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# A general natural history: or, new and accurate descriptions of the animals, vegetables, and minerals of the different parts of the world ...

A history of plants

**Hill, John**

**London, MDCCLI [1751]**

**ETH-Bibliothek Zürich**

Persistent Link: https://doi.org/10.3931/e-rara-20218

Part III. Plants usually called the more perfect ones.

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# THE HISTORY OF PLANTS.

## PART III.

*Plants uſually called the more perfect ones.*

*Claſs the Firſt.*

## MONANDRIA.

*Plants which have only one ſtamen in each flower.*

THE Monandria are of two kinds; ſome have only one ſtyle in the flower, others have two ſtyles, though but a ſingle ſtamen. The Monandria are hence arranged into two orders. The firſt comprehends thoſe which have only one ſtyle, under the name of Monogynia: the ſecond, thoſe which have two ſtyles, under the name of Digynia.

*Claſs the Firſt. Order the Firſt.*

## MONANDRIA MONOGYNIA.

*Plants which have only one ſtamen, and one ſtyle in the flower.*

THE Monandria Monogynia differ conſiderably in the ſeveral genera in the fruit. Some of them have capſules formed of three ſeparate cells, others produce only a ſingle ſeed after every flower.

Hence they are to be arranged into two diviſions.

## *Diviſion the Firſt.*

### *Monandria Mongynia, which have after every flower a capſule, divided into three cells.*

## CANNA.

THE calyx of the Canna is a perianthium, compoſed of three ſmall lanceolated leaves, which are coloured, which ſtand erect, and are permanent. The corolla is monopetalous, and divided into ſix parts. The laciniæ or ſegments are of a lanceolated figure, and cohere at their baſes: the three exterior ones are erect; the three inferior ones are longer than theſe, and two of them are erect, one reflex.

The ſtamen is a ſingle filament, of a lanceolated figure, very much reſembling the laſt ſegment of the corolla, and placed oppoſite to it, and hollow. The anthera is of a linear figure, and is affixed to the margin of the filament.

The germen of the piſtil is roundiſh, rough, and placed below the receptacle of the flower. The ſtyle is ſingle and enſiform, and of the length and figure of a ſegment of the corolla. The ſtigma is of a linear figure, and adheres to the margin of the ſtyle.

The fruit is a capſule of a roundiſh figure, ſcabrous, coronated, marked with three furrows, and compoſed of three valves, which form as many ſeparate cells in it.

The ſeeds are of a globoſe figure, and not very numerous.

### 1. *Canna foliis ovatis, utrinque acuminatis, nervoſis.*
### *The nervous and ovated-leaved Canna.*

The root of this plant is of a vaſt ſize; it is oblong, and often of a foot, or more, in diameter; it is very ſucculent, and of a whitiſh colour, and creeps under the ſurface of the ground. The ſtalk is green, ſucculent, round, an inch, or more, in diameter, and ſix or eight feet in height. The leaves are large, and of a beautiful green colour. The nerves very high and ſtrong in them; they ſtand alternately on the ſtalk at conſiderable diſtances: they are twelve inches long, and ſix or eight broad; the flowers are large, and of a beautiful ſcarlet colour. The capſule is large, and echinated on the outſide; and is roundiſh, but has three angles. The ſeeds are large, and of a pale brown.

This elegant plant is not a native of any part of Europe, but Aſia, Africa, and America all produce it, in conſiderable abundance, in ſeveral places. It is not unfrequent with us in the gardens of the curious, but it requires care. Caſpar Bauhine calls it, Arundo Indica latifolia, p. 19. Tournefort, Cannacorus ampliſſimo folio flore rutilo, Inſt. 367. Sir Hans Sloane and others call it, Canna Indica.

### 2. *Canna foliis lanceolatis, petiolatis, enerviis.*
### *The petiolated, lanceolated, and ſmooth-leaved Canna.*

This is a very beautiful plant. It's root is large, of the thickneſs of a man's arm, fleſhy, whitiſh, and of a ſweetiſh mucilaginous taſte, with a mixture of auſtere. The ſtalks riſe to be four or five feet high; they are round, of the thickneſs of a man's thumb, ſoft and ſucculent, and of a pale green colour: the leaves are large, and of an oblong figure, ſeven or eight inches in length, three in diameter. They are broadeſt in the middle, ſmall at the baſe, and terminate in a point. They are affixed to the ſtalk by ſhort pedicles, and are of a pale bluiſh, or greyiſh-green, colour, and ſmooth ſurface, not marked with ridges by the prominent nerves, as in the other ſpecies. The flowers are very large and beautiful. This, ſo far as is yet known, is only of American origin. It is a perennial plant, like the former, but it ſeldom flowers with us. Linnæus, in the Hortus Cliffortianus, calls it Cannoides; and Dillenius, in the Hortus Elthamenſis, Cannacorus glaucophyllus ampliore flore iridis paluſtris facie.

The other ſpecies of Canna are, 1. The broad-leaved, American Canna, with a deep red, ſhining flower. 2. The Canna, with a yellow ſpotted flower. 3. The narrow-leaved Canna, with a yellow flower, the Albara of Piſo.

The Indians uſe the juice of the Canna root, as an agglutinant and aſtringent.

## AMOMUM.

THE calyx of the Amomum conſiſts of ſeveral ſimple, partial ſpathæ, diſpoſed in an imbricated manner. The corolla is monopetalous, conſiſting of a ſhort tube, and a limb divided into three oblong ſegments; the middle ſegment is larger than the reſt, and the ſinus oppoſite to it more open. The nectarium is monophyllous, and inſerted into the large ſinus juſt mentioned: it ſcarce at all appears above the ſegments of the corolla.

The ſtamen is a ſingle filament, of an oblong figure, and like one of the ſegments of the corolla: the anthera is ſimple, and affixed to this.

The germen of the piſtil is roundiſh, and ſtands below the receptacle of the flower. The ſtyle is ſingle, ſlender, and of the length of the ſtamen. The ſtigma is obtuſe; the fruit is coriaceous, of an oval figure, but ſomewhat three-cornered: it is compoſed of three valves, forming as many cells; the ſeeds are numerous and ſmall.

The Amomum comprehends the plant called Zingiber by other authors.

### 1. *Amomum ſcapo nudo, ſpica ovata.*
### *The naked-ſtalked, oval-ſpiked Amomum.* Ginger.

The root of this ſpecies is tuberous and nodoſe, of the thickneſs of a man's finger, ſomewhat flattiſh, and divided into ſeveral ramifications, of a pale reddiſh colour on the outſide, and white within, and of an extremely acrid and fiery taſte. It creeps under the ſurface of the earth, and does not grow to any great length ſingly. From this root ariſes a ſtalk of the thickneſs of a man's little finger; it is round and tender, ſomewhat larger toward the root than any-where elſe, and in that part it is of a reddiſh colour, elſewhere it is green. It riſes to about ten inches high, and is terminated by a kind of clavated, or oval, ſpike. It is covered with green ſquammæ, reſembling rudiments of leaves, pointed, and reddiſh, at the extremity. The ſpike is very beautiful: it is compoſed of ſcales of a fine gold-yellow, and a bright ſcarlet colour, or elſe of a fine ſhining green, variegated with white. From the ſinus's of theſe ſquammæ, or ſcales, the flowers come forth; they much reſemble, in their general figure, thoſe of our orchis's, and are of a mixt reddiſh and whitiſh colour, and variegated with yellow ſpots. They are ſmall, and but of very ſhort duration, being ſucceeded by others, after they have been but five or ſix hours open.

Theſe ſtalks, or ſcapi, on which the flowers are produced, have no perfect leaves on them; but, beſide theſe, there ariſe alſo, from different parts of the ſame root, other ſtalks, if they may be properly ſo called; theſe are compoſed wholly of the baſes of a multitude of leaves, ſurrounding one another: they grow to two feet, or more, in height. The leaves ſeparate at their tops, and hang down looſe alſo from their ſides. They are about ſix or eight inches long, and an inch or more broad, ſoft to the touch, and pointed at the extremities, and are of a bright green colour.

This ſpecies is a native of the Eaſt Indies: it is frequent in many places there. It is cultivated alſo in ſeveral parts of America to advantage, but it does not ſeem a native there. We have it in ſome of our gardens in the ſtoves; it requires care to keep it alive, and never yet has been brought to flower with us. Plukenet calls it, Zinziber anguſtiore folio, utriuſque Indiæ alumna, Alm. 317. C. Bauhine calls it, ſimply, Zinziber; and Ray, and others, follow his example; Rhede calls it, Juſchi.

### 2. *Amomum ſcapo nudo, ſpica oblonga obtuſa.*
### *The naked-ſtalked Amomum, with an oblong, obtuſe ſpike.*

The root of this ſpecies is tuberous, of the thickneſs of a man's finger, and of two or three inches in length, covered with frequent protuberances, and divaricated in a very irregular manner. It is of a duſky orange colour on the ſurface, and white within, fibrous, and of an acrid taſte, but much leſs ſo than that of the former ſpecies. The ſtalks, which produce the flowers, ariſe from ſeveral parts of the root: they are tender, ſucculent, and, throughout, of a pale greeniſh colour. Their ſurface is covered with little hollow ſquammæ, or ſcales, reſembling rudiments of leaves, which terminate each in a hard, pale, brown point. At the top of this ſtalk ſtands a ſpike, of near two inches

inches in length, of the thickneſs of a man's thumb in the middle, and ſomewhat ſmaller at each extremity. This ſpike conſiſts of ſmall browniſh leaves, variegated with purpliſh; and, from the ſinus's of theſe, appear the flowers, which are ſmall, and of a pale fleſh colour, ſpotted with a deep red.

The leaves of this ſpecies grow, like thoſe of the former, in cluſters, from other parts of the root; they incircle one another with their baſes, ſo as to form a kind of ſtalk. They are about ten inches in length, and three in breadth, and are rough to the touch. The ſpike of flowers in this ſpecies has a very fragrant and aromatic ſmell, but the root is leſs aromatic, as well as leſs acrid, than that of the other ſpecies.

This is a native of Malabar, and of the Iſland of Ceylon, where it grows in vaſt abundance. We keep it alive in our ſtoves, but it never flowers with us.

The roots of the former ſpecies, or common Ginger, are taken up, after the flowers are decayed: the exterior bark is then taken off, and they are dried for exportation. The Indians eat the leaves, as well as the roots, freſh taken up, in many of their diſhes, and they give the freſh root alone in cholics and flatulencies; we uſe it as a ſtomachic and carminative.

## COSTUS.

THE calyx of the Coſtus is a ſimple ſpadix; the ſpathæ alſo are ſimple. The perianthium is very ſmall, compoſed of a ſingle leaf, tridentated at the edge, and ſtands on the germen. The corolla conſiſts of three petals; they are of equal ſize, of a lanceolated figure, hollow, and placed erect. The nectarium is very large; it conſiſts of a ſingle leaf, and is of an oblong figure, tubuloſe, and divided at the extremity into two labia; the lower labium is broad, and longer than the corolla, it's extremity being divided into three ſegments; and the upper labium is ſhort, of a lanceolated figure, and performs the office of a filament, ſupporting a ſingle anthera, which is divided into two parts. The germen of the piſtil is of a roundiſh figure, and ſtands below the receptacle of the flower. The ſtyle is capillary, of the ſame length with the filament. The ſtigma is capitated, compreſſed, and emarginated. The fruit is a roundiſh, coronated capſule, compoſed of three valves, and formed into three cells. The ſeeds are numerous and triangular.

Of this genus there is only one known ſpecies, and, therefore, there needs no diſtinction, or ſpecific name, for it.

### COSTUS.

The root of the Coſtus is tuberous and creeping. It runs under the ſurface of the earth for ſeveral yards; it's general thickneſs is about an inch, but it ſwells out into large protuberances, at diſtances from one another; theſe are of the bigneſs of an egg, or more. It's colour is white, it's texture fibrous, but it is very ſucculent, and of a ſweetiſh taſte, with ſomething of the flavour of ginger with it. From ſeveral parts of this root there riſe diſtinct plants; each grows to be five or ſix feet high. The ſtalk is round, three quarters of an inch in diameter, of a blood-red colour, and extremely gloſſy ſurface, jointed in the manner of a reed, and full of a ſpungy pith within. The leaves ſtand alternately, and have no pedicles. They are of an oblong figure, and narrow, eight or ten inches in length, and not more than three in breadth, broadeſt in the middle, and terminated in a point: the middle rib is very prominent on the under ſurface; above there is a furrow at it, and ſeveral lateral ribs are diſtinguiſhable. The colour is a pale green, the ſurface ſmooth and gloſſy. There ſtands one leaf at every joint of the ſtalk, and they are ſoft to the touch, and ſucculent. The ſtalk is terminated by an imbricated head, compoſed of a number of obtuſe, concave ſquammæ, of an oval figure, each ſquamma producing a ſingle flower, and they all remain, after the flowers are fallen: theſe ſquammæ, when the plant flowers in the Indies, are red as coral; when it flowers in our ſtoves, they are green. The flowers are ſmall, and of a pale red with us, much deeper in the Indies. The ſeeds are preſſed cloſely againſt one another; they are, at firſt, bluiſh, afterwards brown, and, when broken, are found to be white within. They have a ſtrong aromatic ſmell, like that of ginger, and yet have very little taſte.

This plant is a native both of the Eaſt and Weſt Indies; Malabar and the Iſland of Ceylon are the places where it is moſt abundant, but it is common enough in the Braſils, Surinam,

Surinam, and other parts of America. It very rarely flowers with us. The root, when dried, is what is now univerſally received, under the name of Coſtus, in the ſhops: it is not, indeed, the Coſtus of the antients, nor, unleſs the deſcriptions of the Coſtus of their time were more accurate, is it likely we ſhould ever know what was ſo; this, when dried, is of a yellowiſh white, of an aromatic taſte, and ſomewhat acrid and bitteriſh: in ſmell, it reſembles the Florentine iris, having ſomething of the violet ſcent in it. It is eſteemed a pectoral cephalic and uterine; it is certainly an attenuant, and promotes urine and perſpiration. It is an ingredient in many compoſitions, and is uſed in the theriaca, &c. inſtead of the Coſtus of the antients, but it is little known in extemporaneous preſcriptions.

## ALPINIA.

THE calyx of the Alpinia is a ſmall perianthium, and conſiſts of a ſingle leaf, divided into three parts: it is placed upon the germen. The corolla is monopetalous, unequal, and, as it were, double; the exterior is trifid, the upper ſegment is hollow, the two ſide ones flat, and it has a tube: the interior is ſhorter, it's edge is trifid, and the lower ſegment of the three hangs out beyond the lateral parts of the exterior corolla; the other two are emarginated. The baſe is bellied, or ventricoſe. The ſtamen is a ſingle filament, much reſembling one of the ſegments of the interior corolla. The anthera is ſingle, and of a linear figure; it adheres to the margin of the filament. The germen of the piſtil is roundiſh, and ſtands below the receptacle of the flower. The ſtyle is ſimple; the ſtigma is obtuſe, and ſomewhat trigonal. The fruit is a fleſhy capſule, of an ovated figure, compoſed of three valves, and containing three cells: the ſeeds are numerous, of an ovated figure, with a prominent, but truncated, apex, and with a caudated baſe; the receptacle is very large and pulpy.

It is an American, deſcribed by Plumier.

## MARANTA.

THE calyx of the Maranta is a ſmall perianthium, affixed upon the germen, of a lanceolated figure, and conſiſting of three leaves. The corolla is monopetalous, and of the ringent kind. The tube is oblong, compreſſed, crooked, and oblique. The limb is divided into ſix parts: the alternate exterior ſegments are of an ovated figure, equal in ſize, and ſmall; one ſtands below, two above: the two alternate lateral ſegments are very large, of a roundiſh figure, and repreſent a lower lip; the upper one is ſmall, and bipartite. The ſtamen is a ſingle, membranaceous filament, extremely reſembling a ſegment of the corolla. The anthera is of a linear figure, and affixed to the ſide of the filament. The germen of the piſtil is roundiſh, and is placed beneath the receptacle of the flower. The ſtyle is ſimple, and of the length of the corolla; and the ſtigma is ſomewhat trigonal and bent. The fruit is a roundiſh capſule, ſomewhat obſcurely trigonal, and compoſed of three valves, in each of which there is a ſingle, hard, rugoſe ſeed, of an ovated figure.

It is an American, deſcribed by Plumier; and is nearly allied to the canna, but cannot be joined with it.

