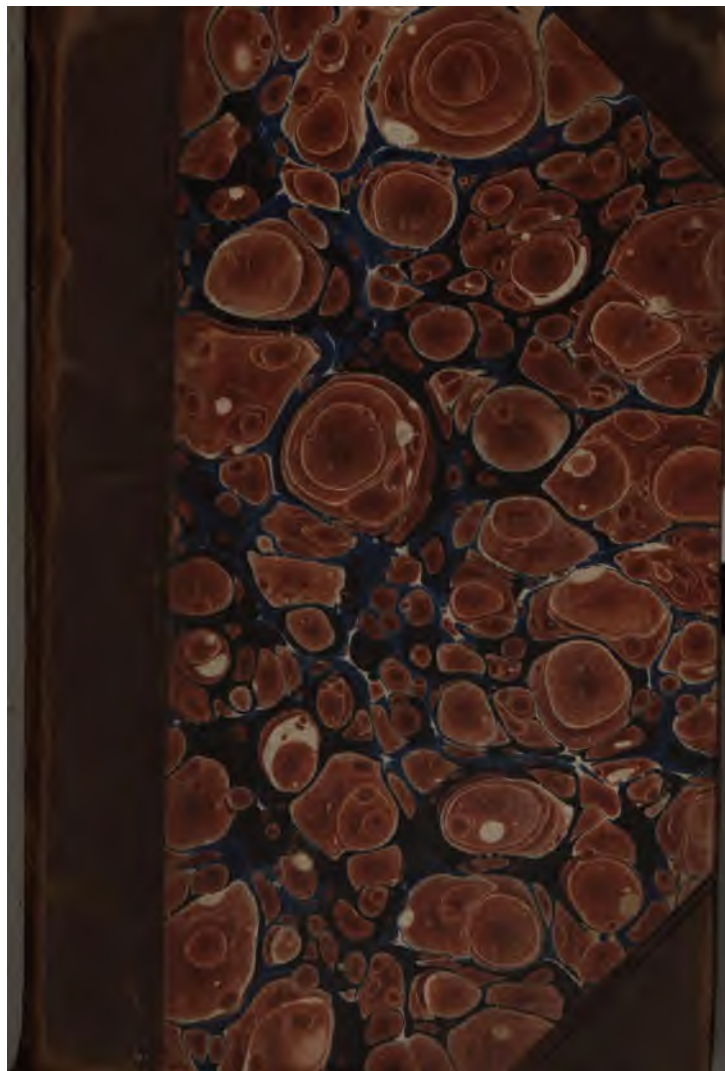






1
AN

SH. 12

INTRODUCTION
TO
MEDICAL BOTANY.

ILLUSTRATED WITH COLOURED FIGURES.

BY
THOMAS CASTLE, F.L.S.
MEMBER OF THE ROYAL COLLEGE OF SURGEONS, ETC.

London:
E. COX, ST. THOMAS'S STREET, SOUTHWARK.
SOLD ALSO BY
SIMPKIN AND MARSHALL, STATIONERS' HALL COURT;
G. UNDERWOOD, FLEET STREET;
AND W. JACKSON, KING STREET, SOUTHWARK.

MDCCCXIX.

49.



TO
SIR WILLIAM BLIZARD, KNT. F.R.S.

ETC. ETC.

THIS HUMBLE PRODUCTION
ILLUSTRATIVE OF MEDICAL BOTANY,

IS, BY PERMISSION,

VERY FAITHFULLY INSCRIBED,

IN TESTIMONY OF HIS FRIENDLY DESIRE

AT ALL TIMES TO PROMOTE

THE AUTHOR'S

LITERARY AND PROFESSIONAL

VIEWS.

PREFACE.

THE little volume which is now ushered into the presence of the Medical Public, is not one of considerable importance or research ; it is a mere outline of the subject on which it treats ; and is only offered to the notice of students, as affording a simple introduction to those points which are essential in the study of medicinal plants.

Botany, independent of its being a necessary branch of Medical Education, is calculated to amuse and to instruct. But when it is pursued with the view of ascertaining means of relief for the suffering evils of mortality, then it holds a superior claim on our attention, and requires to be classed, in common with the sister sciences, as tending to the same considerate and benevolent end.

study is connected with present
e, it is confidently hoped sufficient has bee
n, to make familiar, the principles of th
nce, and to display their especial applica
to medical purposes.

T. C.

Bermondsey Square,
september 5th 1829.

CONTENTS.

PART I.

ELEMENTS OF BOTANY.

Consisting of general remarks on plants: the division of plants into elementary organs, with delineations of these organs, and their standard varieties.

PART II.

LINNÆAN ARTIFICIAL SYSTEM.

Illustrative of the classes and orders of this beautiful system, more particularly as connected with the study of Medical Plants.

PART III.

LINNÆAN NATURAL SYSTEM.

Explaining the general meaning of the different orders, with allusions to the most frequent characters possessed by the Medical Plants enumerated under each head.

TERMINOLOGY OF BOTANY.

Explaining the most useful and practice employed in descriptive botany, as intended to be understood in medical writings.

PART V.

MISCELLANEOUS SUBJECTS.

Consisting of a general arrangement of Medical Plants; a table of English and Syriac names; a general index; and an index of plates.

THE
ELEMENTS OF BOTANY.

PART I.

CONSISTING OF GENERAL REMARKS ON PLANTS; THE
DIVISION OF PLANTS INTO ELEMENTARY ORGANS,
WITH DELINEATIONS OF THESE ORGANS, AND THEIR
STANDARD VARIETIES, AS CONNECTED WITH THE
STUDY OF MEDICAL BOTANY.

THE

ELEMENTS OF BOTANY.

SECTION I.

ON PLANTS IN GENERAL.—THE DIVISION OF PLANTS INTO
ELEMENTARY ORGANS.—GENERAL REMARKS ON THE
ROOT, STEM AND LEAF.

ON PLANTS.

All vegetables will admit of a natural division into three kinds, viz. *trees*, *shrubs* and *herbs*.

Trees :—Trees are the largest and most noble specimens. They are usually defined as having a single stem, from whence are sent out numerous branches.

Quercus Robur, *Laurus Nobilis*, *Prunus Domestica*,
Amygdalus Communis, *Æsculus Hippocastanum*, &c.

Shrubs :—Shrubs are lesser productions than

Daphne Mezereum, Rosa Canina, Juniperus (
Rosmarinus Officinalis, Spartium Scoparium, &c

***Herbs* :—**Herbs are those plants, which die away every year.

Avena Sativa, Leontodon Taraxacum, Daucus
Papaver Somniferum, &c.

From the local situation or attachment of plants, they are denominated *terrestrial* or *parasitical*.

***Terrestrial* :—**When their roots are in the ground, as with most plants.

***Aquatic* :—** When the plant grows in

live, are distinguished by the appropriate terms *annual*, *biennial* and *perennial*.

Annuals:—When they last but one year; that is, come up in the spring and die in the autumn.

Hordeum Distichon, *Triticum Hybernum*, *Nicotiana Tabacum*, *Anethum Graveolens*, *Conium Maculatum*, &c.

Biennials:—Are those which produce seed the second year after their being raised, and then die.

Daucus Carota, *Allium Porrum*, *Angelica Archangelica*, *Apium Petroselinum*, *Lactuca Sativa*, &c.

Perennials:—When they last for more than two years.

Crocus Sativus, *Dorstenia Contrayerva*, *Anethum Fœniculum*, and most plants.

PARTS OF A PLANT.

The more perfect plants, are constantly described, as consisting of five principal parts, viz. the *root*, the *stem*, the *leaf*, the *flower*, and the *seed* or *fruit*.

OF THE ROOT.

The root is that part of the plant by which it

nutrition.

The most common varieties to be met with in medical plants are the *ramose*, the *fibro-bulbous*, the *tuberous*, and the *spindle-shaped*; these, in general botany, is added, the *bis-truncated*.

Ramose:—The *ramose* or branched root is a very common species, being that of most trees and shrubs.

Morus Nigra, *Amygdalus Communis*, *Rosa* (*Æsculus Hippocastanum*, &c. (F. 21.)

Fibrous:—The *fibrous* or *capillary* roots consist of a number of small and thread-like roots, one of which is generally central and the others lateral.

The *Hordeum Distichon*, *Avena Sativa*, and *Trifolium* (F. 22.)

Tuberous :—A tuberous root is formed of a knob or tubercle, furnished with a number of small or scattered fibres; or of a number of knobs or tubercles united by means of such fibres, and forming clusters.

The *Acorus Calamus* and the *Saxifraga Alba*, have tuberous roots.

Spindle :—The spindle-shaped or fusiform root, tapers gradually from the top to the extremity.

This is the case in the *Leontodon Taraxacum*, *Daucus Carota*, and many others. (F. 25.)

Truncated :—If a root bears the appearance of a fusiform root, suddenly cut off, it is then termed a *truncated* or *bitten* root.

Whatever may be the form of the root, it is botanically divided into two parts, the *caudex* or great root; and the *radiculae* or rootlets.

The latter are represented by (b. b.) in the 23d Figure, and the former by the letter (a.)

-The *rootlets* or *fibres* are the essential organs by which absorption of nutriment is effected;

OF THE STEM.

The stem is that part of a plant which supports the herbage or fructification.

There are six sets of stems ; viz. *trunks*, *straws*, *scapes*, *fronds* and *stipes*.

Trunk :—A trunk is the proper stem of trees and shrubs, and is characterized by its large size and woody structure.

Quercus Robur, *Ulmus Campestris*, *Æsculus Hippocuratum*, *Morus Nigra*, *Prunus Domestica*, &c.

Stalks :—The stems of herbaceous plants are called stalks. They are rarely woody, and last but for one or two years in the natural state.

generally divided into compartments by a species of knot or joint.

Avena Sativa, *Hordeum Distichon*, *Triticum Hybernum*, &c.

Scape:—A scape is that kind of stem, which arises from the root and supports the flower, but not the leaf.

Leontodon Taraxacum, *Aloe Perfoliata*, *Anthemis Nobilis*, *Colchicum Autumnale*, &c.

Frond:—The frond is that species in which the stem, leaf, and fructification are united; or in other words, the flowers and fruit are produced from the leaf itself.

Exemplified in the *Aspidium Filix Mas*, and *Lichen Islandicus*.

Stipe:—The word stipe, is used to express the stem of palms, ferns, fuci and fungi. They are generally cylindrical, but sometimes swollen in the middle, and bear a frond, or peculiar foliage at their summit.

In addition to the use of stems in supporting the herbage and fructification, they consist of a number of fine capillary tubes, through

OF THE LEAF.

The leaf is usually the temporary part of a plant; generally of a thin and flat substance, green colour, and issuing from the stem, branches, or immediately from the root.

Most leaves are said to consist of two viz. a small stalk or *petiole* and an *expansion* broad part supported by the petiole.

The *petiole* is illustrated by the letter b in F. 26, *expansion* by the letter a.

Leaves are either situated *close* to the branch or root from whence they proceed they are *supported* on a partial stem, called *petiole* or leaf-stalk.

In the first case, as with the *Crocus Sativus*, A

Simple :—When they consist of but one single expansion.

As in the *Ulmus Campestris*, *Rumex Acetosa*, *Daphne Mezereum*, &c. (F. 26.)

Compound :—When, instead of one expansion, there are several.

As in the the *Rosa Centifolia*, *Æsculus Hippocastanum*, *Ruta Graveolens*, and so on. (F. 27.)

The separate expansions of a compound leaf are called *pinnæ* or *leaflets*.

Thus the *Rosa Centifolia* is said to have a compound leaf with *six* pinnæ and a terminal leaflet making *seven*.

There is an infinite variety of leaves; the most common of which, are the linear, sagittate, and others, as explained in the terminalogy.

The chief use of the leaves, is to assist in supporting the life of the plant, by exhalation from their upper surface, and by absorption from the under part.



THE ELEMENTARY DIVISIONS OF A FLOWER, OR THE
OF FRUCTIFICATION. — GENERAL REMARKS
CALYX, COROLLA, NECTARY, STAMEN, PISTIL, SE
SEL, SEED AND RECEPTACLE.—OBSERVATIONS
VARIETY OF FLOWERS, AND ON INFLORESCENCE

PARTS OF FRUCTIFICATION.

Having obtained a general knowledge
preceeding parts, your attention must n
closely devoted to acquire a perfect comp
sion of the parts of fructification ; viz. the
and the *fruit*.

OF THE FLOWER.

The parts which are considered necess
form a perfect flower, are the *calyx*, the *c*
the *stamen*, the *pistil* and the *receptacle*
these may be added the *nectary*, *seed-ve*

leaves placed at a small distance, or close to the corolla.

It is particularly conspicuous in the unexpanded flower bud of the *Papaver Rhæas*, consisting of two green leaves, as represented in the 29th figure. Also shown by the letter (a.) in the 1st figure.

There are many kinds of calyces enumerated in general works; viz. the *perianth*, the *fence*, the *catkin*, the *sheath*, the *glume*, the *veil* and the *curtain*.

Perianth :—The perianth or flower-cup is the most common kind. It is generally green and situate immediately below the flower, so as to form a part of it.

Possessed by the *Leontodon Taraxacum*, *Rosa Centifolia*, *Papaver Rhæas*, &c. (F. 29)

Involucrum :—The fence or involucrum, is a species of calyx peculiar to umbelliferous plants.

If it is placed below the common receptacle, (a. a. F. 31.) as in the *Conium Maculatum*, it is called a *general involucrum*; and when attached to the smaller divisions, as also in the *hemlock*, (b. b.) it is denominated a *partial involucrum*.

Amentum :—The catkin or amentum consists of a common cylindrical receptacle, beset with numerous scales, each of which is accompanied by one or more stamens or pistils, so that the whole forms an aggregate flower.

Sheath :—The sheath or spathe is that kind of calyx, which is situated more or less remote from the flower, and after constituting a covering for the infant bud, opens longitudinally.

This species of calyx is present in the *Colchicum Autumnale*, but represented by the 33d Figure as it occurs in the *W-drop*.

Glume :—The glume or husk is the peculiar calyx of corn or grasses, constituted by valves enclosing one or more florets.

See *Avena Sativa*, *Hordeum Distichon*, *Triticum Hybericum*. (F. 32.)

Veil :—The veil or calyptra is a kind of membranaceous hood which is said to be the calyx of mosses, covering their capsule or fructification like an extinguisher on a candle.

Curtain :—The curtain or volva is the membranaceous covering of the fungus tribe, concealed

COROLLA.

The corolla is the interior envelope of the flower, investing the central parts, but invested by the calyx.

It is usually, in fact, the principal and most beautiful part of the flower, being that which is most coloured, and commonly regarded as constituting the flower. (F. 1, b.)

If the corolla consists of more than one piece, the individual parts are technically called *petals*, or leaves of the flower.

The apparent use of the corolla is to protect the interior organs; and to increase or diminish the rays of heat for fecundation.

NECTARY.

With some flowers, there is a nectary or peculiar appendage, attached for the most part, to the corolla, secreting or containing a honied juice, though it is not necessary to a nectary, that honey should be present.

the corolla
, however,
rent genera
ded; in the
is Alba, a

ans of the
abric, and
r the most

ill find *three*
icus Carota;

s; viz. a

in the 11th
on the top of

part of the
lust, called
her is ripe
nmit of the
eeds in the

PISTIL.

The pistils are likewise small and column shaped organs, of the utmost importance to the economy of the flower. They occupy, almost invariably, the centre of the flower, and are surrounded immediately by the stamens.

In the *Crocus Sativus* you will discover *one* pistil; in the *Daucus Carota* *two*; in the *Linum Usitatissimum* *five*; and in the different *Roses*, *many* pistils.

Pistils consist of three parts; viz. the *summit* or *stigma*, the *style*, and the *germen* or *ovary*.

The *stigma* is denoted by the letter (a.) in the 12th Figure; the *style* or middle portion by (b); and the *germen* at the inferior extremity, by the letter (c.)

The summit of the pistil is generally organized to absorb the pollen of the stamen, the fecundating influence of which is communicated through a tube in the style, to the undeveloped seeds in the germen. When this is accomplishing, the upper parts of the pistil fade away, but the germen, on the contrary, gradually increases in size, till it finally constitutes the *seed-vessel*.

capsules, pods, legumes, drupes, pomes, berries, cones.

Capsule :—The capsule is a dry, hollow, branous seed-vessel, usually divided into two halves and opening naturally in some peculiar manner according to the plant to which it belongs.

The *Papaver Somniferum*, *Viola Odorata*, *Valeriana cinalis*, *Nicotiana Tabacum*, and many others, have capsules seed-vessels.

Pod :—The pod is a species of seed-vessel which consists of two valves or partitions, between which, the seeds are fixed *alternately* to the seam.

If the pod is longer than it is broad (F. 39.), it is termed a *siliqua*, as in the *Sinapis Nigra*; but if it is broader than it is long (F. 40.), it is then termed, a *silicle*, as in the *Cochlearia Armoracia*.

Legume : The legume is likewise a

containing within, a single hard or bony nut, or only a dry and hard shell:

The latter kind will be found in the *Amygdalus Communis*, *Quercus Robur*; and the former in the *Prunus Domestica*.

