

characters are not found in any wild pigeon besides *C. livia*. I have looked carefully through the great collections of pigeons in the British Museum, and I find that a dark bar at the end of the tail is common; that the white edging to the outer tail-feathers is not rare; but that the white croup is extremely rare, and the two black bars on the wings occur in no other pigeon, excepting the alpine *C. leuconota* and *C. rupestris* of Asia. Now if we turn to the domestic races, it is highly remarkable, as an eminent fancier, Mr. Wicking, observed to me, that, whenever a blue bird appears in any race, the wings almost invariably show the double black bars.<sup>23</sup> The primary wing-feathers may be white or black, and the whole body may be of any colour, but if the wing-coverts are blue, the two black bars are sure to appear. I have myself seen, or acquired trustworthy evidence, as given below,<sup>24</sup> of

<sup>23</sup> There is one exception to the rule, namely, in a sub-variety of the Swallow of German origin, which is figured by Neumeister, and was shown to me by Mr. Wicking. This bird is blue, but has not the black wing-bars; for our object, however, in tracing the descent of the chief races, this exception signifies the less as the Swallow approaches closely in structure to *C. livia*. In many sub-varieties the black bars are replaced by bars of various colours. The figures given by Neumeister are sufficient to show that, if the wings alone are blue, the black wing-bars appear.

<sup>24</sup> I have observed blue birds with all the above-mentioned marks in the following races, which seemed to be perfectly pure, and were shown at various exhibitions. Pouters, with the double black wing-bars, with white croup, dark bar to end of tail, and white edging to outer tail-feathers. Turbits, with all these same characters. Fantails with the same; but the croup in some was bluish or pure blue. Mr. Wicking bred blue Fantails from two black birds. Carriers (including the Bagadotten of Neumeister) with all the marks: two birds which I examined had white, and two had blue

croups; the white edging to the outer tail-feathers was not present in all. Mr. Corker, a great breeder, assures me that, if black carriers are matched for many successive generations, the offspring become first ash-coloured, and then blue with black wing-bars. Runts of the elongated breed had the same marks, but the croup was pale blue; the outer tail-feathers had white edges. Neumeister figures the great Florence Runt of a blue colour with black bars. Jacobins are very rarely blue, but I have received authentic accounts of at least two instances of the blue variety with black bars having appeared in England; blue Jacobins were bred by Mr. Brent from two black birds. I have seen common Tumblers, both Indian and English, and Short-faced Tumblers, of a blue colour, with black wing-bars, with the black bar at the end of the tail, and with the outer tail-feathers edged with white; the croup in all was blue, or extremely pale blue, never absolutely white. Blue Barbs and Trumpeters seem to be excessively rare; but Neumeister, who may be implicitly trusted, figures blue varieties of both, with black wing-bars. Mr. Brent informs me that he has seen a