## CURCUMA.

THE calyx of the Curcuma conſiſts of ſeveral partial, ſimple ſpathæ, which fall off very ſoon. The tube of the corolla is narrow, it's limb is divided into three ſegments, which are of a lanceolated figure and patent. The nectarium is compoſed of a ſingle leaf, of an ovated, but pointed, figure; it is larger than the ſegments of the petal, and inſerted into the larger ſinus, made by it's opening, The ſtamina are five in number, but, as only one of them is of ſervice in the office of generation, or is properly organized for it, the plant ſtill belongs to this claſs. Four of theſe filaments are erect, linear in figure, and barren; the fifth is alſo linear, and reſembles a petal: it is placed within the nectarium, and it's apex is bifid. The germen of the piſtil is roundiſh; the ſtyle is of the length of the ſtamina; the ſtigma is ſimple and uncinated. The fruit is a roundiſh capſule, compoſed of three valves, and contains three cells, in each of which there are a great number of ſeeds.

Tournefort has erroneouſly made the Curcuma a ſpecies of canna; but this ſeems to have been owing to Bontius, who has figured the common canna under the name of

Curcuma,

Curcuma. The root of Curcuma is ſometimes long, ſometimes roundiſh, and, from this difference of figure, has been ſuppoſed to belong to two ſpecies of plants; nay, the long-rooted and round-rooted Curcuma are figured as two plants, in the Hortus Malabaricus, under the names of Manjella Kua, and Manja Kua; but later obſervations confirm the ſuſpicion of their being the roots of the ſame ſpecies, which is indeed, the only ſpecies of this genus.

## CURCUMA. Turmerick.

The root of the Curcuma is tuberous and creeping: it is of the thickneſs of a man's finger, frequently knotted and geniculated. It runs juſt under the ſurface, and has a great number of fibres, tolerably thick and ſtrong, deſcending from the joints. On the outſide it is of a pale colour, or of a mixt white and brown, and yellow: within it is of a fine yellow colour. It is rough on the ſurface, and compact within, conſiderably heavy, and of a fragrant ſmell, and a bitter, acrid taſte, with ſomewhat fatty in it. From every joint of this root there ariſe three, four, or more leaves; they are very like thoſe of the canna, about ſeven inches long, and four or five broad, largeſt in the middle, and terminate in a point: they are of a bright green colour, and firm texture. From other parts of the roots, and eſpecially from the more healthy and robuſt ones, there ariſe ſeparate flowering ſtalks: theſe are tender, ſucculent, round, and of the thickneſs of a gooſe-quill, and are of a pale green colour. Each grows to ſeven or eight inches high; it's lower half is naked, but the upper part is formed into a thick ſpike: this is compoſed of a multitude of little leaves, green at the firſt, but afterwards of a fine yellow, or of an orange colour, or reddiſh. Each leaf is half an inch broad at the baſe, and gradually diminiſhes thence, till it terminate in a point, which is uſually bent downwards. Theſe leaves are placed in a ſquammous manner, over one another, and, in the baſe of each, there is lodged a tough, thick, viſcous matter: from the hollows between theſe ſquammæ there are produced oblong flowers, ſomewhat reſembling thoſe of the canna in ſhape, but not more than a third part as large. They are ſometimes yellowiſh, ſometimes of a pale purple, but the colour is very uncertain. Herman ſays that the flowers conſiſt of four petals each, but he errs extreamly in this. The ſeed veſſels, which ſucceed theſe, are ſmall and membranaceous: the ſeeds are ſmall alſo and round.

The Curcuma is very common in Malabar, in the Iſland of Ceylon, and in many other parts of the Eaſt Indies. Breynius calls it, Curcuma foliis longioribus et acutioribus; and, in the Hortus Malabaricus, it is called, Manjella Kua.

The root of the Curcuma is taken up for uſe, as ſoon as the flowering ſtalks are faded. It is cut into pieces of an inch or two, or more, in length, and dried in the ſun. The Indians themſelves are very fond of it, in ſoups, and other diſhes. We uſe it much as an attenuant and deobſtruent: in all obſtructions of the viſcera it is of great ſervice; but it is particularly famous in jaundices: the dyers alſo uſe it in great quantities for a yellow colour.

## KOEMPFERIA.

THE calyx of the Kœmpferia is a ſimple ſpatha, conſiſting of only one leaf, and opening on one ſide. The corolla conſiſts of a ſingle petal: the tube is long and thin; the limb is plain, and divided into ſix parts: three of the ſegments are lanceolated in figure, and equal in ſize; two other of the ſegments are of an ovated figure, and the ſingle lower one is divided into five parts, which are each vertically cordated: all the ſegments are equal in length. The ſtamen is a ſingle filament, of a membranaceous ſtructure, and ſomewhat ovated figure, and is emarginated. The anthera is of a linear figure; it grows to the filament all it's length, and ſcarce emerges out of the tube of the corolla. The germen of the piſtil is roundiſh. The ſtyle is of the length of the tube, and the ſtigma is obtuſe. The fruit is a roundiſh, and ſomewhat trigonal capſule, compoſed of three valves, and containing three cells, in each of which there are a great number of ſeeds.

There is but one known ſpecies of this genus. It is deſcribed by Burman in his Ceylon, under the name of Arobrebis, and by Kœmpfer in his Japan. It very rarely produces it's fruit, nature contriving to propagate it by germina placed near the root.

## KOEMPFERIA. Galangal.

The root of the Kœmpferia is tuberous and creeping: it runs under the ſurface in various directions, and is crooked and knotty. It's general thickneſs is that of a man's finger, but it is not unfrequently of an inch in diameter; it is ſurrounded with circular ridges in many places, and ſwells into frequent protuberances: it's colour is a pale browniſh red on the ſurface, and yet paler within; it's ſmell aromatic; it's taſte extreamly acrid and pungent; it emits fibres in great number, from ſeveral parts, and propagates itſelf a great way, in a little time, by ſpreading; from the ſeveral knots of the root ariſe the leaves; there grow two of them together, they ſtand on erect, broad, and flattiſh, hollow pedicles: they ſtand oppoſite to one another, and are of a roundiſh figure, and hollowed with a ſmall ſinus at the baſe; they are of a thick, fleſhy ſtructure, and bright green colour, except at the edge, where they are generally purpliſh. They are of a fine aromatic ſmell, and acrid taſte. The flowers ſtand on long pedicles, which ariſe from the center, between the two leaves. They are white within, and toward the baſe of a deep purple, and in ſome parts yellowiſh and greeniſh. Every flower laſts, from the time of it's opening, to the evening when it falls off, and in the morning after a freſh ſet appear.

This plant is frequent in Ceylon, Malabar, and many other parts of the Eaſt Indies. It's root is the Galangal of the ſhops. The apothecaries, and even the people in general who have written of the Materia Medica, diſtinguiſh two kinds of Galangal, the greater and the leſſer; the latter is, of the two, much the ſtronger, and more acrid, and it has been ſuppoſed that they were the roots of two different plants, but they are, in reality, both the root of this ſpecies, and the larger are only the older and leſs vigorous ones. We have the plant in ſome of our gardens, but it requires a ſtove heat, and very ſeldom flowers with us; it never produces any fruit in our country; rarely, where native.

It is deſcribed in the Hortus Malabaricus, under the name of Katsjula-Kelenger. Kœmpfer calls it, Wanhem; and Rudbeck, Orchis abortiva bifolia. The root is a carminative and ſtomachic; it is a common ingredient in bitter infuſions, and enters ſome of the ſhop compoſitions.

*Claſs the Firſt. Genus the Firſt.*

*Diviſion the Second.*

*Monandria Monogynia, which produce only a ſingle ſeed after every flower.*

## BOERHAAVIA.

THE calyx of the Boerhaavia is ſcarce diſtinguiſhable: it is a mere margin, very ſmall, and ſtanding as a corona on the head of the germen. The corolla conſiſts of a ſingle petal; it is campanulated, erect, and of a quinquangular figure. It is divided into five ſegments, which are ſhort and emarginated. The ſtamen is a ſingle ſhort filament, on which is affixed a ſmall, roundiſh anthera. The germen of the piſtil is placed below the receptacle: the ſtyle is capillary and erect, and the ſtigma is obtuſe. The fruit is a turbinated capſule, furrowed on the ſurface, and forming only one cell within, in which there is lodged a ſingle ſeed.

This genus comprehends the Boerhaavia, and the Antaniſophyllum of Vaillant. Linnæus has placed it in his Genera Plantarum among the triandria, and deſcribed it as having three ſtamina, but he had then only ſeen a dried ſpecimen of it; he afterwards ſaw it in flower in the Upſal Garden, and, in his Catalogue of the Plants there, has placed it among the Monandria.

There is only one known ſpecies of this genus.

### BOERHAAVIA.

The root of the Boerhaavia is oblong, and of an inch, or more, in diameter, and conſiſts of a hard, internal part or core, and a ſoft bark of the thickneſs of a ſhilling, or more. It is of a tolerable ſmooth ſurface, and duſky colour. The ſtalk is round, geniculated,

Canna

Costus
The Costus Plant

Curcuma

Kæmpferia
The Galangal Plant

Salicornia

B. Cole Sculp.

geniculated, diffuſe, and ſpreading, and of a gloſſy ſurface, and red colour. The leaves are of an ovated figure, and thick, fleſhy ſtructure: they are of a bright green colour, and reddiſh at the edges. The flowers ſtand towards the top of the plant; in the alæ of the leaves they are of a pale red on the outſide, and of a deeper, or purpliſh, red within, eſpecially near the mouth. The ſtyle is of a deep purple; the ſtamen is alſo purple, the anthera yellow.

The plant is a native of the Eaſt Indies, principally about Montan. It loves a rocky or ſandy ſoil: it ſucceeds very well in our ſtoves, and produces it's flowers and fruit there. Vaillant calls it, Antaniſophyllum ſolanifolium majus. Rheede, Talu Dauca; Linnæus, Boerhaavia diffuſa, and Boerhaavia foliis ovatis.

The Indians uſe the outer part, or bark of the root, as a purge, but it is not known as a medicine in Europe.

## HIPPURIS.

THE calyx of the Hippuris is ſcarce diſtinguiſhable. It conſiſts only of two extreamly ſmall margins, ſtanding oppoſite to one another, on the head of the germen. There is no corolla: the ſtamen is a ſingle filament, fixed on the receptacle of the flower. The anthera is very ſlightly bifid. The germen of the piſtil is oblong, and placed under the receptacle: the ſtyle is ſingle, ſubulated, and erect; it is placed within the ſtamen, and is longer than it. The ſtigma is acute; there is no pericarpium, but after every flower there comes a ſeed, which is roundiſh and naked.

This genus comprehends the Limnopeuce of Vaillant, and the Pinaſtella of Dillenius. There is only one known ſpecies of it.

### HIPPURIS.

The root of the Hippuris is compoſed of a number of reddiſh, or blackiſh, articulated, oblong parts, which ſpread themſelves every way on, or juſt under, the ſurface of the mud, and ſend down from every articulation a number of capillary fibres. The ſtalks ariſe from ſeveral parts of the root, ſometimes ſingly, ſometimes three or four together. They are round, jointed, like ſmall reeds, and of the thickneſs of a large ruſh: they ſtand erect, and are largeſt at the baſe, whence they gradually grow ſmaller to the top, where they terminate in a point. The joints ſtand very cloſe, and the whole ſtalk is ſmooth, not ſtriated: the leaves are ſhort, and ſtand in form of rays round the ſtalk, at the ſeveral joints. The whole plant grows to two feet high, and the leaves are narrow, and ſomewhat reſemble thoſe of the firs, from which, and from the regular growth of the plant, many have compared it to the pines and firs. The leaves are of a pleaſant green colour, and round about the articulations there lie ſingle naked ſeeds, of an oblong figure, and reddiſh brown colour; ten or twelve of theſe often grow round each articulation.

This plant is a native of England, but it is not common with us. I have obſerved it in Leiceſterſhire, and in Yorkſhire; it ſometimes grows in the waters, ſometimes on the mud, about their edges. Cordus calls it, Limnopeuce, Hiſt. 150. Ruppius, Pinaſtella ſurrectior. C. Bauhine, Equiſetum paluſtre brevioribus foliis polyſpermon; and Rudbeck, Polygonum polyſpermum. Many of the old writers have alſo called it, Polygonum fœmina.

Moſt of the botanical authors have confounded the equiſeta with this, and this with the equiſeta, but they are very diſtinct genera. The charæ have alſo as erroneouſly been confounded with this genus, and with the equiſeta, though widely different from both.

## SALICORNIA.

THE calyx of the Salicornia is of a tetragonal figure, truncated, bellied out, and permanent. There is no corolla. The ſtamen is a ſingle, ſimple, capillary filament: the anthera is roundiſh. The germen of the piſtil is of an oblong, ovated figure: the ſtyle is ſimple, and placed under the ſtamen, and the ſtigma is bifid.

There is no pericarpium, but the calyx becomes more ventricoſe, and contains a ſingle ſeed.

1. *Salicornia internodiis brevioribus.*
*The ſhort-jointed Salicornia.*

This ſpecies is large and robuſt; it's root is ſmall, oblong, and ſurrounded with a great number of fibres: it's ſtalks are hard and woody toward the lower part, green and ſucculent toward the upper, and are throughout compoſed of a great number of very ſhort joints, inſerted into one another, in the manner of ſo many cups. The main ſtalk ſends off a great number of branches, and towards it's top divides into a great many others; but theſe have no leaves, but only ſmall branches like themſelves, round and jointed, growing from them; they are round, ſucculent, and of a brackiſh ſaline taſte. The flowers are very minute, and of a yellow colour; they ſtand only on the tops of the branches, and laſt but a little while.

This ſpecies is perennial, and is not a native of England. It is frequent about the coaſts of the Mediterranean. The next ſpecies to be deſcribed greatly reſembles it in it's ſtructure, and is often miſtaken for it; and, by this miſtake, this ſpecies has been called a native with us.

C. Bauhine calls it, Kali geniculatum majus. J. Bauhine, Kali geniculatum ſive Salicornia; and moſt of the other writers, ſimply, Kali geniculatum, by that means confounding it with the other.

2. *Salicornia internodiis longioribus.*
*The longer-jointed Salicornia.*

This ſpecies greatly reſembles the former, but it is leſs robuſt, and is an annual plant. It's root is conſiderably large for the ſize of the plant, of an oblong figure, and whitiſh colour, and furniſhed with a conſiderable number of thick and ſtrong fibres. The plant uſually riſes to eight or ten inches in height, ſometimes to more. The ſtalk is ſucculent, and compoſed of cylindric joints, inſerted into one another; theſe joints are longer than thoſe of the former, though that be ſo much the larger plant: from the ſides of the branches there iſſue others, and from thoſe yet others, till the whole have a very ramoſe figure; the whole plant is of a fine bright green colour, and is ſoft and tender down to the very bottom: the ſtalks all the way are thicker at the joints than elſewhere, and the whole plant has a brackiſh, but not diſagreeable, taſte: the flowers grow only on the tops of the branches; they are ſmall, and of a pale green colour; the ſeeds are black and oblong. This ſpecies is extreamly common with us on the ſea-coaſts, and almoſt through the world. Our people have a way of gathering it, and pickling it, under the name of Sampire. C. Bauhine calls it, Kali geniculatum alterum vel minus; and J. Bauhine, Cali Arabum aliud.

*Claſs the Firſt. Genus the Second.*

## MONANDRIA DIGYNIA.

*Plants which have only one ſtamen, but have two ſtyli in each flower.*
*Of theſe there are but three known genera.*

## CORISPERMUM.

THE Coriſpermum has no calyx. The corolla conſiſts of two petals, which are compreſſed, crooked, pointed, equal in ſize, and placed oppoſite to one another. The ſtamen is a ſingle, long, crooked filament; the anthera is ſimple. The germen of the piſtil is roundiſh, and compreſſed. The ſtyles are two in number; they are capillary and crooked. The ſtigmata are acute. The fruit is a roundiſh capſule, compreſſed, bilocular, and has a furrowed edge: the ſeeds are of an oblong figure, and ſtand ſingle.

This genus comprehends the Stellaria of Dillenius, the Coriſpermum of Juſſieu, and the Rhagroſtis of Buxbaum. It is liable, however, to great variation in ſome of the parts: the eſſential and certain diſtinction is in the corolla. The fruit ſometimes varies in being bilocular and tetraſpermous, and it is ſometimes gymnoſpermous; and the

ſex

ſex varies yet more, it being ſometimes hermaphrodite, ſometimes monæcious, ſometimes diæcious, ſometimes polygamis. As the corolla, however, is invariable, the genus may always be diſtinguiſhed.