Pome:—The pome is a seed-vessel of a peculiar fleshy nature, and instead of containing a nut, like the drupe, it incloses a capsule with several seeds.

As the fruit of the *Pyrus Cydonia*, *Punica Granatum*, &c.

Berry:—The berry is a species of seed-vessel, of a soft and pulpy nature, containing one or more seeds, but not separated by regular valves, nor enclosed within a capsule.

This kind is afforded by the *Citrus Aurantium*, *Citrus Medica*, *Juniperus Communis*, and many other vegetables.

Cone:—The cone or strobile is formed by an amentum with hardened scales, each scale containing a seed at its base.

The *Humulus Lupulus*, *Pinus Sylvestris*, and one or two other medical plants are furnished with coniferous vessels.

SEED.

A seed consists of several parts, some of which are more essential than others; as the *hilum*, *seed-coat*, *cotyledon* and *embryo*.

which it is inclosed in
external covering; the *cotyledons* or *seed-toes*, are the
internal substances which constitute the bulk of the seed
and the *embryo* or heart, is that small part, which is the
first principle of a new plant, and is commonly situated
between the cotyledons.

The intention of the seed, in relation to vegetable life, is to continue the species from one season to another.

As soon as seed is deposited in a proper situation for germination, its several parts become active upon, in a short while, by moisture and other stimuli; the seed-coat bursts, the cotyledons rise above ground as seminal leaves, a radicle or root is given out, and the plumule ascends to form the infant plant. As circumstances are more or less favourable, these several parts increase, till the root has acquired sufficient strength to seek its own food, and the seminal leaves then die away.

It is not always distinguishable by any partial figure, except in the *Leontodon Taraxacum* and other compound flowers, in which it is very remarkable and important. (F. 37.)

Receptacles are usually divided into two kinds ; viz. *proper* and *common*.

Proper :—Proper or peculiar, when it belongs to only one flower.

As in the *Papaver Somniferum*, *Rosa Canina*, &c.

Common :—Common or general, when it connects several florets or distinct flowers, so that if any of them are removed, an irregularity is occasioned.

As in the *Leontodon Taraxacum*, *Anthemis Nobilis*, and other compound flowers.

VARIETY OF FLOWERS.

The different organs of the flower being explained, you have now to acquire a knowledge of the various kinds of flower, and of their manner of blooming or inflorescence.

termed a *pedunculated flower*.

The flowers of the *Ulmus Campestris* are *sessile*; those of the *Solanum Dulcamara* being on a pedicel (F. 6, a.) are *pedunculated*.

All flowers, according to their composition, are said to be either *simple* or *aggregate*.

Simple :—Simple flowers differ from aggregate flowers in not having any parts of the fructification common to many florets, but consisting of a single blossom.

The *Atropa Belladonna*, *Nicotiana Tabacum*, *Amorpha Niger*, &c. have all *simple-flowers*.

A simple flower furnished with both calyx and corolla, is called a *complete flower*: when the calyx is wanting, *incomplete*: and when the corolla is present without the calyx, it is called a *calyciflorous*.

which there are many *florets* or partial flowers, so connected by some part of the fructification, that not one of them can be taken out, without destroying the form of the whole.

Aggregate flowers are of two kinds; viz. the *aggregate*, properly so called, and the *compound*.

Aggregate :—The aggregate proper, have a common undivided receptacle, and the florets usually situated on foot-stalks.

Exemplified in the *Conium Maculatum*, and other plants, particularly of the umbelliferous order. (F. 16.)

The five species of flower, called by Linnaeus the *umbellate*, *cymose*, *amentaceous*, *glumose*, and *spadiceous*, are nothing more than varieties of the kind of flower, now called aggregate proper.

The first were so called from their constituting an *umbel*; the second from their blooming in a *cyme*; the third from their calyx being an *amentum*; the fourth from its being a *glume*; and the last from their having a receptacle issuing from a *spadix*.

Compound :—Compound flowers consist of numerous florets, all sessile or seated on a common undivided receptacle, and inclosed in one continuous calyx. It is also essential to this kind of

or a cynnuer.

The *Leontodon Taraxacum*, *Tussilage* *r.* *Nobilis*, and others, have compound flowers. (F. 9

The florets which constitute a compound may be of two kinds, viz. *ligulate*, or shag a strap; or *tubular*, in the form of a t

The *former* are represented by the letter (a.) in Figure; and the *latter* by the letter (b.)

All flowers, as well as florets, have characteristic names according to the or absence of the stamens and pistils, b are called *perfect*, *barren* and *fertile*.

Perfect:—When the stamens and both, as usual, in one flower, it is ca *ited* or *hermaphrodite*.

—ina. *Papaver Somnife*

Fertile :—When pistils only, a *fertile* or *female* flower, as producing the seed.

As also in the *Humulus Lupulus*, *Ricinus Communis*, *Quercus Robur*, &c.

There are numerous other terms applied to flowers, as respects many peculiar traits connected with the *form* and *structure* of the corolla.

With regard to the *petals* of the corolla, if it is formed of one piece, the flower is called *monopetalous* ; if of two, *dipetalous* ; if three, *tripetalous* ; and so on.

If there are no petals, it is then termed an *apetalous* flower ; if many petals, *polypetalous*.

From the figure of the corolla, a flower is either *campanulate*, *funnel-shaped*, *papilionaceous*, or otherwise.

The following are among the most frequent to be met with in medical plants.

Companulate :—Companulate or bell-shaped, when it swells out without any expanding border.

As in the *Atropa Belladonna*, and several others. (F. 1.)

Funnel-shaped :—Funnel-shaped, or infundi-

This species of inflorescence is very common.
Pulegium. (F. 17.)

Cluster.—The racemus or cluster, consists of numerous rather distinct flowers, each on its proper peduncle, and all connected by one common stalk.

As exemplified in the *Solanum Dulcamara.* (F. 14.)

Spike.—The spica or spike is a species of inflorescence, consisting of one common stalk bearing numerous flowers, all arranged along it without any, or having very small partial stalks.

As in the *Digitalis Purpurea*, *Aloe Spicata*, and others. (F. 13.)

Corymb.—The corymbus or corymb is a species of inflorescence, whose partial flower-stalks are gradually longer, so that they stand lower on the common stalk,

divided and collected into a close bundle at the top.

Tuft:—The head or tuft is that kind, in which several flowers form a kind of ball or head at the extremity of the foot-stalks.

Umbel:—The umbella or umbel has several stalks or rays nearly equal in length, spreading from one common centre.

When each ray or stalk, bear an *umbella* or *little umbel*, the whole is said to be a *compound umbel*. In this case, the first or larger set of rays, constitute the *universal umbel*; while the second or lesser set of peduncles, form the *partial umbel*. Both kinds are present in the *Conium Maculatum*. (F. 16.)

Cyme:—The cyma or cyme consists of several flower-stalks, having the general appearance of an umbel, and agrees with it so far, that its common stalks proceed from one common centre, but differs in having those stalks variously and alternately divided.

Represented by the 19th figure.

Panicle:—The panicula or panicle, is that species, which bears the flowers in a sort of loose subdivided bunch or cluster without any order.

As in the *Avena Sativa*, and several others. (F. 15.)

branch, from which they ultimately and spontaneously detach themselves, and form a new plant.

If they are attached to the root, they are called *radical* bulbs; but if to the stem or branch, they are denominated *caulinar*.

BUDS.

Buds are likewise a species of gem, of an oval or conical figure, issuing from the axil of the leaves or from the sides and extremities of the branch. They contain the rudiment of future branches, leaves or fruit, but do not detach themselves spontaneously from the plant, and form new individuals.

Trees, shrubs, and most herbs have buds.

STIPULES.

Stipules are small leafy appendages accompanying the real leaves, assuming the appearance of leaves in miniature; either situated close to the leaf, along the *petiole*, or at its junction with the branch or stem.

In the *Rosa Centifolia*, and *Geum Urbanum*, they are present; but in the latter, they form two very conspicuous leaves, as represented by the letters (a. a.) in the 35th figure.

BRACTEA OR FLORAL-LEAF.

The bractea or floral-leaf, is a leaf which in general, differs from the true leaves both in shape and colour. It is commonly situated on the peduncle, and often so close to the corolla as to be mistaken for the calyx.

Met with in the *Heleborus Niger*, *Digitalis Purpurea*, &c. (F. 36. a. a.)

THORN.

The thorn or spine is a sharp-pointed projection growing from the ligneous substance of some plants.

Although thorns are peculiar to some plants, they are not scattered over the whole surface; thus, they protrude from the stem and branches in the *Rhamnus Catharticus*; from the leaf in the *Aloe Spicata*; and from the seed-vessel in the *Datura Stramonium*.

the plant, arising from the bark only, and from the wood.

This species of appendage, is well known in the *Rosa Canina*, *Rosa Centifolia*, &c.

TENDRIL.

The cirrus or tendril is a fine spiral string fibre, proceeding from different parts of the plant by means of which, it fastens itself to some other plant or body for support.

Exemplified in the *Vitis Vinifera* *Cucumis Colocynth* &c. (F. 34.)

GLANDS.

Glands are small and minute appendages of various forms, formed chiefly on the surface of the leaf and petiole, but often also on the other parts of a plant.

or hairiness, with which the surface of a plant may be covered.

Pubescence differs both in form and texture, but consists principally of small slender bodies, which are either soft and yielding to the slightest impression, or rigid and comparatively unyielding. The former are, properly speaking, *hairs*, and the latter *bristles*.

THE
LINNÆAN
ARTIFICIAL SYSTEM.

PART II.

ILLUSTRATIVE OF THE CLASSES AND ORDERS OF THE SYSTEM,
MORE PARTICULARLY AS CONNECTED WITH THE
ARRANGEMENT OF MEDICAL PLANTS.

THE
LINNÆAN
ARTIFICIAL SYSTEM.

SECTION I.

AN OUTLINE OF THE LINNÆAN ARTIFICIAL SYSTEM, WITH
DELINEATIONS OF THE CLASSES AND ORDERS, AS USUALLY
EMPLOYED FOR THE PURPOSES OF GENERAL BOTANY.

GENERAL VIEW OF THE SYSTEM.

The Artificial System of Linnæus, is founded entirely on the *stamens* and *pistils* of the flower, and according to his arrangement, all known plants are distributed into different *classes*, *orders*, *genera*, *species* and *varieties*.

Classes :— The classes are the first general division of all vegetables into twenty-four kinds, according to the number, or some other peculiarity of the stamens.

Orders :— Each of the twenty-four classes, admit of being subdivided into orders or tribes. These orders are derived from a *secondary* characteristic.

families. The genera in them
from peculiar characters, which many pl
the same order possess in common to them

Species :—Species are a further divisio
genus or family of plants into individual |

Varieties :—With some species of plants,
to soil, situation or other causes, both the
and flower are subject to variation. Wh
is the case, they are denominated varietie

OF THE CLASSES.

The character of the classes are establ
six circumstances connected with the str

First :—The ten first classes are fou
the *number of stamens alone* ; viz.

Monandria,	one stamen.
Diandria,	two stamens.
	three stamens

lished on the *number* and *insertion* of the stamens, as being attached to the receptacle, or to the calyx and corolla.

Dodecandria,	12 to 19, to the receptacle.
Icosandria,	20 to 1000, to the calyx, or corolla.
Polyandria,	20 to 1000, to the receptacle.

Third:—The fourteenth and fifteenth classes depend on the *number* and *proportion*; or *length* of the stamens one to another.

Didynamia,	two long, two short.
Tetradynamia,	four long, two short.

Fourth:—The next four classes are established on a consideration of the stamens being *united* one with another, into one or more parcels; and the class gynandria, from the circumstance of their being *united* to the pistil

Monadelphia,	filaments united into one set.
Diadelphia,	filaments united into two sets.
Polyadelphia,	united into three or more sets.
Syngenesia,	anthers united into a cylinder.
Gynandria,	stamens rising from the pistil.

Fifth:—The twenty-first and two following classes are founded on the principle of the stamens being *separate*, that is, not in the same flower, or on the same plant as the pistils.

Monœcia,	both on the same plant.
Dicœcia,	both on two plants.
Polygamia,	both on one, two, or three plants.

its in which.

led, or not perceptible to the naked eye.

Cryptogamia, concealed fructification.

DIVISION OF THE ORDERS.

The orders are the secondary divisions of the Linnæan system, and are established upon different principles.

In the first thirteen classes they are founded on the number of pistils in each flower.

Monogynia,	one pistil.
Digynia,	two pistils.
Trigynia,	three pistils.
Tetragynia,	four pistils.
Pentagynia,	five pistils.
Hexagynia,	six pistils.
Heptagynia,	seven pistils.
Octagynia,	eight pistils.
Enneagynia,	nine pistils.
	ten pistils.

The orders of the classes, monadelphia, diadelphia, polyadelphia, and gynandria, are established on the *number of stamens*; and consequently called by the same names as the classes.

Monandria,	one stamen.
Diandria,	two stamens.
Triandria,	three stamens.
Polyandria,	many stamens.

The orders of the nineteenth class or syngenesia, are taken from *the structure of the flower*.

Polygamia æqualis,	stamens and pistils in each floret.
Polygamia frustranea,	the outer florets neutral.
Polygamia superflua,	only stamens in the outer florets.
Polygamia necessaria,	stamens central, pistils outer.
Polygamia segregata,	a calyx to each floret.

In the classes monœcia and diœcia, the orders are taken from the *number and other peculiarities of the stamens*.

Monandria,	one stamen.
Diandria,	two stamens.
Triandria. &c.	three stamens, &c.
Polyadelphia,	stamens in three or more sets.

In the twenty-third class, polygamia, the orders are established on *the separation of the stamens and pistils*.

**Dicæcia,
Tricæcia,**

both on three plants.

**The orders of the last class, or cryptogamia
re five in number, and founded on the *natura
haracters* of each production.**

**Filices,
Musci,
Hepaticæ,
Algæ,
Fungi,**

**ferns.
mosses.
liverworts.
slugs.
mushrooms.**

SECTION II.

AN EXPLANATION OF THE RESPECTIVE CLASSES AND ORDERS, MORE PARTICULARLY AS CONNECTED WITH MEDICAL BOTANY.

FIRST DIVISION.

The first *ten* classes are established on the *number of stamens alone*. The plants which belong to them produce simple perfect flowers.

CLASS I.—MONANDRIA.

Comprehending such plants as bear flowers with but *one* stamen. (F. 41.)

Monandria is divided into two orders;* viz. *monogynia* and *digynia*, according to the *number of pistils* in each flower.

The order *monogynia* only affords Medical Plants; *digynia* is a common division in General Botany.

Monogynia:—Each flower having *one* pistil, as in the

Curcuma Zedoaria.

Elettaria Cardamomum.

Zingiber Officinale.

* All the *orders* of the first *thirteen* classes, as before said, are established on the *number of pistils*. We shall

CLASS II.—DIANDER

The plants of this class, bear
stamens. (F. 42.)

Divided into three orders :
digynia and *trigynia*.

The orders *monogynia* and *trigynia*
Plants: *digynia* is a common division in

***Monogynia* :—Having one pistil**

Gratiola Officinalis.

Olea Europea.

Rosmarinus Officinalis.

***Trigynia* :—Having three pistil**

Piper Cubeba.

Piper Longum.

Piper Nigrum.

ral characters, the seven being distributed in four natural orders.

The *Gratiola* belongs to *personatæ*; *aloe* to *sepiariæ*; *Rosmarinus* to *verticillatæ*; and the *piper* tribe to the order *piperitæ*.

CLASS III.—TRIANDRIA.

The third class includes those plants which bear flowers with *three* stamens. (F. 43.)

The class in question is also divided into three orders; viz. *monogynia*, *digynia* and *trigynia*.

The orders *monogynia* and *digynia*, only afford Medical Plants; *trigynia* is a common division in General Botany.

Monogynia:—Having *one pistil* in each flower.

Crocus Sativus.

Iris Florentina.

Valeriana Officinalis.

Digynia:—Having *two pistils* in each flower.

Avena Sativa.

Triticum Æstivum.

Hordeum Distichon.

Triticum Hybernium.

Saccharum Officinarium.

The plants of this division are arranged in three natural orders.

The Crocus and Iris belong to the family *ensatæ*; Valeriana to *aggregatæ*; and the five species in digynia to the extensive order *gramina*.

four stamens, all equal in length, or nearly

In this circumstance they differ from plants of the class *didynamia*, which have *two* long and *two* short.

It is usually divided into three orders: *monogynia*, *digynia* and *tetragynia*.

The order *monogynia* only, affords Medical Plants; *digynia* and *tetragynia*, are common divisions in General Botany.

***Monogynia* :—**Embracing those plants of this class, which have *one pistil* in each flower.

Rubia Tinctorum.

Dorstenia Contrayerva.

The two plants of this class are both perennials, but of different natural characters.

The first is of the natural order *scabridæ*, and the second of the order *stellatæ*.

CLASS V.—PENTANDRIA.

nogynia, digynia, trigynia, tetragynia, pentagynia and polygynia.

