

were actually  $\cdot 45$  shorter, and proportionally  $\cdot 21$  of an inch shorter, than the feet of the rock-pigeon. The middle toe has only twelve or thirteen, instead of fourteen or fifteen scutellæ. The primary wing-feathers are not rarely nine instead of ten in number. The improved short-faced Tumblers have almost lost the power of tumbling; but there are several authentic accounts of their occasionally tumbling. There are several sub-varieties, such as Bald-heads, Beards, Mottles, and Almonds; the latter are remarkable from not acquiring their perfectly-coloured plumage until they have moulted three or four times. There is good reason to believe that most of these sub-varieties, some of which breed truly, have arisen since the publication of Moore's treatise in 1735.<sup>19</sup>

Finally, in regard to the whole group of Tumblers, it is impossible to conceive a more perfect gradation than I have now lying before me, from the rock-pigeon, through Persian, Lotan, and common Tumblers, up to the marvellous short-faced birds; which latter, no ornithologist, judging from mere external structure, would place in the same genus with the rock-pigeon. The differences between the successive steps in this series are not greater than those which may be observed between common dovecot-pigeons (*C. livia*) brought from different countries.

#### RACE VIII.—INDIAN FRILL-BACK.

*Beak very short; feathers reversed.*

A specimen of this bird, in spirits, was sent to me from Madras by Sir W. Elliot. It is wholly different from the Frill-back often exhibited in England. It is a smallish bird, about the size of the common Tumbler, but has a beak in all its proportions like our short-faced Tumblers. The beak, measured from the tip to the feathered base, was only  $\cdot 46$  of an inch in length. The feathers over the whole body are reversed or curl backwards. Had this bird occurred in Europe, I should have thought it only a monstrous variety of our improved Tumbler: but as short-faced Tumblers are not known in India, I think it must rank as a distinct breed. Probably this is the breed seen by Hasselquist in 1757 at Cairo, and said to have been imported from India.

#### RACE IX.—JACOBIN. (Zopf- or Perrückentaube; nonnain.)

*Feathers of the neck forming a hood; wings and tail long; beak moderately short.*

This pigeon can at once be recognised by its hood, almost enclosing the head and meeting in front of the neck. The hood seems to be merely an exaggeration of the crest of reversed feathers on the back of the head, which is common to many sub-varieties, and

<sup>19</sup> J. M. Eaton's Treatise, edit. 1858, p. 76.