

remarkable change in form and nature which the fruit undergoes during its development.

In the following instance we have the colour and the form of the petals apparently correlated, and both dependent on the nature of the season. An observer, skilled in the subject, writes,<sup>31</sup> "I noticed, during the year 1842, that every "Dahlia of which the colour had any tendency to scarlet, "was deeply notched—indeed, to so great an extent as to "give the petals the appearance of a saw; the indentures "were, in some instances, more than a quarter of an inch "deep." Again, Dahlias which have their petals tipped with a different colour from the rest of the flower are very inconstant, and during certain years some, or even all the flowers, become uniformly coloured; and it has been observed with several varieties,<sup>32</sup> that when this happens the petals grow much elongated and lose their proper shape. This, however, may be due to reversion, both in colour and form, to the aboriginal species.

In this discussion on correlation, we have hitherto treated of cases in which we can partly understand the bond of connection; but I will now give cases in which we cannot even conjecture, or can only very obscurely see, the nature of the bond. Isidore Geoffroy Saint-Hilaire, in his work on Monstrosities, insists,<sup>33</sup> "que certaines anomalies "coexistent rarement entr'elles, d'autres fréquemment, d'autres "enfin presque constamment, malgré la différence très-grande "de leur nature, et quoiqu'elles puissent paraître *complètement* "indépendantes les unes des autres." We see something analogous in certain diseases: thus in a rare affection of the renal capsules (of which the functions are unknown), the skin becomes bronzed; and in hereditary syphilis, as I hear from Sir J. Paget, both the milk and the second teeth assume a peculiar and characteristic form. Professor Rolleston, also, informs me that the incisor teeth are sometimes

<sup>31</sup> 'Gardener's Chron.,' 1843, p. 877.

<sup>32</sup> Ibid., 1845, p. 102.

<sup>33</sup> 'Hist. des Anomalies,' tom. iii.

p. 402. See also M. Camille Dareste, 'Recherches sur les Conditions,' &c., 1863, pp. 16, 48.