

are crossed with pigeons of any other breed, the mongrels are extremely fertile and hardy.<sup>20</sup> MM. Boitard and Corbié<sup>21</sup> affirm, after their great experience, that the more distinct the breeds are which are crossed, the more productive are their mongrel offspring. I admit that the doctrine first broached by Pallas is highly probable, if not actually proved, namely, that closely allied species, which in a state of nature or when first captured would have been in some degree sterile if crossed, lose this sterility after a long course of domestication; yet when we consider the great difference between such races as Pouters, Carriers, Runts, Fantails, Turbits, Tumblers, &c., the fact of their perfect, or even increased, fertility when intercrossed in the most complicated manner becomes a strong argument in favour of their having all descended from a single species. This argument is rendered much stronger when we hear (I append in a note<sup>22</sup> all the cases which I have collected) that

cases of reported sterility in the offspring of certain races when crossed. Pistor ('Das Ganze der Feldtaubenzucht,' 1831, s. 15) asserts that the mongrels from Barbs and Fantails are sterile: I have proved this to be erroneous, not only by crossing those hybrids with several other hybrids of the same parentage, but by the more severe test of pairing brother and sister hybrids *inter se*, and they were perfectly fertile. Temminck has stated ('Hist. Nat. Gén. des Pigeons,' tom. i. p. 197) that the Turbit or Owl will not cross readily with other breeds: but my Turbits crossed, when left free with Almond Tumblers and with Trumpeters; the same thing has occurred (Rev. E. S. Dixon. 'The Dovecot,' p. 107) between Turbits and Dovecots and Nuns. I have crossed Turbits with Barbs, as has M. Boitard (p. 34), who says the hybrids were very fertile. Hybrids from a Turbit and Fantail have been known to breed *inter se* (Riedel, 'Taubenzucht,' s. 25, and Bechstein, 'Naturgesch. Deutsch.' B. iv. s. 44. Turbits (Riedel, s. 26) have been crossed with Pouters and with Jacobins, and with a hybrid

Jacobin-trumpeter (Riedel, s. 27). The latter author has, however, made some vague statements (s. 22) on the sterility of Turbits when crossed with certain other crossed breeds. But I have little doubt that the Rev. E. S. Dixon's explanation of such statements is correct, viz. that individual birds both with Turbits and other breeds are occasionally sterile.

<sup>20</sup> 'Das Ganze der Taubenzucht,' s. 18.

<sup>21</sup> 'Les Pigeons,' &c., p. 35.

<sup>22</sup> Domestic pigeons pair readily with the allied *C. œnas* (Bechstein, 'Naturgesch. Deutschlands,' B. iv. s. 3); and Mr. Brent has made the same cross several times in England, but the young were very apt to die at about ten days old; one hybrid which he reared (from *C. œnas* and a male Antwerp Carrier) paired with a Dragon, but never laid eggs. Bechstein further states (s. 26) that the domestic pigeon will cross with *C. palumbus*, *Turtur risoria* and *T. vulgaris*, but nothing is said of the fertility of the hybrids, and this would have been mentioned had the fact been ascertained. In the Zoological Gardens