

which in external appearance so closely resembles the European wolf, ought to be crossed with this wolf: and the pariah dogs of India with Indian wolves and jackals; and so in other cases. That the sterility is very slight between certain dogs and wolves and other Canidæ is shown by savages taking the trouble to cross them. Buffon got four successive generations from the wolf and dog, and the mongrels were perfectly fertile together.<sup>48</sup> But more lately M. Flourens states positively as the result of his numerous experiments that hybrids from the wolf and dog, crossed *inter se*, become sterile at the third generation, and those from the jackal and dog at the fourth generation.<sup>49</sup> But these animals were closely confined; and many wild animals, as we shall see in a future chapter, are rendered by confinement in some degree or even utterly sterile. The Dingo, which breeds freely in Australia with our imported dogs, would not breed though repeatedly crossed in the Jardin des Plantes.<sup>50</sup> Some hounds from Central Africa, brought home by Major Denham, never bred in the Tower of London;<sup>51</sup> and a similar tendency to sterility might be transmitted to the hybrid offspring of a wild animal. Moreover, it appears that in M. Flourens' experiments the hybrids were closely bred in and in for three or four generations; and this circumstance, would most certainly increase the tendency to sterility. Several years ago I saw confined in the Zoological Gardens of London a female hybrid from an English dog and jackal, which even in this the first generation was so sterile that, as I was assured by her keeper, she did not fully

<sup>48</sup> M. Broca has shown ('Journal de Physiologie,' tom. ii. p. 353) that Buffon's experiments have been often misrepresented. Broca has collected (pp. 390-395) many facts on the fertility of crossed dogs, wolves, and jackals.

<sup>49</sup> 'De la Longévité Humaine,' par M. Flourens, 1855, p. 143. Mr. Blyth says ('Indian Sporting Review,' vol. n. p. 137) that he has seen in India several hybrids from the pariah-dog and jackal; and between one of these hybrids and a terrier. The experiments of Hunter on the jackal are

well-known. See also Isid. Geoffroy St.-Hilaire, 'Hist. Nat. Gén.,' tom. iii. p. 217, who speaks of the hybrid offspring of the jackal as perfectly fertile for three generations.

<sup>50</sup> On authority of F. Cuvier, quoted in Bronn's 'Geschichte der Natur,' B. ii. s. 164.

<sup>51</sup> W. C. L. Martin, 'History of the Dog,' 1845, p. 203. Mr. Philip P. King, after ample opportunities of observation, informs me that the Dingo and European dogs often cross in Australia.