

as Turbits and short-faced Tumblers. The remaining domestic forms might have been included, in the same genus with the wild rock-pigeon.

*Individual Variability; variations of a remarkable nature.*

The differences which we have as yet considered are characteristic of distinct breeds; but there are other differences, either confined to individual birds, or often observed in certain breeds but not characteristic of them. These individual differences are of importance, as they might in most cases be secured and accumulated by man's power of selection and thus an existing breed might be greatly modified or a new one formed. Fanciers notice and select only those slight differences which are externally visible; but the whole organisation is so tied together by correlation of growth, that a change in one part is frequently accompanied by other changes. For our purpose, modifications of all kinds are equally important, and if affecting a part which does not commonly vary, are of more importance than a modification in some conspicuous part. At the present day any visible deviation of character in a well-established breed is rejected as a blemish; but it by no means follows that at an early period, before well-marked breeds had been formed, such deviations would have been rejected; on the contrary, they would have been eagerly preserved as presenting a novelty, and would then have been slowly augmented, as we shall hereafter more clearly see, by the process of unconscious selection.

I have made numerous measurements of the various parts of the body in the several breeds, and have hardly ever found them quite the same in birds of the same breed,—the differences being greater than we commonly meet with in wild species within the same district. To begin with the primary feathers of the wing and tail; but I must first mention, as some readers may not be aware of the fact, that the number of the primary wing and tail-feathers in wild birds is generally constant, and characterises, not only whole genera, but even whole families. When the tail-feathers are unusually numerous, as for instance in the swan, they are apt to be variable in number; but this does not apply to the several species and genera of the Columbidae, which never (as far as I can hear) have less than twelve or more than sixteen tail-feathers; and these numbers cha-