### *Coriſpermum foliis oppoſitis.*
### *The Coriſpermum, with leaves placed oppoſite.*

The root of this ſpecies is ſmall, and creeping, and is uſually affixed in the mud at the bottom of waters not very deep; from this grows ſeveral ſtalks very thin, tender, and flexile, which riſe up till they reach the ſurface of the water, where great tufts of them uſually appear together, and the upper leaves of each diſpoſe themſelves in a ſort of radiated manner, ſo as to reſemble a ſtar; and hence it obtained the name of Stellaria Aquatica, and Water Starwort, among the ordinary botanical writers. The leaves ſtand in pairs on the ſtalks, oppoſite to one another, and every pair at the diſtance of about three quarters of an inch from the other, from the ſame joints, whence the leaves iſſue; there uſually grow alſo a few white fibrous roots. The ſtalks grow, according to the different depth of the water, to a foot or two in length, or to no more than five or ſix inches; they are uſually ſimple, ſometimes branched. The leaves are of a bright green colour, about half an inch in length, and a ſixth of an inch in breadth. They are broadeſt in the middle, and thence gradually grow ſmaller toward each extremity. The cluſters of leaves on the ſurface of the water conſiſt of ſeveral leaves, broader than the others, and laid in a radiated manner over one another, the inner ones growing gradually ſhorter and ſhorter to the center. The flowers ſtand in the alæ of the leaves, two at a joint. They are ſmall, white, and the petals are ſo bent, that they almoſt meet one another. The whole plant is of a very tender and delicate ſtructure.

It grows abundantly in almoſt all our ponds and ditches, covering ſpots of them often of two or three yards diameter. Parkinſon, Gerrard, and the reſt, call it, Stellaria aquatica; and J. Bauhine, Alſine aquis innatans foliis longiuſculis. It varies in it's manner of growth ſo extreamly, as to have been miſtaken by authors for ſeveral ſpecies, and deſcribed by them as ſuch. The plant, in it's moſt natural ſtate, produces leaves of an elliptic, oblong figure. One of the varieties, eſteemed a different ſpecies by authors, is that with leaves bifid at the ends. The authors, who erected a new ſpecies out of this variety, did not give themſelves the pains to examine the plant in it's common ſtate, in which it's lower leaves are always bifid in this manner at the extremity; and the whole difference between the new ſpecies and that was, that in the one only the lower leaves were thus emarginated, in the others all. This variety is uſually found in autumn, in ponds, where it has grown under water in the ſpring, and the water, in the heat of ſummer, has been dried up, and the plant deſtroyed down to the root: in this caſe it grows again on the ponds filling with freſh water; and it's firſt ſhoots in this ſtate always have narrow linear leaves, bifid at the end, like the lower leaves of the other plants. Another variety is the ſhorter and rounder-leaved plant; in this ſtate it is ſmall, and creeps on the ſurface of the mud, in places where the water has been dried up, or in places where the ſeeds have been received, though never covered with water in theſe places: in this caſe the ſtalk takes root at every joint, and it's leaves are ſmaller, ſhorter, and roundiſh.

The firſt of theſe varieties is deſcribed in the Fl. Pr. under the name of Lenticula paluſtris anguſtifolia folio in apice diſſecto; and by Petiver, in Ray's Synopſis, under that of Stellaria aquatica longifolia; and by Ray, under that of Stellaria aquatica foliis longis tenuiſſimis. The other is called by Dillenius, Cat. Giſſ. Stellaria minor et repens; by C. Bauhine, Lenticula paluſtris bifolia fructu tetragono; and by Pliny, Callitriche.

Theſe are evident varieties of the common Coriſpermum, firſt deſcribed; but there are, however, two really diſtinct ſpecies, which will be eaſily diſtinguiſhed by their names. The firſt is the Coriſpermum foliis alternis, called by Joſſieu, Coriſpermum hyſſopifolium; and by Buxbaum, Rhagroſtis ſemine paſtinachæ. This grows on the ſandy ſhores in Tartary, about the Volga. The ſecond is the Coriſpermum glabrum majus longiſſimis foliis of Amman; the Rhagroſtis foliis arundinaceis of Buxbaum, found alſo on the ſhores of the Volga, and in many other places in Tartary. Linnæus calls the firſt of theſe two, Coriſpermum floribus lateralibus; the latter, Coriſpermum ſpicis ſquarroſis. They are both annual, but the latter is larger and more procumbent; it's ſtalk ſmooth, whereas it is rough in the other: the leaves not only larger,

but

but more robuſt; and the top of the branches more imbricated with leaves, and as it were ſpiked.

Linnæus has thought of dividing this genus into two, from the difference of the fruit, calling the Stellaria of Dillenius, which has four ſeeds in every fruit, Callitriche; and the Coriſpermum of Juſſieu and Rhagroſtis of Buxbaum, which have only ſingle ſeeds, Coriſpermum: but the varieties in the flower, as well as this in the fruit, are ſo great, that it is of little conſequence, though juſt and exact. In the Coriſpermum foliis alternis, the loweſt flower uſually has four ſtamina, the ſecond three, the third two, and the reſt only one each. So that the ſame plant has the characters not only of ſeveral genera, but even of ſeveral claſſes.

## BLITUM.

THE calyx of the Blitum is a perianthium, conſiſting of one leaf divided into three parts, and is permanent and patent; the ſegments are of an oval figure, equal in ſize, and two of them gape open more than the reſt. There is no corolla; the ſtamen is a ſingle ſetaceous filament, longer than the cup, and placed erect within the intermediate ſegment. The anthera is didymous. The germen of the piſtil is oval, and pointed: the ſtyles are two in number; they are erect, of the length of the ſtamen, and they gape open: the ſtigmata are ſimple; the fruit is a baccated calyx; it is of an oval figure, and ſomewhat compreſſed. The ſeed is ſingle, of a globular figure, compreſſed, and of the ſize of the capſule.

This genus comprehends the Chænopodio-Morus of Boerhaave, and the Morocarpus of Ruppius.

### 1. *Blitum capitellis ſpicatis terminalibus.*
### *The Blite, with ſpicated, terminatory heads.*

The root of this ſpecies is conſiderably large, of an oblong figure, and white colour, ſoft and fleſhy, and of an agreeable taſte. From this there uſually ariſe ſeveral ſtalks together: they are round, ſtriated, of a deep colour, and conſiderably thick; they grow to ten or twelve inches high, and are very much branched. They uſually are in part procumbent, but the half, or more, of the ſtalk generally riſes erect. The leaves ſtand on long pedicles; they are of a triangular figure, like thoſe of ſpinach, and ſtand irregularly on the ſtalks: the lower ones are ſomewhat dentated round the edges, the upper ones are even. The flowers and fruits grow on the tops of the branches. The flowers are ſingly ſmall, and inconſiderable, but with the fruit in the cluſter they appear very ſingular; the whole reſembles very much a mulberry or raſpberry, and adheres very firmly to the ſtalk; it is of the bigneſs of a nut, of a fine red colour, and full of juice, much reſembling red wine in colour. The whole cluſter of the fructifications makes a kind of double globules, firmly fixed to the ſtalk without any pedicles.

This ſpecies is not a native of England, but it is not uncommon in our gardens. It is an annual but a ſufficiently hardy plant, eaſily raiſed from ſeed, and ſtanding in the open ground. It is a native of Tyrole, and the country thereabouts. Boerhaave calls it, Chænopodiomorus major. Haller, Chænopodiomorus foliis pene integris. Ruppius, Morocarpus major; and Ray, Atriplex baccifera.

### 2. *Blitum capitellis ſparſis lateralibus.*
### *The Blite, with ſparſed lateral heads.*

The root of this ſpecies is oblong, as thick as a man's finger, and of a white colour, and ſweet taſte; from this there riſe uſually five or ſix ſtalks, ſometimes only a ſingle one. The ſtalk is ſomewhat ſtriated, and very ramoſe, dividing uſually almoſt immediately from the baſe into three or four parts. Theſe grow to a foot, or more, in length, and each ſends out a great number of branches, ſo that the whole plant is very ramoſe; the ſtalks are in part procumbent, in part erect. The leaves ſtand irregularly on the ſtalks; they are triangular, hoary, and ſerrated round the edges. The fructifications grow in cluſters, reſembling ſmall mulberries, not on the extremities of the

the ſtalks, but on it's ſides; and in the alæ of the leaves they are juicy, and of a fine red colour, and give a great beauty to the plant. This ſpecies is a native of Spain, Italy, and Tartary; it's fruit is ripe in Auguſt. It is kept in ſome of our gardens, but not ſo frequently as the former ſpecies. Cluſius calls it, Atriplex ſylveſtris baccifera. C. Bauhine, Atriplex ſylveſtris mori fructu; and Amman, Blitum fragiferum, maximum, polyſpermum.

*Claſs the Second.*

## DIANDRIA.

*Plants which have in every flower two ſtamina.*

THE Diandria are of three diſtinct kinds; ſome have only one ſtyle in the flower, others have two, and, finally, others have three ſtyles.

The Diandria are hence arranged into three orders: the firſt comprehending thoſe which have only one ſtyle, under the name of Monogynia; the ſecond, thoſe which have two ſtyles, under the name of Digynia; and the third, thoſe which have three ſtyles, under that of Trigynia.

*Claſs the Firſt. Order the Firſt.*

## DIANDRIA MONOGYNIA.

*Plants which have only one ſtyle, and two ſtamina in each flower.*

THE Diandria Monogynia differ very conſiderably in the ſeveral genera, in regard to the corolla and the fruit. Some of them have regular, others irregular corollæ; and, of the latter, ſome have the ſeeds contained in capſules, others have them naked.

*Diviſion the Firſt.*

*Diandria Monogynia, which have regular corollæ.*

### NYCTANTHES.

THE calyx of the Nyctanthes is a monophyllous perianthium, very ſmall, of a cylindric figure, lightly divided into eight ſegments, or denticulæ, of a ſubulated figure, and permanent. The corolla conſiſts of a ſingle petal, and is of the hypocrateriform kind. The tube is cylindric, and longer than the cup: the limb is plane, divided into eight ſegments of an oblong figure, and patent. The ſtamina are two extreamly ſmall filaments affixed to the receptacle, and of a ſubulated figure: the antheræ are erect, and ſomewhat acute: the germen of the piſtil is roundiſh and depreſſed. The ſtyle is ſimple, of the length of the tube: the ſtigmata are two, and are erect. The fruit is a didymous berry, of a roundiſh figure, and contains two cells. The ſeeds are roundiſh and large, and one only is contained in each cell.

1. *Nyctanthes foliis inferioribus cordatis obtuſis, ſuperioribus ovatis acutis.*

*The Nyctanthes, with the lower leaves cordated and obtuſe, and the upper ones ovated and acute.* Arabian Jaſmine.

This elegant little ſhrub does not riſe to more than two or three feet high, and often trails upon the ground, or winds about other things. It's bark on the trunk is grey, and full of cracks; the branches iſſue two together, oppoſite one to the other; they are round, ſomewhat hairy and tender, ſometimes wind round other things, ſometimes not. The firſt leaves which appear in the ſpring are cordated, obtuſe, and almoſt emarginated; thoſe which appear afterwards in the ſummer are ovated, and acute; they all ſtand on pedicles, and are nervous, ſmooth at the edges, and not hairy on either ſide, except that underneath, juſt at the ramifications of the veſſels, there are ſometimes a few hairs: their petioles are crooked, and ſeem to be jointed in the mid-

dle; the leaves fall off by the petioles breaking at this joint, and, in conſequence of this, there remains a part of it on the branches, which thence appear as it were ſpinoſe; at the extremities of the branches ſtand the flowers in cluſters; three, five, or nine flowers uſually ſtand together; they are large and white, each has it's ſeparate pedicle. They ſmell extreamly ſweet, ſomewhat like the lilly of the valley-flower, but with a flavour of the citron among it: they ſmell much ſweeter in the night than at any other time.

This ſpecies is a native of Malabar, and ſome other parts of the Eaſt Indies. We have it in ſome of our gardens. It requires a ſtove heat, and flowers with us, but very ſeldom ripens it's fruit here. It has been generally called, Jaſminum Arabicum; and the firſt oil or eſſence of jaſmine, or jeſſamy, we were acquainted with, was diſtilled from the flowers of this ſhrub, not from jaſmine. Ray calls it, Sauchac Arabicum, ſive jaſminum Arabicum. Cluſius gives it the ſame name, with the addition of Sive ſiringa Arabica. In the Hortus Cliffort. it is called, Nyctanthes caule volubili foliis ſubovatis acutis; and, in our Gardener's Catalogue, Jaſminum Arabicum foliis Limonii conjugatis.

2. *Nyctanthes foliis omnibus lanceolatis.* Indian Jaſmine.
*The Nyctanthes, with all the leaves lanceolated.*

This ſpecies is larger and more robuſt than the former; it grows to ſix feet high, and is very much branched: the young branches are covered with a fine down, the older are hard, geniculated, and covered with a brown cracked bark. The leaves grow in pairs, and are oblong and lanceolated, broadeſt in the middle, and terminating in a very long, narrow point. They are of a ſhining, gloſſy, green colour, and are ſmooth both on the upper and under ſurfaces. They have no ſmell, but are of a very bitter taſte. The flowers are large and white, of a fine fragrant ſcent, and they uſually ſtand three or five in a cluſter. The fruit is a ſmall black berry, conſiſting of a pulpy matter, covered with a very thin ſkin, and containing one ſeed.

This is a native of Malabar, Java, and Ceylon, and has not, that I know of, been yet raiſed in any of our gardens. Ray calls it, Jaſminum Indicum flore polypetalo, exalbido, fructu minori. Rheede, Tsjiregam mulla.

The other ſpecies of the Nyctanthes are, 1. The larger-fruited Nyctanthes, or Kater Tsjiregam mulla of the Hortus Malabaricus. 2. The red-edged Nyctanthes, or Kater pitsjegam muller of the H. M. and 3. The larger-leaved, weak-ſtalked Nyctanthes. All theſe are natives of the Eaſt Indies. We ſometimes meet with ſpecimens of them prepared upon the ſpot; and ſome of them have been kept in the ſtoves of the late Lord Petre, and other curious perſons.

## JASMINUM.

THE calyx of the Jaſminum is a tubulated, oblong perianthium, conſiſting of a ſingle leaf, divided into five ſhort ſegments at the edge, and ſtanding erect. The corolla conſiſts of a ſingle petal. The tube is cylindric and long; the limb plane and divided into five ſegments. The ſtamina are two ſhort filaments; the antheræ are ſmall, and are hid within the tube of the corolla. The germen of the piſtil is roundiſh; the ſtyle is capillary, and of the length of the ſtamina, and the ſtigma is bifid. The fruit is a ſmooth oval berry, containing two cells: the ſeeds are two in number; they are large, of an oval, oblong figure, convex on one ſide, and flat on the other, and they are covered with a membrane.

The figure of the flower varies; it is ſometimes acute, ſometimes obtuſe, but the number and proportion of the ſtamina is regular and conſtant; the fruit is a ſingle berry in ſome, and a double one in others.

1. *Jaſminum foliis oppoſitis pinnatis.* Common Jaſmine.
*The Jaſmine, with oppoſite, pinnated leaves.*

This is the common Jaſmine. It is a weak ſhrub; it's branches riſe to ſix, ſeven, or eight feet high, if ſupported; they are thin and tough, and the young ones are green, the older browniſh. The leaves are pinnated; there uſually are three pinnæ on each ſide the middle rib, and an odd leaf at the end. The pinnæ are all ſhort, and pointed

pointed at the ends: they are ſmooth, and of a deep green colour. The flowers grow, as it were, in an umbel, and are of a very ſweet ſmell. It rarely produces it's fruit with us; where it does, the berry is greeniſh, and the ſeeds round. This ſhrub, though now ſo common with us, and hardy enough to bear ſo well the ſeverity of our climate, is originally of Eaſt Indian origin. The oil of Jaſmine, or, as it is vulgarly called, eſſence of Jeſſamy, is now uſually prepared from the flowers of this ſpecies. C. Bauhine calls it, Jaſminum vulgatius flore albo; others, Jaſminum vulgare.

