

formerly shown, no variety is quite uniform in character. The same thing, as I am assured by nurserymen, would take place in our flower-gardens, if the seed of the different varieties were not separately saved. When the eggs of the wild and tame duck are hatched together, the young wild ducks almost invariably perish, from being of smaller size and not getting their fair share of food.³⁹

Facts in sufficient number have now been given showing that natural selection often checks, but occasionally favours, man's power of selection. These facts teach us, in addition, a valuable lesson, namely, that we ought to be extremely cautious in judging what characters are of importance in a state of nature to animals and plants, which have to struggle for existence from the hour of their birth to that of their death,—their existence depending on conditions, about which we are profoundly ignorant.

Circumstances favourable to Selection by Man.

The possibility of selection rests on variability, and this, as we shall see in the following chapters, mainly depends on changed conditions of life, but is governed by infinitely complex and unknown laws. Domestication, even when long continued, occasionally causes but a small amount of variability, as in the case of the goose and turkey. The slight differences, however, which characterise each individual animal and plant would in most, probably in all, cases suffice for the production of distinct races through careful and prolonged selection. We see what selection, though acting on mere individual differences, can effect when families of cattle, sheep, pigeons, &c., of the same race, have been separately bred during a number of years by different men without any wish on their part to modify the breed. We see the same fact in the difference between hounds bred for hunting in different districts,⁴⁰ and in many other such cases.

In order that selection should produce any result, it is manifest that the crossing of distinct races must be prevented; hence facility in pairing, as with the pigeon, is highly

³⁹ Mr. Hewitt and others, in 'Journal of Hort.,' 1862, p. 773.

⁴⁰ 'Encyclop. of Rural Sports,' p. 405.