

at the Philoperisteron Soc. I bred a mongrel pigeon which had fibrous feathers, and the wing and tail-feathers so short and imperfect that the bird could not fly even a foot in height.

There are many singular and inherited peculiarities in the plumage of pigeons: thus Almond-Tumblers do not acquire their perfect mottled feathers until they have moulted three or four times: the Kite Tumbler is at first brindled black and red with a barred appearance, but when "it throws its nest feathers it becomes almost black, generally with a bluish tail, and a reddish colour on the inner webs of the primary wing-feathers."²⁹ Neumeister describes a breed of a black colour with white bars on the wing and a white crescent-shaped mark on the breast; these marks are generally rusty-red before the first moult, but after the third or fourth moult they undergo a change; the wing-feathers and the crown of the head likewise then become white or grey.³⁰

It is an important fact, and I believe there is hardly an exception to the rule, that the especial characters for which each breed is valued are eminently variable: thus, in the Fantail, the number and direction of the tail-feathers, the carriage of the body, and the degree of trembling are all highly variable points; in Pouters, the degree to which they pout, and the shape of their inflated crops; in the Carrier, the length, narrowness, and curvature of the beak, and the amount of wattle; in Short-faced Tumblers, the shortness of the beak, the prominence of the forehead, and general carriage,³¹ and in the Almond-Tumbler the colour of the plumage; in common Tumblers, the manner of tumbling; in the Barb, the breadth and shortness of the beak and the amount of eye-wattle; in Runts, the size of body; in Turbits the frill; and lastly in Trumpeters, the cooing, as well as the size of the tuft of feathers over the nostrils. These, which are the distinctive and selected characters of the several breeds, are all eminently variable.

There is another interesting fact with respect to the

²⁹ 'The Pigeon Book,' by Mr. B. P. Erent, 1859, p. 41.

³⁰ 'Die rtaarhalsige Taube. Das Ganze, &c.,' s. 21, tab. i. fig. 4.

³¹ 'A Treatise on the Almond-Tumbler, by J. M. Eaton, 1852, p. 8, et passim.