2. *Jaſminum foliis alternis, ternatis, pinnatiſque, ramis teretibus.*
*The round-branched Jaſmine, with alternate, ternate, and pinnated leaves.*

This ſpecies grows to four feet, or more, in height, when properly ſupported. It's branches are reddiſh, and the young ſhoots are rounded, except for two ſtriæ, on the ſides, from the petioles or pedicles of the leaves. The leaves uſually ſtand three together, ſometimes ſeven, in a pinnated manner. They are large, and of an oblong figure, ſomewhat reſembling thoſe of the pomegranate, ovated, ſcarce at all pointed, of a fine ſhining green colour, and not at all dentated at the edges. The flowers ſtand in a ſort of umbels, like thoſe of the common Jaſmine; they are large, of a fine ſhining yellow colour, and extreamly ſweet ſmell; theſe are ſucceeded by oblong berries, green, at the firſt, but yellow and pellucid, when ripe.

This ſpecies is a native of the Eaſt Indies, and of ſome other places: it is not uncommon in our green houſes. Ferrarius calls it, Jaſminum Indicum, flavum, odoratiſſimum, a name moſt other authors have borrowed for it. Linnæus, in the H. C. calls it, Jaſminum foliis alternis, ternatis, obtuſis.

3. *Jaſminum foliis alternis, ternatis, pinnatiſque, ramis angulatis.*
*The angular-branched Jaſmine, with alternate, ternate, and pinnated leaves.*

This riſes to be a ſhrub of the ſame kind of ſtature with the common Jaſmine. It's branches are tender, green, and flexile, and a little angulated. The leaves are in general ternate, but in the middle of the branches pinnated, and compoſed of ſeven pinnæ: the lateral leaves are oval, and pointed, and are twice as ſmall as the terminating leaf, which is large, of an oval figure, pointed at the extremity, and narrow at the baſe. They are all of a firm ſtructure, ſmooth and gloſſy. The flowers are yellow, and ſmell very ſweet: they ſtand in a kind of umbels, as thoſe of the other ſpecies do, and the ſegments are obtuſe. The fruit is a moderately large, oblong, black berry. This ſpecies is found wild in many parts of the Eaſt Indies. It is not uncommon in our green houſes: it is an ever green, and flowers very plentifully with us.

C. Bauhine calls it, Jaſminum humile luteum. J. Bauhine, Gelſeminum ſive Jaſminum luteum. Linnæus, in the Hort. Cliffort. Jaſminum foliis alternis, ternatis, acuminatis.

4. *Jaſminum foliis alternis, ternatis, ſimplicibuſque, ramis angulatis.*
*The alternate, ternate, and ſimple-leaved Jaſmine, with angulated branches.*

The root of this ſpecies is remarkable for it's creeping: it runs under the ſurface to a great diſtance; from this there ariſe a number of ſhoots or ſeparate plants; theſe grow to be five or ſix feet high: the ſtalks are angular and green, and ſend out many branches. On theſe grow the leaves, ſometimes ſingle, but uſually three on a pedicle. They are ſmall, and in ſome meaſure reſemble thoſe of rue. The flowers ſtand on the tops of the branches; they are yellow, and like thoſe of the common Jaſmine. They are ſucceeded by large round berries, red, when ripe. This ſpecies is a native of France, Spain, and Italy: it is common in the hedges about Montpelier. It is not wild with us, but is common in our gardens. C. Bauhine calls it, Jaſminum luteum vulgo dictum bacciferum. J. Bauhine, Trifolium fruticans quibuſdam polemonium flore luteo.

luteo. Others call it, Polemonium ſimply, or Polemonium flavum and luteum; Dodonæus, Jaſminum fruticans.

The other ſpecies of Jaſmine are, 1. The large, flowered, Spaniſh Jaſmine. 2. The white Jaſmine of the Azores Iſlands. 3. The broad-leaved, Indian Jaſmine. 4. The bay-leaved American Jaſmine, with extremely ſweet flowers. 5. The tobacco-leaved, arboreſcent Jaſmine, with white flowers. 6. The nightſhade-leaved American Jaſmine, with bluiſh-black berries; and, 7. The creeping, violet-leaved Jaſmine.

## LIGUSTRUM.

THE calyx of the Liguſtrum is a perianthium, conſiſting of one leaf, of a tubulated form, very ſmall, and divided into four ſhort ſegments at the top, erect and obtuſe. The flower conſiſts of a ſingle petal, and is of the infundibuliform kind. The tube is of a cylindric figure, and is larger than the cup. The limb is patent, and is divided into four oval ſegments. The ſtamina are two ſimple filaments, placed oppoſite to each other. The antheræ are erect, and uſually of the length of the corolla. The germen of the piſtil is roundiſh; the ſtyle is very ſhort; the ſtigma is bifid, obtuſe, and very thick. The fruit is a ſmooth, globoſe berry, containing only one cell, in which there are four ſeeds, convex on one ſide, and angulated on the other.

### 1. *Liguſtrum folio anguſtiore.* *Narrow-leaved Privet.* Privet.

The root of the common Privet is large and ſtrong: it's trunk often an inch and an half in diameter, and it's height eight or nine feet. It is very ramoſe; it's branches fine and ſlender, and very tough: the older branches are covered with a greyiſh bark, the younger ones are green. The leaves ſtand two together, oppoſite to one another; they are oblong and narrow, of a deep green colour, and fleſhy ſtructure, ſmooth and gloſſy, and of an acrid, bitteriſh taſte, with ſome aſtringency. The flowers grow in cluſters, at the tops of the branches; they are white, ſmall, and very fragrant: the berries, which ſucceed theſe, are ſmall, and of a jet black.

This is the only European ſpecies of Liguſtrum. It is common wild with us, and in almoſt all other parts of Europe. It flowers almoſt all the ſummer. C. Bauhine calls it, Liguſtrum Germanicum; other authors, ſimply, Liguſtrum, or Liguſtrum vulgare. Our gardeners have a way of variegating it's leaves with yellow and with white. Tournefort has named this variegated plant as a ſpecies.

### 2. *Liguſtrum folio latiore.* *Broad-leaved Privet.*

This is a low, but very elegant, ſhrub. It uſually riſes with a ſingle ſtem, which is branched out into many others. The bark is of a duſky brown colour, very ſmooth, and ſcarce ever cracked at all. The branches are tough; the leaves are an inch broad, and more than an inch and an half long, broadeſt in the middle, and narroweſt at each end: they are of a fine ſhining green, and ſomewhat reſemble the leaves of the common bay-tree. The flowers are larger than thoſe of our Privet, and of a bright yellow colour: the berries are large and white.

This is a native of America. Plumier has deſcribed it under the name of Liguſtrum laurifolio, flore flaveſcente, baccis niveis.

Theſe are the only known ſpecies of Privet; and the latter of them is ſcarce ever ſeen with us.

## PHYLLYREA.

THE calyx of the Phyllyrea is a ſmall perianthium, with four indentings at the edge, and is permanent. The corolla conſiſts of a ſingle petal: it has ſcarce any tube. It's limb is divided into four ſhort ſegments, of an oval figure, revolute and acute. The ſtamina are two very ſhort filaments, placed oppoſite to each other. The antheræ are ſimple and erect. The germen of the piſtil is roundiſh; the ſtyle is ſimple, and

and of the length of the ſtamina. The ſtigma is thick. The fruit is a globoſe berry, having but one cell, in which there is a ſingle, large, globoſe ſeed.

1. *Phyllyrea foliis lanceolatis ſubintegerrimis.* **Common Phyllyrea.**
*The lanceolated-leaved Phyllyrea.*

This ſpecies of Phyllyrea grows to ſix or ſeven feet high. It's wood is white and firm, it's bark greyiſh: it is very ramoſe. It's leaves ſtand together in pairs, one oppoſite to the other: they are oblong, narrow, and even at the edges, and of a bitteriſh, aſtringent taſte. The flowers grow in cluſters, at the baſes of the leaves; they are ſmall, and of a greeniſh-white colour: the berries, which ſucceed theſe, are round, and, when ripe, of a bluiſh-black; theſe ſtand on very ſhort peduncles, and cloſe to one another: they are of a mixed ſweet and bitter taſte, and in each is a ſingle, hard kernel.

This ſhrub is very common in our gardens, where it bears the open air, and needs no care or trouble to be taken about it; but it is not a native of England. It is wild in great abundance in Italy, Germany, Spain, and ſome parts of France.

This ſpecies varies extremely in it's general ſize, and in the largeneſs of it's leaves; hence Cluſius has made two ſpecies, if not three; his third and fourth Phyllyrea are evidently the ſame, and his fifth ſeems ſo too.

2. *Phyllyrea foliis cordato-ovatis.* **Prickly Phyllyrea.**
*The Phyllyrea with cordated oval-leaves.*

This is a more robuſt ſhrub than the former, though it ſcarce riſes to ſo much height as it. It's ſtem is an inch, or more, in diameter, the wood white, and the bark of a greyiſh colour. On the young branches the bark is green, ſpotted with white. The leaves are of a duſky green colour; they are an inch and an half long, near an inch broad in the wideſt part, of a thick conſiſtence, and ſomewhat prickly round the edges. The flowers are ſmall, and whitiſh, and ſtand in cluſters about the alæ of the leaves. The berries are ſmall, round, and black.

This ſpecies is a native of Portugal, and of ſome parts of Italy; and, though it's leaves are ſo extremely different in figure from thoſe of the other, yet, in all other reſpects, it is very like it. C. Bauhine calls the former ſpecies, Phyllyrea liguſtri folio, and this, Phyllyrea latifolia ſpinoſa; J. Bauhine calls the laſt, Phyllyrea foliis ilicis; both theſe authors, however, as well as Cluſius, and many others, have been miſled, by the variety both ſpecies ſometimes appear in, to deſcribe each of them under the name of ſeveral different ones. C. Bauhine calls one variety of the firſt, Phyllyrea anguſtifolia prima; and another, Phyllyrea anguſtifolia ſecunda; and a variety of the latter, Phyllyrea folio leviter ſerrato. Moſt of the botanical writers, ſince his time, have copied theſe errors from him.

The really diſtinct ſpecies of Phyllyrea, beſide theſe two, are, 1. The ſmall, broad-leaved Phyllyrea. 2. The box-leaved Phyllyrea. 3. The narrow-leaved, prickly Phyllyrea. 4. The narrow-leaved, deeply-indented Phyllyrea. 5. The nerium-leaved Phyllyrea. 6. The American Phyllyrea, with a yellow root, and pointed leaves. 7. The American Phyllyrea, with a red root, and roundiſh leaves.

The leaves and bark of Phyllyrea are ſaid to be aſtringent, and good in ulcers of the mouth, but they are not in uſe at this time.

## O L E A.

THE calyx of the Olea is a ſmall, tubulated perianthium, conſiſting of one leaf. It has four indentings at the rim, and is erect and deciduous. The corolla conſiſts of a ſingle petal. It's tube is cylindric, and of the length of the cup; the limb is plain, divided into four parts, of a ſemioval figure. The ſtamina are two ſhort filaments, of a ſubulated figure, placed oppoſite to one another: the antheræ are erect. The germen of the piſtil is roundiſh. The ſtyle is ſingle, and very ſhort; the ſtigma bifid and thick, and it's ſegments are emarginated. The fruit is a drupe, of an oval figure, ſmooth, and containing only one cell, in which there is lodged a ſingle, rugoſe nut, of an ovato-oblong figure.

1. *Olea foliis oblongis, anguſtis, rigidis.*
*The Olea, with oblong, narrow, rigid leaves.* **The Olive.**

This is the common Olive-tree. It grows to be a large and tall tree, and ſpreads out it's branches every way. The bark is ſmooth, and of a greyiſh colour, the wood tolerably firm and ſolid. The leaves are of an oblong, narrow figure, and greyiſh colour: they, in ſome degree, reſemble thoſe of the common, long-leaved willows; they are even at the edges, of a thick ſtructure, and have no viſible veins, except only the middle rib. They are of a darker colour above, and a paler on the under ſurface; they ſtand on extremely ſhort pedicles, and frequently in pairs, oppoſite to one another. The flowers grow in cluſters, at the alæ of the leaves; they ſtand on ſhort pedicles: they are ſmall, and of a greeniſh white. Theſe, in many places, fall without producing any fruit, but, where the tree thrives well, they are ſucceeded by the common Olives.

The Olive-tree is not a native of England, but it is frequent in many parts of Europe, in moderate climates. It varies extremely in the ſize, ſhape, and colour of it's fruit, in conſequence of the culture; and Tournefort has recounted theſe varieties as ſo many diſtinct ſpecies. C. Bauhine, and moſt of the other writers, call this ſpecies Olea ſativa. The Oleaſter, or Olea Sylveſtris, deſcribed by many as a different ſpecies, is the ſame in a wild or uncultivated ſtate.

The really diſtinct ſpecies of the Olive are, 1. The African Olea, with box-like leaves, and a white, ſcabrous bark. 2. The African Olea, with a long and broad leaf, of a deep ſhining green above, and a paler green underneath. 3. The African Olea, with a long, narrow, pale-green leaf, and round, purple fruit. 4. The wild, Spaniſh Olive, with rigid leaves, hoary underneath, and an obtuſely-mucronated fruit.

We owe to the common Olea, firſt deſcribed, the pickled Olives eaten at our tables, and the oil we eat with ſallads, and uſe on ſo many, and ſo important, occaſions, both in medicine and mechanics.

## CHIONANTHUS.

THE calyx of the Chionanthus is a perianthium, conſiſting of one leaf, divided into four ſegments at the edge, erect, acuminated, and permanent. The corolla conſiſts of a ſingle petal, and is divided into four parts. The tube is very ſhort, no longer than the cup, and is patulous. The limb is divided into four extremely long ſegments, which are erect, acute, of a linear figure, and ſomewhat uneven. The ſtamina are two extremely ſhort filaments, of a ſubulated figure, and are inſerted into the tube. The antheræ are cordated and erect. The germen of the piſtil is of an oval figure. The ſtyle is ſimple, and of the length of the cup. The ſtigma is obtuſe and trifid. The fruit is a round, unilocular berry, containing a ſingle, ſtriated officle. The ſtamina in this genus are often three, inſtead of two. The genus itſelf is allied to the nyctanthes, the ſyringa, the olea, liguſtrum, phyllyrea, and jaſmine, but, moſt of all, to the fraxinus corollifera. There is but one known ſpecies of it.

### CHIONANTHUS.

The root is very ramoſe, and brachiated. The trunk is covered with a brown bark, cracked, and furrowed. The leaves are broad and roundiſh; the upper ſide of a deep green, the under ſide hoary and white. The flowers are white, and deeply laciniated. It is a native of Ceylon; but we have it in ſome of our gardens. Plukenet has figured it in his Almageſtum, T. 241. f. 4.

## SYRINGA.

THE calyx of the Syringa is a ſmall, tubulated perianthium, conſiſting of a ſingle leaf, divided into four ſhort ſegments at the mouth, and erect. The corolla conſiſts of a ſingle petal; the tube is cylindric, and very long: the limb is divided into four ſegments, of a linear figure, hollow, and obtuſely-pointed. The ſtamina are two very ſhort filaments: the antheræ are ſmall, and hid within the tube of the flower. The germen of the piſtil is oblong; the ſtyle is capillary, and of the length of the ſtamina: the ſtigma is bifid and thick. The fruit is an oblong, compreſſed, acuminated capſule, formed of two valves, and containing two cells. The ſeeds are ſingle, oblong, and compreſſed, pointed at each end, and furniſhed with a membranaceous margin.

This genus comprehends the lilac of Tournefort.

1. *Syringa*

1. *Syringa foliis ovato-cordatis.*
*The Syringa with ovato-cordated leaves.* **Common Lilac.**

This is a large ſhrub. It riſes to eight or ten feet high, and ſends out a great number of branches. It's trunk is of two or three inches in diameter, and is covered with a bark, of a pale brown. The leaves grow two at a joint, and are large, oblong, and of an ovated figure, ſomewhat cordated at the baſe. They ſtand on moderately long pedicles, and are even at the edges, and of a pale colour, both on the upper and under ſides. The flowers are ſmall, but they grow in great cluſters, and are of a very ſweet ſmell: they are naturally bluiſh, but frequently of a pale roſe red, or quite white.

This ſpecies is common in our gardens: it is a native of Egypt and the Eaſt Indies, yet it perfectly well bears the cold of our climate. C. Bauhine calls it, Syringa cærulea; Tournefort, Lilac; Renealm, Calobotrichys. Tournefort very improperly makes the white-flowered one a diſtinct ſpecies, under the name of Lilac flore albo.

