

about 95 per cent. of farmyard mongrel's in Hearson's incubator, and reared eighty chicken's together in the top of a tub, heated by a lamp, without losing one. But I cannot get anything like such a percentage of highly bred chicken's from the same incubator, and cannot rear more than twenty together in one rearer.

Well, however we get our stock, whether by buying eggs or birds, it is essential to get good typical ones, and then the great object to be aimed at is the formation of a strain.

In endeavouring to form a strain sound judgment is required, and even the best judgment may not insure success, because no one can tell how a pair of unrelated birds will "hit off." A pair of remarkably good unrelated birds may produce inferior chickens, and a pair of very moderate birds may by chance "hit" well and produce excellent chickens. It is this uncertainty of even the best birds producing good stock which makes the great value of a good "strain" when once formed. A strain is always the result of in-breeding, otherwise there can be no strain and all is mere chance. A strain is formed by mating good birds with sound judgment the first season, carefully noting which pairs throw the best chickens, and only using these selected pairs and their best chicks the next season. This selection and breeding from the same family is carried on so long as there is no loss of vigor or development of bad points. If any loss of vigor or development of bad points be noticed, a change of blood to correct these become necessary. This introduction of fresh blood must be made with great caution, or it may spoil the strain and the results of several seasons' labours.

This principle of strain does not seem to be generally understood. Many appear to think it consists in some mysterious (but not in-bred) combination in the hand of a prominent exhibitor. Strain is simply and solely relationship—family. In-breeding is the only method of permanently fixing any desired characteristics. As I have said, the progeny of even the best unrelated birds is most uncertain, whereas the progeny of related birds becomes more assured each season.

It is obvious that this principle of strain involves the much disputed question of in breeding. Of course all the arguments are not on one side, but the conclusions of science, as well as the results of long practice, pretty conclusively prove that in-breeding is not in itself harmful to constitution, vigor, and stamina. They are not necessarily impaired in the least by in-breeding. But the very forces of in-breeding which reproduce and perpetuate desired characteristics, are also liable to reproduce undesired qualities either internal or external, if any such are strongly latent in

the parent stock. In-breeding has only this one danger, the possibility of latent imperfections or diseases in the parent stock. But providing there is no special tendency to weakness or imperfections in the original stock, in-breeding will never generate them.

It is clear that the forces of relationship which reproduce good points will also reproduce bad points if there is a strong original tendency, but will not originate them, and of course by skill and careful selection the chief benefits of in-breeding can be obtained with scarcely any, sometimes none, of its disadvantages.

Fancy poultry culture is a large subject, and I must already have taxed your patience; but before sitting down I should like to advert to the subject of new varieties.

All true fanciers must have sympathy with the effort to produce fresh and distinct varieties. It is the triumph of the breeder's art. But I do not think the recent stimulated boom in "Buffs" is worth much sympathy or support. It is not an attempt to popularize a distinctive new variety, but rather to absorb, in the interest of speculators, three beautifully characteristic and distinct breeds into one buff variety. How entirely different and characteristic are the barred Plymouth Rocks, the laced Wyandottes, and the black Orpingtons, but what becomes of the distinctiveness of these three grand breeds when degenerated to a nearly uniform buff hawl, with size, shape, and carriage running one into the other, and the only real distinctions left being the minor points of leg-color and comb?

The only difference between a buff Orpington and a buff Rock is that the Orpington is supposed to be deeper and rounder in body, and with flesh colored instead of yellow legs and beak. The only difference between the buff Rock and buff Wyandotte is a slight theoretic one in shape, and a rose instead of a single comb. When once these three grand breeds are "buffed" they lose every important distinction, and become so merged into each other, that by breeding one you could supply fair specimens of all three. Of course the object of the boom is to make the buffs supersede, at least for a time, these three fine breeds. It is to be feared that some fancy speculators would not mind the effacement of three or four of our best breeds if it brought grist to their mill. I do not pretend to sneer at the financial returns from poultry, but they should follow and not control the interests of the "fancy" at large.—*Poultry*.

You should exhibit at at least one of the large shows for purposes of comparison if for nothing else.