intervals of time, and likewise in the several striking cases given of analogous or parallel variations. Although some of these latter cases are due to reversion, others cannot thus be accounted for.

From the indirect action of changed conditions on the organisation, owing to the reproductive organs being thus affected—from the direct action of such conditions, and these will cause the individuals of the same species either to vary in the same manner, or differently in accordance with slight differences in their constitution—from the effects of the increased or decreased use of parts—and from correlation,—the variability of our domesticated productions is complicated to an extreme degree. The whole organisation becomes slightly plastic. Although each modification must have its own exciting cause, and though each is subjected to law, yet we can so rarely trace the precise relation between cause and effect, that we are tempted to speak of variations as if they arose spontaneously. We may even call them accidental, but this must be only in the sense in which we say that a fragment of rock dropped from a height owes its shape to accident.

It may be worth while briefly to consider the result of the exposure to unnatural conditions of a large number of animals of the same species and allowed to cross freely with no selection of any kind, and afterwards to consider the result when selection is brought into play. Let us suppose that 500 wild rock-pigeons were confined in their native land in an aviary and fed in the same manner as pigeons usually are; and that they were not allowed to increase in number. As pigeons propagate so rapidly, I suppose that a thousand or fifteen hundred birds would have to be annually killed. After several generations had been thus reared, we may feel sure that some of the young birds would vary, and the variations would tend to be inherited; for at the present day slight deviations of structure often occur and are inherited. It would be tedious even to enumerate the multitude of points which still go on varying or have recently varied. Many variations would occur in correla-