets—let us suppose it is want of feather. To correct this, he next season buys or selects from his own stock a hooked bird. This time he gets plenty of feather, but if his pencilling was good before, it is very likely worse now. So for next season he selects a bird with beautiful dark but speckled breast and splendid hackles, and he finds his pencilling somewhat improved (though not as much as he hoped) but very likely his cockerels are now very light on the breast, and ten to one the old fault, or want of feather, reappears. He thinks now that what he wants is a fine jet black breasted cock, and he gets one just to suit, when some of his cockerels are splendid in color; but perhaps the father was coarse in the comb and so all the chickens are, and very probably the pencilling of nearly all his pullets is quite dull and cloudy, those which are not, being nearly white breasted. I think this is a pretty fair picture of average breeding. Such a plan necessarily fails in producing uniformity, simply because no point is bred for long and persistently enough to fix it at all. Each time a fault is attempted to be corrected, some influence upon that fault really is exerted, and it followed up the ground might be secured, but very little really is gained for the first year or two, and by dropping the next link in succession all or nearly all is lost again. And the link is thus dropped in many cases where it would not be suspected. For suppose a very small and neat comb to have been bred for, and a good approach to it luckily gained, but some other grave fault developed. To correct this it may be impossible to select a bird from the home stock, and a cock from another yard is procured. His comb, too, may be good, and hence it is thought that the course of breeding for good combs is *not* dropped, though the other point be taken up too. It may indeed be thus, but it may also be that the new bird, though good in comb, is almost the only one such in his yard, and comes of a very coarse combed strain, and so the result is equally what I have attempted to describe. Hence it appears that it is not enough even in breeding steadily for any point desired, to select birds from anywhere which present that point, however perfectly. Unless any bird be an *actual link in the chain*, scarcely anything will be gained by him. And he is not a link in the chain unless he be either one of the strain which is being protected, or if foreign to it, at least the product of a *generally similar course of breeding*, by which the desired points have been to a certain extent fixed in him in a similar way. It is on account of this that all good breeders are so unwilling to cross. No good breeder I know crosses but when obliged, and when thus obliged, always proceeds with the most extreme care, and often gets "served out" even at that; though even then, if he really has acted with judgment, however grievously he be disappointed the first year, all generally comes right in the second or third generation. Though the birds be alike, if the course of breeding be different, the first result is almost always bad. Thus, it is only lately that breeders have had much success in breeding first-rate birds of both sexes from the same strain, and even yet, as is well known, there are many strains which breed first-rate cocks, and only moderate pullets with others more famed for pullets than cockerels. Now supposing one breeder to have

started with a good cock-breeding strain, and by judicious breeding to have so improved it that at last it breeds also good pullets, whilst another strain only originally bred pullets but has by similar skill been made to breed also fine cockerels; if these strains be crossed, and have little blood in common, the produce the first year will in all probability be bad, each strain 'throwing back' to its recent fault, though the strains themselves may appear closely similar. But in such a case as this, the second year should remedy matters. Hence the reason why a man who buys birds every year to breed from, *can never breed well*. He may win at exhibitions, if the birds he buys are good enough; and he may even get a good chick now and then, but breed he cannot. This rule is invariable, and I have never known a single exception to it. It is also plain enough, that if two careful breeders work independently their strains can never be alike. Each has formed an ideal of his own, towards which he steadily works; and as it is many chances to one against two such ideals being precisely similar, the 'strains' will vary. They do thus vary. It is so in the most famous tribes, or what we shall call 'strains' of short-horns—the 'Bates' and the 'Booth' strains; the Booth animals having perceptibly broader backs and somewhat stouter limbs, while the Bates bulls have more symmetrical elegance of form. The two represent the two *ideals* of these famous breeders, and so different strains of any fowl—that is, if they be *real strains*, carefully bred for generations—present similar differences to an educated eye. One man's Cochons are noted for their beautiful tails, those of another for their small and delicate heads; those of a third for their fine broad proportions. And it can be easily understood how it is, that artists very frequently make the best fanciers, their trained eyes *size the ideal* of a race, and do not go wandering off from it, or continually changing it, as others do. They seem to seize what I may call the 'genius' of a breed and hold it fast. They may improve on their ideal as they go on, but if so, their improvement is a gradual and steady development, not a capricious change of type. Many of the great cattle breeders even, were artists. Fawkes was, so was Booth himself; so were Strafford and Page. One of the best light Brahma breeders in England is an artist; and I noted with much interest that his artist eye sprang at once to as good a standard of shape as I have often seen. And it is found that a really thoroughly good breeder, almost always makes a good judge. It follows, too, that it is almost impossible to perfect a strain without considerable interbreeding. The process has its dangers, but these may be counteracted by judgment and care; and after the experience of many years, I say advisedly, that a good strain *cannot* be made without it. Every one knows that to in-breeding of the closest character the tribes of short-horns owed *everything*. The celebrated bull "Favorite" was put to his own dam, to his sister, his daughter, his granddaughter, and even his great-granddaughter! besides countless other matings of collateral relationship. And even when this process might have been supposed to be completed and the desired qualities sufficiently fixed, what is the testimony of Mr. Booth? "The result of the last three crosses upon which I ventured," said he to Mr. Carr, "namely, Water King, Exquisite, and Lord Stanley—has made me distrust the policy of any further step in that direction; nor have the results I have witnessed of the experiments of others in crossing animals of any blood with the most fashionable bulls of other strains, tended in any instance to remove that distrust."

