

verted into cornucopias, which are enclosed within one another and resemble the true petals. In hose-in-hose flowers the sepals mock the petals. In some cases the flowers and leaves vary together in tint: in all the varieties of the common pea, which have purple flowers, a purple mark may be seen on the stipules.

M. Faivre states that with the varieties of *Primula sinensis* the colour of the flower is evidently correlated with the colour of the under side of the leaves; and he adds that the varieties with fimbriated flowers almost always have voluminous, balloon-like calyces.<sup>26</sup> With other plants the leaves and fruit or seeds vary together in colour, as in a curious pale-leaved variety of the sycamore, which has recently been described in France,<sup>27</sup> and as in the purple-leaved hazel, in which the leaves, the husk of the nut, and the pellicle round the kernel are all coloured purple.<sup>28</sup> Pomologists can predict to a certain extent, from the size and appearance of the leaves of their seedlings, the probable nature of the fruit; for, as Van Mons remarks,<sup>29</sup> variations in the leaves are generally accompanied by some modification in the flower, and consequently in the fruit. In the Serpent melon, which has a narrow tortuous fruit above a yard in length, the stem of the plant, the peduncle of the female flower, and the middle lobe of the leaf, are all elongated in a remarkable manner. On the other hand, several varieties of Cucurbita, which have dwarfed stems, all produce, as Naudin remarks, leaves of the same peculiar shape. Mr. G. Maw informs me that all the varieties of the scarlet Pelargoniums which have contracted or imperfect leaves have contracted flowers: the difference between "Brilliant" and its parent "Tom Thumb" is a good instance of this. It may be suspected that the curious case described by Risso,<sup>30</sup> of a variety of the Orange which produces on the young shoots rounded leaves with winged petioles, and afterwards elongated leaves on long but wingless petioles, is connected with the

<sup>26</sup> 'Revue des Cours Scientifiques,' June 5, 1869, p. 430.

<sup>27</sup> 'Gardener's Chron.,' 1864, p. 1202.

<sup>28</sup> Verlot gives several other in-

stances, 'Des Variétés,' 1865, p. 72.

<sup>29</sup> 'Arbres Fruitières,' 1836, tom. ii. pp. 204, 226.

<sup>30</sup> 'Annales du Muséum,' tom. xx. p. 188.