

if I were so situated that I considered eggs would pay me best, I would keep the small breeds, as I consider for the amount of food they eat they will produce the largest number of eggs. Leghorns, white or brown; Andalusians, black Minorcas or Hamburgs. If you want a general purpose fowl I would keep Wyandottes or Plymouth Rocks.

I often wonder how it is that farmers don't give more attention to the raising of ducks for market. I think that one of the general ideas is that they must have a pond or creek, or they would be a failure. I can assure them they are greatly mistaken about that as I find our city buyers will buy land fed ducks every time in preference to water raised, the former are much firmer in flesh, consequently command a readier sale. There is one thing however, if a farmer intends to raise ducks as well as chickens they must not be fed together under any circumstances. As a rule you will find ducks pay you best when sold at the age of about eight weeks, sell them when they reach the weight of three or four pounds. If your farm is in close proximity to a railway station, or a city, or large town, you may reasonably expect to make a poultry or duck farm pay you much better than any other industry on your farm. What I have said is from my own observation and practical experience.

#### MATING BUFF BREEDS TO PRODUCE EXHIBITION BIRDS.

PAPER READ BY DR. A. W. BELL, BEFORE TORONTO POULTRY, PIGEON AND PET STOCK ASSOCIATION AT FEBRUARY MEETING.

(Continued.)

As to mating to produce the best results, what plans should we adopt? In the first place look to the color of the beak eyes and legs, the first and last should be of a bright yellow whilst the eyes should be bay. A light or pearl or yellow eye in a buff bird is very unsightly as if there were something lacking in the constitution of the bird. Some maintain that the light eye should be found with the light buff. If such be the case, and personally I do not believe it to be so, how much more interesting is it to breed birds by the dozens that do not quite score 99½ points.

Be on your guard against any mealiness either in male or female. This is chiefly most prominent in the wings and on wing bows and consists of two or three different shades of buff, or even white, in the same feather.

Another feature to shun is one that is very difficult to eradicate when one has been unfortunate enough to have it

introduced into his flock. I refer to the lacing, chiefly on the backs of the females, of each feather with a dark shade of buff or red in some cases. This will produce cockerels with an edging of dark buff, whilst the centre will be light in the back and saddle feathers making a very mottled bird.

Mottled backs and cushions are another defect one wishes to avoid. The cause of this is the lack of coloring matter in the feather necessary to sustain the color, for it is generally only the surface portion of the feather that becomes lighter.

A buff undercolor is most desirable, but personally would prefer a bird with poor under color and good even surface color to one with good under color and mottled and uneven surface color. Do not think that because you have obtained a deep under color that it is a strong point for it invariably comes with mottled birds either when young or after moulting.

If we mate a cinnamon male with a cinnamon female we certainly shall expect to and will, produce cinnamon birds. Again if we mate a cinnamon male with a medium colored female or *vice versa* we will obtain birds of a more or less mottled character and some cinnamon and some medium.

And just here let me say, that it is a theory that the color of the offspring comes from the sire and the size and shape from the dam. I have followed this each year in my chicks and fail to agree with this statement, for each season has found my birds about equally divided as to color, half taking after the sire and half after the dam. It is these personal experiences that sometimes make us unbelievers in many of the pet theories advanced by the old school, if such we may call them.

Again if we mate cinnamon and a golden buff we will have too many culls in color to satisfy the ordinary fancier, but yet we may out of some twenty-five birds or so obtain a pair that is as near the Standard color as is possible, but the desired end has not been reached for if we mate these birds or use either of them as breeders the offspring will revert invariably to the ancestors, though by selecting those nearest the desired color each season will we in time, other things being equal, reach the goal of our ambition.

Methinks I hear some say "What are we to do then?" My advice is to mate birds as near Standard color and requirements as one can procure, of course taking into account the other lines of mating such as offsetting the faults in the male by the female being strong in those particulars etc., etc., and do not believe it necessary to mate one pen to produce males and another females for I think this the greatest bane of the poultry fancy, and if the Standard of to-