

within this same group, the peach has often varied by buds, whilst the apple and pear, both grafted trees extensively cultivated, have afforded, as far as I can ascertain, extremely few instances of bud-variation.

The law of analogous variation holds good with varieties produced by buds, as with those produced from seed: more than one kind of rose has sported into a moss-rose; more than one kind of camellia has assumed an hexagonal form; and at least seven or eight varieties of the peach have produced nectarines.

The laws of inheritance seem to be nearly the same with seminal and bud-varieties. We know how commonly reversion comes into play with both, and it may affect the whole, or only segments of a leaf, flower, or fruit. When the tendency to reversion affects many buds on the same tree, it becomes covered with different kinds of leaves, flowers, or fruit; but there is reason to believe that such fluctuating varieties have generally arisen from seed. It is well known that, out of a number of seedling varieties, some transmit their character much more truly by seed than others; so with bud-varieties, some retain their character by successive buds more truly than others; of which instances have been given with two kinds of variegated *Euonymus* and with certain kinds of tulips and pelargoniums. Notwithstanding the sudden production of bud-varieties, the characters thus acquired are sometimes capable of transmission by seminal reproduction: Mr. Rivers has found that moss-roses generally reproduce themselves by seed; and the mossy character has been transferred by crossing from one species of rose to another. The Boston nectarine, which appeared as a bud-variation, produced by seed a closely allied nectarine. On the other hand, seedlings from some bud-variations have proved variable to an extreme degree.¹⁵⁷ We have also heard, on the authority of Mr. Salter, that seeds taken from a branch with leaves variegated through bud-variation, transmit this character very feebly; whilst many plants, which were variegated as seedlings, transmit variegation to a large proportion of their progeny.

Although I have been able to collect a good many cases of

¹⁵⁷ Carrière, 'Production des Variétés,' p. 39.