The orders *monogynia, digynia, trigynia* and *pentagynia* furnish us with Medical Plants : *tetragynia* and *polygynia* are common divisions in General Botany.

***Monogynia* :—**Including such plants of the pentandrous character as have *one pistil* in each flower ; among which will be found, the

<i>Anchusa Tinctoria.</i>	<i>Cusparia Febrifuga.*</i>
<i>Atropa Belladonna.</i>	<i>Datura Stramonium.</i>
<i>Capsicum Annuum.</i>	<i>Hyoscyamus Niger.</i>
<i>Cephaelis Ipecacuanha.</i>	<i>Menyanthes Trifoliata.</i>
<i>Chironia Centaurium.</i>	<i>Nicotiana Tabacum.</i>
<i>Cinchona Cordifolia.</i>	<i>Rhamnus Catharticus.</i>
<i>Cinchona Lancifolia.</i>	<i>Spigelia Marilandica.</i>
<i>Cinchona Oblongifolia.</i>	<i>Solanum Dulcamara.</i>
<i>Convolvulus Jalapa.</i>	<i>Strychnos Nux Vomica.</i>
<i>Convolvulus Scammonia.</i>	<i>Vitis Vinifera.</i>

***Digynia* :—**The second order also affords many medical plants, the flowers of which are possessed of *two pistils*.

<i>Anethum Fœniculum.</i>	<i>Carum Carui.</i>
<i>Anethum Graveolens.</i>	<i>Conium Maculatum.</i>
<i>Angelica Archangelica.</i>	<i>Coriandrum Sativum.</i>

* The *Bonplandia Trifoliata* according to Wildenow ; or *Gulipea Officinalis*, in the first volume of the Transactions of the Medico-Botanical Society.

<i>Syringium maritimum.</i>	Rhus Toxi
Ferula Assafœtida.	Sium Nodi
Gentiana Lutea.	Ulmus Car
Heracleum Gummiferum.	—

Trigynia :—Containing one me
in each flower of which will be
pistils.

Sambucus Nigra.

Pentagynia :—Including those p
class which produce *five pistils* in e

Linum Catharticum.

Linum U

The extent of this class, necessari
the plants which we have enumerat
to several natural orders.

The Anchusa, is arranged in the order *asperi*
Capsicum, Datura, Hyoscyamus, Nicotiana,
Strychnos, in *lurida* : Cerealia in —

CLASS VI.—HEXANDRIA.

The plants of this class have flowers with *six* stamens, all of one uniform length, or at least, nearly so, in which respect they differ from the class *tetradynamia*. (F. 46.)

None of the flowers of this class have four petals, as is the case with all those of the fifteenth. Indeed, all the medical species of hexandria, have *six* petals, except the *rumex acetosa*, which has but *three*.

The class hexandria is divided into five orders; viz. *monogynia*, *digynia*, *trigynia*, *hexagynia* and *polygynia*.

The orders *monogynia* and *trigynia* are the only two which afford Medical Plants, the other three are common divisions in General Botany.

Monogynia :—Having *one pistil* in each flower.

Acorus Calamus.

Allium Cepa.

Allium Porrum.

Allium Sativum.

Aloe Spicata.

Aloe Vulgaris.

Scilla Maritima.

—

Trigynia :—Having *three pistils* in each flower.

Colchicum Autumnale.

Rumex Acetosa.

Rumex Aquaticus.

The Medical Plants of this part of the system, do not possess many natural affinities.

CLASS VII.—HEPTANDRIA.

This class embraces such plants as flowers with *seven* stamens. (F. 47.)

Though a very small class, it is divided into four orders, viz. *monogynia*, *digynia*, *tetragynia*, and *heptagynia*.

Monogynia :—The only heptandrous species, is one having *one* pistil in each flower, consequently belonging to this order.

This is the *Æsculus Hippocastanum*, or horse-chesnut, a native tree of Siberia, belonging to the family *triikilatæ*.

CLASS VIII.—OCTANDRIA.

The plants of this class have *eight* stamens in each flower, of which kind there is a great number.

Monogynia :—Including those octandrous plants which have but *one pistil* in each flower.

Amyris Elemifera.
Amyris Gileadensis.
Daphne Mezereum.

Trigynia :—Comprehending those which have *three pistils* in each flower.

Polygonum Bistorta.

The few plants which we have mentioned as of this class, are arranged in three natural orders.

Amyris belongs to *dumosæ* ; Daphne to *vepriculæ* ; and Polygonum to *koleracææ*.

CLASS IX.—ENNEANDRIA.

All plants of this class, bear flowers with *nine* stamens. (F. 49.)

Enneandria is divided into three orders ; viz. *monogynia*, *trigynia* and *hexagynia*.

Monogynia and *trigynia* require attention as furnishing Medical Plants ; while *hexagynia* is a common arrangement in General Botany.

Monogynia :—Each flower having *one pistil*.

Laurus Camphora.	Laurus Nobilis.
Laurus Cassia.	Laurus Sassafras.
Laurus Cinnamomum.	—

The few Medical Plants which arrange in this class, are of the same natural tribe.

Both the genera *Laurus* and *Rheum*, consequently belong to the natural order *Aoleraceæ*.

CLASS X.—DECANDRIA.

Here we have arranged, all plants which bear flowers with *ten* stamens. (F. 50.)

The orders of decandria are five; viz. *monogynia*, *digynia*, *trigynia*, *pentagynia* and *decagynia*.

Of these orders *monogynia*, *digynia* and *pentagynia* comprehend Medical Plants. *Trigynia* and *decagynia* are common divisions in General Botany.

Monogynia :—Having *one pistil* in each flower.

Arbutus Uva Ursi.

Cassia Fistula.

Quassia Simarouba.

Rhododendron Chrysanthemum.

Pentagynia :—Every flower having *five pistils*.

Oxalis Acetosella.

The plants of the tenth class are distributed among seven natural orders.

Arbutus, Rhododendron, and Styrax, belong to *bicornes* ; Cassia, Hæmatoxylon, and Myroxylon, to *lomentaceæ* ; Copaifera, and Toluifera to *dumosæ* ; Gualacum, Quassia, and Oxalis to *gruinales* ; Ruta to *multisiliquæ* ; Swietenia to *trihilataæ* ; and Dianthus to *caryophyllææ*.

SECOND DIVISION.

The three classes which constitute the second division, are founded on the *number* and *insertion* of the stamens.

CLASS XI.—DODECANDRIA.

Comprehending those plants which produce flowers with from *twelve to nineteen* stamens *inserted into the receptacle*. (F. 51.)

The orders are six in number ; viz. *monogynia*, *digynia*, *trigynia*, *tetragynia*, *pentagynia* and *dodecagynia*.

The orders *monogynia*, *digynia*, and *trigynia*, afford Medical Plants ; *tetragynia*, and the other two, are common divisions in General Botany.

Digynia:—Each fl
Agrimo

Trigynia:—Each fl
Euphorbia

The four Medical
class, do not possess any
all arranged in differen

Asarum belongs to the trib
to *koleraceæ*; Agrimonia to
triccæ.

CLASS XII.—

This class embraces t
flowers with *twenty or mo*
the calyx or corolla. Son
are not so many as twent

three which supply Medicinal Plants. *Digynia* and *trigynia* are common divisions in General Botany. .

***Monogynia* :—Having *one pistil* in each flower.**

Amygdalus Communis.

Prunus Domestica.

Eugenia Caryophyllata.

Punica Granatum.

Myrtus Pimenta.

***Pentagynia* :—Having *five pistils* in each flower.**

Pyrus Cydonia.

***Polygynia* :—Each flower having *twenty or more pistils*.**

Geum Urbanum.

Rosa Gallica.

Rosa Canina.

Tormentilla Erecta.

Rosa Centifolia.

The icosandrous Medical Plants are met with in only three natural divisions.

Amygdalus, Prunus, Punica and Pyrus, belong to the order *pomaceæ*; Eugenia and Myrtus, to *hesperideæ*; while the five we have mentioned in polygynia, assimilate with the *senticosæ*.

CLASS XII.—POLYANDRIA.

The plants arranged in this class, have from *twenty stamens or upwards*, all inserted into the *receptacle*. (F. 53.)

Polyandria is divided into seven *monogynia, digynia, trigynia, tetragynia, hexagynia* and *polygynia*.

The first, third, fourth, and last, are the only contain Medical Plants ; the other three are sions in General Botany.

Monogynia:— Including such pl class as have *one pistil* in each flower

Papaver Rhœas.

Papaver Sc

Trigynia:— Including those which *pistils* in each flower.

Aconitum Napellus.

Delphinium

Tetragynia:— Claiming such as ha in each flower.

polyandrous character, are mostly arranged in two natural orders.

Papaver belongs to *rhæadeæ* ; while Aconitum, Delphinium, and Helleborus contribute to form the family denominated *multisiliquæ*. The natural order for Winters, is not mentioned in medical writings.

THIRD DIVISION.

There are only two classes in this division ; and these are founded on the *number and proportion* of the stamens.

CLASS XVI.—DIDYNAMIA.

The present class is constituted by plants whose flowers have *four* stamens ; *two long* and *two short*. (F. 54.)

The fourth class, *tetrandria*, has also *four* stamens, but all of an equal length or nearly so, which very effectually divides it from *didynamia*.

With all the preceding classes, the number of pistils established the different orders ; but here, the *presence or absence of the seed vessel*, divides the class into two orders ; the first called *gymnospermia*, and the second *angiospermia*.

Both of these orders we shall find, supply Medical Plants.

calyx.

Hyssopus Officinalis.	Mentha
Lavandula Spica.	Mentha
Marrubium Vulgare.	Origanu
Melissa Officinalis.	Teucriu
Mentha Piperita.	Teucriu

Angiospermia :—Containing those answering the character of the class, whose seeds are covered, that is, *locus seed-vessel*.

Digitalis Purpurea.	Scroph
----------------------------	---------------

The plants of this class, particularly of the first order, have many natural orders, and consequently are not much distributed in the present arrangement.

Hyssopus, Lavandula, and all the plants of the first order belong to *verticillatæ*; Digitalis to the order *personatæ*.

The flowers are also *cross-shaped*, consisting of *four* petals ; which, together with the above character, is sufficient to distinguish plants of this class from those of *hexandria*.

There are two orders in this class ; viz. *siliculosa* and *siliquosa* ; both founded on *the form of the seed vessel*.

Both the orders of this class also, afford Medical Plants, though not so numerous as those of *didynamia*.

Siliculosa :—The plants of this order are furnished with that kind of seed-vessel which is called a *silicle* or little pod.

Cochlearia Armoracia.

Siliquosa :—The plants of the second order, instead of having a little pod, have a *silique* or very long pod.

Cardamine Pratensis.

Sinapis Alba.

Sinapis Nigra.

Tetradynamia, is almost a natural class, consisting, in fact, of two extensive families of plants, which are included under one natural order.

The plants we have mentioned, therefore, belong to the same natural family, or in other words, to the common order *siliquosæ*.

In this division, we shall explain those orders which are founded on a consideration of the union of the stamens one to another; on the other hand, the union of the stamens to the pistil.

CLASS XVI.—MONADELPHIA

This is a vast and interesting class, which includes those plants, the flowers of which have the stamens united below, that is below the pistil, into one body or set, through which the pistil passes.

It will be as well to observe, in the first place, that the orders of monadelphia are founded on the peculiarities connected with the union of the stamens to the pistil; the classes are employed with the pistil, and consequently, the union of the filaments to the pistil is the class.

The orders of this class, are six, viz triandria, pentandria, hexandria, heptandria, octandria, and enneandria.

Triandria:—There is only one Medical Plant which has *three stamens*.

Tamarindus Indica.

Polyandria:—Containing two Medicinal Plants of the monadelphous character: the flowers of which, have *more than twenty stamens inserted in the receptacle*.

Althæa Officinalis.

Malva Sylvestris .

The three plants of monadelphia, belong to two natural orders.

The Tamarindus to *lomentaceæ*, and the Althæa and Malva to the tribe called *columniferæ*.

CLASS XVII.—DIADELPHIA.

With plants belonging to this class, the flowers have their stamens *united by their filaments into two sets*. (F. 57.)

The same remarks may be made here, as in the last class, with respect to the essential foundation of the class, and the origin of the orders.

There are four orders of plants in diadelphia—viz. *pentandria*, *hexandria*, *octandria*, and *decandria*, all established on *the number of stamens in each flower*.

The orders *octandria* and *decandria* are those which require our notice; the other two are common divisions in General Botany.

eight stamens.

g ten stamens.

us *Erinacea.*

us *Santalinus.*

Scoparium.

ch are used in
al order.

t *Astragalus*, *Doli-*
der *papilionaceæ.*

ELPHIA.

ve their stamens
re than two sets.

so established on the
s. The orders, how-
stamens alone.

. *dodecandria*, *ico-*
se are, of course,
ad insertion of the

which affords Medicinal
ia are common divisions

Icosandria:—An order, in which the flowers have *numerous stamens inserted in the calyx or corolla.*

Citrus Aurantium.

Citrus Medica.

Melaleuca Leucodendron.

The three plants of polyadelphia icosandria, are found in two natural orders.

The genus Citrus in *bicornes*, and Melaleuca in *Aesperideæ*.

CLASS XIX.—SYNGENESIA.

This is a very extensive class, comprehending for the most part, those plants which produce *compound flowers.* (F. 59.)

The necessary character, however, is, *the anthers united into a cylinder or tube*, whilst the filaments, by which they are supported, are separate and distinct. The pistil passes through the tube formed by the anthers.

Its orders are five; viz. *polygamia æqualis*, *polygamia superflua*, *polygamia frustranea*, *polygamia necessaria*, and *polygamia segregata*. These orders are all founded on *the structure of the flower.*

Medical species are only afforded by the two first, *polygamia æqualis*, and *polygamia superflua*; but as it is rather a complex class, I shall explain each order respectively.

united, that is, furnished with both stamens and pistils, and thereby capable of bringing their seed to maturity, without the aid of any other floret.

Arctium Lappa.

Lactuca Sativa.

Lactuca Virosa.

Leontodon Taraxacum.

***Polygamia superflua* :—**With the peripheral subdivision, the florets in the centre are *perfect* or *united*, while those of the circumference or margin, are furnished with pistils only.

Anthemis Nobilis.

Anthemis Pyrethrum.

Arnica Montana.

Artemisia Arbotanum.

Artemisia Absinthium.

Artemisia Maritima.

Artemisia Saeva.

Inula Helena.

Solidago Virgata.

Tanacetum Vulgare.

Tussilago Farfara.

***Polygamia frustranea* :—**In the first order, the florets of the disk or centre are furnished with both stamens and pistils.

of the centre are furnished with *stamens only*, while those of the margin or circumference, are merely supplied with *pistils*.

The family calendula or marygold is the most common you can consult for polygamia necessaria.

Polygamia segregata :—This order of syngenesia, embraces such plants as bear flowers, either simple or compound, but with *united tubular anthers*, and *with a partial calyx*, all included in one general calyx.

Examples of this order occur in the genera Echinops or globe-thistle, Elephantopus or elephant's-foot, and a few others.

All the Medical Plants we have mentioned, are not only syngenesious, but likewise arranged in one Natural Order.

This order is the Linnæan *compositæ*, because every plant which it embraces, produce compound flowers.

CLASS XX.—GYNANDRIA.

The plants of this class are furnished with perfect flowers, the stamens of which are *inserted* either upon the *style* or *germen* of the pistil. (F. 60.)

The general division of the class is into seven

according to the number of stamens.

Of these orders, *Hexandria* is the only one that attracts our attention.

***Hexandria* :—**Every plant produces six stamens in each flower.

Even in this order, there is only one member, the *Aristolochia Serpentaria*, a native of America, belonging to the natural order *sarmentaceae*.

FIFTH DIVISION.

The classes which we have hitherto considered are constituted by plants, the flowers of which are *perfect*, or in other words, furnished with both stamens and pistils. In the classification, we shall ascertain that there are some plants not only in different flowers on the same plant, but also on different plants.

According to the nature of these differ-

stamens only, and some flowers with *pistils only*, both kinds growing on the same plant.

Monandria, *diandria*, *triandria*, *tetrandria*, *pentandria*, *hexandria*, *polyandria*, *monadelphia* and *polyadelphia* are the orders.

The first six orders are established on the number of stamens alone; *polyandria* on the number and insertion; *monadelphia* on the union of the filaments into one set; and *polyadelphia* on the union of the filaments into more than two sets.

***Tetrandria* :—**In this order are arranged such plants of the monoecious character, as produce barren flowers with *four* stamens.

Morus Nigra.

***Polyandria* :—**Including those plants of the class which produce barren flowers with *more than seven* stamens.

Arum Maculatum.

Quercus Pedunculata.

Quercus Infectoria.

Quercus Robur.

***Monadelphia* :—**Embracing those plants, the barren flowers of which, have their filaments united into one set.

Croton Cascarilla.

Pinus Balsamea.

Croton Tiglium.

Pinus Larix.

Cucumis Colocynthis.

Pinus Sylvestris.

Momordica Elaterium.

Ricinus Communis.

Pinus Abies.

NATURAL ORDER.

