

its origin, said, "Had I not seen I was shoeing a horse, I should have thought I was shoeing a donkey."

With respect to the varieties of our domesticated animals, many similar and well-authenticated facts have been published,¹⁵² and others have been communicated to me, plainly showing the influence of the first male on the progeny subsequently borne by the mother to other males. It will suffice to give a single instance, recorded in the 'Philosophical Transactions,' in a paper following that by Lord Morton: Mr. Giles put a sow of Lord Western's black and white Essex breed to a wild boar of a deep chesnut colour; and the "pigs produced partook in appearance of both boar and sow, but in some the chesnut colour of the boar strongly prevailed." After the boar had long been dead, the sow was put to a boar of her own black and white breed—a kind

¹⁵² Dr. Alex. Harvey on 'A remarkable Effect of Cross-breeding,' 1851. On the 'Physiology of Breeding,' by Mr. Reginald Orton, 1855. 'Intermarriage,' by Alex. Walker, 1837. 'L'Hérédité Naturelle,' by Dr. Prosper Lucas, tom. ii. p. 58. Mr. W. Sedgwick in 'British and Foreign Medico-Chirurgical Review,' 1863, July, p. 183. Bronn, in his 'Geschichte der Natur,' 1843, B. ii. s. 127, has collected several cases with respect to mares, sows, and dogs. Mr. W. C. L. Martin ('History of the Dog,' 1845, p. 104) says he can personally vouch for the influence of the male parent on subsequent litters by other dogs. A French poet, Jacques Savary, who wrote in 1665 on dogs, was aware of this singular fact. Dr. Bowerbank has given us the following striking case:—A black, hairless Barbary bitch was first accidentally impregnated by a mongrel spaniel with long brown hair, and she produced five puppies, three of which were hairless and two covered with *short* brown hair. The next time she was put to a black, hairless Barbary dog; "but the mischief had been implanted in the mother, and again about half the litter looked like pure Barbarys, and the other

half like the *short*-haired progeny of the first father." I have given in the text one case with pigs; an equally striking one has been recently published in Germany, 'Illust. Landwirth. Zeitung,' 1868, Nov. 17, p. 143. It is worth notice that farmers in S. Brazil (as I hear from Fritz Müller), and at the C. of Good Hope (as I have heard from two trustworthy persons) are convinced that mares which have once borne mules, when subsequently put to horses, are extremely liable to produce colts, striped like a mule. Dr. Wilckens, of Pogarth, gives ('Jahrbuch Landwirthschaft,' ii. 1869, p. 325) a striking and analogous case. A merino ram, having two small lappets or flaps of skin on the neck, was in the winter of 1861–62 put to several Merino ewes, all of whom bore lambs with similar flaps on their necks. The ram was killed in the spring of 1862, and subsequently to his death the ewes were put to other Merino rams, and in 1863 to Southdown rams, none of whom ever have neck lappets: nevertheless, even as long afterwards as 1867, several of these ewes produced lambs bearing these appendages.