

In the eight first birds, belonging to distinct breeds, in this table, we see a decided reduction in the weight of the bones of the wing.

In the Indian Frizzled fowl, which cannot fly, the reduction is carried to the greatest extent, namely, to thirty-three per cent. of their proper proportional weight. In the next four birds, including the Silk hen, which is incapable of flight, we see that the wings, relatively to the legs, are slightly increased in weight; but it should be observed that, if in these birds the legs had become from any cause reduced in weight, this would give the false appearance of the wings having increased in relative weight. Now a reduction of this nature has certainly occurred with the Burmese Jumper, in which the legs are abnormally short, and in the two Hamburgs and Silk fowl, the legs, though not short, are formed of remarkably thin and light bones. I make these statements, not judging by mere eyesight, but after having calculated the weights of the leg-bones relatively to those of *G. bankiva*, according to the only two standards of comparison which I could use, namely, the relative lengths of the head and sternum; for I do not know the weight of the body in *G. bankiva*, which would have been a better standard. According to these standards, the leg-bones in these four fowls are in a marked manner far lighter than in any other breed. It may therefore be concluded that in all cases in which the legs have not been through some unknown cause much reduced in weight, the wing-bones have become reduced in weight relatively to the leg-bones, in comparison with those of *G. bankiva*. And this reduction of weight may, I apprehend, safely be attributed to disuse.

To make the foregoing table quite satisfactory, it ought to have been shown that in the eight first birds the leg-bones have not actually increased in weight out of due proportion with the rest of the body; this I cannot show, from not knowing, as already remarked, the weight of the wild Bankiva.<sup>74</sup> I am indeed inclined to suspect that the leg-bones in the Dorking, No. 2 in the table, are proportionally too heavy; but this bird was a very large one, weighing 7 lb. 2 oz., though very thin. Its leg-bones were more than ten times as heavy as those of the Burmese Jumper! I tried to ascertain the length both of the leg-bones and wing-bones relatively to other parts of the body and skeleton: but the whole organisation in these birds, which have been so long domesticated, has become so variable, that

as 100 : 52;—in Dorkings as 557 : 248, or as 100 : 44; and so on for the other breeds. We thus get the series of 62, 52, 44 for the relative weights of the wing-bones in *G. bankiva*, Cochins, Dorkings, &c. And now taking 100, instead of 62, for the weight of the wing-bones in *G. bankiva*, we get, by another rule of three, 83 as the weight of the wing-bones in Cochins; 70 in the Dorkings; and

so on for the remainder of the third column in the table.

<sup>74</sup> Mr. Blyth (in 'Annals and Mag. of Nat. Hist.,' 2nd series, vol. i., 1848, p. 456) gives 3½ lb. as the weight of a full-grown male *G. bankiva*; but from what I have seen of the skins and skeletons of various breeds, I cannot believe that my two specimens of *G. bankiva* could have weighed so much.