I hoped to have concluded in this number, but the subject has grown upon me, and I must leave to still another paper the practical application in detail of the principles we have been considering.

#### Deteriorated Games.

A writer in the November number of the *Poultry Bulletin* says:—"This is a subject which seems to be agitating our brethren over the water at the present time. That the English game fowls of the past and present are not of the same quality is evident to any one who can compare the illustrations of Weir in Tegetmeier's Book with those of Ludlow in Wright's Book of Poultry."

Who can suppose from a glance at the pictures that they represented birds of the same variety? The birds of Weir were models or curved lines (said to be the lines of beauty), those of Ludlow are made up of angles, which betray too evidently the stain impressed upon the English games by the angular Malay. Compare the purest of the Malay cocks of Tegetmeier with that of the brown-breasted red of Wright, and we do not think many will doubt the

near relationship of the two; then compare the same with the Malays of Wright, and the comparison will be as confirmatory of the Malay taint in the English games as proofs of "Holy Writ." The thin hackle, whip-tail and long legs of the exhibition game are undoubtedly owing to a cross with the Malay birds. Again compare the pile game of Wright with his Malays and he must be blind who cannot see how much closer is the relationship between the two than between the pite and the noble looking birds of Weir. The black breasted reds and the Duckings of the two illustrators are far enough apart to be classed as different varieties, instead of strains of the same variety.

Allowing that the blood of the Malay mingles with that of the game, is it disadvantageous to the game? Undoubtedly it is. It gives them a handsome appearance in the exhibition coops, but it adulterates the *gameness*. They are not to be depended upon in the pit. Those who admire games do so because of the renowned courage of the variety, and no one keeping them would be pleased to hear that his birds had shown the white feather; yet that is what those with the Malay cross will do. A little experience may be of service here. Before the late war we bred from a Malay cock and three Sefton hens, of a well tested strain, a lot of chicks, from which we selected a stag to breed with the same hens, thereby producing young with but a quarter Malay blood. From the last lot we selected two very handsome stags, and ran them with pure-bred Sefton and Tartar hens. Their young were almost identical in appearance with the exhibition fowls delineated for the Book of Poultry. Six of the best were tested in a main of eleven. One killed his opponent in the first fly, four ran away, and the sixth was killed before he had time to run. Our family complained of the monotony of chicken dinners for some time afterward. Take them all in all they were the handsomest birds we ever bred, mostly black breasted reds, standing high, with thin hackles, whip-tails, and an average weight of six and a half pounds. Naturally they were savagely fighters, but proved craven before the steel. In other words, the Malay cross (too common in English games) was the cause of deteriorated games.

After studying the illustrations in Wright's Book of Poultry, and discovering so many characteristics of the Malay, we suspect deteriorations of courage, and should require to see the usual tests applied before believing otherwise with regard to birds of that style.

From the foregoing remarks it may be gathered we are not favorably inclined towards the standard of the modern game fowls portrayed in the book by Mr. Wright. To any one who wishes such, we have but little to say, a few crosses with our *bete noir* (the Malay) and they can have the present style of bird, with his doubtful courage (even where the art of selection has been carried to the sixth generation). To those who still indulge in the amusement of pitting their fowls, it is unnecessary to say anything. With them a craven has but one remove; viz., from the pit to the pot. There are however a goodly number of persons who though never expecting to fight their birds, yet wish them to be of undoubted courage. To such we say, avoid the thin hackled, whip-tailed exhibition birds as you would the plague. Procure a cock that has been the bearer of the steel and test, or have his young ones tested in the usual way. Many gentlemen do this, and they breed to the purest feather also.

#### Laying Qualities of Brahmas.

Mr. B. N. Pierce, of Corning, Iowa, communicates the facts given below to the *Poultry Record* :—

Desiring to know more of the productive qualities of Light Brahmas, I made an effort last season to experiment with one pullet, selecting her from a pure blood of last year, and keeping her separated from others of her variety. She commenced laying on January 12th, 1873, and laid eighty-three eggs before becoming broody; up to this date, August 1, 1873, she has laid 136 eggs. The manner of keeping the record, or count, of the number of eggs laid, was, to let the last egg remain in the egg-basket until the next was brought in, and to mark the number of each egg on itself, so that there was no chance for an error. The hen was pure bred, and from one of the leading strains of Light Brahmas. She has been kept in confinement from January 1st, except each day since April 1st, she has been given her liberty after 3 p.m., and during the whole time has had but little animal food. One half-bushel of corn, and twenty-five pounds of wheat screenings, and, now and then, bran and shorts mixed, all told, not to exceed one bushel of grain, has been her feed, and would not cost over fifty cents.