## CHAPTER X.

PLANTS continued - FRUITS - ORNAMENTAL TREES -- FLOWERS.

FRUITS—GRAPES—VARY IN ODD AND TRIFLING PARTICULARS.—MULBERRY—THE ORANGE GROUP—SINGULAR RESULTS FROM CROSSING.—
PEACH AND NECTARINE—BUD VARIATION—ANALOGOUS VARIATION—
RELATION TO THE ALMOND.—APRICOT.—PLUMS—VARIATION IN
THEIR STONES.—CHERRIES—SINGULAR VARIETIES OF.—APPLE.—
PEAR.—STRAWBERRY—INTERBLENDING OF THE ORIGINAL FORMS.—GOOSEBERRY—STEADY INCREASE IN SIZE OF THE FRUIT—VARIETIES OF.—WALNUT.—NUT.—CUCURBITACEOUS PLANTS—WONDERFUL VARIATION OF.

ORNAMENTAL TREES—THEIR VARIATION IN DEGREE AND KIND—ASH-TREE—SCOTCH-FIR—HAWTHORN,

FLOWERS—MULTIPLE ORIGIN OF MANY KINDS—VARIATION IN CONSTITUTIONAL PECULIARITIES—KIND OF VARIATION.—ROSES—SEVERAL SPECIES CULTIVATED. — PANSY. — DAHLIA. — HYACINTH —HISTORY AND VARIATION OF.

The Vine (Vitis vinifera).—The best authorities consider all our grapes as the descendants of one species which now grows wild in western Asia, which grew wild during the Bronze age in Italy,¹ and which has recently been found fossil in a tufaceous deposit in the south, of France.² Some authors, however, entertain much doubt about the single parentage of our cultivated varieties, owing to the number of semi-wild forms found in Southern Europe, especially as described by Clemente³ in a forest in Spain; but as the grape sows itself freely in Southern Europe, and as several of the chief kinds transmit their characters by seed,⁴ whilst others are extremely variable, the existence of many different escaped forms could hardly fail to occur in countries where this plant has been cultivated from the remotest antiquity. That the vine varies much when propagated by seed, we may infer from the largely increased number of varieties since the earlier historical records. New hot-house varietics are

<sup>&</sup>lt;sup>1</sup> Heer, 'Pflanzen der Pfahlbauten,' 1866, s. 28.

<sup>&</sup>lt;sup>2</sup> Alph. De Candolle, 'Géograph. Bot.,' p. 872; Dr. A. Targioni-Tozzetti, in 'Jour. Hort. Soc.,' vol ix. p. 133. For the fossil vine found by Dr. G. Planchon, see 'Nat. Hist. Review,' 1865, April, p. 224. See also the valuable works of M. de

Saporta on the 'Tertiary Plants of France.'

<sup>3</sup> Godron, 'De l'Espèce,' tom. ii. p.

<sup>&</sup>lt;sup>4</sup> See an account of M. Vibert's experiments, by Alex. Jordan, in 'Mém. de l'Acad. de Lyon,' tom. ii. 1852, p. 108.