

favourable for the work; and difficulty in pairing, as with cats, prevents the formation of distinct breeds. On nearly the same principle the cattle of the small island of Jersey have been improved in their milking qualities "with a rapidity that could not have been obtained in a widely extended country like France."<sup>41</sup> Although free crossing is a danger on the one side which every one can see, too close interbreeding is a hidden danger on the other side. Unfavourable conditions of life overrule the power of selection. Our improved heavy breeds of cattle and sheep could not have been formed on mountainous pastures; nor could dray-horses have been raised on a barren and inhospitable land, such as the Falkland Islands, where even the light horses of La Plata rapidly decrease in size. It seems impossible to preserve several English breeds of sheep in France; for as soon as the lambs are weaned their vigour decays as the heat of the summer increases:<sup>42</sup> it would be impossible to give great length of wool to sheep within the tropics; yet selection has kept the Merino breed nearly true under diversified and unfavourable conditions. The power of selection is so great, that breeds of the dog, sheep, and poultry, of the largest and smallest size, long and short beaked pigeons, and other breeds with opposite characters, have had their characteristic qualities augmented, though treated in every way alike, being exposed to the same climate and fed on the same food. Selection, however, is either checked or favoured by the effects of use or habit. Our wonderfully-improved pigs could never have been formed if they had been forced to search for their own food; the English race-horse and greyhound could not have been improved up to their present high standard of excellence without constant training.

As conspicuous deviations of structure occur rarely, the improvement of each breed is generally the result of the selection of slight individual differences. Hence the closest attention, the sharpest powers of observation, and indomitable perseverance, are indispensable. It is, also, highly important

<sup>41</sup> Col. Le Couteur, 'Journal Roy. Agricult. Soc.,' vol. iv. p. 43.

<sup>42</sup> Malingié - Nouel, Journal R

Agricult. Soc.,' vol. xiv., 1853, pp. 215, 217.