

in the flowers, other characteristics fixed and invariable, which; no circumstance of soil or cultivation could alter. On these he seized; and according to these appearances he formed that elegant classification, which will be known by the name of the *Linneæan system*; while science remains an object of regard to the learned.

Botanists have divided all flowers into two classes termed simple flowers and compound flowers; but as this division is of little service to the beginner, the compound, being in general made up of a number of simple flowers; it is unnecessary to dwell long on this part of the subject. It is only requisite when giving a minute description of any plant, to mention any peculiar appearance which a compound flower exhibits and which is not observable in the simple flowers of which it is formed.

There are six principal parts in a flower which demand the attentive consideration of the Botanist. These are not all to be met with in every flower; but as they are very common and as some of them agree considered as essentially necessary to the propagation of plants, they merit close attention. They are 1st The *Empalement*, 2d The *Blossom*, 3d The *Chives*, 4th The *Pointals*, 5th The *seed vessel*, 6th The *seeds*. To these some writers have added other two parts called The *Honey-cup* and the *Receptacle*. But these are less frequently met with than the others, and form no essential character for classification.

The *Empalement*, or *Calyx* as it is termed in the language of Botany, is the name applied to all those little leaves or envelopes which surround the outside of the flower, and which Linneæus considers to be formed by a continuation of the outer bark of the Plant. It is commonly of a green colour; although not invariably so. Withering has enumerated seven different species of *Empalements*; but other writers on this subject have noticed only five and subdivided each of these into a number of varieties. Perhaps on a still nearer approach to simplifying the study, there will be found only four kinds of *Empalements* possessing sufficient distinctions to entitle them to be considered as different species.—The first is the cup called the *Perianthum* and which is that species of *Empalement* which immediately incloses the flower; and either includes one or more of them. The varieties of this kind of *Empalement*, are founded upon the differences observable in its form, upon its duration and on its mode of decay. When the cup is composed of only one leaf it is called *monophyllous*, but when formed of more than one it is said to be *Biphilous*, or *Triphilous* according to the number of leaves of which it consists. When the edge of it is notched, it is said to be *dentated* or *toothed*; when the notches extend half its length they are called *Fissures*.

Another variety of this species of *Empalement* is formed upon their duration. Some of them soon after the flower decays, wither and fall off the stalk in which case they are said to be *deciduous*. Others remain attached as long as the leaves when they are termed *persisting Empalements*. An example of the former is met with in the *Lime-tree*; and of the latter in the *Henbane*, &c. In some plants such as the *Strawberry* and the *Mallow*, the *Empalement* is composed of more