Thus, *Morus* will be found among the *scaberrimæ* in *piperitæ*; *Quercus* in *amentaceæ*; *Croton* in *trilocellæ*; *Cucumis* and *Momordica* in *cucurbitaceæ*; *Pinus* in *conifereæ*.

CLASS XXII.—DIECIA.

The twenty-second class contains those which have no perfect flowers, but *flowers with stamens* on one plant, and *with pistils* on another of the same species.

Like the preceding class, diecia is usually divided into nine orders; viz. *diandria*, *triandria*, *tetrandria*, *pentandria*, *octandria*, *polyandria* and *monandria*.

The first eight, are derived from the number of stamens alone: *polyandria*, when there are more than eight; and *monadelphia*, when the filaments of the stamens are united.

***Pentandria* :—**Each barren flower having *six stamens*, as in the

Humulus Lupulus.
Pistacia Lentiscus.
Pistacia Terebinthus.

***Hexandria* :—**Each barren flower having *six stamens*, as in the

Smilax Sarsaparilla.

***Monadelphia* :—**The *filaments* of the stamens *united into one set*, as in the

Juniperus Communis.
Juniperus Sabina.
Myristica Moschata.

The six genera of Medical Plants belonging to this class, are nearly all of different natural arrangements.

Salix and Pistacia assist in forming the family *armen-taceæ* ; Humulus is classed with the *scabrideæ* ; Smilax, with the *sarmentaceæ* ; Juniperus with the *coniferæ* ; and Myristica with the *holeraceæ*.

CLASS XXIII.—POLYGAMIA.

This class includes such plants as produce three kind of flowers ; viz. some with *pistils* only, some with *stamens* only, and others with *both* ;

same species.

The orders of polygamia are three; viz. *monœcia*, *diœcia* and *triœcia*.

The two former are named in accordance with the class so called, and *triœcia* because with the plants which it embraces, there are *stamens only* on one plant, *pistils only* on another, and *both stamens and pistils* on a third, all of same species.

Monœcia :—Including those plants which have perfect flowers, accompanied with barren or *staminate* flowers, or both, on the same plant.

Acacia Catechu.
Acacia Vera.

Stalagmatis Cambogia.
Veratrum Album.

Diœcia :—Embracing those plants which have the three different flowers on *two* of the species.

Ficus Carica*.
Fraxinus Ornus.

The genus *Acacia* belongs to *lomentaceæ*; *Staglinum* to *triccæ*; *Veratrum* to *coronariæ*; *Ficus* to *scabridæ*; and *Fraxinus* to *sepiariæ*.

SIXTH DIVISION.

This division brings us to the last class of the Linnæan Artificial System. The plants which belong to it are widely different to those we have considered.

CLASS XXIV.—CRYPTOGAMIA.

The class cryptogamia contains a vast assemblage of vegetables, in which the parts of fructification are, either from their minuteness or from their particular situation, entirely concealed or imperfectly visible.

The class has been divided into five natural orders—viz. *filices*, *musci*, *hepaticæ*, *algæ*, and *fungi*, each established on the distinguishing characters of the productions they embrace.

Of these, *filices*, *musci*, *algæ*, and *fungi*, form four orders in the Linnæan Natural System.

Filices or *Ferns*:—This order contains a selection of plants, the fructifications of which, are essentially different, at least in point of situation,

eing generally diffused
under surface of the leaf.

Aspidium Filix Mas.

Musci or *Mosses*:—These plants have root and leaves something like those of other plants but the fruit is very different. Small three like the filaments of stamens generally grow of the bosom of the leaves, and support roundish bodies that resemble anthers, but are really the capsules that contain the

Hepaticæ or *Liverworts*:—The products of this order, are a tribe of small plants resembling mosses, in which the herbage, generally, is leafy, and the fructification originates at the same time, both leaf and capsule. The capsules have no lid or operculum like the mosses.

—The fourth or
the herba

Fungi or Mushrooms:—This order is composed of a tribe of plants of a fleshy substance, generally of a quick growth and short duration, differing in firmness, from a watery pulp to a leathery or even woody texture.

Boletus ignarius.

SECTION III.

CONTAINING GENERAL RULES FOR ASCERTAINING
CLASS, ORDER, GENERA, AND SPECIES OF PLANTS
ACCORDING TO THE LINNÆAN SYSTEM.

THE CLASS.

If you have a plant, and wish to know its class, you must remember, that the classes are formed upon six circumstances connected with the stamens.

You must first examine the parts of fructification, and see to which *division* of the system the stamens correspond.

Having proved the *division*, you will find no difficulty to come at the *individual class*.

THE ORDER.

The genera remembered. are as follows.

certain of the *class* and *order* to which your plant belongs, refer to the said class and order, in a good systematic arrangement or *genera plantarum*, and taking notice of the different *genera* by which the order is constituted, carefully examine the principal characters of the plant under examination, and mark which *genus* it *most* resembles.

THE SPECIES.

The *genus* being fixed upon, to which you think the plant belongs, read over the *species*, and by comparing the plant with what you read, there will be no difficulty in finding *its name*, though you might never have seen or heard of the plant before.

THE

LINNÆAN

NATURAL SYSTEM.

PART III.

**EXPLAINING THE GENERAL MEANING OF THE DIFFERENT
ORDERS, WITH ALLUSIONS TO THE MOST FREQUENT
CHARACTERS POSSESSED BY THE MEDICAL PLANTS ENU-
MERATED UNDER EACH HEAD.**



THE
LINNÆAN
NATURAL SYSTEM.

ORDER I.—PALMÆ.

The tribe of *palms* is an entire natural and very distinct order, constituted by families of lofty plants with very peculiar frondose tops.

Cocos Butyraceæ.

This plant corresponds to the general character of the order.

Emollient in medicinal virtues : has a three-leaved calyx ; a corolla of six or three petals ; flowers monœcious ; stamens six ; and the seed a one-celled, smooth, and succulent drupe.

The plants of this division have an acrid flavour, whence they are called *pepper-plants*.

Acorus Calamus.

Piper Longum.

Arum Maculatum.

Piper Nigrum.

Piper Cubeba.

In natural characters, the medical species are not very similar.

Natural Characters:—Root and stem indefinite; leaves sword-shaped, triangular, ovate or cordate; stamens two, six, or more; fruit a capsule or berry.

Medical Properties:—Acorus Calamus and the Peppers are considered stomachic, carminative, and stimulant; and the Arum Maculatum, stimulant, diuretic, and errhine.

ORDER III.—CALAMARIÆ.

Consisting of such plants as are usually called *reeds*, and most of which are very closely related to the true grasses.

The Medical Plants here mentioned, have several natural common characters.

Natural Characters:—They have fibrous roots; hollow stems or culms; inflorescence either a spike or panicle; calyx two-valved; from one to six stamens; and the germen superior, with two pistils.

Medical Properties:—The *Saccharum Officinarium* is reckoned nutrient and slightly aperient, and all the rest are valuable nutrients and emollients.

ORDER V.—TRIPETALOIDES.

The plants of this order, have flowers with *three petals* only, and are nearly allied to the grasses, but possess no very striking characters.

ORDER VI.—ENSATÆ.

The sword-shaped leaves of some plants, have established this order, hence they are called *sword-leaved plants*.

Crocus Sativus.

Iris Florentina.

The calyx is a kind of spurious spathe; corolla usually of six petals; seed-vessel a capsule of three cells and three valves, with many seeds.

ORDER VII.—ORCHIDÆÆ.

The plants of this order are of the *orchis tribe*, forming a peculiar selection of vegetables.

This is an order of plants approaching
orchideæ in aspect. They are of an *aroma*
ture, from whence the name of the order
erived.

Curcuma Zedoaria.

Elettaria Cardamomum.

Zingiber Officinale.

These scitaminous plants have considers
atural affinities.

Natural Characters :—The roots are fleshy, mostly
and aromatic ; stem simple ; leaves lanceolate, entire
floreescence either a spike or cluster ; flower superior
stamen ; one pistil ; calyx a perianth of three valves ; co
irregular.

Medical Properties :—The three plants are all poss
of stimulating, carminative and stomachic properties.

ORDER IX.—SPATHACEÆ.

In this order are arranged those plants, v

usually sheathing at the root, and either linear, or linear-lanceolate; stem, a round, two-edged or triangular scape; corolla one or more petalled; stamens six; pistils one or three; capsules three celled.

Medical Properties:—The three first are expectorant and diuretic, and the *Colchicum Autumnale*, narcotic, diuretic, and cathartic.

ORDER X.—CORONARIÆ.

An order so named from many of its plants producing flowers which were formerly used to decorate a *coronary* or garland.

Aloe Spicata.
Aloe Vulgaris.

Scilla Maritima.
Veratrum Album.

The plants before us are very similar in natural characters, and very fairly so in medical virtues.

Natural Characters:—Roots tuberous; stem simple, often a mere scape; flower of six petals; no calyx; six stamens; one or three pistils; germen superior; capsules three celled and three valved, with many seeds.

Medical Properties:—The two *Aloes* are of a warm stimulating cathartic nature; the *Scilla Maritima* emetic, expectorant, diuretic, and even cathartic; and the *Veratrum Album*, violently emetic, purgative and stimulant.

ORDER XI.—SARMENTACÆ.

A set of plants so called from their being unarmed, long, weak, and of a trailing or twining habit.

Smilax Sarsaparilla.

The plants of this order do not agree very closely in their general characters, though bearing great similarity in medical properties.

Natural Characters.:—They are all monocotyledonous roots fibrous; stems various; leaves simple and undivided, sometimes cordate, kidney-shaped or ovate; flowers in stalks; corolla none or one petalled; stamens six or more; styles usually three; the fruit six or three-celled.

Medical Properties.:—The *Aristolochia Serpentina* diaphoretic and diuretic; the *Asarum Europæum*, emetic, diaphoretic and diuretic; and the *Smilax Sarsaparilla* diaphoretic and diuretic.

ORDER XII.—HOLERACEÆ.*

This order is intended to embrace those plants which are tender or brittle in the mouth. They are commonly called *pot-herbs*, and many of them are employed for culinary purposes.

Canella Alba.

Myristica Moschata.

Peperomia Ristorta.

The natural characters of these plants are very vague, as also are their medicinal qualities.

Natural Characters.—The roots are arborescent or otherwise; stems various; leaves usually entire and long; inflorescence a cluster, panicle, spike or whorl; corolla none one, or more petalled; calyx sometimes wanting; stamens and pistils indefinite; seed-vessel a berry, drupe, legume, or capsule.

Medical Properties.—The *Canella Alba* is stimulant and stomachic; the *Laurus Camphora* narcotic, diaphoretic and sedative; the *Laurus Cassia*, laxative; the *Laurus Cinnamonum* and *Myristica Moschata*, stimulant, carminative and narcotic; the *Laurus Sassafras*, stimulant, sudorific, and diuretic; the *Polygonum Bistorta*, astringent and tonic; the *Rhubarba* purgative and astringent; the *Rumex Acetosa* diuretic; and the *Rumex Aquaticus*, astringent.

ORDER XIII.—SUCCULENTÆ.

In this division, are arranged such plants as are of a fleshy and juicy nature.

ORDER XIV.—GRUINALES.

This order brings together those plants which have flowers somewhat resembling a *crane's bill*.

Guaiaacum Officinale.	Oxalis Acetosella.
Linum Catharticum.	Quassia Excelsa.
Linum Usitatissimum.	Quassia Simarouba.

With the plants of this division, the natural

Natural Characters :—The roots are arborescent or branched; stems erect; leaves obovate, lanceolate, obcordate, elliptical or oblong; inflorescence generally simple; corolla five petalled; calyx, five leaved; stamens, five or ten; pistil one or five; and the seed-vessel, a three or more celled capsule or a drupe.

Medical Properties :—The Guaiacum Officinale is calidiphoretic and stimulant; the Linum Catharticum, purgative; the Linum Usitatissimum, emollient; and the species of Quassia, tonic.

ORDER XV.—INUNDATÆ.

An order of plants, so called, because they grow in water, many of them under the surface except their blossoms.

ORDER XVI.—CALYCIFLORÆ.

Plants of the shrub and tree kind having *stamens* inserted into the calyx.

twelve to nineteen stamens; one pistil; and a two-celled capsule with many seeds. Of tonic and astringent properties.

ORDER XVIII.—BICORNES.

So called because many of the plants which belong to it, have the anthers terminating in *two beaks* or *horns*.

Arbutus Uva Ursi.	Rhododendron Chrysanthemum.
Citrus Aurantium.	Styrax Benzoin.
Citrus Medica.	Styrax Officinale.

The plants of *bicornes* do not altogether differ very materially in natural affinities, or in medical virtues.

Natural Characters.—Root, arborescent; stem, shrubby; leaves, obovate, ovate, elliptical, oblong; inflorescence, a cluster, peduncle, or spike; corolla, one or five petalled; calyx, generally five-cleft; stamens, from four to ten; pistil, one; seed-vessel, a berry or drupe.

Medical Properties.—The *Arbutus Uva Ursi*, is recommended as a tonic and astringent; the juice of the *Citrus Aurantium* and *Citrus Medica* is refrigerant, and the rind tonic; the *Rhododendron Chrysanthemum*, stimulant, narcotic and diaphoretic, and the two species of *Styrax* are stimulant and expectorant.

ORDER XIX.—HESPERIDEE.

This order is said to consist of aromatic and elegant shrubs and trees.

Melaleuca Leucodendron.	Myrtus Pimenta.
-------------------------	-----------------

alike, and correspond.

Natural Characters.—Root, arborescent or fibrous; stem shrubby, branching; leaves, lanceolate, entire; corol five-parted; calyx, five-cleft; stamens, five or icosandrous; pistil, one; and the fruit, a capsule of many seeds.

Medical Properties.—The cajeput oil, or product of the *Melaleuca Leucodendron*, is stimulant, anti spasmodic, and diaphoretic; and allspice, the fruit of the *Myrtus Pimenta* is stimulant and carminative.

ORDER XX.—ROTACEÆ.

Embracing plants with a *wheel-shaped* corol

Chironia Centaurium.

Gentiana Lutea.

Both the *chironia* and *gentiana* have natural and medicinal characters common to the two.

Natural Characters.—Root woody; leaves mostly sessile, elliptical, spear-shaped; corolla divided into five or six narrow segments; calyx, five-cleft or a spathe; stamens five; pistil one or two; fruit a capsule. They are tonic and stomachic.

stem branched; leaves obovate; corolla, funnel-shaped, cleft into five deep segments; calyx, five-toothed; stamens five; pistil one; seed-vessel a capsule of one cell. In medical properties it is tonic, diuretic and purgative.

ORDER XXII.—CARYOPHYLLÆ.

This order consists of the tribes of pink and campion, with numerous other plants having natural affinities to the same.

Dianthus Caryophyllus.

Natural Characters.—A perennial plant with a fibrous root; leaves channelled, linear, glaucous; corolla, five petalled; calyx tubular, five cleft; stamens ten; pistils two; fruit a cylindrical capsule of one cell. In medical properties said to be aromatic.

ORDER XXIII.—TRIHILATÆ.

Containing plants with *three-celled* and *three-grained* fruit, all the cells being distinct, and each seed marked with the hilum or scar.

Æsculus Hippocastanum.

Swietenia Febrifuga.

These two trees have several natural affinities, and agree in medical properties.

Natural Character.—The root and stem, arborescent; leaves, digitated or abruptly-pinnated; inflorescence, a spike or panicle; corolla, five-petalled; calyx, five-cleft; the seed-vessel, a capsule.

hic,

at re-

a strong

ls.

Niger.
olens.

a slight ba-
t cannot be
ee one with

indefinite; the
e; inflorescence,
ur, five, or more
olens, wanting in
ils, one, three, or

o y q 127

1

Medical Properties.:—The *Aconitum Napellus* is narcotic, sudorific, and deobstruent; the *Delphinium Staphisagria* and *Hellebores*, cathartic, emmanagogue and vermifuge; and the *Ruta Graveolens*, tonic and antispasmodic.

ORDER XXVII.—RHŒADEÆ.

The order in question, is constituted by the poppy tribe, and a few other genera of plants.

Papaver Rhœas.

Papaver Somniferum.

With these two plants, the natural characters and medical virtues are very similar.

Natural Characters.:—Roots, fibrous; stems, erect, smooth, or rough; leaves, sessile, pinnatifid, obtuse; corolla, four-petalled; calyx, two-leaved; stamens, polyandrous; pistil, one; and seed-vessel, a capsule of one cell.

Medical Properties.:—The flowers of the first, are used for coloring, and the dried juice of the last, constitutes *opium*. The capsules, however, of both are considered sedative and anodyne.

ORDER XXVIII.—LURIDÆ.

An order of plants whose pale and gloomy appearance, indicate their baneful and noxious qualities.

Atropa Belladonna.

Capsicum Annuum.

Datura Stramonium.

Digitalis Purpurea.

Hyoscyamus Niger.

Nicotiana Tabacum.

Solanum Dulcamara.

Strychnos Nux Vomica.

is respects them.

most uniform orders in the system,
dical species being more or less poisonous.

