

same parentage produced at the same time. These twin plants "were closely coherent, below the two pairs of cotyledon-leaves, "into a single cylindrical stem, so that they had subsequently the "appearance of being branches on one trunk." Had the two united stems grown up to their full height, instead of dying, a curiously mixed hybrid would have been produced. A mongrel melon described by Sageret¹²⁶ may perhaps have thus originated; for the two main branches, which arose from two cotyledon-buds, produced very different fruit,—on the one branch like that of the paternal variety, and on the other branch like to a certain extent that of the maternal variety, the melon of China.

In most of these cases of crossed varieties, and in some of the cases of crossed species, the colours proper to both parents appeared in the seedlings, as soon as they first flowered, in the form of stripes or larger segments, or as whole flowers or fruit of different kinds borne on the same plant; and in this case the appearance of the two colours cannot strictly be said to be due to reversion, but to some incapacity of fusion. When, however, the later flowers or fruit produced during the same season, or during a succeeding year or generation, become striped or half-and-half, &c., the segregation of the two colours is strictly a case of reversion by bud-variation. Whether all the many recorded cases of striped flowers and fruit are due to previous hybridisation and reversion is by no means clear, for instance with peaches and nectarines, moss-roses, &c. In a future chapter I shall show that, with animals of crossed parentage, the same individual has been known to change its character during growth, and to revert to one of its parents which it did not at first resemble. Finally, from the various facts now given, there can be no doubt that the same individual plant, whether a hybrid or a mongrel, sometimes returns in its leaves, flowers, and fruit, either wholly or by segments, to both parent-forms.

On the direct or immediate action of the male element on the mother form.—Another remarkable class of facts must be here considered, firstly, because they have a high physiological importance, and secondly, because they have been supposed to account for some cases of bud-variation. I refer to the direct

¹²⁶ 'Pomologie Physiolog.,' 1830, p. 126.