I have seen the pollen-mass of an Ophrys, which is a very complex structure, developed in the edge of an upper petal. The segments of the calyx of the common pea have been observed partially converted into carpels, including ovules, and with their tips converted into stigmas. Mr. Salter and Dr. Maxwell Masters have found pollen within the ovules of the passion-flower and of the rose. Buds may be developed in the most unnatural positions, as on the petal of a flower. Numerous analogous facts could be given.[68]

I do not know how physiologists look at such facts as the foregoing. According to the doctrine of pangenesis, the gemmules of the transposed organs become developed in the wrong place, from uniting with wrong cells or aggregates of cells during their nascent state; and this would follow from a slight modification in their elective affinities. Nor ought we to feel much surprise at the affinities of cells and gemmules varying, when we remember the many curious cases given in the seventeenth chapter, of plants which absolutely refuse to be fertilised by their own pollen, though abundantly fertile with that of any other individual of the same species, and in some cases only with that of a distinct species. It is manifest that the sexual elective affinities of such plants—to use the term employed by Gärtner—have been modified. As the cells of adjoining or homologous parts will have nearly the same nature, they will be particularly liable to acquire by variation each other's elective affinities; and we can thus understand to a certain extent such cases as a crowd of horns on the heads of certain sheep, of several spurs on the legs of fowls, hackle-like feathers on the heads of the males of other fowls, and with the pigeon wing-like feathers on their legs and membrane between their toes, for the leg is the homologue of the wing. As all the organs of plants are homologous and spring from a common axis, it is natural that they should be eminently liable to transposition. It ought to be observed that when any compound part,

[68] Moquin-Tandon, 'Tératologie Vég.,' 1841, pp. 218, 220, 353. For the case of the pea, *see* 'Gardener's Chron.,' 1866, p. 897. With respect to pollen within ovules, *see* Dr. Masters in 'Science Review,' Oct. 1873, p. 369. The Rev. J. M. Berkeley describes a bud developed on a petal of a Clarkia, in 'Gard Chronicle,' April 28, 1866.