Natural Character:—Root, principally fibrous; stem erect or climbing; leaves ovate, undulated, entire; corolla, bell-shaped, funnel-shaped, or tubular, sometimes five-cleft; stamens five or didynamous; pistil one; the seed-vessel, a berry or capsule, generally two-celled.

Medical Properties:—The whole set are more or less, narcotic, diuretic, diaphoretic, sedative and anodyne.

ORDER XXIX.—CAMPANACEÆ.

An order consisting of plants with *campanulate* or bell-shaped flowers.

Convolvulus Jalapa.

Convolvulus Scammonia.

These plants have large juicy roots, which send up many twining slender stems; the leaves in the former varying, in the latter arrow-shaped; corolla bell-shaped, plaited; calyx differing; stamens five; pistil one; and the seed-vessel a capsule. In Medical Properties they are both purgative and hydragogue.

The three plants here mentioned, have of course, the common generic characters, and also agree in their properties and habits.

Natural Characters.—The root and stems are arborescent; leaves differing; inflorescence in large, terminal, leafy panicles; corolla funnel-shaped, plaited; calyx, somewhat globular and five-toothed; stamens five; pistil one; capsule inferior and two-celled. In Medical Properties they are tonic, astringent, stomachic and febrifuge.

ORDER XXXI.—VEPRECLÆ.

Derived from *veprecula* or little briar, and consisting of plants resembling the daphne.

Daphne Mezereum.

An ornamental shrub with a fibrous root; leaves lanceolate, sessile, entire, smooth; corolla monopetalous, tubular; four-cleft; calyx none; stamens eight; pistil one; fruit, a pulpy drupe containing one round seed. In small quantities it is diaphoretic and stimulant, and in large doses emetic.

ORDER XXXII.—PAPILIONACEÆ.

An extensive and very natural assemblage of plants, having *papilionaceous* or butter-fly shaped flowers.

Astragalus Verus.
Dolichos Pruriens.
Geoffræa Inermis.
Glycyrrhiza Glabra.

Pterocarpus Erinacea.
Pterocarpus Santalinus.
Spartium Scoparium.

and, however, to bear such a similarity.

Natural Characters :—Roots and stems indefinite ; leaves pinnate, pinnate, ovate ; corolla papilionaceous ; calyx, deeply five-toothed ; stamens diadelphous ; the fruit a legume or a drupe.

Medical Properties :—The *Astragalus Verus*, and *Glycyrrhiza Glabra*, are demulcent ; the *Dolichos Pruriens*, and *Geoffræa Inermis*, anthelmintic ; the two *Pterocarpis*, stringent ; and the *Spartium Scoparium*, astringent and diuretic.

ORDER XXXIII.—LOMENTACEÆ.

An order named from *lomentum*, a colour used by painters, because some of its plants are employed in the art of dyeing.

Acacia Catechu.

Acacia Vera.

Cassia Fistula.

Cassia Senna.

Hæmatoxylon Campechianum.

Myroxylon Peruiferum.

Polygala Senega.

*Tamarindus Indica**.

* Very similar in natural

five-petalled; calyx, usually five-parted; stamens indefinite; pistil one; the fruit in all, a legume.

Medical Properties:—The *Acacia Catechu* and *Hæmatoxylon Campechianum*, are astringents; the *Acacia Vera*, demulcent; the two *Cassiæ*, laxative; the *Myroxylon Peruiferum*, stimulant and expectorant; the *Polygala Senega*, stimulant, expectorant, diaphoretic and diuretic; and the *Tamarindicus Indica*, laxative and refrigerant.

ORDER XXXIV.—CUCURBITACEÆ.

This order has received its name from *cucurbita*, a gourd, on account of its being constituted by plants similar to the gourd family.

Cucumis Colocynthis. *Momordica Elaterium.*

These plants in natural characters have trailing stems; the leaves on long petioles, rough; flowers axillary; corolla, bell-shaped, five-cleft; calyx, bell-shaped, five-toothed; stamens, monœcious; and the fruit a large berry. In medical virtues they are strong cathartics.

ORDER XXXV.—SENTICOSÆ.

So named from *sentis*, a briar, on account of its embracing the briar and bramble tribe.

Agrimonia Eupatoria.

Rosa Centifolia.

Geum Urbanum.

Rosa Gallica.

Rosa Canina.

Tormentilla Erecta.

The plants of *senticosæ* which are employed in

In these plants we find three or more ; leaves obovate, lyrate, oval, lanceolate corolla four or five-petalled ; calyx three, five or six-petalled ; stamens either icosandrous or dodecandrous ; pistils two or many ; seeds mostly naked.

ORDER XXXVI.—POMACEÆ.

Pomaceæ from *pomum*, an apple, embracing the apple and plum tribe.

Amygdalus Communis.	Punica Granata.
Prunus Domestica.	Pyrus Cydonia.

This is altogether a tolerable natural order, the medical species of which are some common and useful characters all.

Natural Characters :—Root and stem are woody ; leaves either elliptical, serrated or ovate ; corolla five-petalled ; calyx five-cleft, superior or inferior ; stamens icosandrous ; pistils, one or five ; fruit, a drupe or berry. *Properties* :—The Almond and Quince are the most common.

sisting of plants, whose stamens are united in the form of a column or pillar.

Althæa Officinalis.

Malva Sylvestris.

In these plants, the root is spindle-shaped; stem, branched; leaves, five or seven-lobed, roughish, alternate, petiolate; corolla, five-petalled, cordate; calyx, double; stamens, monadelphous; and the fruit, a capsule with one seed.—They are both emollient and demulcent.

ORDER XXXVIII.—TRICOCCÆ.

Consisting of plants usually with a single three-cornered capsule, of three cells, each cell containing one seed.

Croton Cascarilla.

Ricinus Communis.

Croton Tiglium.

Stalagmatis Cambogioides.

Euphorbia Officinarum.

These plants are very analogous in medical virtues, but not so in natural characters.

Natural Characters:—Root and stem indefinite; leaves cordate, lanceolate, lobed, ovate; corolla none, or four or five petalled; calyx indefinite; stamens monœcious, dodecandrous, or polygamous; seed-vessel mostly a three-celled capsule.

Medical Properties:—The *Croton Cascarilla*, is tonic; the *Euphorbia Officinarum*, errhine; and the other three purgative and cathartic.

ORDER XXXIX.—SILICOUSÆ.

Embracing the plants of the tetradynamia,

a silicle or
d.

Alba.
Nigra.

considered
characters and

uberous roots ;
lobed ; inflores-
s ; calyx, four-
and the seed-

atensis, is sti-
the Cochlearia
two species of
efacient.

n the flowers
t, gaping or
sembling the

leccabunga.
ata.

r much alike
properties.
indefinite ; leaves

obovate, cordate, ovate; corolla four or five-petalled; calyx, four or five-parted; stamens two to ten; pistil one; fruit a capsule.

Medical Properties:—The *Gratiola Officinalis*, is anthelmintic, purgative, and diuretic; the *Scrophularia Nodosa* is externally anodyne and repellant; the *Veronica Beccabunga*, a supposed antiscorbutic; and the *Viola Odorata*, slightly laxative.

ORDER XLI.—*ASPERIFOLIÆ*.

The plants of this order are called *rough-leaved plants*, because of their usual rough or harsh habit.

Anchusa Tinctoria.

A perennial plant, with a woody fibrous root; round, hairy, rough, branched stem; purple flowers in clusters; a funnel-shaped corolla, with a five toothed expansion; a persistent five-cleft calyx; five stamens and one pistil.

ORDER XLII.—*VERTICILLATÆ*.

Consists of herbaceous vegetables, having four naked seeds, and the flowers placed in whorls round the stalks.

Hyssopus Officinalis.

Lavandula Spica.

Marrubium Vulgare.

Melissa Officinalis.

Mentha Piperita.

Mentha Pulegium.

Mentha Viridis.

Origanum Marjorana.

Origanum Vulgare.

Rosmarinus Officinalis.

Salvia Officinalis.

Teucrium Chamædrys.

Teucrium Marum.

not bear
and the medica

er woody or fibrous;
al, linear, orbicular,
ce a spike, whorl or
ular, labiate; calyx,

opus Officinalis, is sti-
ula Spica, Rosmarinus
nulant and tonic; Mar-
scinalis, stomachic and
Marjorams, stomachic
amædrys, tonic and sto-
ernutatory.

-DUMOSÆ.

cluding plants of the
and bushy, rising from
ty feet.

Rhamnus Catharticus.
Rhus Toxicodendron.
Sambucus Nigra.

we cannot discover these
much; but in medical
similarity.

toot branched; stem shrubby;
erwise; inflorescence, a corymb,

raceme, spike, or cyme; corolla, four or five petalled, or five or six cleft; calyx none, or four toothed, five parted; stamens five, eight, nine or ten; seed-vessel, a drupe, a legume, a capsule, or a berry.

Medical Properties.—The three first are stimulant and more or less diuretic; the *Rhamnus* is cathartic; the *Rhus Toxicodendron*, stimulant and narcotic; and the berries of the *Sambucus*, aperient, flowers diaphoretic, and the bark purgative.

ORDER XLIV.—SEPIARIÆ.

From *sepes*, a hedge, the plants of which, from their use and habits, are particularly calculated for hedges.

Fraxinus Ornus.

Olea Europea.

These are both native trees of the south of Europe; the leaves of the former are pinnate, of the latter lanceolate; inflorescence a panicle or cluster; corolla none, or four parted; calyx none, or four cleft; seed-vessel, a capsule or drupe.

ORDER XLV.—UMBELLATÆ.

This is a very true and natural order of plants furnished with *umbels*; though all plants which bear umbels do not belong to it, but only those with five stamens, two pistils, and two seeds.

Anethum Fœniculum.

Daucus Carota.

Anethum Graveolens.

Daucus Sylvestris.

Angelica Archangelica.

Eryngium Maritimum.

Conium Maculatum.
Coriandrum Sativum.
Cuminum Cyminum.

Pimpinella Anisum.
Sium Nodiflorum.

The Medical Plants of this order, are upon the whole, considerably related to each other.

Natural Characters :—Root principally fusiform and fibrous; stem, herbaceous; leaves, indefinite, generally alternate, and repeatedly compound; corolla, principally five-petalled; calyx, mostly five-leaved; stamens five; pistils, and two seeds.

Medical Properties :—The seeds of the Anethum Foeniculum, Anethum Graveolens, Angelica Archangelica, Carum Carui, Coriandrum Sativum, Daucus, and Pimpinella Anisum, are carminative, and more or less diuretic; the gum of the Bubon Galbanum, Ferula Assafoetida, and Heracleum Gummiferum, is anti-spasmodic, deobstruent and expectorant; the Conium Maculatum, narcotic; the Cuminum Cyminum, anti-spasmodic; the Pastinaca Opoponax, an anti-spasmodic and emmenagogue; the Eryngium Maritimum, diuretic and expectorant; and the Sium Nodiflorum, diuretic and stimulant.

Vitis Vinifera.

A native tree of Armenia and other temperate regions; root arborescent; stem climbing; leaves, lobed, sinuated, serrate, alternate; inflorescence a bunch; corolla, greenish white; calyx, very minute; fruit a berry.

ORDER XLVII.—STELLATÆ.

This order is named from the leaves of most of the plants which compose it, being placed four, six, or eight together, in the form of a star or *stella*, round the stem.

Rubia Tinctorum.**Spigelia Marilandica.**

These plants have annual stems, quadrangular; leaves elliptical, or ovate-lanceolate; corolla, monopetalous, bell-shaped or funnel-shaped; stamens, four or five; pistil one; seed-vessel, a berry or capsule. The first is emmenagogue and astringent, and the second anthelmintic.

ORDER XLVIII.—AGGREGATÆ.

Embracing those plants which are furnished with aggregate flowers, that is, with flowers consisting of a number of partial flowers, each of which have a proper and common calyx.

Cephaelis Ipecacuanha.**Valeriana Officinalis.**

Two perennials, with fibrous, branched roots; leaves, ovate or connate; inflorescence, a tuft or corymb; stamens three or five; pistil one; seed-vessel, a berry or capsule. The first, emetic, sudorific and expectorant; the second, antispasmodic, tonic, and emmenagogue.

A very extensive order of plants — compound flowers, that is, flowers with many florets enclosed in one common calyx.

Anthemis Nobilis.	Centaurea Benedicta.
Anthemis Pyrethrum.	Inula Helenium.
Arctium Lappa.	Lactuca Sativa.
Arnica Montana.	Lactuca Virosa.
Artemisia Abrotanum.	Leontodon Taraxacum.
Artemisia Absinthium.	Solidago Virga Aurea.
Artemisia Maritima.	Tanacetum Vulgare.
Artemisia Santonica.	Tussilago Farfara.

These plants are not strikingly similar, though many are alike both in their natural character and quality of virtue.

Natural Characters: — Root, principally fibrous woody; stem, herbaceous; leaves, indefinite; inflorescence of course, compound.

Medical Properties: — The Anthemis Nobilis is considered tonic and stomachic; the Anthemis Pyrethrum, sialagogue; the Arctium Lappa, aperient, sudorific and diuretic; the Arnica Montana, narcotic, stimulant, diaphoretic, and emmenagogue.

ORDER L.—AMENTACEÆ

Including a tribe of plants which have the species of calyx, called an *amentum* or catkin.

<i>Pistacia Lentiscus.</i>	<i>Quercus Robur.</i>
<i>Pistacia Terebinthus.</i>	<i>Salix Alba.</i>
<i>Quercus Infectoria.</i>	<i>Salix Caprea.</i>
<i>Quercus Pedunculata.</i>	<i>Salix Fragilis.</i>

The trees of this order are more or less alike each other, both in natural characters and remedial virtues.

Natural Characters:—Roots and stems arborescent; leaves alternate; inflorescence, monœcious or diœcious.

Medical Properties:—The resins of the two *Pistaciæ* are stimulant and diuretic; and the production of the *Quercus* and *Salix* tribe, tonic and astringent.

ORDER LI.—CONIFERÆ.

Consisting of a selection of plants, which have for their seed-vessel, a *strobile* or *cone*.

<i>Juniperus Communis.</i>	<i>Pinus Balsamea.</i>
<i>Juniperus Lycia.</i>	<i>Pinus Larix.</i>
<i>Juniperus Sabina.</i>	<i>Pinus Sylvestris.</i>
<i>Pinus Abies.</i>	—

The Medical Plants under consideration, are somewhat different both in natural characters,

medicine.

Natural Characters :—In the genus *Juniper*, the *male* flower is an ovate amentum, the calyx a scale, no corolla, three stamens; the *female* flower has a three-parted calyx, three petals, three styles, producing an irregular three-sided berry, with the three tubercles of the calyx. In the *Pinus* genus, the *male* flower has no corolla, a four-leaved calyx, many stamens, and naked anthers; the *female* flower has no corolla; the calyx, a strobile, with a two flowered scale, pistil one, producing a species of nut, with a membranous wing.

Medical Properties :—The berries of the *Juniperus Communis*, are diuretic and carminative; the olibanum or resin of the *Juniperus Lycia*, stimulant; the leaves of the *Juniperus Sabina*, stimulant, diaphoretic, emmenagogue, anthelmintic and escharotic; and the products of the different firs, more or less stimulant and diuretic.

ORDER LII —COADUNATÆ.

From *coadunare*, to join—an order of plants established on the general appearance of the seed-scales which are numerous, being slightly joined in the fruit. the parts o

Dorstenia Contrayerva.

Morus Nigra.

Ficus Carica.

Ulmus Campestris.

Humulus Lupulus.

—

These plants are equally variable in natural characters and medicinal virtues.

Natural Characters.—Root and stem, mostly arborescent; leaves, irregular, cordate, serrate; corolla, none; calyx, indefinite; stamens, variable; fruit, a capsule, cone, or otherwise.

Medical Properties.—The root of the *Dorstenia Contrayerva* is tonic, stimulant, and sudorific; the fruit of the *Ficus Carica*, demulcent and suppurative; the *Humulus Lupulus*, anodyne, narcotic, and diuretic; the berries of the *Morus Nigra*, laxative; and the bark of the *Ulmus Campestris*, tonic, alterative, and diuretic.

ORDER LIV.—MISCELLANÆÆ.

This order consists of miscellaneous plants, or such genera as are not connected together by very numerous relations.

ORDER LV.—LVI.—LVII.—LVIII.

The four last orders, viz. *filices* or ferns, *musci* or mosses, *algæ* or flags, and *fungi* or mushrooms, are natural divisions of the class *cryptogamia* in the Artificial System, therefore do not require another explanation.

PLANTÆ DUBIÆ .

Linnæus found numerous genera which he could not reduce to any of the foregoing orders; he has, in consequence, thrown them into an appendix, as plants of an uncertain or doubtful order.

THE
TERMINALOGY
OF
BOTANY.

PART IV.

**EXPLAINING THE MOST USEFUL AND PRACTICAL TERMS
EMPLOYED IN DESCRIPTIVE BOTANY, AS INTENDED TO
BE UNDERSTOOD IN MEDICAL WRITINGS.**

THE
TERMINALOGY
OF
BOTANY

***Abrupt*, truncated:—**When the extremity of a part is apparently cut off transversely.

***Abruptly-pinnate*:—**When a compound leaf does not have a terminating leaflet or tendril.

***Acerose*, acicular, or needle-shaped:—**Applied to a leaf when it is linear and evergreen, sharp and rigid.

***Acinaciform*, scimitar-shaped:—**Having one edge thick and straight, the other thin and curved.

Acuminate, sharp-pointed :—When ter
in a point.

