

rents and grandpatents. If we breed from this third generation again, still selecting five-toed individuals, the tendency to produce the peculiarity will be increased enormously; and in a generation or two more, a bird *not* five-toed will be as rare as the five-toed specimens originally were. We now have what is called a *strain*, so far as regards this one point of five toes—that is, we have produced a race of birds which we can depend upon with almost absolute certainty, to produce nothing but five-toed birds. Such a strain is the Dorking breed itself.

Now let us put this instance in another light. Supposing the pair, which showed the feature accidentally, to have been kept alive for ten years, as might easily be the case, whilst their descendants have been successively selected and bred from in the manner supposed. It will readily be seen that it may be very easy to select from the tenth generation a pair of fowls which to the eye appear precisely like the original pair from which operations were commenced. In plumage, in comb, in shape, and in the toes, the closest scrutiny may fail to find any essential difference. But, as we have seen, the difference in breeding value is tremendous. The first pair have scarcely any tendency that can be relied upon to produce the desired five toes; the other pair can be depended upon as regards nearly every one. The first pair presents nothing to a breeder save the foundation upon which he may, by care and perseverance, found a structure hereafter; the other represents work fully done, and a “strain” which, as regards the one point we have considered, is perfected and established, and only needs ordinary care to preserve it in the same perfection for an unlimited length of time.

We have selected one feature as an example; but to any other the same reasoning would apply. Single or double combs in fowls, colour, or carriage of tail or of ears, or any other point in a dog; speed or endurance in a horse; all are subject to the same laws, and can be “fixed” in the same manner. So far, we think we shall have been easily understood; but it will readily occur to most of our readers, if not to all, that every animal is bred for many points, and not solely for one such as we have been considering; and that here the difficulty in breeding successfully begins. On the next occasion we will look a little into that part of the subject. *Fanciers Gazette.*

Poultry on the Farm.

I have just threshed, and sold at 41s. 6d. per quarter, a crop of Rivett wheat, grown after white wheat, and it yielded seven and a half quarters per acre, tail included. This field is open to and within thirty feet of the fowl-house, from which emerge every morning some 150 head of poultry, and they have been free to roam at large in this field from the time it was sown to the day of carting the crop. As it was drilled with something under five pecks per acre, and as the said poultry, immediately after sowing, took possession of the field and made a most searching and continuous examination of its contents, the prospect of a crop would appear alarming to those who were inexperienced in the matter; and I confess that in the early days of my confidence and belief in poultry, I have felt somewhat nervous as to this and the next particular fields, knowing how sundry opponents of thin sowing would triumph and rejoice over a failure of the four pecks per acre. Well, but there is the fact of the sixty bushels of crop per acre, and by no means the first, second, or third instance of the kind, for, however shabby and scratched the plants may appear in their early growth, their ultimate development is grand, and the thickest part of the crop is always that nearest to the fowl-house. They not only cultivate the crop but manure it, just as sheep do. But the great benefit is, that not

an insect has a chance of injuring a plant, while, at the lower end of the field, less used by the poultry, there was injury from wireworm. In fact, a long and close observation of the habits of birds and poultry has convinced me that they are the farmers' and gardeners' best friends. It has been jocularly said that nothing in the shape of live stock makes so large a return as poultry do, as “for every grain they gave a peck.” It is interesting to watch their operations. Having, with their active claws, pulverised every clod and unhoused the plant destroyer, he is at once appropriated and converted into food for our table. Winged insects also have a poor chance with them. How neatly they “nab” the fly from his place of settlement, whether on the legs of our horses or cattle, or on the walls or boards. A sensible cart-mare in my stable would not lift a foot so long as her favourite chicken was watching for and appropriating every fly that settled on any of her legs. I have also been amused at seeing a blackbird on the lawn making a vigorous effort to withdraw from its hole a stout worm, and tumbling over backwards by an ultimate and suddenly successful result. We should, as farmers and gardeners, remember that, for probably eleven months, out of twelve, birds have to live upon the insect tribe, and that it is only during the the ripening or ripened period that we must by netting and other means, protect our fruit and crops. The good they do vastly exceeds the injury; I therefore strictly forbid bird-nesting, and strongly advocate that there should be at least one per cent. of shrubbery to every 100 acres of farm as a home for birds. This is a very different affair from great trees and ugly banks, fences and ditches in the corn-fields, which are (particularly this dry season) so greatly detrimental to the farmer's welfare. As regards the question whether poultry are profitable, I have long since proved the affirmative. All live stock consume in proportion to their weight, and as we obtain nearly twice the price of meat for our poultry, it is not only the dearest food to the consumer but the most profitable creature to the producer.

Weigh a sheep or bullock immediately before slaughtering, and ditto a fowl, and ascertain how much per lb. live weight you obtain for each when sold. In one case you have to get rid of nearly half the weight in skin, entrails, and their contents and general offal. In the other (the poultry) the takes all offal, internal and external, except the feathers, which sell at a better price than the meat. I enlarged on this matter in my second volume, “Profitable Farming,” p. 283. Besides, poultry convert into good human food the insect tribe and a large amount of grain and seeds that would be wasted. They never do better than with free access to the land. Our French neighbours have done wisely in preventing by legislation the destruction of small birds. I found by experiment that a fowl or a pig consumed alike in proportion to their weight, but sold at very different prices live weight. The management of poultry is an art which, like all others, should be learned. As to gardens, I know of a case in my neighbourhood where the crops were destroyed by insects. The new tenant stocked it with his poultry, and soon had abundant and uninjured crops. A little slovenliness of appearance is amply compensated by increased produce. I breed from pure Brahmas and Game crossed; sometimes Cochin and Game. Dorkings find our soil and climate here unsuitable. Poultry are almost or quite as gross feeders as pigs—in fact, carnivorous and omnivorous. The contents of the pig pail is most acceptable to them, and they will kill and eat mice, or even a helpless juvenile duckling. They enjoy red-herrings, and cooked fish; and I know at my breakfast-table, sometimes, when they have had access to it, for the flavours of fish, also red-herring, are strongly evidenced in the taste of the egg. The same remark holds good in the case of sheep, also of cows. Turnip-flavoured mutton and milk are not unfrequent. J. M.