

(*Aquilegia vulgaris*) some of the stamens are converted into petals having the shape of nectaries, one neatly fitting into the other; but in one variety they are converted into simple petals.¹⁷¹ In the "hose in hose" primulæ, the calyx becomes brightly coloured and enlarged so as to resemble a corolla; and Mr. W. Wooler informs me that this peculiarity is transmitted; for he crossed a common polyanthus with one having a coloured calyx,¹⁷² and some of the seedlings inherited the coloured calyx during at least six generations. In the "hen-and-chicken" daisy the main flower is surrounded by a brood of small flowers developed from buds in the axils of the scales of the involucre. A wonderful poppy has been described, in which the stamens are converted into pistils; and so strictly was this peculiarity inherited that, out of 154 seedlings, one alone reverted to the ordinary and common type.¹⁷³ Of the cock's-comb (*Celosia cristata*), which is an annual, there are several races in which the flower-stem is wonderfully "fasciated" or compressed; and one has been exhibited¹⁷⁴ actually eighteen inches in breadth. Peloric races of *Gloxinia speciosa* and *Antirrhinum majus* can be propagated by seed, and they differ in a wonderful manner from the typical form both in structure and appearance.

A much more remarkable modification has been recorded by Sir William and Dr. Hooker¹⁷⁵ in *Begonia frigida*. This plant properly produces male and female flowers on the same fascicles; and in the female flowers the perianth is superior; but a plant at Kew produced, besides the ordinary flowers, others which graduated towards a perfect hermaphrodite structure; and in these flowers the perianth was inferior. To show the importance of this modification under a classificatory point of view, I may quote what Prof. Harvey says, namely, that had it "occurred in a state of nature, and had a botanist collected a plant with such flowers, he would not only have placed it in a distinct genus from *Begonia*, but would probably have considered it as the type of a new natural order." This modification cannot in one sense be considered as a monstrosity, for analogous structures naturally occur in other orders, as with Saxifragæ and Aristolochiaceæ. The interest of the case is largely added to by Mr. C. W. Crocker's observation that seedlings from the *normal* flowers produced plants which bore, in about the same proportion as the parent-plant, hermaphrodite flowers having inferior perianths. The hermaphrodite flowers fertilised with their own pollen were sterile.

If florists had attended to, selected, and propagated by seed other

¹⁷¹ Moquin-Tandon, 'Eléments de Tératologie,' 1841, p. 213.

¹⁷² See also 'Cottage Gardener,' 1860, p. 133.

¹⁷³ Quoted by Alph. de Candolle, 'Bibl. Univ.,' November 1862, p. 58.

¹⁷⁴ Knight, 'Transact. Hort. Soc.,'

vol. iv. p. 322.

¹⁷⁵ 'Botanical Magazine,' tab. 5160, fig. 4; Dr. Hooker, in 'Gardener's Chron.,' 1860, p. 190; Prof. Harvey, in 'Gardener's Chron.,' 1860, p. 145; Mr. Crocker, in 'Gardener's Chron.,' 1861, p. 1092.