Adnate, adhering :—Applied to part
appear to grow together.

Alternate :—When not in pairs, but
one after the other.

Angled :—When a circumference has
able projections, which are not lobular.

Appendiculated, appendaged :—Signify
thing in particular attached to a part.

Arborescent, tree-like :—Partaking o
nature.

Arillus, tunic :—Is either a complete
to its base

Articulated:—Applied to parts when they are joined together, or divided into parts by peculiarity of structure.

Awl-shaped, subulate:—Thick at the base, and gradually attenuated to a sharp point.

Awn, arista:—A terminating spine or appendage.

Axilla:—Applied to the point of junction of a branch to the stem, or of a leaf to the stem or branch.

Axillary:—Situated or issuing from an axilla.

Bigeminate, twice-paired:—In compound leaves, when near the common leaf-stalk there is a single pair of secondary leaf-stalks, each of which support a pair of opposite leaflets.

Bilabiate:—Having two lips.

Bilocular:—Having two cells.

Binate:—Applied to a compound leaf consisting of two leaflets only, inserted at the same point on one leaf-stalk.

common foot-stalk support
stalks on its apex, and
three leaflets.

Caducous:—Applied to
the end of the summer ;
only until expanded ; and
at the opening of the flower

Calycine:—Attached to

Calyculate:—Applied
a lesser one at the base

Capillary:—Applied
long, fine, and flexible.

Carinated:—Expressive
when the back is longit

Channelled:—Applied to leaves, stalks, or petioles, having grooves or longitudinal furrows on their surface.

Ciliated:—When parts are covered with soft parallel hairs, not closely set together.

Cirrose, circinate:—tipped with a cirrus or tendril.

Cleft:—Divided into parts, therefore said to be two-cleft, four-cleft, and so on.

Cloven:—When the margin or segments of any part are nearly straight lines.

Clubbed:—When parts are thicker towards their extremities than in the centre.

Conjugate:—Applied to leaves consisting of one pair of leaflets.

Connate:—When leaves are united at their base, so as to appear but one leaf.

Cordate, heart-shaped:—When a leaf is hollowed at the base into two lobes, and pointed at the apex.

***Crenate* :—**When the margin of a leaf is ...
in round forms, not directed to either end of
leaf.

***Crenulated* :—**When the crenatures are
shallow, and at the same time perfect.

***Cuculate, hooded* :—**When one part grows
another, so as to form a hood or covering.

***Cuspidate, mucronate* :—**Terminating in a
spine.

***Deciduous* :—**Applied to parts which fall
after they have performed the offices for
they are destined.

***Decurrent* :—**When the flat part of a leaf
down the stem or branch.

Dicotyledonous :—Plants whose seeds have two or more cotyledons.

Digitate :—When several, usually seven leaflets, proceed from the summit of a common footstalk, and have the appearance of fingers.

Distichous :—Applied to stems, leaves, &c. when they spread in two horizontal directions.

Dolabriform, hatchet-shaped :—Leaves compressed, with a very prominent dilated keel and a cylindrical base.

Elliptical, oval :—When a leaf is twice as long as it is broad, and nearly equally rounded at the extremities.

Emarginate :—When there is nearly a triangular notch in the summit of a leaf.

Embracing :—When leaves clasp the stem by their bases.

Ensiform, sword-shaped :—When a leaf is long, tapering to a point, very thin on both edges, and slightly curved.

Entire :—The margin of any part being perfectly free of notches or irregularities.

Fasciculated:—When several leaves or stems spring from the same point.

Filiform, thread-shaped:—Having a thread-like appearance.

Follicle:—A membranous seed-vessel of one valve and one cell.

Furrowed:—Having several linear depressions.

Geniculated:—Expressive of parts bent at the knee.

Gibbous:—When both parts of a side are convex.

Glabrous:—Applied to stems and leaves shining and perfectly smooth.

Being of a sea-green shade in

Herbaceous:—Stems which die annually down to the root.

Hirsute:—When the surface of any part is covered with longish hairs.

Hispid:—When the hairs are short and stiff.

Imbricated:—Parts placed one over another like tiles.

Incurvated:—Signifying parts turned inwards.

Inferior:—Applied to the corolla, when its receptacle is below the germen; to the calyx, when its base is below the germen; and to the germen, when it is placed beneath the calyx or corolla.

Interruptedly:—With compound leaves, when the principal leaflets are intermixed with smaller ones.

Irregular:—When there is no regularity of structure, or uniformity in the distribution of parts.

Labiate:—When parts assume the appearance of lips.

Lanate:—When a part is covered with hairs, and have a woolly aspect.

Lanceolate, lance-shaped:—Of a narrow oblong form, tapering towards the end.

Linear:—Of equal breadth from the base to the apex.

Lingulate, tongue-shaped:—Of a thick oblong blunt figure in the shape of a tongue.

Lobed:—The segments of any part be rounded.

Lyrate, lyre-shaped:—Divided transversely into several segments, which increase towards the extremity.

Monocotyledonous:—Plants whose seeds have

Multifid:—The margin of round leaves, cut from the apex almost to the base, without having any great intermediate sinuses.

Naked:—Applied to flowers without calyces, to stems without leaves, and to leaves without hair or down.

Nerved:—When the fibres or vessels of leaves are peculiarly prominent.

Obcordate:—Heart-shaped leaves when rounded at the apex.

Oblique:—When one part of the leaf is vertical, the other horizontal.

Oblong:—Three or four times longer than broad.

Obovate:—Egg-shaped, with the broad end uppermost.

Obtuse:—When any part forms the segment of a circle and is rounded.

Ovate:—When the length of a leaf is greater than the breadth, with both extremities rounded, but the base much broader than the apex.

Palmated:—When a leaf is divided near down to the middle into several segments.

Panduræform, fiddle-shaped:—oblong, broad at the two extremities and contracted in middle.

Papillose:—Covered with soft tubercles or c

Pectinate:—When the segments of a leaf are very narrow, linear, and parallel, like the teeth of a comb.

Peltate:—When the petiole is inserted into the disk of a leaf.

Pendent:—When the whole leaf droops.

Perfoliate:—When the stem runs through the middle of a leaf.

Pinnate:—When several leaves proceed laterally from one foot-stalk.

Pinnatifid:—Applied to parts cut transversely into deep oblong parallel segments.

Plaited:—Parts lying in folds like a fan

Plumous:—Having a feathery appearance.

Procumbent:—Lying on the surface of the ground.

Polycotyledonous:—Plants whose seeds have more than two lobes or cotyledons. This, however, is an unnecessary term, since the word *dicotyledonous* embraces the same meaning.

Quadripartite:—When a lacinated leaf is divided into five parts.

Quinate:—When there are five leaflets attached to the apex of the petiole.

Quinquifid:—Having five clefts.

Radical: Situated on, or proceeding immediately from the root.

Repand:—Bordered with numerous angle segments of circles alternately.

Resupinate:—When the surface of a leaf, is commonly undermost, is found uppermost

Retuse:—When the apex is obtuse, with broad shallow notch in the middle.

Rugose:—Applied to leaves with inequally rising above the veins.

Runcinate:—When the expansion of a leaf is deeply cut into many transverse acute-angled segments, the points of which tend toward base of the leaf.

Segments:—The division of leaves, corolla and calyces.

Sheathing:—When leaves embrace the stem with their bases.

Sinuated:—When the margin of a leaf is cut, as it were, into roundish scollops.

Solitary:—Parts which stand singly or alone.

Spatulate:—When a leaf is round at the apex and gradually tapers towards the base.

Striated:—Marked with parallel lines

Sulcate:—Impressed with deep parallel lines.

Superior:—Applied to the corolla when its receptacle is above the germen; to the calyx when it is above the germen; and to the germen when it is included in the corolla or calyx.

Tergeminate:—When a compound leaf resembles the bigeminate in its foot-stalk divisions, and has besides a third pair of leaflets at the point where the secondary leaf-stalks originate.

Terminal:—Applied to parts when they are at the end of a branch or stem.

Tomentose:—Covered with a downy pubescence.

Trichotomous:—Divided into three branches.

Tricuspid:—Terminating in three rigid apices.

Trifid:—When a cloven leaf has three or more divisions.

Tripartite:—A lacinated leaf divided into three parts.

Tripinnate:—In a compound leaf when the sides of a common petiole, there are secondary foot-stalks supporting a ternary which are pinnate.

Triterminate:—In a compound leaf, when a common petiole supports on its apex three secondary petioles, which each support three

Unarmed :—Devoid of spines or thorns.

Undulated :—Margins waved obtusely up and down.

Uncinate :—When any part is curved so as to resemble a hook.

Unequal :—Leaves having two halves of unequal size.

Villous :—Parts covered with long soft hairs.

Viscid :—Parts covered with a clammy juice.

Wedge-shaped, cuneiform :—Broad at the base, and tapering towards the point.

Whorled :—Verticillated, or placed around the stem.

MISCELLANEOUS

SUBJECTS.

PART V.

CONSISTING OF A GENERAL ARRANGEMENT OF MEDICAL
PLANTS; A TABLE OF ENGLISH AND SYSTEMATIC
NAMES; A GENERAL INDEX; AND AN INDEX TO THE
PLATES.

IN THE FOLLOWING ARRANGEMENT, THE READER WILL
FIND A FEW ABBREVIATIONS USED FOR THE DISTINCTION
OF PLANTS, VIZ.—

A. annual. *B. biennial.* *P. perennial.* *S. shrub.*

T. tree.

AN ARRANGEMENT

SHEWING THEIR LINNÆAN OR SYSTEMATIC NAMES;
THEIR CLASS AND ORDER ACCORDING TO THE LI:
PLANTS.

<i>Linnæan Name.</i>	<i>English Name.</i>	<i>Flo</i>
1 Acacia Catechu	Medicinal Acacia	
2 Acacia Vera	Egyptian Thorn	
3 Aconitum Napellus	Aconite or Monkshood	
4 Acorus Calamus	Sweet Flag	
5 Æsculus Hippocastan.	Horse Chesnut	
6 Agrimonia Eupatoria	Common Agrimony	
7 Allium Cepa	Common Onion	
8 Allium Porrum	Common Leek	
9 Allium Sativum	Common Garlic	
10 Aloe Vulgaris	Hepatic Aloe	

OF MEDICAL PLANTS.

ENGLISH DENOMINATIONS; THEIR TIME OF FLOWERING;
SYSTEMS; THEIR NATIVE SOIL; AND DISTINCTION OF

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
1 Polygamia	Monœcia	Lomentaceæ	E. Indies	T
2 Polygamia	Monœcia	Lomentaceæ	Egypt	T
3 Polyandria	Trigynia	Multisiliquæ	Siberia	P
4 Hexandria	Monogynia	Piperitæ	Europe	P
5 Heptandria	Monogynia	Trihilatæ	Asia	T
6 Dodecandria	Digynia	Senticosæ	Britain	P
7 Hexandria	Monogynia	Spathaceæ	Spain	B
8 Hexandria	Monogynia	Spathaceæ	Switz.	B
9 Hexandria	Monogynia	Spathaceæ	Sicily	P
10 Hexandria	Monogynia	Coronariæ	Barbado.	P
11 Hexandria	Monogynia	Coronariæ	G. Hope	P
12 Monadelphica	Polyandria	Columniferæ	Britain	P
13 Icosandria	Monogynia	Pomaceæ	Barbary	T
14 Octandria	Monogynia	Dumosæ	Arabia	T
15 Octandria	Monogynia	Dumosæ	Carolina	T
16 Pentandria	Monogynia	Asperifoliæ	Europe	P
17 Pentandria	Digynia	Umbellatæ	Europe	P

21 <i>Anthemis Pyrethrum</i>	Pellitory of Spain
22 <i>Apium Petroselinum</i>	Common Parsley
23 <i>Arbutus Urva Ursi</i>	Bear's Whortleberry
24 <i>Arctium Lappa</i>	Common Burdock
25 <i>Aristolochia Serpentaria</i>	Virginian Snake-root
26 <i>Arnica Montana</i>	Mountain Arnica
27 <i>Artemisia Abrotanum</i>	Southernwood
28 <i>Artemisia Absinthium</i>	Common Wormwood
29 <i>Artemisia Maritima</i>	Sea Wormwood
30 <i>Artemisia Santonica</i>	Tartarian Southernw.
31 <i>Arum Maculatum</i>	Wake Robin
32 <i>Asarum Europæum</i>	Asarabacca
33 <i>Aspidium Filix Mas</i>	Male Fern
34 <i>Astragalus Verus</i>	Tragacanth
35 <i>Atropa Belladonna</i>	Deadly Nightshade
36 <i>Avena Sativa</i>	Common Oats
37 <i>Boletus Ignarius</i>	Agaric of the Oak
38 <i>Bubon Galbanum</i>	Galbanum
39 <i>Cephaelis Ipecacuhana</i>	Ipecacuhana
40 <i>Canella Alba</i>	White Canella
41 <i>Capsicum Annuum</i>	Cayenne Pepper
42 <i>Centaurium Benthonia</i>	Snake Flower

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil</i>	<i>Kd.</i>
18 Pentandria	Digynia	Umbellatæ	Europe	P
19 Pentandria	Digynia	Umbellatæ	Britain	B
20 Syngenesia	Superflua	Compositæ	Britain	P
21 Syngenesia	Superflua	Compositæ	Arabia	B
22 Pentandria	Digynia	Umbellatæ	Sardinia	B
23 Decandria	Monogynia	Bicornes	Europe	S
24 Syngenesia	Æqualis	Compositæ	Britain	P
25 Gynandria	Hexandria	Sarmentacæ	Virginia	P
26 Syngenesia	Superflua	Compositæ	Europe	P
27 Syngenesia	Superflua	Compositæ	Europe	S
28 Syngenesia	Superflua	Compositæ	Britain	P
29 Syngenesia	Superflua	Compositæ	Britain	P
30 Syngenesia	Superflua	Compositæ	Siberia	S
31 Monœcia	Polyandria	Piperitæ	Britain	P
32 Dodecandria	Monogynia	Sarmentacæ	Britain	P
33 Cryptogamia	Filices	Filices	Britain	P
34 Diadelphia	Decandria	Papilionacæ	Persia	S
35 Pentandria	Monogynia	Luridæ	Britain	P
36 Triandria	Digynia	Gramina	Asia	A
37 Cryptogamia	Fungi	Fungi	Europe	P
38 Pentandria	Digynia	Umbellatæ	G. Hope	P
39 Pentandria	Monogynia	Aggregatæ	Brazil	P
40 Dodecandria	Monogynia	Holeracæ	W. Indies	T
41 Pentandria	Monogynia	Luridæ	S. Ameri.	A
42 Tetradynamia	Siliquosa	Siliquosæ	Britain	P
43 Pentandria	Digynia	Umbellatæ	Britain	B
44 Decandria	Monogynia	Lomentacæ	E. Indies	T
45 Decandria	Monogynia	Lomentacæ	Egypt	A
46 Syngenesia	Frustranea	Compositæ	Spain	A
47 Pentandria	Monogynia	Rotacæ	Britain	A
48 Pentandria	Monogynia	Contortæ	Quito	T
49 Pentandria	Monogynia	Contortæ	Ayavaca	T

0	<i>Cinchona Oblongifolia</i>	...	
1	<i>Citrus Aurantium</i>	Seville Orange	May
2	<i>Citrus Medica</i>	Lemon-tree	May
3	<i>Cocculus Palmatus</i>	Calumba-tree	—
4	<i>Cochlearia Armoracia</i>	Horse-radish	June
5	<i>Cocos Butyracea</i>	Mackaw-tree	May
6	<i>Colchicum Autumnale</i>	Meadow Saffron	Sept.
7	<i>Conium Maculatum</i>	Spotted Hemlock	June
8	<i>Convolvulus Jalapa</i>	Jalap Plant	Aug.
9	<i>Convolv. Scammonia</i>	Scammony Plant	July
0	<i>Copaifera Officinalis</i>	Copaiba Balsam Tree	—
1	<i>Coriandrum Sativum</i>	Common Coriander	June
2	<i>Crocus Sativus</i>	Common Saffron	Sept.
3	<i>Croton Cascarilla</i>	Cascarilla Tree	July
4	<i>Croton Tiglium</i>	Purging Croton	Sept.
5	<i>Cucumis Colocynthis</i>	Bitter Cucumber	May
6	<i>Curcuma Zedoaria</i>	Common Zedoary	April
7	<i>Cuminum Cyminum</i>	Common Cumin	June
8	<i>Cusparia Febrifuga</i>	Cusparia or Augustura	May
9	<i>Daphne Mezereum</i>	Mezereum	March
0	<i>Datura Stramonium</i>	Thorn-apple	July
1	<i>Daucus Carota</i>	Garden Carrot	June
2	<i>Daucus Sylvestris</i>	Wild Carrot	June
	<i>Staphisag.</i>	Stavesacre	June

