

related to some external character which man values, it has been, unintentionally on his part, acted on by selection, and has become more or less fixed. We see this in the wonderful protuberance of the skull, which supports the crest of feathers in Polish fowls, and which by correlation has affected other parts of the skull. We see the same result in the two protuberances which support the horns in the horned fowl, and in the flattened shape of the front of the skull in Hamburgs consequent on their flattened and broad "rose-combs." We know not in the least whether additional ribs, or the changed outline of the occipital foramen, or the changed form of the scapula, or of the extremity of the furculum, are in any way correlated with other structures, or have arisen from the changed conditions and habits of life to which our fowls have been subjected; but there is no reason to doubt that these various modifications in the skeleton could be rendered, either by direct selection, or by the selection of correlated structures, as constant and as characteristic of each breed, as are the size and shape of the body, the colour of the plumage, and the form of the comb.

Effects of the Disuse of Parts.

Judging from the habits of our European gallinaceous birds, *Gallus bankiva* in its native haunts would use its legs and wings more than do our domestic fowls, which rarely fly except to their roosts. The Silk and the Frizzled fowls, from having imperfect wing-feathers, cannot fly at all; and there is reason to believe that both these breeds are ancient, so that their progenitors during many generations cannot have flown. The Cochins, also, from their short wings and heavy bodies, can hardly fly up to a low perch. Therefore in these breeds, especially in the two first, a considerable diminution in the wing-bones might have been expected, but this is not the case. In every specimen, after disarticulating and cleaning the bones, I carefully compared the relative length of the two main bones of the wing to each other, and of the two main bones of the leg to each other, with those of *G. bankiva*; and it was surprising to see (except in the case of the tarsi) how exactly the same relative length had been retained. This fact is curious, from showing how truly the proportions of an organ may be inherited, although not fully exercised during many generations. I then compared in several breeds the length of the femur and tibia with the humerus and ulna, and likewise these same bones with those of *G. bankiva*; the result was that the wing-bones in all the breeds (except the