

some characters refuse to blend, and are transmitted in an unmodified state either from both parents or from one. When grey and white mice are paired, the young are piebald, or pure white or grey, but not of an intermediate tint; so it is when white and common collared turtle-doves are paired. In breeding Game fowls, a great authority, Mr. J. Douglas, remarks, "I may here state a strange fact: if you cross a black with a white game, you get birds of both breeds of the clearest colour." Sir R. Heron crossed during many years white, black, brown, and fawn-coloured Angora rabbits, and never once got these colours mingled in the same animal, but often all four colours in the same litter.¹⁸ From cases like these, in which the colours of the two parents are transmitted quite separately to the offspring, we have all sorts of gradations, leading to complete fusion. I will give an instance: a gentleman with a fair complexion, light hair but dark eyes, married a lady with dark hair and complexion: their three children have very light hair, but on careful search about a dozen black hairs were found scattered in the midst of the light hair on the heads of all three.

When turnspit dogs and ancon sheep, both of which have dwarfed limbs, are crossed with common breeds, the offspring are not intermediate in structure, but take after either parent. When tailless or hornless animals are crossed with perfect animals, it frequently, but by no means invariably, happens that the offspring are either furnished with these organs in a perfect state, or are quite destitute of them. According to Rengger, the hairless condition of the Paraguay dog is either perfectly or not at all transmitted to its mongrel offspring; but I have seen one partial exception in a dog of this parentage which had part of its skin hairy, and part naked, the parts being distinctly separated as in a piebald animal. When Dorking fowls with five toes are crossed with other breeds, the chickens often have five toes on one foot and four on the other. Some crossed pigs raised by Sir R. Heron between the solid-hoofed and common pig had not all four feet in an intermediate condition, but two feet were furnished with properly divided, and two with united hoofs.

Analogous facts have been observed with plants: Major Trevor

¹⁸ Extract of a letter from Sir R. Heron, 1838, given me by Mr. Yarrell. With respect to mice, see 'Annal. des Sc. Nat.,' tom. i. p. 180; and I have heard of other similar cases. For turtle-doves, Boitard and Corbié, 'Les Pigeons,' &c., p. 238. For the Game fowl, 'The Poultry Book,' 1866, p. 128. For crosses of tailless fowls, see Bechstein, 'Naturges. Deutsch.' b. iii. s. 403. Brönn, 'Geschichte der Natur,' b. ii. s. 170, gives analogous facts with horses. On the hair-

less condition of crossed South American dogs, see Rengger, 'Säugethiere von Paraguay,' s. 152: but I saw in the Zoological Gardens mongrels from a similar cross, which were hairless, quite hairy, or hairy in patches, that is, piebald with hair. For crosses of Dorking and other fowls, see 'Poultry Chronicle,' vol. ii. p. 355. About the crossed pigs, extract of letter from Sir R. Heron to Mr. Yarrell. For other cases, see P. Lucas, 'L'Héréd. Nat.' tom. i. p. 212.