

alone. By following with perseverance this plan during three or four successive seasons, a distinct and fixed variety can generally be secured.

Finally, the facts given in this chapter prove in how close and remarkable a manner the germ of a fertilised seed and the small cellular mass forming a bud, resemble each other in all their functions—in their power of inheritance with occasional reversion,—and in their capacity for variation of the same general nature, in obedience to the same laws. This resemblance, or rather identity of character, is shown in the most striking manner by the fact that the cellular tissue of one species or variety, when budded or grafted on another, may give rise to a bud having an intermediate character. We have seen that variability does not depend on sexual generation, though much more frequently its concomitant than of bud reproduction. We have seen that bud-variability is not solely dependent on reversion or atavism to long-lost characters, or to those formerly acquired from a cross, but appears often to be spontaneous. But when we ask ourselves what is the cause of any particular bud-variation, we are lost in doubt, being driven in some cases to look to the direct action of the external conditions of life as sufficient, and in other cases to feel a profound conviction that these have played a quite subordinate part, of not more importance than the nature of the spark which ignites a mass of combustible matter.