

streaked with dark shades: the chickens of silver-cinnamon Cochins are almost always of a buff colour. The chickens of the white Game and white Dorking breeds, when held in particular lights, sometimes exhibit (on the authority of Mr. Brent) faint traces of longitudinal stripes. Fowls which are entirely black, namely, Spanish, black Game, black Polish, and black Bantams, display a new character, for their chickens have their breasts and throats more or less white, with sometimes a little white elsewhere. Spanish chickens also, occasionally (Brent), have, where the down was white, their first true feathers tipped for a time with white. The primordially striped character is retained by the chickens of most of the Game sub-breeds (Brent, Dixon); by Dorkings; by the partridge and grouse-coloured sub-breeds of Cochins (Brent), but not, as we have seen, by the sub-breeds; by the pheasant-Malay (Dixon), but apparently not (at which I am much surprised) by other Malays. The following breeds and sub-breeds are barely, or not at all, longitudinally striped: viz., gold and silver pencilled Hamburgs, which can hardly be distinguished from each other (Brent) in the down, both having a few dark spots on the head and rump, with occasionally a longitudinal stripe (Dixon) on the back of the neck. I have seen only one chicken of the silver-spangled Hamburg, and this was obscurely striped along the back. Gold-spangled Polish chickens (Tegetmeier) are of a warm russet brown; and silver-spangled Polish chickens are grey, sometimes (Dixon) with dashes of ochre on the head, wings, and breast. Cuckoo and blue-dun fowls (Dixon) are grey in the down. The chickens of Sebright Bantams (Dixon) are uniformly dark brown, whilst those of the brown-breasted red Game Bantam are black, with some white on the throat and breast. From these facts we see that young chickens of the different breeds, and even of the same main breed, differ much in their downy plumage; and, although longitudinal stripes characterise the young of all wild gallinaceous birds, they disappear in several domestic breeds. Perhaps it may be accepted as a general rule that the more the adult plumage differs from that of the adult *G. bankiva*, the more completely the chickens have lost their stripes.

With respect to the period of life at which the characters proper to each breed first appear, it is obvious that such structures as additional toes must be formed long before birth. In Polish fowls, the extraordinary protuberance of the anterior part of the skull is well developed before the chickens come out of the egg;⁴⁰ but the crest, which is supported on the protuberance, is at first feebly developed, nor does it attain

⁴⁰ As I hear from Mr. Tegetmeier; see also 'Proc. Zoolog. Soc.' 1856, p. 366. On the late development of the

crest, see 'Poultry Chronicle,' vol. ii. p. 132.