Two explanations have been suggested to account for these conversions. First, that the parent trees have been in every case hybrids[53] between the peach and nectarine, and have reverted by bud-variation or by seed to one of their pure parent forms. This view in itself is not very improbable; for the Mountaineer peach, which was raised by Knight from the red nutmeg-peach by pollen of the violette hâtive nectarine,[54] produces peaches, but these are said *sometimes* to partake of the smoothness and flavour of the nectarine. But let it be observed that in the previous list no less than six well-known varieties and several unnamed varieties of the peach have once suddenly produced perfect nectarines by bud variation: and it would be an extremely rash supposition that all these varieties of the peach, which have been cultivated for years in many districts, and which show not a vestige of a mixed parentage, are, nevertheless, hybrids. A second explanation is, that the fruit of the peach has been directly affected by the pollen of the nectarine: although this certainly is possible, it cannot here apply; for we have not a shadow of evidence that a branch which has borne fruit directly affected by foreign pollen is so profoundly modified as afterwards to produce buds which continue to yield fruit of the new and modified form. Now it is known that when a bud on a peach-tree has once borne a nectarine the same branch has in several instances gone on during successive years producing nectarines. The Carclew nectarine, on the other hand, first produced half-and-half fruit, and subsequently pure peaches. Hence we may confidently accept the common view that the nectarine is a variety of the peach, which may be produced either by bud-variation or from seed. In the following chapter many analogous cases of bud-variation will be given.

The varieties of the peach and the nectarine run in parallel lines. In both classes the kinds differ from each other in the flesh of the fruit being white, red, or yellow; in being clingstones or freestones; in the flowers being large or small, with certain other characteristic differences; and in the leaves being serrated without glands, or crenated and furnished with globose or reniform glands.[55] We can hardly account for this parallelism by supposing that each variety of the nectarine is descended from a corresponding variety of the peach; for though our nectarines are certainly the descendants of several kinds of peaches, yet a large number are the descendants of other nectarines, and they vary so much when thus reproduced that we can scarcely admit the above explanation.

The varieties of the peach have largely increased in number since the Christian era, when from two to five varieties were known;[56] and the nectarine was unknown. At the present time,

[53] Alph. De Candolle, 'Géograph. Bot., p. 886.

[54] Thompson, in Loudon's 'Encyclop. of Gardening,' p. 911.

[55] 'Catalogue of Fruit in Garden of Hort. Soc.,' 1842, p. 105.

[56] Dr. A. Targioni-Tozzetti, 'Journal Hort. Soc.,' vol. ix. p. 167. Alph. de Candolle, 'Géograph. Bot.,' p 885.