

exhibit her proper periods; but this case was certainly exceptional, as numerous instances have occurred of fertile hybrids from these two animals. In almost all experiments on the crossing of animals there are so many causes of doubt, that it is extremely difficult to come to any positive conclusion. It would, however, appear, that those who believe that our dogs are descended from several species will have not only to admit that their offspring after a long course of domestication generally lose all tendency to sterility when crossed together; but that between certain breeds of dogs and some of their supposed aboriginal parents a certain degree of sterility has been retained or possibly even acquired.

Notwithstanding the difficulties in regard to fertility given in the last two paragraphs, when we reflect on the inherent improbability of man having domesticated throughout the world one single species alone of so widely distributed, so easily tamed, and so useful a group as the Canidæ; when we reflect on the extreme antiquity of the different breeds; and especially when we reflect on the close similarity, both in external structure and habits, between the domestic dogs of various countries and the wild species still inhabiting these same countries, the balance of evidence is strongly in favour of the multiple origin of our dogs.

Differences between the several Breeds of the Dog.—If the several breeds have descended from several wild stocks, their difference can obviously in part be explained by that of their parent species. For instance, the form of the greyhound may be partly accounted for by descent from some such animal as the slim Abyssinian *Canis simensis*,⁵² with its elongated muzzle; that of the larger dogs from the larger wolves, and the smaller and slighter dogs from the jackals: and thus perhaps we may account for certain constitutional and climatal differences. But it would be a great error to suppose that there has not been in addition⁵³ a large

⁵² Rüppel, 'Neue Wirbelthiere von Abyssinien,' 1835-40; 'Mammif.,' s. 39, pl. xiv. There is a specimen of this fine animal in the British

Museum.

⁵³ Even Pallas admits this; see 'Act. Acad. St. Petersburg,' 1780, p. 93.