

a distinguishing mark from any other flower in the same class and order.

We shall hereafter enumerate all the different Genera comprised in the British Flora as they stand in the classes and orders, with their descriptions: but it should be understood that in doing this the limits of this Pocket Compendium will not admit of going into the characters at full length.

We shall therefore content ourselves with describing them by their essential characters alone, *i. e.* those *particular marks* and forms of the parts of fructification, which distinguish them from the other allied genera.

The next SUBDIVISION, *i. e.*

THE SPECIES OF PLANTS,

is formed from the characters drawn either from the particular shape of the leaves, flowers, branches, roots, &c. &c. These we must also for the above reasons describe by their essential characters also.

It will however be necessary for the student to understand a little of terminology, as descriptive of the different parts which the species of plants are determined from; and by a little attention he will be enabled soon to find out the name of any plant he may meet with; as nothing more will be wanting than practical investigation, made by studying the plants in their places of growth, and comparing them with their written descriptions.

ROOT (*Radix*). This is generally considered that part of the plant which is under ground, and which draws nourishment from the earth, necessary to the plant's existence.

TRUNK (*Truncus*). This in its structure is very similar to the root; so much so indeed, that Linnæus has considered the stalk as a root above ground. And we find that the generality of stalks may by artificial modes be caused to throw out roots. Hence the mode of propagating plants by cuttings.

Under this head may be considered the following, *viz.*—

THE CAULIS. A stalk supporting both the leaves and fructification.

CULMUS (*Straw*). A stalk peculiar to the grasses and all kinds of grain.

STIPES. A kind of stalk peculiar to the Fungi. It is also used to signify the stem supporting the Ferns and Palms.

BRANCHES (*Rami*). An extension of the trunk. After the first year's growth they divide to considerable extent, and become larger and more spreading as the tree increases in growth.

LEAVES (*Folia*). These are defined to be fibrous and cellular, and to differ greatly in form and size: they are however mostly flat, and appear to be the same as the branches, only differing in structure. Leaves

are generally composed of the ligneous fibre, which is seen in numerous ramifications, and the Parenchyma, which is a fleshy or pulpy substance placed on each side and covering the above. This substance is generally tender, and parts from the ligneous fibre by maceration, leaving the skeleton of it behind. Leaves are both *simple* and *compound*.

SUPPORTS (Fulcra). These are usually attendant on the stalk, and are calculated to defend the plant from injury, and also to assist its growth. It consists of eight different kinds, viz.

BRACTEA. Leaves growing with the flower, as is seen in *Tilia*, Lime-tree.

PUBES. Hairs accompanying the plant in different parts; as on the seed-vessel in the Sweet Briar, *Rosa rubiginosa*; on the leaves, as in Dead Nettle, *Lamium*.

PEDUNCULUS. The foot-stalk of a flower.

STIPULÆ. Small leaves growing at the base of the petioles in certain plants.

CIRRHUS. A tendril or clasper by which the plant holds itself up; as in *Ivy*, &c.

ACULEI (Prickles). Small thorns fixed to the bark only, as in the Rose.

SPINE (Thorns). Rigid prickles which take their rise and are fixed in the wood: as in the Black Thorn, *Prunus spinosa*.

STIMULI. Hairs containing a sharp point, on which is placed an irritating fluid; as in the *Urtica urens*, Stinging Nettle.

PETIOLE (Petiolus). This is the stalk which connects the leaf with the wood. It contains two sets of sap-vessels: those which contain the ascending fluid (the common sap) are supposed to terminate, and those which take the returning fluid (the proper sap) are believed to commence, in the Petiole.

INFLORESCENCE. (The modes in which plants flower). Of these Linnaeus enumerates several different kinds: the principal of which are,

1st. **VERTICILLUS (or Whorl).** A mode of flowering in which the flowers are arranged circularly at each joint of the stem, having very short foot-stalks; as exemplified in the Mint, Horehound, and other plants: hence called *verticillate*.

2nd. **SPICA.**—A mode of flowering in which the flowers are disposed alternately on both sides or all round a simple common flower-stalk. In general the flowers are seated immediately on the stalk, without any partial foot-stalk; or if there are any foot-stalks, they are very short. When these flowers grow all on one side it is called *Spica secunda*, as in *Cynosurus*, Dog's-tail Grass; when on both sides, *Spica disticha*, as in Barley, *Hordeum*.

3rd. **RACEMUS.** A mode of flowering in which, according to Linnaeus, the fructification is placed along a common foot-stalk, and is furnished with short proper foot-stalks, proceeding as lateral branches from the common flower-stalk:—this is instanced in the flower of the

Gooseberry, *Grossularia*; also in fruit, as a cluster of Grapes or Currants.

4th. PANICULA. A mode of flowering in which the fructification is disposed on foot-stalks, variously subdivided; as in *Poa*, Meadow Grass.

5th. The SPICULÆ are the single spikelets at the termination of each branch of the panicle.

6th. THYRSUS. A mode of flowering in which a panicle contracts into an oval or egg-shaped form; as exemplified in the Lilac.

7th. UMBELLA. A mode of flowering in which a number of slender foot-stalks proceed from the same centre, and rise to an equal height, so as to form an even and flat surface at top, as is exemplified in *Corium maculatum*, Hemlock.

8th. CYMA. A mode of flowering very like the Umbel, in which a number of slender foot-stalks proceed from a common centre, and rise to the same height; but, unlike the Umbel, the secondary or partial foot-stalks are disposed without any regular order: this is seen in *Viburnum*, *Laurus Cerasus*, &c. &c.

9th. CORYMBUS. A mode of flowering in which the partial flower-stalks are produced along the common stalk on both sides; and though of unequal lengths, rise to the same height, so as to form a flat and even surface at top. This is exemplified in *Iberis*, Canarytuft.

10th. CAPITULUM.—A mode of flowering in which many flowers are collected into a head at the extremity of a summit of the foot-stalk; as in *Asperula*, Woodroof.

The SEEDS. These also vary in shape, which will be illustrated hereafter in the List of Botanical Definitions.

RECEPTACLE (*Receptaculum*). The base of the fructification, which supports the whole.

It is termed *Proper* when it supports only a single fructification, as in *Dianthus*.

Or *Common*, when it supports a number. Of this kind are those which support the parts in the compound flowers, as in the class *Syngenesia*.

BUD (*Gemma*) is the hybernaculum of the leaves, and formed in the summer's growth. These consist of two kinds: the one containing leaves alone, which are known by gardeners as Wood-buds; the other contains the bloom, which is distinguished by the name of Fruit-buds. The outer coat of the former consists of scales, which fall off; but in the latter it forms in many cases the calyx, as above described.

VERNATION (*Vernatio*). The disposition of the leaves in the bud before they are unfolded.

MEASURES are sometimes referred to in botanical description. A description of these will be found in the succeeding pages.

For a further and more general explanation of the different forms and characters of the above, I shall refer the student to the following Glossary of

Th
Term
varia

ROC

Ann
Bien
Pere

Fibr
Bran
Spin
Pren
Cree
Join
Dent
Glob
Tub
Fasc
Palm
Bulb
Gran

T

Stem
Cul
Scap
Stip