2. *Syringa foliis lanceolatis integris laciniatiſque.* **Perſian Lilac.**
*The Syringa with undivided, lanceolated, and laciniated leaves.*

This is a ſmall, but beautiful ſhrub. It grows to four or five feet high: it's wood is white, and the large branches have alſo a white pith in them. The bark is of a dark brown, or elſe reddiſh, and is uſually ſpotted with innumerable punctules, of a duſky yellow. The leaves, which grow on the lower part of the branches, are laciniated in ſuch a manner as to reſemble, in ſome degree, the leaves of the common jaſmine; thoſe higher up are ſingle, undivided, and of a lanceolated figure, and much reſemble thoſe of the common privet. The flower is ſmall, and uſually of a pale roſe colour, or fleſh colour, and of an extremely ſweet ſmell. It ſometimes flowers twice in a year, but the latter flowers, with us, are leſs beautiful and leſs fragrant than the former.

This ſpecies is a native of Perſia, but it is frequent in our gardens. It is very ſingular that, though the flower of this ſhrub is ſo perfectly ſimilar to that of the common Lilac, yet authors have referred it to very different genera. C. Bauhine calls it, Liguſtrum foliis laciniatis; Parkinſon, Jaſminum Perſicum. Cornutus calls it, Agem lilag Perſarum; and Gerard and J. Bauhine, Syringa cærulea.

3. *Syringa foliis lanceolatis integris.*
*The Syringa, with undvided leaves.*

This riſes to a ſhrub of ſix or ſeven feet high. It's bark is of a duſky brown colour, and very ſmooth: it's leaves are oblong and narrow, broadeſt at the middle, narrow at the baſe, and pointed at the extremity; they are of a duſky green colour on the upper ſide, and ſomewhat paler underneath. The flowers ſtand in cluſters, and greatly reſemble thoſe of the common Lilac; they are uſually of a pale red, ſometimes bluiſh. It greatly reſembles the former ſpecies, in all reſpects, but in wanting thoſe laciniated leaves which it has; poſſibly they may be but varieties one of another, though there requires further obſervation to determine that with certainty.

Theſe are all the known ſpecies of Syringa. The ſhrub, commonly called Syringa by our gardeners, is not of this claſs; it will be deſcribed hereafter in it's place, under the name of Philadelphus.

## CIRCÆA.

THE calyx of the Circæa is a perianthium, compoſed of two leaves, of an ovated figure, concave, bent backward and deciduous. The corolla conſiſts of two petals; they are turbinated and cordated, equal in ſize, patent, and ſhorter than the leaves of the cup. The ſtamina are two capillary filaments; they ſtand erect, and are of the length of the cup: the antheræ are roundiſh. The germen of the piſtil is of a turbinated figure, and ſtands under the receptacle. The ſtyle is capillary, and of the length of the ſtamina; the ſtigma is obtuſe, and emarginated. The fruit is a turbinated, oval capſule; it is hairy, compoſed of two valves, and contains two cells: it opens from the baſe to the apex. The ſeeds are placed one in each cell, and are oblong, and narroweſt at the baſe.

*Circæa.*

### *Circæa.*
### *Enchanter's Nightſhade.*

This is a very beautiful, as well as a very ſingular, plant. It riſes to five, ſix, or ten inches, or more, high. It's root is oblong, white, and creeping, frequently jointed, and full of fibres. The ſtalk is round, of the thickneſs of a ſtraw at the bottom, ſmaller all the way up, lightly hairy, and never much branched. It often riſes ſingle to the top; ſometimes from about the middle of it's height it ſends out a couple of branches, of two, three, or four inches long. The leaves ſtand in pairs, oppoſite to one another; they ſtand on pedicles of half an inch in length, and are broad, and of a ſort of oval figure, but pointed, thin, of a pale green, and lightly indented at the edges. The upper part of the main ſtalk, and of the branches, runs up into a kind of ſpike, on which ſtand the flowers: they are very ſmall, but very beautiful, and ſtand at diſtances, on ſhort pedicles.

This elegant plant is common with us, and all over Europe, in woods, and among buſhes. It flowers in April. C. Bauhine calls it, Solanifolia Circæa dicta major; Lobel, Circæa Lutetiana. There is, in reality, no other ſpecies of this genus, but authors have deſcribed the varieties of this under the names of diſtinct ſpecies. When it grows on ſtarving ground, it has been called Circæa minima, and Solanifolia Circæa Alpina; and, in North America, where it grows very large, authors have called it, Circæa latifolia Canadenſis flore albo.

## DIANDRIA MONOGYNIA.

### *Diviſion the Second.*

### *Such as have regular corollæ, and the ſeeds contained in capſules.*

## VERONICA.

THE calyx of the Veronica is a perianthium, conſiſting of a ſingle leaf, divided into four acute, lanceolated ſegments, and permanent. The corolla conſiſts of a ſingle petal; the tube is of the length of the cup, or nearly ſo: the limb is plain, and divided into four parts; the ſegments are oval, and the lower one is narrower than any of the reſt; the ſegment overagainſt it is broader than any. The ſtamina are filaments, ſmaller at the bottom than above, and bending upwards: the antheræ are two oblong. The germen is compreſſed; the ſtyle is capillary, of the length of the ſtamina, and declinate; the ſtigma is ſimple. The fruit is a capſule, of a turbinated, cordated figure, with a compreſſed apex; it is compoſed of two valves, and contains two cells, in each of which there are numerous, roundiſh ſeeds. The tube of the corolla is very different in the different ſpecies of this genus; in ſome it is extremely ſhort, in others longer, and, in ſeveral ſpecies, the upper larger ſegment forms a kind of labium, or upper lip; and the other three form, together, a lower lip, but the loweſt ſegment is always narrower than the others.

1. *Veronica floribus ſpicatis, foliis oppoſitis, caule procumbente.*

*The common Veronica, with oppoſite leaves, ſpicated flowers, and procumbent ſtalks.*

**Common Speedwell.**

This is one of the moſt frequent ſpecies of Veronica, both with us and in moſt parts of Europe. It's ſtalks are long and procumbent; they lie upon the ſurface of the ground, and ſhoot out roots, as they run along; they are of the thickneſs of a packthread, and of a pale green colour, and lightly hairy; they are frequently jointed, and, at every joint, there grow two leaves; theſe are broad and ſhort, ſomewhat hairy, and crenated round the edges, about half an inch in length, and a third of an inch in diameter, in dry places; in moiſt, often much larger. They are of a bitteriſh taſte. The flowers ſtand in ſpikes, riſing from the alæ of the leaves; they are ſmall,

and

and of a bluiſh, or pale red colour. The ſtalks are ſometimes wholly procumbent, ſometimes the ends of them riſe up a little. This ſpecies is very common in meadows and paſtures, and on heaths. C. Bauhine calls it, Veronica mas ſupina & vulgatiſſima, a name borrowed by many others. J. Bauhine calls it, Veronica vulgatior folio rotundiore. Linnæus, in his Fl. L. Veronica caule repente, ſcapis ſpicatis, foliis oppoſitis, ovatis, ſtrigoſis.

2. *Veronica floribus ſpicatis, foliis ternis.*
*The ternate-leaved, ſpiked-flowered Veronica.*

This is a very ſpecious and beautiful plant. It grows to a foot and half, or more, in height; the ſtalk is round, of a pale green, and ſmooth, robuſt, and erect. The leaves ſtand uſually three at a joint, ſometimes more; they are ſomewhat like the leaves of the ptarmaca, two or three inches long, very narrow, and deeply ſerrated at the edges. They are ſmooth, and of a duſky green colour: the ſtalk is ſometimes quite ſingle, ſometimes it ſends out two or more branches; the tops are formed into long and beautiful ſpikes of flowers; they are of a beautiful blue colour, and ſtand very thick together, when they are fallen. The ſeed-veſſels appear, and are full of very ſmall, round ſeeds. The root is ſmall and not creeping, but it ſends up new ſhoots in great number, from the baſe of the old ſtalk.

This beautiful ſpecies is not a native of England, but is common in many other parts of Europe, in dry, hilly paſtures. Gerard and Parkinſon call it, Veronica cærulea, and Veronica ſpicata cærulea. C. Bauhine calls it, Lyſimachia ſpicata cærulea; and J. Bauhine, Veronica ſpicata, recta, profunde ſerrata, quam lyſimachiam cæruleam quidam vocant.

3. *Veronica floribus racemoſis lateralibus, foliis ovatis planis, caule repente.* Brook-lime.
*The lateral cluſter-flowered Veronica, with oval leaves, and creeping ſtalks.*

The root of this ſpecies is compoſed of a number of white fibres. The ſtalk is round, ſmooth, thick, and ſucculent; it is ſometimes of a pale green, but more frequently of a reddiſh colour; it is procumbent in the lower part, and ſends out fibrous roots from the ſeveral joints into the mud. The upper part of the ſtalk riſes to ſix or eight inches high, and both this and the procumbent part have, at every joint, two leaves: theſe are of a deep green colour, ſmooth and ſucculent; they ſtand on moderately long pedicles, and are crenated about the edges; they are of an oval figure, and an inch and half, or more, in length. The flowers ſtand in ſpikes, on pedicles growing from the alæ of the leaves; they are of a beautiful blue colour: the capſules, which ſucceed them, are moderately large.

This ſpecies is common with us, and in all other parts of Europe, in ſhallow waters, and about the ſides of ditches and rivers. C. Bauhine calls it, Anagallis aquatica folio ſubrotundo; but he erroneouſly divides it into two ſpecies, a larger and a ſmaller, as it happens to grow in a better or worſe ſoil. Dodonæus calls it, Anagallis aquatica; and Tournefort, Veronica aquatica major folio ſubrotundo.

4. *Veronica floribus racemoſis lateralibus, foliis ovatis plicatis, dentatis.* Wild germander.
*The lateral, cluſter-flowered Veronica, with oval, plicated, and dentated leaves.*

The root of this ſpecies conſiſts of a number of ſlender fibres. The ſtalk is round, of a pale green colour, and a little hairy: it is in part procumbent, and ſhoots out in that part fibres into the earth from every joint; it riſes uſually to the height of ſix or eight inches. The leaves ſtand in pairs, and are affixed to the ſtalk without pedicles: they are hairy, and deeply dentated about the edges, three quarters of an inch long, and half an inch broad, and of a pale, greyiſh, green colour: from the alæ of theſe leaves there grow ſpikes of two or three inches long, on which ſtand a great number of very beautiful blue flowers; they are much larger than thoſe of the brooklime, otherwiſe like them.

This plant is very common in our paſtures in May, June, and July, and makes a very beautiful figure. C. Bauhine calls it, Chamœdrys ſpuria minor rotundifolia. J. Bauhine, Chamœdrys ſpuria latifolia ſive fœmina. Gerard and Parkinſon, Chamœdrys ſylveſtris.

Theſe are the moſt different from one another, in their manner of growth, of the ſpecies of Veronica, and ſerve therefore to ſhew it's principal variations in form; the reſt of the ſpecies are very numerous. The more ſingular are, 1. The bugle-leaved, ſpiked, Veronica of Wales. 2. The ſmall, erect, ſpiked Veronica. 3. The ſerpyllum-leaved Veronica; 3 The germander-leaved Veronica, with flowers on long pedicles. 4. The Veronica, with the flowers adhering to the ſtalks. 5. The upright Veronica, with divided leaves. 6. The ivy-leaved Veronica. 7. The long-leaved Veronica. 8. The narrow-leaved, ſcutellated Veronica. 9. The germander-leaved Veronica, with long pedicles to the leaves: Theſe are all natives of England. 10. The Pyrenæan, ſmooth-leaved Veronica. 11. The great, erect Veronica. 12. The broad-leaved, ſpiked Veronica. 13. The naked-ſtalked Veronica. 14. The clinopodium-leaved Veronica. 15. The hairy daiſy-leaved Veronica. 16. The Alpine, ſhrub Veronica. 17. The American, tall Veronica, with three, five, or ſeven leaves of a joint. 18. The ſhort-leaved, ever-green Veronica. 19. The laciniated-leaved Veronica. 20. The great, ſingle-ſtalked Veronica, 21. The Veronica, with the lower leaves round. 22. The teucrium-leaved Veronica. 23. The vervain-leaved Veronica. 24. The cymbalaria-leaved Veronica. 25. The moneywort-leaved Veronica. 26. The olive-leaved, water Veronica. 27. The nettle-leaved, ſpiked Veronica; and, 28. The hoary, obtuſe-leaved Veronica.

Several of the ſpecies of this genus are famous in medicine; the common ſpeedwell is a good antiſcorbutic, and has lately been celebrated in the gout and rheumatiſm. The water brooklime is alſo one of the antiſcorbutics of the ſhops, and it's juice is always made a part of the ſpring juices, given againſt thoſe complaints.

## PÆDEROTA.

THE calyx of the Pæderota is a perianthium, conſiſting of a ſingle leaf, divided into five acute linear ſegments, and permanent. The corolla conſiſts of a ſingle petal. The tube is cylindric, and of the length of the cup; the limb is formed, as it were, into two labia: the upper lip is oblong, hollow, and narrow; the lower lip is broader, and is divided into three equal ſegments at the extremity. The ſtamina are two filaments, of the length of the corolla, and bend downwards; the antheræ are aſſurgent. The germen of the piſtil is roundiſh; the ſtyle is capillary, and of the length of the ſtamina; the ſtigma is truncated. The fruit is an oval capſule, compreſſed at the top and bifid, compoſed of four valves, and containing two cells, in each of which there are numerous oblong, obtuſe ſeeds, which adhere to a columnar receptacle. This genus is very nearly allied to the Veronica; but, though Linnæus ſeems deſirous of referring it to it, there ſeems more reaſon for the keeping them ſeparate.

Micheli has deſcribed this genus under the name of Bona rota.

### 1. *Pæderota foliis ovatis crenatis.*

### *The Pæderota, with oval, crenated leaves.*

The root is fibrous and white; the ſtalks are round, ſlender, and ſcarce erect. The leaves ſtand in pairs, and are near an inch long, and little leſs in breadth; they are of a duſky green, and deeply ſerrated. The flowers are moderately large, and blue; they ſtand in ſhort, thick ſpikes. It is a native of Italy. Micheli calls it Bona rota montana Italica chamædryos folio rotundiore ſpica cærulea habitiore.

The other ſpecies are, 1. The narrower-leaved Pæderota; and 2. The yellow-flowered Pæderota.

## JUSTICIA.

THE calyx of the Juſticia is a very ſmall perianthium, formed of a ſingle leaf, with five indentings at the top, acute, erect, and narrow: the corolla conſiſts of a ſingle petal. The tube is gibbous, the limb ringent. The upper lip is oblong and emarginated: the lower lip is of the ſame length with that, and is reflex, and obtuſely trifid. The ſtamina are two ſubulated filaments, they are hid under the upper lip of the flower; the antheræ are erect and bifid at the baſe. The fruit is an oblong, obtuſe capſule,

capſule, narrow at the baſe; compoſed of two valves, and containing two cells; (the partition placed contrariwiſe to the valves,) and opens by an elaſtic unguis: the ſeeds are roundiſh.

The upper lip of the corolla is various in it's ſituation. The unguis of each locule, by which the capſule is expanded, conſtitutes the eſſential character of the genus.

This genus comprehends the *Juſticia* of Houſton, the *Adhatoda* of Tournefort, and the *Echolium* of Rivinus.

1. *Juſticia arborea foliis lanceolato-ovatis, bracteis ovatis perſiſtentibus, corollarum galea concava.*

*The arboreſcent Juſticia, with lanceolato-ovate leaves, with ovated bracteæ, and a hollow galea.*

This is a beautiful ever-green ſhrub: it grows to four or five feet high. It's root is large, woody, divided into three or four branches, and furniſhed with a multitude of fibres, of a duſky browniſh colour, and ſtyptic taſte; the trunk grows to an inch and half, or more, in diameter. It's bark is of a pale brown, ſmooth, and gloſſy: it divides into a number of branches, which are thin and tough. The leaves are moderately large, and grow in pairs; they are of a pale green colour, and tender ſtructure; they are broad at the baſe, and terminate in a point. The flowers ſtand in ſpikes, with leaves intermixed, but it ſeldom produces them with us.

It is a native of Ceylon, but is to be met with in many of our ſtoves, where it thrives very well, but does not flower. Tournefort, Plukenet, and moſt other authors call it, Adhatoda Zeylanenſium. Linnæus, in the Hort. Cliffort, Juſticia foliis ovato-lanceolatis, ſpicis folioſis, florum galea concava.