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
50 Pentandria	Monogynia	Contortæ	Andes	T
51 Polyadelphia	Icosandria	Bicornes	Asia	T
52 Polyadelphia	Icosandria	Bicornes	Asia	T
53			Africa	T
54 Tetradynamia	Siliculosa	Siliquosæ	Britain	P
55 Monœcia	Hexandria	Palmeæ	Brazil	T
56 Hexandria	Trigynia	Spathacæ	Britain	P
57 Pentandria	Digynia	Umbellatæ	Britain	B
58 Pentandria	Monogynia	Campanacæ	S Ameri.	P
59 Pentandria	Monogynia	Campanacæ	Syria	P
60 Decandria	Monogynia	Dumosæ	Brazils	T
61 Pentandria	Digynia	Umbellatæ	Italy	A
62 Triandria	Monogynia	Ensataæ	Britain	P
63 Monœcia	Monadelphia	Tricoccæ	Bahamas	T
64 Monœcia	Monadelphia	Tricoccæ	Molucca	T
65 Monœcia	Monadelphia	Cucurbitacæ	G. Hope	A
66 Monandria	Monogynia	Scitamineæ	E Indies	P
67 Pentandria	Digynia	Umbellatæ	Egypt	A
68 Pentandria	Monogynia		America	T
69 Octandria	Monogynia	Vepreculæ	Britain	S
70 Pentandria	Monogynia	Luridæ	Egypt	A
71 Pentandria	Digynia	Umbellatæ	Britain	B
72 Pentandria	Digynia	Umbellatæ	Britain	B
73 Polyandria	Trigynia	Multisiliquæ	S Europe	B
74 Decandria	Digynia	Caryophylleæ	Italy	P
75 Didynamia	Angiospermia	Luridæ	Britain	B
76 Diadelphia	Decandria	Papilionacæ	India	P
77 Tetrandria	Monogynia	Scabridæ	W. Indies	P
78 Monandria	Monogynia	Scitamineæ	India	P
79 Pentandria	Digynia	Umbellatæ	Britain	P
80 Icosandria	Monogynia	Hesperideæ	Molucca.	T
81 Dodecandria	Trigynia	Tricoccæ	Africa	P

82 <i>Fragaria Vesca</i>	Flowering Strawberry
85 <i>Fucus Vesiculosus</i>	Bladder Fucus
86 <i>Gentiana Lutea</i>	Yellow Gentian
87 <i>Geoffræa Inermis</i>	Cabbage Tree
88 <i>Geum Urbanum</i>	Common Avena
89 <i>Glycyrrhiza Glabra</i>	Common Liquorice
90 <i>Gratiola Officinalis</i>	Official Hedge Hys
91 <i>Guaiacum Officinale</i>	Official Guaiacum
92 <i>Hæmatoxylon Campe.</i>	Logwood Tree
93 <i>Helleborus Fœtidus</i>	Stinking Hellebore
94 <i>Helleborus Niger</i>	Black Hellebore
95 <i>Heracleum Gummifer.</i>	Ammoniacum Plant
96 <i>Hordeum Distichon</i>	Common Barley
97 <i>Humulus Lupulus</i>	Common Hop
98 <i>Hyoscyamus Niger</i>	Black Henbane
99 <i>Hyssopus Officinalis</i>	Common Hyssop
100 <i>Inula Helenium</i>	Elecampane
101 <i>Iris Florentina</i>	Florentine Iris
102 <i>Juniperus Communis</i>	Common Juniper
103 <i>Juniperus Lycia</i>	Lycian Juniper
104 <i>Juniperus Sabina</i>	Savine
105 <i>Krameria Triandra</i>	Medical Rhatany

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
82 Pentandria	Digynia	Umbellatæ	Persia	P
83 Polygamia	Diœcia	Scabrideæ	Persia	T
84 Polygamia	Diœcia	Sepiariæ	Italy	T
85 Cryptogamia	Algæ	Algæ	Britain	P
86 Pentandria	Digynia	Rotaceæ	Alps, &c.	P
87 Diadelphia	Decandria	Papilionaceæ	Jamaica	T
88 Icosandria	Polygynia	Senticosæ	Britain	P
89 Diadelphia	Decandria	Papilionaceæ	Europe	P
90 Diandria	Monogynia	Personatæ	Europe	P
91 Decandria	Monogynia	Gruinales	Jamaica	T
92 Decandria	Monogynia	Lomentaceæ	S. Amer.	T
93 Polyandria	Polygynia	Multisiliquæ	Britain	P
94 Polyandria	Polygynia	Multisiliquæ	Austria	P
95 Pentandria	Digynia	Umbellatæ	Africa	S
96 Triandria	Digynia	Gramina	Tartary	A
97 Diœcia	Pentandria	Scabrideæ	Britain	P
98 Pentandria	Monogynia	Luridæ	Britain	A
99 Didynamia	Gymnospermia	Verticillatæ	Siberia	P
100 Syngenesia	Superflua	Compositæ	Britain	P
101 Triandria	Monogynia	Ensatiæ	Europe	P
102 Diœcia	Monadelphia	Coniferæ	Britain	S
103 Diœcia	Monadelphia	Coniferæ	S. Europe	S
104 Diœcia	Monadelphia	Coniferæ	Levant	S
105 Tetrandria	Monogynia		Java	—
106 Syngenesia	Æqualis	Compositæ	Europe	B
107 Syngenesia	Æqualis	Compositæ	Britain	B
108 Enneandria	Monogynia	Holeraceæ	Japan	T
109 Enneandria	Monogynia	Holeraceæ	Malabar	T

114	<i>Leontodon Taraxacum</i>	Common Dandelion
115	<i>Lichen Islandicus</i>	Iceland Moss
116	<i>Lichen Rocella</i>	Litmus Lichen
117	<i>Linum Catharticum</i>	Purging Flax
118	<i>Linum Usitatissimum</i>	Common Flax
119	<i>Lythrum Salicaria</i>	Loosetrife
120	<i>Malva Sylvestris</i>	Common Mallow
121	<i>Marrubium Vulgare</i>	Common Horehound
122	<i>Melaleuca Leucodend.</i>	Cajuput Oil Tree
123	<i>Melissa Officinalis</i>	Common Balm
124	<i>Mentha Piperita</i>	Pepper-Mint
125	<i>Mentha Pulegium</i>	Penny-royal-Mint
126	<i>Mentha Viridis</i>	Spear-Mint
127	<i>Menyanthes Trifoliata</i>	Common Buckbean
128	<i>Momordica Elaterium</i>	Squirting Cucumber
129	<i>Morus Nigra</i>	Common Mulberry
130	<i>Myristica Moschata</i>	Nutmeg Tree
131	<i>Myroxylon Peruiferum</i>	Sweet-smelling Balsam
132	<i>Myrtus Pimenta</i>	Allspice Tree
133	<i>Nicotiana Tabacum</i>	Virginian Tobacco
134	<i>Olea Europea</i>	European Olive

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
110 Enneandria	Monogynia	Holeraceæ	Ceylon	T
111 Enneandria	Monogynia	Holeraceæ	Italy	T
112 Enneandria	Monogynia	Holeraceæ	N. Amer	T
113 Didynamia	Gymnospermia	Verticillatæ	Europe	P
114 Syngenesia	Æqualis	Compositæ	Britain	P
115 Cryptogamia	Algæ	Algæ	Britain	P
116 Cryptogamia	Algæ	Algæ	Britain	P
117 Pentandria	Pentagynia	Gruinales	Britain	A
118 Pentandria	Pentagynia	Gruinales	Britain	A
119 Dodecandria	Monogynia	Calycanthem.	Britain	P
120 Monadelphia	Polyandria	Columniferae	Britain	P
121 Didynamia	Gymnospermia	Verticillatæ	Britain	P
122 Polyadelphia	Icosandria	Hesperidæ	Amboyna	T
123 Didynamia	Gymnospermia	Verticillatæ	Europe	P
124 Didynamia	Gymnospermia	Verticillatæ	Britain	P
125 Didynamia	Gymnospermia	Verticillatæ	Britain	P
126 Didynamia	Gymnospermia	Verticillatæ	Britain	P
127 Pentandria	Monogynia	Peciciæ	Britain	P
128 Monœcia	Monadelphia	Cucurbitaceæ	S. Europ.	P
129 Monœcia	Tetrandria	Scabridæ	Persia	S
130 Diœcia	Monadelphia	Holeraceæ	Moluccas	T
131 Decandria	Monogynia	Lomentaceæ	S. Amer.	T
132 Icosandria	Monogynia	Hesperidæ	S. Amer.	T
133 Pentandria	Monogynia	Luridæ	America	A
134 Diandria	Monogynia	Sepiariæ	S. Europ.	T
135 Didynamia	Gymnospermia	Verticillatæ	Portugal	A
136 Didynamia	Gymnospermia	Verticillatæ	Britain	P
137 Decandria	Pentagynia	Gruinales	Britain	P
138 Polyandria	Monogynia	Rhodææ	Britain	A
139 Polyandria	Monogynia	Rhodææ	Asia	A

144 <i>Pinus Larix</i>	Common Larch
145 <i>Pinus Sylvestris</i>	Scotch Fir
146 <i>Piper Cubeba</i>	Cubeb Pepper
147 <i>Piper Longum</i>	Long Pepper
148 <i>Piper Nigrum</i>	Black Pepper
149 <i>Pistacia Lentiscus</i>	Mastic Pistacia
150 <i>Pistacia Terebinthus</i>	Turpentine Pistacia
151 <i>Polygala Senega</i>	Senega-root Plant
152 <i>Polygonum Bistorta</i>	Great Bistort
153 <i>Prunus Domestica</i>	Common Plum Tree
154 <i>Pterocarpus Erinacea</i>	Kino Tree
155 <i>Pterocarpus Santalinus</i>	Red Saunders Tree
156 <i>Punica Granatum</i>	Quince Tree
157 <i>Pyrus Cydonia</i>	Pomegranate Tree
158 <i>Quassia Excelsa</i>	Bitter Quassia Tree
159 <i>Quassia Simarouba</i>	Simarouba Tree
160 <i>Quercus Infectoria</i>	Gall or Dyer's Oak
161 <i>Quercus Pedunculata</i>	Pedunculated Oak
162 <i>Quercus Robur</i>	Oak Bark Tree
163 <i>Rhamnus Catharticus</i>	Purging Buckthorn
164 <i>Rheum Palmatum</i>	Palmated Rhubarb
165 <i>Rheum Undulatum</i>	Wavy-leaved Rhubarb

ss.	Order.	Natural Order.	Soil.	Kd.
andria	Digynia	Umbellatæ	S.Europ.	P
andria	Digynia	Umbellatæ	Egypt	A
œcia	Monadelphia	Coniferæ	Europe	T
œcia	Monadelphia	Coniferæ	N. Amer.	T
œcia	Monadelphia	Coniferæ	Alps	T
œcia	Monadelphia	Coniferæ	Britain	T
dria	Trigynia	Piperitæ	Java	P
dria	Trigynia	Piperitæ	E. Indies	P
dria	Trigynia	Piperitæ	E. Indies	P
cia	Pentandria	Amentaceæ	Levant	T
cia	Pentandria	Amentaceæ	Barbary	T
elphia	Octandria	Lomentaceæ	N. Amer.	P
ndria	Trigynia	Holeraceæ	Britain	P
andria	Monogynia	Pomaceæ	Asia	T
elphia	Decandria	Papilionaceæ	Africa	T
elphia	Decandria	Papilionaceæ	India	T
andria	Pentagynia	Pomaceæ	S.Europ.	T
andria	Pentagynia	Pomaceæ	Crete	T
ndria	Monogynia	Gruinales	Surinam	T
ndria	Monogynia	Gruinales	Jamaica	T
œcia	Polyandria	Amentaceæ	Asia	T
œcia	Polyandria	Amentaceæ	Britain	T
œcia	Polyandria	Amentaceæ	Britain	T
andria	Monogynia	Dumosæ	Britain	S
andria	Trigynia	Holeraceæ	China	P
andria	Trigynia	Holeraceæ	Siberia	P
andria	Monogynia	Bicornes	Siberia	S
andria	Trigynia	Dumosæ	N. Amer.	S
œcia	Monadelphia	Tricoccæ	Indies	A
andria	Polygynia	Senticosæ	Britain	S
andria	Polygynia	Senticosæ	S.Europ.	S
andria	Polygynia	Senticosæ	S. Europ.	S

176	<i>Ruta Graveolens</i>	Common Rue	June
177	<i>Saccharum Officinatum</i>	Sugar Plant	—
178	<i>Salix Alba</i>	White Willow	April
179	<i>Salix Caprea</i>	Grt. round-leav. Willow	April
180	<i>Salix Fragilis</i>	Crack Willow	April
181	<i>Salvia Officinalis</i>	Garden Sage	June
182	<i>Sambucus Nigra</i>	Common Elder	June
183	<i>Scilla Maritima</i>	Squill or Sea Onion	April
184	<i>Scrophularia Nodosa</i>	Knobby-rosted Figwort	July
185	<i>Sinapis Alba</i>	White Mustard	June
186	<i>Sinapis Nigra</i>	Black Mustard	June
187	<i>Sium Nodiflorum</i>	Creeping Water Parsnip	July
188	<i>Smilax Sarsaparilla</i>	Sarsaparilla Plant	July
189	<i>Solanum Dulcamara</i>	Bitter Sweet	June
190	<i>Solidago Virga Aurea</i>	Common Golden Rod	July
191	<i>Spartium Scoparium</i>	Common Broom	May
192	<i>Spilegia Marilandica</i>	Perennial Worm-grass	July
193	<i>Stalagmatis Cambogiod.</i>	Gamboge Tree	—
194	<i>Strychnos Nux Vomica</i>	Poison-nut Plant	—
195	<i>Styrax Benzoin</i>	Benzoin Tree	—
196	<i>Styrax Officinale</i>	Common Storax	July
197	<i>Swietenia Febrifuga</i>	Febrifuge Swietenia	—

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
172 Diandria	Monogynia	Verticillatæ	S. Europ.	S
173 Tetrandria	Monogynia	Stellatæ	S. Europ.	P
174 Hexandria	Digynia	Holeraceæ	Britain	P
175 Hexandria	Digynia	Holeraceæ	Britain	P
176 Decandria	Monogynia	Multisiliquæ	S. Europ.	P
177 Triandria	Digynia	Gramina	Indies	P
178 Diœcia	Diandria	Amentaceæ	Britain	T
179 Diœcia	Diandria	Amentaceæ	Britain	T
180 Diœcia	Diandria	Amentaceæ	Britain	T
181 Diandria	Monogynia	Verticillatæ	S. Europ.	P
182 Pentandria	Trigynia	Dumosæ	Britain	T
183 Hexandria	Monogynia	Coronariæ	S. Europ.	P
184 Didynamia	Angiospermia	Personatæ	Britain	P
185 Tetradymania	Siliquosa	Siliquosæ	Britain	A
186 Tetradymania	Siliquosa	Siliquosæ	Britain	A
187 Pentandria	Digynia	Umbellatæ	Britain	P
188 Diœcia	Hexandria	Sarmentaceæ	Virginia	P
189 Pentandria	Monogynia	Luridæ	Britain	S
190 Syngenesia	Superflua	Compositæ	Britain	P
191 Diadelphia	Decandria	Papilionaceæ	Britain	S
192 Pentandria	Monogynia	Stellatæ	Britain	P
193 Polygamia	Monœcia	Tricoccæ	Ceylon	T
194 Pentandria	Monogynia	Luridæ	E. Indies	A
195 Decandria	Monogynia	Bicornes	Sumatra	T
196 Decandria	Monogynia	Bicornes	Levant	T
197 Decandria	Monogynia	Tribilatæ	E. Indies	T
198 Monadelphia	Triandria	Lomentaceæ	Indies	T
199 Syngenesia	Superflua	Compositæ	Britain	P
200 Didynamia	Gymnospermia	Verticillatæ	Britain	P
201 Didynamia	Gymnospermia	Verticillatæ	Spain	P
202 Decandria	Monogynia	Dumosæ	America	T
203 Icosandria	Polygynia	Senticosæ	Britain	P

207	Ulmus Campestris	Common Elm	April
208	Valeriana Officinalis	Common Valerian	June
209	Veratrum Album	White Hellebore	July
200	Veronica Beccabunga	Broad-leaved Brooklim.	June
211	Viola Odorata	Sweet Violet	April
212	Vitis Vinifera	Common Grape Vine	June
213	Wintera Aromatica	Winter's Bark Tree	—
214	Zingiber Officinale	Officinal Ginger	Sept.

<i>Class.</i>	<i>Order.</i>	<i>Natural Order.</i>	<i>Soil.</i>	<i>Kd.</i>
204 Triandria	Monogynia	Gramina		A
205 Triandria	Monogynia	Gramina		A
206 Syngenesia	Superflua	Compositæ	Britain	P
207 Pentandria	Digynia	Scabrideæ	Britain	T
208 Triandria	Monogynia	Aggregatæ	Britain	P
209 Polygamia	Monœcia	Coronariæ	Europe	P
210 Diandria	Monogynia	Personatæ	Britain	P
211 Pentandria	Monogynia	Personatæ	Britain	P
212 Pentandria	Monogynia	Hederaceæ	Armenia	T
213 Polyandria	Tetragynia			T
214 Monandria	Monogynia	Scitamineæ	E. Indies	P



A TABLE

OF

ENGLISH AND SYSTEMATIC

NAMES.

