

Once a week, chop up four or five raw onions and feed them to the hens, independently of all other food, as a tonic and stimulant. If you do this you will have no trouble to keep your flock in good healthy condition.

## NOTES ON THE WHITE LEGHORN

BY BLACK WYANDOT.

PURE white plumage gives a fowl a delicate look and so gives an appearance of truth to the old error, "White fowls are not hardy." White Leghorns are the hardiest of fowls, and one of the best breeds for laying the year through. No sickly or weakly fowl can continue to have a bright red comb and a sprightly air such as the white Leghorn possesses all through the year under ordinary care, all the time shelling out eggs in profusion. Of course the Leghorn comb is likely to be too "beefy" and so is liable to the attacks of frost, but there is no reason why Leghorn combs should not be bred down to the medium. The beefy comb is not sightly, and on the male bird it is likely to be weak and fall to one side. A medium comb is stiffer and more erect, consequently can be bred nearer the standard and at same time is better looking and more practical. In point of comb Leghorns are improving. The Leghorns bred at first, produced combs that would have made a meat breakfast for a small family. Great stories are told of the size of comb on these original Leghorns, one hen is said to have possessed a five inch comb, and certainly must have experienced difficulty in scratching up a flower bed without also giving her comb an occasional dig. S. C white Leghorns being the oldest of the Leghorn breeds,

posses the true Leghorn traits in the fullest degree. In them the non-sitting trait is more fully established than in the browns, which have a dash of Game blood. The whites are also claimed to be the "best layers on earth," but we doubt if there is much difference in Leghorns when it comes to "shelling out."

It is objected to Leghorns that they are not a good table fowl—they *are* a good table fowl "as far as they go." Being purely "egg-machines" they do not put on fat easily, yet they have full breasts and meat of good quality. I do not believe any breed will pay its way any better than the Leghorns. They are easily kept. Two Leghorns can be kept on same feed as required for one Cochin, and a Leghorn hen will produce at least three eggs to the Cochins two. The best proof of their merit is the fact that they have always been popular. No unprofitable fowl could hold the place they have held since their introduction.

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## POULTRY BREEDING.

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### OUT-BREEDING.

OUT-breeding is the reverse of in-breeding. If the latter is the union of the most nearly related specimens, the former is the mating of the most distant relatives. As all fowls are believed to have descended from a common ancestor, all are related and, therefore, this definition logically includes the crossing of the most diverse breeds. But, as in-breeding was limited to its extent, out-breeding in this article will be

limited to the mating of distantly related specimens of the same variety.

Out-breeding, thus defined, is the common method of mating, employed by those opposed to in-breeding, who believe that in-breeding is followed by disastrous results. The advocates of out-breeding introduce fresh blood annually into their flocks, usually by the purchase of a male bird, because this is the cheapest method to pursue. The progeny of yards of fowls where out-breeding is practiced, are usually healthy and vigorous, thoroughly practical and profitable, but often lacking in the perfection of points, that seem so desirable to the fancier.

The introduction of fresh blood is always attended with a risk of introducing antagonistic tendencies in breeding. If it is done injudiciously the chances are that the progeny will be very undesirable in plumage and markings, though occasionally a "nick" occurs which gives the best possible results; such out breeding at the best, is very uncertain work. But it is not necessarily so uncertain; there is a judicious as well as injudicious method of introducing fresh blood annually.

The best method is to secure fowls, bred to the same ideal. For example take the Plymouth Rock, Mr. A. breeds a rather tall, long-backed type; Mr. B. a short-backed Cochin type; Mr. C. a type resembling the American Dominique. Now, it is evident, that if either of these breeders purchases from the other he will introduce a very different type of fowl into his yards, and the result will be very uncertain as to lack of uniformity. Again, A. breeds his fowls from a single mating, B. mates extremes in color, dark males light females and *vice versa*; C. makes two matings, an early white cock to light females for pullets, and a dark mate to