2. *Juſticia herbacea, fructu parvo.*

*The herbaceous Juſticia, with a very ſmall fruit.*

This is an extreamly elegant plant. The root is oblong, white, and of the thickneſs of a ſtraw, or more: the ſtalk riſes to two feet in height, and is round, and of a pale green colour, jointed, and not quite ſtrait. The leaves ſtand in pairs, at an inch, or more, diſtance, oppoſite to one another; they are of a yellowiſh green colour, and of an irregularly oval figure, broadeſt near the baſe, and pointed at the extremity. The tops of the ſtalks and ſide branches have flowers in ſpikes on them; the fruit is very ſmall, and the ſeeds are heart-faſhioned.

This is a native of the Eaſt Indies, and is rarely met with in our ſtoves. The late Lord Petre had it: elſewhere I have not ſeen it. Tournefort calls it, Adhatoda herbacea, circeæ foliis, parvo fructu.

The other ſpecies of the Juſticia are, 1. The ſmall and white-flowered, mallow-leaved, Indian Juſticia. 2. The Juſticia, with a very narrow lip, bent backwards. 3. The ſmaller-leaved Juſticia; and, 4. The Juſticia, with ſhort pedicles to the leaves.

## GRATIOLA.

THE calyx of the Gratiola is an erect perianthium, compoſed of a ſingle leaf, divided into five ſegments of a ſubulated figure, and permanent. The corolla is monopetalous and ringent: the tube is of an angular figure, and is longer than the cup. The limb is ſmall, and divided into four parts. The upper ſegment is broad, reflex, and emarginated: the others are ſtrait and equal. The ſtamina are five in number, but three of them are ſhort and ſteril; two only of power and efficacy, whence it properly belongs to this claſs. They are all of a ſubulated figure, and ſhorter than the corolla; the two which are perfect are affixed to the tube of the petal, and have each a round anthera on it. The germen of the piſtil is conic; the ſtyle is ſtrait and ſubulated, the ſtigma is bilabiated, but, after impregnation, the two lips fall together. The fruit is an oval, pointed capſule, compoſed of two valves, and containing two cells. The ſeeds are numerous and ſmall.

The eſſential characteriſtic of this genus is, that it has three caſtrated ſtamina. It has been confounded with the digitalis by many authors, but it differs in almoſt all the particulars from it.

There is but one known ſpecies of it.

*Gratiola*

### *Gratiola.*
### *Hedge Hyſſop.*

The root of this is oblong, of the thickneſs of a gooſe-quill, and creeps under the ſurface of the earth: it is white, and jointed, and ſends out a multitude of fibres from the ſeveral joints. The ſtalk is round, of a reddiſh colour at the bottom, and greeniſh toward the top; it grows to five, ſix, or eight inches high. The leaves ſtand in pairs oppoſite to one another, and at ſmall diſtances: they are oblong, broadeſt in the middle, and terminate in a point; they uſually are even at the edges, but ſometimes are lightly dentated. The flowers ſtand on ſhort branches, ariſing from the alæ of the leaves: they are ſingle, oblong, ſtriated, and are of a yellowiſh colour at the baſe, and white or reddiſh in all other parts of the ſurface, and a little yellowiſh within. The whole plant is remarkably bitter.

It is frequent in Germany, Italy, and France. C. Bauhine calls it, Gratiola centauroides. J. Bauhine ſimply, Gratiola; others, Gratia Dei centaurium paluſtre, and Polemonium paluſtre amarum.

It is a violent purge and vomit. People, in places where it is to be had, often take an infuſion of it in dropſies, jaundices, and many other chronic caſes. It is a rough medicine, but a powerful one.

## PINGUICULA.

THE calyx of the Pinguicula is a ſmall, ringent, permanent perianthium. The upper lip of it is erect, and divided into three ſegments; the lower lip is reflex, and divided into two. The corolla is ringent, and conſiſts of a ſingle petal: the longer lip is ſtrait, obtuſe, trifid, and ſupine: the ſhorter lip is bifid, more obtuſe, and patent. The nectarium is of a corniculated figure, and is produced from the baſis of the petal. The ſtamina are two bifid filaments; one of the branches is cylindric and crooked, it turns upwards, is ſhorter than the cup, and has it's anthera; the other is ſhorter than this, and produces a glandule: the antheræ are roundiſh. The germen of the piſtil is globoſe: the ſtyle is very ſhort; the ſtigma is bilabiate; the upper lip of it is large, plane, and reflex, and covers the antheræ; the lower lip is very narrow, erect, bifid, and ſhorter. The fruit is an oval capſule, compreſſed at the top, and containing only one cell, in which there are ſeveral ſmall ſeeds, of a cylindric figure, and a looſe receptacle.

### 1. *Pinguicula nectario cylindraceo longitudine petali.*
### *The Pinguicula, with a cylindric nectarium of the length of the corolla.*

**Butter-wort.**

This is the ſpecies of Pinguicula found with us, and called Yorkſhire Sanicle. The root of this ſpecies conſiſts of a tuft of fibres moderately thick, but not very long; from this root there riſe four, five, or more leaves: theſe lie flat on the ground, and are of a yellowiſh green colour, and are ſoft and unctuous on the ſurface, as if rubbed over with oil or butter. They are two inches long, about an inch broad, and obtuſe at the point: the edges are even; and the upper ſurface of the leaf, if nicely examined, is found to be covered with a fine ſilky down or hairineſs. From among theſe leaves riſe up two, or three, or more pedicles, ſometimes only one; theſe are three or four inches in height, and on the top of each ſtands a ſingle flower, of a purpliſh, bluiſh, or white colour, ſomewhat reſembling a violet in it's general form.

This ſpecies grows in boggy places in ſome parts of England, but it is not common with us; in Sweden, Germany, and Denmark, it is much more abundant. C. Bauhine and Tournefort call it, Pinguicula Geſneri, and many others borrow the ſame name; ſome call it ſimply Pinguicula, but that is erroneous, as there are other ſpecies of the ſame genus.

This ſpecies varies in the ſize and in the colour of the flower very conſiderably, in conſequence of the places it grows in. Linnæus Fl. Lap. mentions a variety of it with a purple flower, and the labia white. The large purple-flowered Pinguicula of Ray is a variety of this ſpecies. The length of the ſpur behind the flower varies alſo extreamly;

ly; and to this, as well as to the ſize and colour, are owing many of the ſuppoſed diſtinct ſpecies of the Engliſh botaniſts.

### 2. *Pinguicula nectario conico petalo breviore.*
### *The Pinguicula, with a conic nectarium, ſhorter than the corolla.*

The root of this ſpecies is compoſed of two or three ſmall fibres, each of which divides into three or four ramifications; from this root there riſe three, four, or five leaves, ſometimes more: they are fatty on the ſurface, and of a pale green colour, narroweſt at the baſe, broadeſt near the other extremity, and terminate in an obtuſe point. The ſtalk uſually riſes ſingle in the midſt of theſe leaves; it is two or three inches high, and ſupports a ſingle flower, ſomewhat of the external ſhape of a violet, of a white colour, with an elegant yellow ſpot in the palate of the corolla, where there is a grey one in the common kind. The great diſtinction, however, is in the nectarium, which in this ſpecies is ſhort and conic. Ray ſeems to mean this by that he calls, Pinguicula flore albo minore calcari breviſſimo. The Bauhines ſeem alſo to have known it as diſtinct from the former, though they did not well underſtand what the diſtinction was. We have it on the bogs in Weſtmoreland, but very ſcarce; it is more frequent in Sweden, Norway, and ſome parts of Germany.

### 3. *Pinguicula ſcapo villoſo.*
### *The hairy-ſtalked Pinguicula.*

This is the ſmalleſt of all the Pinguicula kind. It's root is compoſed of three or four fibres, which divide each into a few ramifications: from this there riſe three or four leaves, about three quarters of an inch in length, half an inch in breadth, and very obtuſe at the ends; they are of a pale green colour, and fatty ſurface. In the midſt of theſe riſes a ſingle ſtalk, ſometimes two, or more, on the top of which ſtands a ſingle flower, ſmaller than in either of the former ſpecies, and of a pale blue, or pale red colour. The ſtalks are covered with a fine ſoft hairineſs, which is the eſſential character of the ſpecies.

This is found in Cornwal, and in ſome other parts of England; in Lapland alſo, and in ſome parts of Germany, it has been lately diſcovered. Ray calls it, Pinguicula flore minore carneo. Rudbeck, Pinguicula Lapponum vel Alpina minima flore purpureo, liis ad radicem ternis rotundis.

## UTRICULARIA.

THE calyx of the Utricularia is a very ſmall perianthium, compoſed of two oval, concave, deciduous leaves. The flower is of the ringent kind: it conſiſts of a ſingle petal. The upper lip is plane, obtuſe, and erect; the lower lip is large, plane, and entire: the palate of the flower is cordated, and appears prominent between the lips: the nectarium is corniculated, and ariſes from the baſe of the petal. The ſtamina are two very ſhort and crooked filaments; the antheræ are ſmall and coherent. The germen of the piſtil is globoſe, the ſtyle is capillary, and of the length of the cup; and the ſtigma is conic. The fruit is a large, globoſe capſule, having only one cell, and in it a number of ſmall ſeeds.

This genus takes in the lentibularia of Rivinus, Vaillant, and Dillenius.

### 1. *Utricularia nectario conico longiore.*
### *The Utricularia, with a longer, conic nectarium.*

The root of this ſpecies is thin, whitiſh, and creeping; from this ariſe a multitude of branches, which divide into many others, and are furniſhed with finely divided or divaricated leaves: theſe branches, with their leaves, lie flat upon the mud, and ſend out fibrous roots at ſeveral diſtances, by which they are faſtened down to it. At the ſame parts of theſe branches, from whence the roots grow, there are alſo affixed a very ſingular kind of round hollow bodies; they are a kind of pellucid veſicles, or Utriculi, and have only one aperture. Theſe are very numerous on the branches: the genus has it's name from them, but it is not eaſy to aſcertain their uſe. From theſe branches,

in ſeveral parts, there ariſe naked ſtalks of ſix or eight inches high: theſe are ſimple, of the thickneſs of a packthread at the baſe, and on their upper part they bear ſix or eight flowers moderately large, of a beautiful yellow colour.

This ſpecies is not uncommon with us in ſtanding waters, and it is yet more frequent in Germany. Rivinus calls it, ſimply, Lentibularia. Vaillant, Lentibularia major. C. Bauhine, Millefolium aquaticum lenticulatum. J. Bauhine, Millefolium aquaticum flore luteo galericulato. Rudbeck calls it, Filipendula aquatica ſive millefolia lenticulata.

There is only one more ſpecies of this genus, which is the leſſer Utricularia, with a ſhorter conic nectarium; this floats on the water in ſome of our rivers and ponds.

## DIANDRIA MONOGYNIA.

### *Diviſion the Third.*

### *Such as have irregular corollæ, and naked ſeeds.*

## VERBENA.

THE calyx of the Verbena is a tubulated, angular, linear perianthium, compoſed of a ſingle leaf, marked with five indentings at the verge, and the fifth denticle truncated. This cup is permanent. The corolla conſiſts of a ſingle petal: the tube is cylindric, ſtrait, and of the length of the cup. The extremity of it is dilated and incurvate: the limb is patent, and lightly divided into five ſemiorbicular and equal ſegments. The filaments are four in number, but uſually two of them want antheræ, and ſerve to no purpoſe in generation. The filaments are all ſhort, and buried within the tube; the two naked ones ſhorter than the reſt. The germen of the piſtil is ſquare, the ſtyle is ſimple, capillary, and of the length of the tube: the ſtigma is obtuſe: the ſeeds are either two or four in number, after every flower; and they lie naked, or with a very thin and ſcarce diſtinguiſhable covering in the calyx.

This genus comprehends the Verbena of Tournefort and others; the Sherardia of Vaillant; the Blairia of Houſton; the Kempfera of Houſton, and the Valerianelloides of Boerhaave.

In the Sherardia, the antheræ are only two, and the ſeeds in like manner two: in the Blaira, the antheræ are two, the ſeeds echinated, and the calyx inflated: in the Verbena of authors, the antheræ are four in number, and the ſeeds obtuſe: in the Kempfera, the ſtamina are two, and the calyx has four acute ſetæ.

1. *Verbena foliis multifido-laciniatis, ſpicis filiformibus.*
*The Vervain, with multifid, laciniated leaves, and filiform ſpikes.*

**Common Verbain.**

The root of this ſpecies is oblong, white, of the thickneſs of a large packthread, and of a bitter taſte: the plant riſes to two feet in height; the ſtalk is ſquare, and very rigid and firm, a little hairy, and ſomewhat branched. The leaves ſtand in pairs, at ſmall diſtances on the ſtalk; they are a little hairy, and of a duſky green colour: they are oblong, and very deeply ſinuated, ſomewhat in the manner of oak-leaves; the two loweſt ſinus's are always larger, and deeper than any of the others. In the alæ of the leaves, and at the top ſtalks, ſtand very long and thin ſpikes of flowers. The colour of the flowers is a pale blue, and they are very ſmall.

This ſpecies is common with us in dry and barren places. C. Bauhine calls it, Verbena communis cæruleo flore. J. Bauhine, Verbena vulgaris; and Dodonæus, Verbena recta.

2. *Verbena tetrandra ſpicis filiformibus, foliis multifido-laciniatis, caulibus numeroſis.*
*The thin-ſpiked Vervain, with multifid, laciniated leaves, and numerous ſtalks.*

This is a very robuſt plant: it grows to four feet high; it's root is white, thick, and oblong; it's ſtalks are ſquare, rigid, and ſomewhat hairy: four or more of theſe ariſe from the ſame root, and, each of them dividing into many branches, the whole plant has a very buſhy appearance. The leaves ſtand in pairs, oppoſite to one another, at ſmall diſtances; they have moderately long pedicles; they are two inches and a half in length, and an inch and half in breadth in the broadeſt part: they are of a duſky green colour, largeſt near the baſe, and terminate in a point; they are of a rigid ſtructure, and very deeply laciniated. The flowers are much larger than thoſe of the former ſpecies, and of a pale blue; they ſtand in long, thin ſpikes. This ſpecies is a native of Spain and Portugal. It is to be met with in ſome of our gardens. Haller calls it, Verbena urticæ folio Canadenſis, foliis inciſis, flore majore.

The other principal ſpecies of Vervain are, 1. The ſhort-ſpiked, nettle-leaved, American Vervain. 2. The narrower-leaved, American, nettle-like Vervain, with ſhort ſpikes, and purple flowers. 3. The white-flowered, narrower, nettle-leaved, American Vervain, with long ſpikes. 4. The broad-leaved, tall, Portugal Vervain. 5. The fine-leaved Vervain. 6. The ſmall, green-leaved Vervain, flowering at the joints. 7. The American Vervain, with numerous ſpikes, and very narrow, nettle-like leaves. 8. The lanceolate, amplexicaule leaved Vervain, with faſciated ſpikes. 9. The long and thin-ſpiked Vervain, with haſtated leaves. 10. The thin-ſpiked Vervain, with undivided, ſerrated leaves. Of all theſe ſpecies, not one, except the firſt, is a native of England.

Vervain is a cephalic and carminative; it is good in head-achs, nervous complaints of all kinds, and in obſtructions of the viſcera. It is greatly recommended alſo by ſome in diſeaſes of the breaſt and lungs.

## LYCOPUS.

THE calyx of the Lycopus is a tubulated perianthium, compoſed of one leaf, and lightly divided at the end into five narrow and pointed ſegments. The corolla conſiſts of a ſingle petal: the tube is cylindric, and of the length of the cup: the limb is divided into four parts, obtuſe and patulous; the ſegments are nearly equal in length; the upper one is broad and emarginated, the lower one ſmaller. The ſtamina are two filaments, longer than the corolla, and inclined towards it's upper ſegment. The antheræ are ſmall: the germen of the piſtil is quadrifid: the ſtyle is capillary, ſtrait, and of the length of the ſtamina: the ſtigma is bifid and reflex. There is no fruit, but the ſeeds are four after every flower, and are lodged in the cup.

This genus comprehends the Lycopus of Tournefort, and the Pſeudomarrubium of Rivinus.

