

other set of protective or enveloping parts, usually of a more delicate texture, and more likely to be colored, called the *corolla*, and its parts *petals*; then a set of organs so transformed as for the midrid to become a simple support called the *filament*, the lateral expansion to be contracted into cells forming the *anther*, whilst the superficial cells of its infolded surface are specialised into sperm cells called *pollen*. These organs as a whole are called *androecium* and singly *stamens*. In the remaining circle the leaves are made to bear on their margin or at their base *germ* cells called *ovules*, this expanded portion of the leaf or of several such leaves united being the *ovarium*; the apical portion generally drawn out to some length, is the *style*, and the naked glandular tip is the *stigma*. The whole circle of these leaves is the *gynoecium*, individually they are *carpels*. As there are four distinct modifications of leafy organs, forming in typical examples as many circles, there is a manifest convenience in having a name for each circle as a whole and for the parts of each, besides any names required to designate special portions of each organ. I have adopted names from good authority using care in their selection. The chief thing to be observed is the use of the term *gynoecium* for the whole of the inner circle and *carpel* for each separate part. I have judged it necessary to reject entirely the Linnæan term *pistil*, because, the true theory of the structure of the flower not being then understood, he used the term, sometimes for the whole circle of carpels when so united as to seem a single organ; sometimes for each separate style where the ovarian portions of the carpels are united, but their styles distinct, and sometimes for each carpel where they remained entirely separate, the word is useful enough in reference to the Linnæan artificial system, but cannot be employed to express what is now known without being a source of confusion. It is much to be regretted that eminent teachers of the science will persevere in employing it, especially as the evil is greatly aggravated by attempts to give the term a new meaning or to persuade us that Linnæus employed it in accordance with our modern ideas.

2. Having considered what seems well established, respecting the origin of the flower and the nature of its parts, what first claims our notice is the variation in the number of circles.

We have mentioned four differing in kind, but we may have one, two, or three of these absent, and we may have them increased by the occurrence of many circles of one kind of organ. The difference is in the development of the axis of the flower, which varies from a single