

northern breeds are specifically distinct from the native dogs which flourish in India. The same remark may be made with respect to different breeds of sheep, of which, according to Youatt,⁴⁵ not one brought "from a torrid climate lasts out the second year," in the Zoological Gardens. But sheep are capable of some degree of acclimatisation, for Merino sheep bred at the Cape of Good Hope have been found far better adapted for India than those imported from England.⁴⁶ It is almost certain that all the breeds of the fowl are descended from one species; but the Spanish breed, which there is good reason to believe originated near the Mediterranean,⁴⁷ though so fine and vigorous in England, suffers more from frost than any other breed. The Arrindy silk moth introduced from Bengal, and the Ailanthus moth from the temperate province of Shan Tung, in China, belong to the same species, as we may infer from their identity in the caterpillar, cocoon, and mature states;⁴⁸ yet they differ much in constitution: the Indian form "will flourish only in warm latitudes," the other is quite hardy and withstands cold and rain.

Plants are more strictly adapted to climate than are animals. The latter when domesticated withstand such great diversities of climate, that we find nearly the same species in tropical and temperate countries; whilst the cultivated plants are widely dissimilar. Hence a larger field is open for inquiry in regard to the acclimatisation of plants than of animals. It is no exaggeration to say that with almost every plant which has long been cultivated, varieties exist which are endowed with constitutions fitted for very different climates; I will select only a few of the more striking cases, as it would be tedious to give all. In North America numerous fruit-trees have been raised, and in horticultural publications,—for instance, in that by Downing,—lists are given of the varieties which are best able to withstand the severe climate of the northern States and Canada. Many American varieties of the pear, plum, and peach are excellent in their own country, but until recently, hardly one was known that succeeded in England; and with apples,⁴⁹ not one succeeds. Though the American varieties can withstand a severer winter than ours, the

⁴⁵ Youatt on Sheep, 1838, p. 491.

⁴⁶ Royle, 'Prod. Resources of India,' p. 153.

⁴⁷ Tegetmeier, 'Poultry Book,' 1866, p. 102.

⁴⁸ Dr. R. Paterson, in a paper com-

municated to Bot. Soc. of Canada, quoted in the 'Reader,' 1863, Nov 13th.

⁴⁹ See remarks by Editor in 'Gard. Chronicle,' 1848, p. 5.