

who has given a table of the average period of their dentition, which proves that there is a difference of no less than six months in the appearance of the permanent incisors. The period of gestation, from observations made by Tessier on 1131 cows, varies to the extent of eighty-one days; and what is more interesting, M. Lefour affirms "that the period of gestation is longer in the large German cattle than in the smaller breeds."⁵⁸ With respect to the period of conception, it seems certain that Alderney and Zetland cows often become pregnant earlier than other breeds.⁵⁹ Lastly, as four fully developed mammæ is a generic character in the genus *Bos*,⁶⁰ it is worth notice that with our domestic cows the two rudimentary mammæ often become fairly well developed and yield milk.

As numerous breeds are generally found only in long-civilized countries, it may be well to show that in some countries inhabited by barbarous races, who are frequently at war with each other, and therefore have little free communication, several distinct breeds of cattle now exist or formerly existed. At the Cape of Good Hope Leguat observed, in the year 1720, three kinds.⁶¹ At the present day various travellers have noticed the differences in the breeds in Southern Africa. Sir Andrew Smith several years ago remarked to me that the cattle possessed by the different tribes of Caffres, though living near each other under the same latitude and in the same kind of country, yet differed, and he expressed much surprise at the fact. Mr. Andersson has described⁶² the Damara, Bechuana, and Namaqua cattle; and he informs me in a letter that the cattle north of Lake Ngami are likewise different, as Mr. Galton has heard is also

⁵⁸ 'Ann. Agricult. France,' April, 1837, as quoted in 'The Veterinary,' vol. xii. p. 725. I quote Tessier's observations from Youatt on Cattle, p. 527.

⁵⁹ 'The Veterinary,' vol. viii. p. 681, and vol. x. p. 268. Low's 'Domest. Animals, &c.,' p. 297.

⁶⁰ Mr. Ogleby, in 'Proc. Zoolog. Soc.,' 1836, p. 138, and 1840, p. 4. Quatrefages quotes Philippi ('Revue

des Cours Scientifiques,' Feb. 12, 1688, p. 657), that the cattle of Piacentino have thirteen dorsal vertebræ and ribs in the place of the ordinary number of twelve.

⁶¹ Leguat's Voyage, quoted by Vasey in his 'Delineations of the Ox-tribe,' p. 132.

⁶² 'Travels in South Africa,' pp. 317, 336.