Acacia, Medicinal	Acacia Catechu.
Aconite or Monkshood	Aconitum Napellus.
Agaric of the Oak	Boletus Ignarius.
Agrimony, Common	Agrimonia Eupatoria.
Alkanet, Common	Anchusa Tinctoria.
Allspice Tree	Myrtus Pimenta.
Almond Tree	Amygdalus Communis.
Aloe, Hepatic	Aloe Vulgaris.
Aloe, Socotorine	Aloe Spicata.
Ammoniacum Plant	Heracleum Gummiiferum.
Angelica, Garden	Angelica Archangelica.
Anise, Common	Pimpinella Anisum.
Arnica, Mountain	Arnica Montana.
Asarabacca	Asarum Europeanum.

Balsam, Sweet smelling
 Barley, Common
 Bear's, Whortleberry
 Benzoin Tree
 Bistort, Great
 Bitter-sweet
 Bladder Fucus
 Blessed Thistle
 Brooklime, Broad-leaved
 Broom, Common
 Buckbean, Common
 Buckthorn, Purging
 Burdock, Common

Cabbage Tree
 Cajeput Oil Tree
 Calumba Tree
 Camphor Tree
 Canella, White
 Caraway, Common
 Carrot, Garden
 Carrot, Wild
 Cardamom Plant
 Cascarilla Tree

Myroxylon Peruiferu
 Hordeum Distichon.
 Arbutus Uva Ursi.
 Styrax Benzoin.
 Polygonum Bistorta.
 Solanum Dulcamara.
 Fucus Vesiculosus.
 Centaurea Benedicta.
 Veronica Beccabunga
 Spartium Scoparium
 Menyanthes Trifoliat
 Rhamnus Catharticu
 Arctium Lappa.

Geoffræa Inermis.
 Melaleuca Leucodend.
 Cocculus Palmatus.
 Laurus Camphora.
 Canella Alba.
 Carum Carui.
 Daucus Carota.
 Daucus Sylvestris.
 Elettaria Cardamomu
 Croton Cascarilla.

ona, Red-barked	<i>Cinchona Oblongifolia.</i>
ona, Pale-barked	<i>Cinchona Lancifolia.</i>
ion Tree	<i>Laurus Cinnamomum.</i>
Pink	<i>Dianthus Caryophyllus.</i>
Tree	<i>Eugenia Caryophyllata.</i>
oot, Common	<i>Tussilago Farfara.</i>
erva Plant	<i>Dorstenia Contrayerva.</i>
a Balsam Tree	<i>Copaifera Officinalis.</i>
ler, Common	<i>Coriandrum Sativum.</i>
h or Cowage	<i>Dolichos Pruriens.</i>
Purging	<i>Croton Tiglium.</i>
-flower	<i>Cardamine Pratensis.</i>
Plant	<i>Piper Cubeba.</i>
er, Bitter	<i>Cucumis Colocynthis.</i>
ber, Squinting	<i>Momordica Elaterium.</i>
Common	<i>Cuminum Cyminum.</i>
a or Augustura	<i>Cusparia Febrifuga.</i>
ion, Common	<i>Leontodon Taraxacum.</i>
Nightshade	<i>Atropa Belladonna.</i>
ommon	<i>Anethum Graveolens.</i>
in Thorn	<i>Acacia Vera.</i>
Common	<i>Sambucus Nigra.</i>
pane	<i>Inula Helenium.</i>
Tree	<i>Amyris Elemifera.</i>
ommon	<i>Ulmus Campestris.</i>
lale	<i>Aspidium Filix Mas.</i>
e	<i>Ficus Carica.</i>
t Knobby	<i>Scrophularia Nodosa.</i>
nada	<i>Pinus Balsamea.</i>
rway Spruce	<i>Pinus Abies.</i>
atch	<i>Pinus Sylvestris.</i>
ommon	<i>Linum Usitatissimum.</i>

Gamboge Tree
Garlic, Common
Gentian, Yellow
Ginger, Official
Golden-rod, Common
Grape-vine, Common
Guaiacum Official

Hedge-hyssop
Hellebore, Black
Hellebore, Stinking
Hellebore, White
Hemlock, Spotted
Henbane, Black
Hop, Common
Horehound, Common
Horse-chesnut, Common
Horse-radish, Common
Hyssop, Common

Iceland Moss
Ipecacuanha
Iris, Florentine

Stalagmatis Cambogioides.
Allium Sativum.
Gentiana Lutea.
Zingiber Officinale.
Solidago Virga Aurea.
Vitis Vinifera.
Guaiacum Officinale.

Gratiola Officinalis.
Helleborus Niger.
Helleborus Fœtidus.
Veratrum Album.
Conium Maculatum.
Hyoscyamus Niger.
Humulus Lupulus.
Marrubium Vulgare.
Æsculus Hippocastanum.
Cochlearia Armoracia.
Hyssopus Officinalis.

Lichen Islandicus.
Cephaelis Ipecacuhana.
Iris Florentina.

Larch, Common	<i>Pinus Larix.</i>
Laurel or Sweet Bay	<i>Laurus Nobilis.</i>
Lavender, Common	<i>Lavandula Spica.</i>
Leek, Common	<i>Allium Porrum.</i>
Lemon Tree	<i>Citrus Medica.</i>
Lettuce, Garden	<i>Lactusa Sativa.</i>
Lettuce, Strong-scented	<i>Lactusa Virosa.</i>
Liquorice, Common	<i>Glycyrrhiza Glabra.</i>
Litmus Lichen	<i>Lichen Rocella.</i>
Logwood Tree	<i>Hæmatoxylon Campechianum.</i>
Loosestrife	<i>Lythrum Salicaria.</i>
Mackaw Tree	<i>Cocos Butyracea.</i>
Madder, Dyer's	<i>Rubia Tinctorum.</i>
Mallow, Common	<i>Malva Sylvestris.</i>
Marjoram, Common	<i>Origanum Vulgare.</i>
Marjoram, Sweet	<i>Origanum Marjorana.</i>
Marsh-mallow, Common	<i>Althæa Officinalis.</i>
Marum, Common	<i>Teucrium Marum.</i>
Mastiche Tree	<i>Pistacia Lentiscus.</i>
Meadow-saffron, Common	<i>Colchicum Autumnale.</i>
Mezereon	<i>Daphne Mezereum.</i>
Mulberry, Common	<i>Morus Nigra.</i>
Mustard, Black	<i>Sinapis Nigra.</i>
Mustard, White	<i>Sinapis Alba.</i>
Nutmeg Tree	<i>Myristica Moschata.</i>
Nux Nomica or Poison Nut	<i>Strychnos Nux Vomica.</i>
Oak, British	<i>Quercus Robur.</i>
Oak, Dyer's	<i>Quercus Infectoria.</i>
Oak, Pedunculated	<i>Quercus Pedunculata.</i>
Oats, Common	<i>Avena Sativa.</i>
Olive, European	<i>Olea Europea.</i>
Onion, Common	<i>Allium Cepa.</i>

Parsley, Common

Pellitory of Spain

Pennyroyal

Pepper, Black

Pepper, Long

Pepper-Mint

Plum Tree, Common

Pomegranate Tree

Poppy, Red or Corn

Poppy, White

Quassia Tree

Quince Tree

Red Saunders Tree

Rose, Dog or Wild

Rose, French or Red

Rose, Provins

Rosemary, Common

Rhatany, Medical

Rhododendron

Rhubarb, Palmated

Rhubarb, Wave-leaved

Rue, Common

Anthemis Pyrethrum.

Mentha Pulegium.

Piper Nigrum.

Piper Longum.

Mentha Piperita.

Prunus Domestica.

Punica Granatum.

Papaver Rhoeas.

Papaver Somniferum.

Quassia Excelsa.

Pyrus Cydonia.

Peterocarpus Santalinus.

Rosa Canina.

Rosa Gallica.

Rosa Centifolia.

Rosmarinus Officinalis.

Krameria Triandra.

Rhododendron Chrysanth.

Rheum Palmatum.

Rheum Undulatum.

Ruta Graveolens.

Sea Wormwood	<i>Artemisia Maritima.</i>
Seneka-root Plant	<i>Polygala Senega.</i>
Senna, Egyptian	<i>Cassia Senna.</i>
Simarouba Tree	<i>Quassia Simarouba.</i>
Squill or Sea Onion	<i>Scilla Maritima.</i>
Spear Mint	<i>Mentha Viridia.</i>
Spurge, Official	<i>Euphorbia Officinarum.</i>
Sorrel, Common	<i>Rumex Acetosa.</i>
Southernwood, Common	<i>Artemisia Abrotanum.</i>
Southernwood, Tartarian	<i>Artemisia Santonica.</i>
Stavesacre	<i>Delphinium Staphisagria.</i>
Storax, Common	<i>Styrax Officinale.</i>
Sugar Plant	<i>Saccharum Officinarum.</i>
Sumach or Poison Oak	<i>Rhus Toxicodendron.</i>
Sweet Fennel, Common	<i>Anethum Fœniculum.</i>
Sweet Flag, Common	<i>Acorus Calamus.</i>
Swietenia, Febrifuge	<i>Swietenia Febrifuga.</i>
Tamarind Tree	<i>Tamarindus Indica.</i>
Tansey, Common	<i>Tanacetum Vulgare.</i>
Thorn Apple	<i>Datura Stramonium.</i>
Tobacco, Virginian	<i>Nicotiana Tabacum.</i>
Tormentil, Common	<i>Tormentilla Erecta.</i>
Tragacanth	<i>Astragalus Verus.</i>
Turpentine Pistacia	<i>Pistacia Terebinthus.</i>
Valerian, Common	<i>Valeriana Officinale.</i>
Violet, Sweet	<i>Viola Odorata.</i>
Virginian Snake-root	<i>Aristolchia Serpentina.</i>
Wake-robin, Common	<i>Arum Maculatum.</i>
Wall Germander	<i>Teucrium Chamædrys.</i>
Water-dock, Great	<i>Rumex Aquaticus.</i>
Water-parsnip, Creeping	<i>Sium Nodiflorum.</i>
Wheat, Summer	<i>Triticum Æstivum.</i>

Willow, Crack
Winter's-bark Tree
Wood-sorrel, Common
Worm-grass, Perennial
Wormwood, Common

Zedoary, Common

~~Sassafras~~
Winters Aromatica.
Oxalis Acetosella.
Spigella Marilandica.
Artemisia Absinthium.

Curcuma Zedoaria.

GENERAL INDEX.

INDEX TO THE ELEMENTS.

	PAGE		PAGE
Aculeus	42	Caudex	15
Amentum	21	Cirrus	42
Annuals	13	Cluster	36
Anther	24	Cone	27
Appendages	39	Corolla	23
Berry	27	Corymb	36
Biennial	13	Cotyledon	27
Bractea	41	Curtain	22
Branches	39	Cyme	37
Bristles	43	Drupe	26
Buds	40	Embryo	27
Bulbs	39	Farina	24
Bunch	38	Fascicle	36
Calyptra	22	Fence	21
Calyx	20	Filament	24
Capsule	26	Floral-leaf	41
Catkin	21	Flower-cup	21

Fructification	20	Inflorescence	
Germen	25	Racemus	
Glands	42	Radiculæ	
Glume	22	Receptacle	
Hairs	43	Roots	
Head	37	Scape	
Herb	12	Seed	
Hilum	27	Seed-vessel	
Husk	22	Sessile	
Inflorescence	35	Sheath	
Involucrum	21	Shrubs	
Leaf	18	Silicle	
Legume	26	Silique	
Nectary	23	Spathe	
Ovary	25	Spike	
Panicle	37	Spine	
Parasiticals	12	Stamen	
Perennials	13	Stems	
Perianth	21	Stigma	
Petalæ	23	Stipe	

INDEX.

169

	PAGE		PAGE
Trees	11	Verticillus	35
Tuft	37	Volva	22
Umbel	37	Whorl	35
Veil	22		

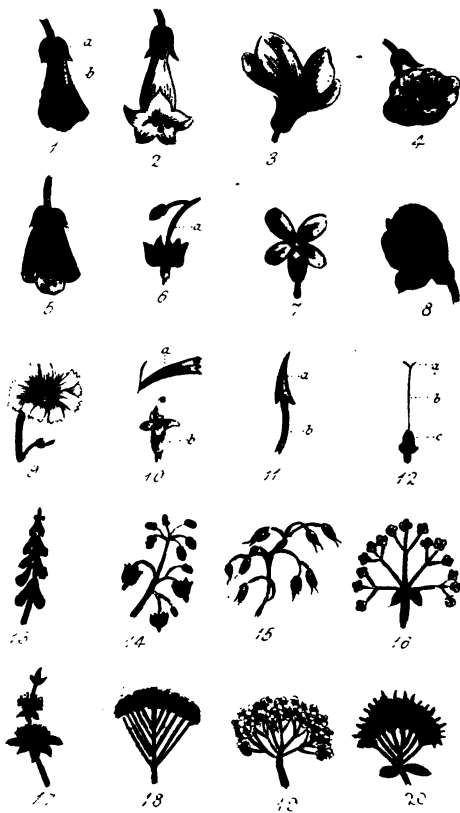
LINNÆAN ARTIFICIAL SYSTEM.

Classes	48	Monandria	53
Decandria	62	Octandria	60
Diadelphia	71	Orders	50
Diandria	54	Pentandria	56
Didynamia	67	Polyadelphia	72
Dodecandria	63	Polyandria	65
Enneandria	61	Species.....	48
Genera	48	Syngenesia	73
Gynandria	75	Tetradynamia....	68
Heptandria	60	Tetrandria	56
Hexandria	59	Triandria	55
Icosandria	64	Varieties	48
Monadelphina	70		

LINNÆAN NATURAL SYSTEM.

Aggregatæ.....	113	Bicornes	97
Algæ	117	Calamariæ.....	90
Amentacæ	115	Calycanthemæ ..	96
Asperifoliæ	109	Calycifloræ	96

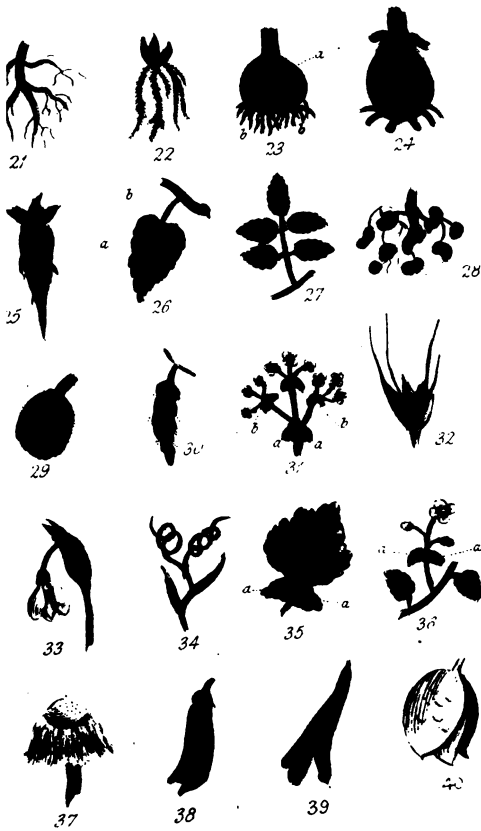
Caryophyllææ ..	90	Palmæ	89
Coadunatæ	116	Papilionacæ ..	103
Columniferæ	106	Personatæ	108
Compositæ.....	114	Piperitæ	90
Coniferæ	115	Pomacææ	106
Contortæ	102	Preciæ	98
Coronarizæ	93	Putaminæ	100
Corydales	100	Rhæadesæ	101
Cucurbitacææ ..	105	Rotacææ.....	98
Dumosæ.....	110	Sarmentacææ ..	93
Ensatzæ	91	Scabridææ	116
Filices	117	Scitamineæ ...	92
Fungi	117	Senticosæ	105
Gramina.....	90	Sepiarizæ	111
Gruinales	95	Siliquosæ	107
Hederacææ	112	Spathacææ.....	92
Hesperideæ	97	Stellatæ	113
.....	94	Succulentææ	95

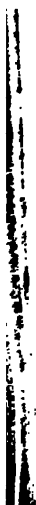


7

.

.





1

2



41



42



43



44



45



46



47



48



49



50



51



52



53



54



55



56



57



58



59



60

INDEX TO THE PLATES.

FIGURE	PAGE	FIGURE	PAGE
1 a.....	21	18	36
1 b.....	23	19	37
1	33	20	36
2	34	21	14
3	34	22	14
4	34	23	15
5	34	23	14
6	35	24	14
7	35	25	15
8	35	26	18
9	32	27	19
10	32	28	15
11	24	29	21
12	25	30	22
13	36	31	21
14	36	32	22
15	37	33	22
16	37	34	42
17	36	35	41

11

12

13

14



