

better explanations, and even if there is some truth in the principle, it is peculiarly liable to abuse in its applications. Dr. Gray follows Brown in believing that the Gynoecium of Brassicaceae consists of only two carpels, a view which has been already sufficiently commented upon. Though particular in describing the glands, and employing them as characters of genera and species, he does not refer to them in judging of the symmetry of the order, and he relies on the arguments of Moquin Tandon and Webb, to prove that the six stamens represent one circle of four. These arguments then I must review:—

1st. In some species, as *Clypeola cyclodonteæ*, the filaments of the solitary stamens are furnished with two teeth, one on each side, whilst those of the double stamens have but one on their outer side. If we join these two stamens together, so that they form but one, a bidentate filament will result entirely similar to the solitary stamens. This is without doubt plausible, but we must recollect that the two anthers of a stamen represent the two sides of the lamina of the leaf, their presence therefore shows the completeness of the organ, whilst the tooth-like projection on the filament is only representative of a wing to the petiole, or an angle at the bottom of the leaf; since then each of the pairs of stamens has its two anthers, we must conclude that the development of the tooth at the inner side in the pair of stamens is prevented by the two organs being so near to each other, which causes a pressure unfavourable to such development.

2nd. In other species a longer or shorter portion of the filament remains simple, thus in *Sterigma tomentosum* the division takes place as far as the middle; and in *Anchonium Billardieri* in a third part only of the upper portion of the filament. Here the position of the longer stamens, double only in their upper portion, is exactly the same as that of the solitary stamens—these facts I reply afford no argument, because they are easily explained by partial coherence (an exceedingly common occurrence) of organs really distinct, and the two anthers tend to prove this distinctness.

3. In *Vella pseudo-cytisus* we find in the place of the double stamens, a single one, its filament being frequently rather broader, sometimes divided only at its summit, sometimes entirely undivided, but bearing in that case an anther wholly or partially gemminated. I have not examined this case, but the description indicates a more complete coherence of two organs. Instances however which occur, of only one stamen being found in the place of the pair, are only cases in which that circle, as