

times in England,<sup>27</sup> together with training, have made him a very different animal from his parent-stocks. As a writer in India, who evidently knows the pure Arab well, asks, who now, "looking at our present breed of race-horses, could have conceived that they were the result of the union of the Arab horse and African mare?" The improvement is so marked that in running for the Goodwood Cup "the first descendants of Arabian, Turkish, and Persian horses, are allowed a discount of 18 lbs. weight; and when both parents are of these countries a discount of 36 lbs."<sup>28</sup> It is notorious that the Arabs have long been as careful about the pedigree of their horses as we are, and this implies great and continued care in breeding. Seeing what has been done in England by careful breeding, can we doubt that the Arabs must likewise have produced during the course of centuries a marked effect on the qualities of their horses? But we may go much farther back in time, for in the Bible we hear of studs carefully kept for breeding, and of horses imported at high prices from various countries.<sup>29</sup> We may therefore conclude that, whether or not the various existing breeds of the horse have proceeded from one or more aboriginal stocks, yet that a great amount of change has resulted from the direct action of the conditions of life, and probably a still greater amount from the long-continued selection by man of slight individual differences.

With several domesticated quadrupeds and birds, certain coloured marks are either strongly inherited or tend to re-appear after having been lost for a long time. As this subject will hereafter be seen to be of importance, I will give a full account of the colouring of horses. All English breeds,

<sup>27</sup> See the evidence on this head in 'Land and Water,' May 2nd, 1868.

<sup>28</sup> Prof. Low, 'Domesticated Animals,' p. 546. With respect to the writer in India, see 'India Sporting Review,' vol. ii. p. 181. As Lawrence has remarked ('The Horse,' p. 9), "perhaps no instance has ever occurred of a three-part bred horse (*i.e.* a horse, one of whose grandparents was of impure blood) saving his dis-

tance in running two miles with thoroughbred racers." Some few instances are on record of seven-eighths racers having been successful.

<sup>29</sup> Prof. Gervais (in his 'Hist. Nat. Mamm.,' tom. ii. p. 144) has collected many facts on this head. For instance, Solomon (Kings, B. i. ch. x. v. 28) bought horses in Egypt at a high price.