1. *Lycopus foliis indiviſis.* **Water Hoarhound.**
*Lycopus, with undivided leaves.*

The root of this ſpecies is long, ſlender, and creeps under the ſurface of the ground. It ſends down fibres in great abundance, and from the ſeveral parts of it there riſe a great number of ſtalks. Theſe ſtand ſingly: they grow to be three feet high, and are ſquare, green, hairy, and hollow: they uſually ſend off ſome, but not many, branches. The leaves ſtand in pairs, on the ſtalk, at ſmall diſtances: they are oblong, of a pale green colour, very rugoſe, and deeply ſerrated about the edges; they terminate in a point. They have no pedicles, and the lower ones are uſually ſomewhat divided, eſpecially toward the baſe; the reſt are only ſerrated. The flowers grow in cluſters round the ſtalks; at the inſertions of the leaves, they are ſmall, white, and remain but a little time on the plant. The cup remains long, and contains the ſeeds.

This

This ſpecies is extreamly common with us in meadows, and by ditch-ſides. Tournefort calls it, Lycopus paluſtris glaber. Rivinus, Pſeudomarrubium vulgare paluſtre; and C. Bauhine, Marrubium paluſtre glabrum.

This herb was once uſed for dying black; linnen and cloaths were dyed by means of it.

### 2. *Lycopus foliis laciniatis hirſutis.*
### *The hairy, laciniated-leaved Lycopus.*

The root of this ſpecies is compoſed of ſeveral long and jointed flagellæ, which creep upon, or juſt under, the ſurface of the ground. The ſtalks are ſquare, and more hairy than thoſe of the former; they grow to about eighteen inches high. The leaves ſtand in pairs at the diſtance of an inch, or more; they have no pedicles, but are affixed immediately to the ſtalk. They are about an inch and half long, and three quarters of an inch in diameter: they are hairy, and of a pale green colour, and are laciniated or divided into ſegments, down to the middle rib. The ſegments are ſharp-pointed, and crenated at the edges. The flowers are ſmall and white; they ſtand in cluſters round the ſtalk, at the baſe of the leaves.

This ſpecies is not a native of England, but it is common in many parts of France. C. Bauhine calls it, Marrubium paluſtre, hirſutum, tenuius laciniatum; and Tournefort, Lycopus foliis in tenues lacinias diſſectis.

The other ſpecies of the Lycopus are, 1. The hairy Lycopus, with undivided leaves. 2. The ſmooth, Canada, laciniated Lycopus.

## ZIZIPHORA. Amethyſtea.

THE calyx of the Ziziphora is a very long, cylindric, and tubular perianthium; it is compoſed of one leaf, and is hairy, ſtriated, and divided at the end into five very ſmall ſegments, and is bearded. The corolla is ringent, and compoſed of a ſingle petal; the tube is cylindric, and of the length of the cup; the limb is very ſmooth; the upper lip is ovated, erect, emarginated, and obtuſe: the lower lip is broad and patent, and is divided into three rounded, equal ſegments. The ſtamina are two ſimple patent filaments, of the length of the corolla; the ſtigma is acuminated and inflex. There is no fruit, but the cup contains four ſeeds, which are oblong and obtuſe, gibbous on one ſide, and angular on the other.

### 1. *Ziziphora foliis lanceolatis, floribus lateralibus.*
### *The Ziziphora, with lanceolated leaves, and lateral flowers.*

The root of this ſpecies is compoſed of a number of moderately thick, white fibres; from this riſe three or four ſtalks. The plant grows to ſix, eight, or ten inches in height. It's ſtalk is rigid and firm, it's leaves of two different ſhapes; thoſe near the root, and on the lower part of the plant, are ſhort, obtuſe, and of a roundiſh figure; the others are narrow and oblong narroweſt at the baſe, broadeſt in the middle, and terminate in a point: they are ſmooth and even at the edges, and of a duſky green colour. The flowers ſtand in the alæ of the leaves, in little cluſters; they are ſmall, and of a pale red.

This ſpecies is a native of Syria, but it ſucceeds very well in our gardens, where it bears the open air; it is an annual, but riſes very eaſily from ſeed.

## DIANTHERA.

THE calyx of the Dianthera is a perianthium, divided into five parts. The ſegments are equal, and of a lineari-lanceolated figure, and equal in ſize; the whole cup is of the length of the corolla, and is permanent. The corolla is compoſed of a ſingle petal, and is of the ringent kind. The tube is patulous, and of the length of the limb. The upper lip is of an ovated figure; the lower lip is divided into three oblong and equal ſegments. The ſtamina are two filaments, affixed to the back of the corolla, and of the length of the upper lip; the antheræ are double on each filament;

lament, they are of a kidney-like ſhape, and one of them is ſomewhat higher than the other. The germen of the piſtil is of an oval figure; the ſtyle is of the length of the ſtamina: the ſtamen is ſlender and bifid, and it's lower ſegment is bent backward.

This genus differs from ſage in it's cup, being divided into five parts; from all the other genera of this claſs, by the double antheræ.

Of this genus there is only one known ſpecies.

### DIANTHERA.

The root is compoſed of a great number of thick fibres: the ſtalk is tender, of a duſky green, and erect. The leaves ſtand in pairs, and are of a lanceolated figure; they are ſmooth, even at the edges, and of a deep green, and have no pedicles. The flowers ſtand on peduncles ariſing out of the alæ of the leaves; they are diſpoſed in a kind of ſpike, and do not grow two at a joint, but alternately.

It is a native of Virginia; it was firſt diſcovered by Mr Clayton, and is deſcribed by Gronovius, in his Flora Virginica.

## SALVIA.

THE calyx of the Salvia is a tubulated, ſtriated perianthium, compoſed of one leaf, compreſſed, gradually widening toward it's top, and at the verge erect and bilabiated; the upper lip is terminated by three points, the under one by two. The corolla conſiſts of a ſingle petal; the tube toward the upper part is large and compreſſed, the limb is ringent; the upper lip is hollow, compreſſed, crooked, and emarginated; the lower lip is broad, and divided into three ſegments, of which the middle one is large, roundiſh, and emarginated. The ſtamina are two filaments bifid from the middle, their branches ſeparated by an obtuſe ſinus; one of the branches of each filament is longer than the other, and is hid under the upper lip of the flower, and on this branch ſtands the anthera; on the other branch only an obtuſe head. The germen of the piſtil is quadrifid; the ſtyle is long and capillary, and ſituated as the ſtamina. The ſtigma is bifid; there is no fruit: the ſeeds are lodged in the cup, which cloſes a little at the top, to keep them in; they are four in number after every flower.

This genus comprehends the Salvia, the Horminum, and the Sclarea of Tournefort, and other authors. The ſingular bifurcation of the ſtamina conſtitutes the eſſential character of it. There are found in many of the ſpecies the rudiments of two ſteril ſtamina, in the mouth of the corolla, under the upper lip. The obtuſe head, which terminates the ſhorter branch of the filaments, in ſome is callous, and reſembles a glandule; in others it has the appearance of the rudiment of an anthera, and has ſome farina.

1. *Salvia foliis lanceolato-ovatis, integris, crenulatis, floribus ſpicatis, calycibus acutis.* Red Sage.

*The lanceolato-ovate-leaved Sage, with ſpiked flowers, and acute cups.*

The root of this ſpecies is hard, oblong, and woody, variouſly branched, and of a brown colour; from this riſe ſeveral ſtalks, woody, hard, branched, and variouſly contorted and bent: the younger branches are ſquare, hairy, and of a greeniſh or reddiſh colour. There ariſe a great number of leaves immediately from the root, and others ſtand on the ſtalks in pairs, oppoſite to one another: they ſtand on long pedicles, and are very rugoſe, and a little hairy. They are of an oblong figure, obtuſely pointed at the end, and crenated round the edges, and are ſometimes of a pale green, but more uſually of a reddiſh colour. The flowers ſtand in a kind of ſpikes at the tops of the ſtalks; they are large, and of a beautiful blue colour, with more or leſs reddiſhneſs in it.

This ſpecies is a native of Italy, and of ſome parts of France. It is cultivated in almoſt all our gardens, and is perennial and ſufficiently hardy.

2. *Salvia foliis rugoſis oblongo-cordatis, floralibus calyce longioribus.* Clary.

*The rugoſe and oblong cordated-leaved Sage, with the floral leaves longer than the calyx.*

The root of this ſpecies is oblong, ſingle, woody, of a brown colour, and covered

with fibres. It's taſte is hot, and ſomewhat aromatic. The ſtalk is ſquare, and of a third of an inch in diameter; it grows to three or four feet high; it is lightly hairy and jointed, and it ſends out branches in pairs, croſs-wiſe one to another. The leaves are placed in pairs oppoſite to one another. They are of a greyiſh colour, very rugoſe and hoary; they ſtand on long pedicles, and are ſeven or eight inches long, and four or five over in the broadeſt part. They are largeſt at the baſe, ſomewhat cordated, and dentated about the edges. The leaves toward the upper part of the ſtalks are ſmaller, but of the ſame ſhape. The flowers grow on the tops of the main ſtalks and branches in very long ſpikes. They are very large, of a pale bluiſh-grey colour, and ſtand in circles round the ſtalks. The whole plant has a very ſtrong and diſagreeable ſmell, and a bitter taſte. It is a native of Syria, but it thrives very well in the open air in our gardens. C. Bauhine calls it, Hominum ſclarea dictum. J. Bauhine, Gallitrichum ſativum; others, Horminum vulgare.

3. *Salvia foliis ſimplicibus dentato-pinnatis, rugoſis, verrucoſis.*
*The ſimple, dentato-pinnated-leaved Sage.*

The root of this ſpecies is oblong, and of a whitiſh colour: the ſtalk is ſquare, not ſolid, but containing a ſpungy pith. It is hoary on the ſurface, and whitiſh. The leaves ſtand in pairs: they are oblong, and very deeply laciniated, ſo as to give ſome reſemblance of a ſtag's horn. They are very rugoſe, and riſe up in ſeveral places into a kind of protuberances. They are covered with a white, hoary matter, and are of a ſtrong ſmell. The flowers grow in long ſeries, on the tops of the main ſtalk and branches; they are of a middle ſize, between thoſe of common Sage, and the common clary, and are of a pale yellowiſh colour.

This ſpecies is a native of Perſia, but it thrives very well with us in the open air, and is in many of the botanical gardens. This is one of the ſclareæ of Tournefort; he calls it, Sclarea rugoſo verrucoſoque folio laciniato. Moriſon calls it, Horminum ceratophyllum, rugoſum, flore ſulphureo; and Plukenet, Horminum folio rugoſo cornu cervi exprimente.

4. *Salvia foliis oblongis, ovatis, obtuſis, æqualiter crenatis, corollæ galea ſemi-orbiculata.*
*The oval, oblong-leaved Sage, with a ſemi-orbicular galea of the flower.*

The root of this ſpecies is oblong and ſlender: the ſtalks ſquare, green, and a little hairy; the leaves of an oval, oblong figure, and crenated round the edges: the lower ones have long pedicles, the upper ones are ſeſſile; the floral leaves are of a cordated figure. The flowers ſtand about, three on a ſide, in the alæ of the leaves. The galea is rounded, and not emarginated; the lower lip is entire and emarginated, and the lateral denticles are prominent. The piſtil is crooked, and ſcarce appears.

This is a native of Syria, but it bears the cold of our climate very well. Tournefort calls it, Horminum coma viridi.

The other principal ſpecies of this large genus are of the Sage-kind: 1. The broad-leaved, ſerrated Sage. 2. The arboreſcent Sage, with divided leaves. 3. The great Cretic Sage. 4. The large, broad, and roundiſh-leaved Sage. 5. The ſmaller auriculated Sage. 6. The narrow-leaved, ſerrated Sage. 7. The broad-leaved, wormwood Sage, with red flowers. 8. The broad-leaved, hairy, and viſcous Oriental Sage, with purple flowers. 9. The African, ſhrubby Sage, with ſcorodonia leaves, and violet-coloured flowers. 10. The ſhrubby African Sage, with roundiſh blue-green leaves, and large yellow flowers. 11. The undated-leaved pomiferous Sage. 12. The lavender-leaved Spaniſh Sage. 13. The white-flowered, wormwoood Sage.

Of the Horminum kind are, 1. The wild Clary. 2. The meadow Clary, with a very ſmall flower. 3. The betony-leaved, blue-flowered, ſpring Clary. 4. The hairy, ovated-leaved Clary. 5. The vervain-leaved Clary. 6. The oak-leaved Clary. 7. The little-branched Egyptian Clary. 8. The little betony-leaved procumbent Clary.

Of the Sclarea kind are, 1. The great lanuginous Clary, called Æthiopic by the old authors. 2. The jagged-leaved, very hoary Sclarea. 3. The aſphodel-rooted Clary. 4. The glutinous Pyrenæan Clary, with ſinuated leaves. 5. The ſtinking, hairy, white-flowered Clary. 6. The great blue-flowered Clary. 7. The ſerrated-leaved, meadow Clary. 8. The ovated-leaved, great Clary. 9. The triangular, dentated-

leaved

leaved Clary. 10. The hairy-ſtalked, triangular-leaved Clary. 11. The helianthemum-leaved African Clary. 12. The dwarf laciniated Clary, with large flowers.

The virtues of the plants of this genus are very conſiderable. The common Sage is a ſudorific and detergent. The Clary is famous in hyſteric and hypochondriac complaints, and is alſo eſteemed a cordial, and a provocative to venery.

## ROSMARINUS.

THE calyx of the Roſmarinus is a tubulated perianthium formed of one leaf, compreſſed at the top, and bilabiate; the upper lip entire, and the lower bifid. The corolla conſiſts of a ſingle petal: the tube is longer than the cup; the limb is ringent. The upper lip is erect, ſhort, divided into two ſegments, and has it's edges turned back: the lower lip is reflex, and divided into three ſegments, of which the middle one is much the largeſt, and is hollow, and narrow at the baſe. The lateral ſegments are narrow and acute. The ſtamina are two ſubulated filaments, turned toward the upper lip, and longer than it. The antheræ are ſimple: the germen of the piſtil is quadrifid; the ſtyle in figure and ſituation reſembles the ſtamina; the ſtigma is ſimple and acute. Every flower is ſucceeded by four oval ſeeds, which are lodged in the cup. This genus is very nearly allied to the ſalvia. There is but one ſpecies of it,

*Roſmarinus. Roſemary.*

This is a low, but conſiderably robuſt, ſhrub: the root is long, variouſly divaricated, woody, and furniſhed with a number of fibres. The ſtem is hard and firm, and covered with a brown bark, which is full of cracks and wrinkles. The younger ſhoots are round, green or whitiſh, and tender: the leaves are oblong and narrow, of a very dark green on the upper ſide, and whitiſh underneath. They ſtand thick on the ſtalks, and are firm, rigid, and of a very pleaſant ſmell: the flowers are of a greyiſh white. Roſemary is a native of Spain and Greece: it thrives tolerably well in our gardens in the open air.

It is a very conſiderable plant in medicine. It enters many of the compoſitions, as a cephalic and nervine; and the Hungary water of the perfumers is made of it. The upper parts of the branches, when loaded with flowers, are diſtilled in ſpirit of wine for this purpoſe.

## MONARDA.

THE calyx of the Monarda is a tubulated, cylindric, ſtriated perianthium, conſiſting of a ſingle leaf, divided into five ſhort and equal ſegments at the rim. The corolla conſiſts of a ſingle petal: the tube is cylindric, and longer than the cup; the limb is ringent. The upper lip is ſtrait, narrow, and undivided: the lower lip is broad, reflex, and divided into three ſegments: the middle ſegment is oblong, narrow, and emarginated; the lateral ones are ſhorter and obtuſe. The ſtamina are two ſetaceous filaments, of the length of the upper lip of the corolla, in which they are incloſed and ſurrounded. The antheræ are compreſſed, truncated above, and convex below, and erect. The germen of the piſtil is quadrifid; the ſtyle is capillary, and involved in the upper lip along with the ſtamina; the ſtigma is bifid and acute; after every flower there grow four ſeeds of a roundiſh figure; theſe are lodged naked in the cup.

This genus includes the Origanum ſpurium of Rivinus.

