

than one row of leaves, when it is called *double*, and if these leaves be of unequal lengths and laid on in the form of tiles, it is said to be *imbricated*. The next species of Empalement is known by the name of the *Gluma* or *Husk*. And is distinguished from others by having its leaves, dry and semi transparent forming what is vulgarly termed *Chaff*. This kind is most commonly met with in the grasses, and not unfrequently encloses the chives and pointals, performing the office of the blossom. The varieties of the husk are distinguished from each other according to the number of leaves it is composed of. That denomination of Inflorescence which was described under the term Catkin belongs to the husk species of Empalements.

In some plants as the carrot, the Empalement is placed at the bottom of the flower stalk or at a distance from the flower, which forms a specific difference, from the Cup which always grows close to the flowers; and this in the language of the science is termed an *Involucrum*.

The last species of Empalement we shall notice here is termed a *Sheath* or *Spatha* from its fanciful resemblance to the Sheath of a sword. In most plants where this is met with it has been observed that it withers and falls off soon after the flower; and another peculiarity has been remarked in the flowers being commonly protruded from the side of it as observable in the Daffodil.

The maxim that nature has made nothing in vain is no where more strikingly, illustrated than in the science of Botany, as will be shown when we come to treat of the Theory of vegetation. It is here only necessary to remark that the Empalements of flowers are evidently designed to defend their tender parts from injuries during the time they are forming, and in the earlier stages of their growth. Situated immediately within the Empalement, and formed as Linnaeus imagines, by an expansion of the inner bark of the plant. We find the next part to be described, viz: the *Blossom* called among Botanists the *Corolla*. It is this part which exhibits all that beautiful diversity of colour observable in the vegetable world, and which, although liable to change by culture and other circumstances is nevertheless not without its use. The delicate beauty of the tints; and splendour of the colour exhibited by many flowers, was perhaps the first thing which drew the attention of men to study their structure, upon which rests all the knowledge of the science we are possessed of.

The marks which characterise the differences of varieties and species we observe among the blossoms are formed on two circumstances first the number of parts of which the blossom is composed, and second the shape and arrangement of these parts. The small coloured leaves which form the blossom are called *petals*, and when there is only one of them the flower is said to be *monopetalous* of two or more *dipetalous*, or *tripetalous* according to their number; and when that number is very great or indefinite as the in thistle, &c. they are called *Polypetalous*.

In observing the shape of the petals, with the view of distinguishing the varieties which depend upon it there are two parts to be considered. 1st. The *claw* or base of the petal by which it is attached to