1. *Monarda capitulis terminalibus caule obtuſe angulato.*
*The obtuſely angular-ſtalked Monarda, with terminatory heads.*

The root of this ſpecies is compoſed of a great number of fibres: the ſtalks are uſually obtuſely quadrangular; they riſe to a foot and half in height, and are hairy and branched. The leaves are oblong and narrow, and of a pale green colour; they much reſemble thoſe of the common Lyſimachia ſiliquoſa of authors. They grow irregularly, but very thick and cloſe upon the ſtalk: at the top of the main ſtalk and of the branches there ſtand cluſters of ſmaller ones, ten or twelve in a cluſter, diſpoſed orbicularly; theſe ſurround a cluſter of the flowers, which are formed into a rounded but flat head, compoſed of a multitude of long tubular flowers, like little pipes, of a purple or red colour. From this tuft of leaves, and head of the flower, there not unfrequently riſes another, ſupported on a ſhort ſtalk; in this caſe the

the plant is ſaid to be proliferous. The whole plant is covered with a hoary lanugo, and ſmells fragrant and aromatic. It's taſte is very pungent and acrid, burning the mouth, on taking the leaſt piece of it into it: the root is quite inſipid.

This ſpecies is perennial; it flowers in Auguſt. It is a native of Canada, and ſome other parts of North America. It is preſerved in the green-houſes of our curious people, and flowers there regularly. Cornutus, to whom we owe the knowledge of it, calls it, Origanum fiſtuloſum Canadenſe. Moriſon calls it, Clinopodium Canadenſe majus, hirſutum, floribus fiſtuloſis. Linnæus, in his H. Cliffert. Monarda floribus capitatis caule obtuſo.

2. *Monarda floribus verticillatis corollis punctatis.*
*The verticillate Monarda, with punctated flowers.*

The root of this ſpecies is compoſed of a number of white fibres, inſipid to the taſte. The plant riſes to eight or ten inches high: the ſtalk is ſquare, and the leaves oblong, narrow, and of an extreamly fragrant ſmell. The flowers ſtand in cluſters, in a verticillate manner, ſurrounding the ſtalks: there grow under every cluſter of them ten or twelve reddiſh leaves: the flowers themſelves are large, and of a beautiful yellow colour, and are variegated with purple ſpots. This ſpecies is a native of Virginia, but it is not eaſy to make it ſtand more than the firſt year in our gardens, though naturally a perennial plant.

The Monardæ have improperly been ranked among the clinopodia and ocyma by moſt authors.

## COLLINSONIA.

THE calyx of the Collinſonia is a ſmall perianthium, compoſed of a ſingle leaf, divided into five ſhort and equal denticles at the extremity: the three upper ones are convex and inflex, and the two lower ones patent and ſubulated. The whole cup is permanent: the corolla is monopetalous and unequal: the tube is of a conico-cylindraceous ſhape, and is much larger than the cup: the limb is quadrifid and erect: one of the ſegments is very long, and is divided to the middle into other ſmaller, ramoſe, and capillary laciniæ. The ſegment, oppoſite to this, is very ſmall, emarginated, and acute: the lateral or alternate ones are oppoſite to one another, and are erect, entire, and very ſmall. The ſtamina are two erect and very long ſetaceous filaments: the antheræ are ſimple: the germen of the piſtil is globoſe; the ſtyle is ſetaceous, of the length of the ſtamina, and inclines to one ſide; the ſtigma is bifid and acute. The ſeed is ſingle, and of a globular figure, and is contained in the bottom of the cup.

Of this genus there is but one known ſpecies.

### COLLINSONIA.

The root is compoſed of a multitude of white and thick fibres. The ſtalk is ſquare, and grows to three or four feet high. The leaves ſtand on pedicles, and are large, and of an obſcure green, broadeſt near the baſe, and terminate in a point; they are deeply ſerrated round the edges. The flowers are numerous, and moderately large; they are of a pale red. It is a native of North America, but is now frequent in our gardens. None of the old authors were acquainted with it.

## MORINA.

THE calyx of the Morina is double: the perianthium of the fruit is of a cylindric figure, tubulous and permanent; it is compoſed of a ſingle leaf, dentated at the verge: two of the oppoſite denticuli are longer than the reſt, and all of them are ſubulated and acute. The perianthium of the flower is bifid, tubulous, and compoſed alſo of one leaf: the ſegments are emarginated, obtuſe, erect and permanent, and are of the ſize of the others.

The corolla conſiſts of a ſingle petal: the tube is extreamly long, large at the top, and ſomewhat crooked; at the baſe it is thin and capillary. The limb is plain, obtuſe,

tuſe, and bilabiate: the upper lip is ſmall and ſemibifid; the lower lip is divided into three obtuſe ſegments, the middle one of which is longer than the others. The ſtamina are two ſetaceous filaments, ſhorter than the limb; they ſtand parallel, and preſs the ſtyle. The antheræ are erect and approximate, and of a cordated figure: the germen of the piſtil is globoſe, and is placed under the receptacle of the flower: the ſtyle is capillary, and longer than the ſtamina; the ſtigma is peltated, capitated, and inflex. After the flower there appears a ſingle naked ſeed, which is coronated with the cup of the flower, and ſtands in the other cup.

This genus comprehends the Morina of Tournefort, and the Diototheca of Vaillant.

Of this there is but one known ſpecies.

### MORINA.

The root is oblong, ſlender, white, and furniſhed with a few fibres: the radical leaves are eight inches long, moderately broad, divided at the edges, and of a duſky green. The ſtalks are erect and robuſt; the leaves ſtand uſually two at a joint; ſometimes, though leſs frequently, there are four together: the flowers ſtand on the tops of the branches in cluſters, or heads, and are ſmall and reddiſh. It is a native of the Eaſt. Vaillant has deſcribed it under the name of Diototheca carlinæ foliis ex adverſo binis; Tournefort, under that of Morina Orientalis carlinæ folio.

## *Claſs the Second. Order the Second.*

## DIANDRIA DIGYNIA.

*Plants which have two ſtamina and two ſtyli in each flower.*

### BUFFONIA.

THE calyx is a perianthium, conſiſting of four leaves; the corolla conſiſts of four petals: the ſtamina are two; the ſtyles are alſo two; and the fruit is a capſule, containing only one cell, but in it a number of ſmall ſeeds.

Of this genus there is but one known ſpecies.

### BUFFONIA.

The root of this plant is oblong, ſlender, and furniſhed with a number of fibres, whitiſh and flexible. The ſtalk riſes to ſix or eight inches high, it is round, and very ſlender, yet robuſt and ſtrong enough to keep itſelf erect; this ſtalk has frequent joints, or knots, and, at each joint, there ſtand two extremely narrow, graſſy leaves; thoſe on the lower part of the ſtalk are about an inch in length, thoſe on the upper part ſcarce half ſo much; all are of a pale green colour, and terminate in a point. The ſtalks are branched toward their upper part, and ſend out many ſmaller branches from their ramifications; theſe are ſhort, and do not ſtand two oppoſite to one another, but alternately. The flowers ſtand in the alæ of the leaves; they are ſmall and white; the ſeed, which follows theſe, is ſmall and black.

This plant is found in ſome parts of England and France, but it is not common; it is an annual, and flowers in July and Auguſt. Ray calls it, Alſine polygonoides tenui folio, floſculis ad longitudinem caulis velutiin ſpicam diſpoſitis. Magnol, Polygonum anguſtiſſimo, gramineo, folio erectum; and C. Bauhine, Polygono anguſtiſſimo folio affinis.

### ANTHOXANTHUM.

THE calyx of the Anthoxanthum is a bivalve glume, containing a ſingle flower: the valves are ovate, acuminated, and concave, and the inner one is larger than the other. The corolla is of the length of the larger valves of the cup, and is alſo a bivalve glume: each valve of this ſends forth a ſmall ſpine, from the lower part of it's back. The nectarium is diphyllous, and very thin, of a cylindric figure, and formed of ovated leaves, ſurrounding one another. The ſtamina are two capillary filaments of great length; the antheræ are oblong, and bifurcated at each end: the germen of the

piſtil is oblong; the ſtyles are two, and are capillary; the ſtigmata are ſimple. The glume of the corolla adheres afterwards to the ſeed, which is ſingle, roundiſh, and pointed at each end.

This is the only graſs, ſo far as is yet known, which has only two ſtamina.

Of this genus there is only one known ſpecies.

### ANTHOXANTHUM.

The root is compoſed of a number of white, and not very thick, fibres: the leaves are four or five inches long, about a third of an inch broad, and of a yellowiſh-green: the ſtalk is ſlender, jointed, and ſix or eight inches high; at every joint there ſtands a leaf, like the radical ones, and, at it's top, a ſhort lax ſpike, about three quarters of an inch long, and leſs than half an inch broad, and of a browniſh, or yellowiſh-green, colour. It is a very common graſs in our meadows, and flowers early in ſpring. Ray calls it, Gramen vernum, ſpica brevi laxa.

*Claſs the Second. Order the Third.*

## DIANDRIA TRIGYNIA.

*Plants which have two antheræ, and three ſtyles in each flower.*

### PIPER.

THE Piper has no calyx, or, at the moſt, only an unequal receptacle, of the nature of an amentum, or catkin: there is no corolla, nor any ſtamina. The antheræ are two in number, and are roundiſh, and are placed oppoſite, at the baſe of the germen: the germen of the piſtil is large, and of an oval figure. There is no ſtyle: the ſtigma is triple, and hairy: the fruit is a round berry, having in it only one cell, in which is lodged a ſingle globular ſeed.

Of this genus there is but one known ſpecies.

### PIPER. The Pepper Plant.

The root is compoſed of a number of black fibres: the ſtalks are numerous, green, ſomewhat woody, and jointed; they are not robuſt enough to ſtand erect, but lie upon the ground, unleſs ſupported, and, as they trail on the ground, they ſend out roots from the joints. The leaves ſtand ſingly at the joints, and are large, of a roundiſh figure, and have four or five high, longitudinal ribs on them: they are four inches long, three broad, and of a firm texture. The flowers are ſmall, and ſtand in cluſters, on the ſpikes; they are ſucceeded by the fruit, which is the common Pepper: twenty or thirty grains of this grow on each ſpike, and have no pedicles.

It is a native of Java, Sumatra, and Malabar; and is deſcribed in the Hortus Malabaricus, under the name of Molago Coddi.

There is a variety of this plant, the fruit of which is white: the plant, in all other reſpects, is the ſame. The common Black Pepper of our ſhops is the fruit of the firſt, and the genuine and native White Pepper of the ſecond: this genuine White Pepper, however, rarely comes to us; what we have is made by art, from the Black, by taking off the rind.

*Claſs the Third.*

## TRIANDRIA.

*Plants which have in every flower three ſtamina.*

THE Triandria have ſome of them only one, ſome two, ſome three ſtyles in the flower; they are hence naturally arranged into three orders, of which the firſt comprehends, under the name of Triandria Monogynia, ſuch as have three ſtamina and one ſtyle; the ſecond, under that of Triandria Digynia, thoſe which have

have three ſtamina and two ſtyles; and the third, under that of Triandria Trigynia, ſuch as have three ſtamina and three ſtyles in each flower.

## *Order the Firſt.*

## TRIANDRIA MONOGYNIA.

*Plants which have three ſtamina and only one ſtyle in the flower.*

*Of theſe ſome have flowers neither ſpathaceous nor amentaceous; others have ſpathaceous flowers, and all that have ſo, have alſo trilocular capſules.*

### *Claſs the Third. Order the Firſt.*

### *Diviſion the Firſt.*

*Triandria Monogynia, which have flowers neither ſpathaceous nor amentaceous.*

## VALERIANA.

THE calyx of the Valeriana is ſcarce diſtinguiſhable; it is a mere margin, or edge, crowning the germen: the corolla conſiſts of a ſingle petal; the tube is gibbous on one ſide, and contains a ſweet juice: the limb is divided into five obtuſe ſegments: the ſtamina are three, ſometimes not ſo many; they are of a ſubulated figure, erect, and of the length of the corolla. The antheræ are round: the germen of the piſtil is placed below the receptacle; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is thick. The fruit is a deciduous, coronated capſule, which does not open, while on the plant; the ſeeds are ſingle, and of an oblong figure.

This genus comprehends the Valeriana of Tournefort and Vaillant, the Valerianella of the ſame authors, and the Valerianelloides of Vaillant.

The ſeveral ſpecies of it, however, differ very widely in the number and figure of the parts of fructification: the margin of the cup in ſome is ſo ſmall, as ſcarce to be viſible; in others it is larger, and divided into five ſegments. The tube of the corolla in ſome is very long, in others very ſhort, in ſome it has a ſpur, full of a honey juice: the limb in ſome is equal, in others it is bilabiated, and the upper lip is bifid. In ſome the ſtamina are three, in others, as in the difform flowered ones, they are only two; in ſome others there is only one ſtamen, and in ſome the flowers are of diſtinct ſexes. The ſtigma of the piſtil is, in ſome, bifid, in others emarginated, in others globular: the fruit, in ſome, is a thick capſule, in others there is ſcarce any; in ſome the capſule is bilocular. The ſeed, in ſome ſpecies, is winged with down, in ſome covered with a capſule: it's figure, alſo, frequently varies from the general oblong one.

1. *Valeriana floribus triandris, foliis caulinis, pinnatis radicalibus indiviſis.* Garden Valerian.

*The Valerian with three ſtamina, and with whole and pinnated leaves.*

The root of this ſpecies is oblong, of the thickneſs of a man's finger, and creeping. The plant riſes to three feet in height: the ſtalk is round, ſmooth, and hollow; the leaves, which ariſe immediately from the root, are undivided, and of an oblong figure, and conſiderably broad; thoſe which ſtand on the ſtalks are pinnated; they ſtand in pairs, at conſiderable diſtances, and have broad pedicles, which ſurround the ſtalk. The flowers ſtand on the top of the main ſtalk, and of ſeveral little branches, which ariſe from the alæ of the upper leaves; they are diſpoſed in cluſters, in form of umbels; they are ſmall and white, with a faint caſt of red ſometimes among it.

This ſpecies is a native of Alſace, and many other places in Europe; with us it is not wild, but is common in gardens. C. Bauhine calls it, Valeriana hortenſis; Lobel, Valeriana major; and J. Bauhine, Valeriana major odorata radice.

2. *Valeriana*

2. *Valeriana floribus monandris caudatis, foliis lanceolatis integerrimis.* Red Valerian.

*The whole lanceolated-leaved Valerian, with caudated flowers, with ſingle ſtamina.*

The root of this ſpecies is oblong, and of the thickneſs of a man's finger, white and hard. The plant grows to a foot and half, or more, in height: the ſtalks are round, ſucculent, of a bluiſh green, and frequently jointed and hollow. The leaves ſtand in pairs at the joints; they are broad at the baſe, where they embrace the ſtalk, and thence go ſmaller to the extremity, of a flattiſh texture, and bluiſh-green colour, and uſually even at the edges. The flowers ſtand in large cluſters; they are of a fine ſcarlet colour, and each adheres to a long peduncle: the ſeed is winged with down.

This ſpecies is a native of Italy, Germany, and other parts of Europe; with us it is common in gardens, and often propagates itſelf by it's ſeed on the walls. C. Bauhine calls it, Valeriana rubra. J. Bauhine, Valeriana latifolia rubra. Parkinſon, Valeriana rubra Dodonæi.

3. *Valeriana floribus triandris, caule dichotomo, foliis linearibus.* Corn Sallad.

*The linear-leaved and dichotomous Valerian, with three ſtamina.*

The root of this ſpecies is ſmall and oblong, and at the end is furniſhed with many fibres. The plant riſes to ſix inches high; the ſtalks are angulated, ſlender, of a yellowiſh-green, and diffuſe: the ramifications always going off two by two. The leaves ſtand in pairs on the ſtalks; they are about three quarters of an inch long, and a third of an inch, or more, in breadth; they are thin, and of a pale green. The flowers ſtand in little tufts or cluſters; about the extremities of the ſtalks, they are whitiſh and ſmall.

This ſpecies is very common with us in corn-fields, and is cultivated ſometimes in gardens, as a ſallad, under the name of Lamb's Lettice. C. Bauhine calls it, Valeriana campeſtris, inodora, major. J. Bauhine, Locuſta herba prior. Rivinus, Locuſta minor; and Gerard, Lactuca agnina. The leaves of this plant are ſometimes ſerrated, and from this variety is made a new ſpecies by authors, under the name of Valerianella præcox foliis ſerratis. It's other common varieties have alſo given riſe to ſome other imaginary ſpecies.

The other more ſingular ſpecies of Valerian are, 1. The Pyrenæan, cacalia-leaved Valerian. 2. The creeping-rooted Alpine Valerian, with undivided leaves. 3. The ſcrophularia-leaved Valerian. 4. The roundiſh-leaved, mountain Valerian. 5. The tuberous-rooted Valerian. 6. The Celtic Valerian, or Celtic Nard. 7. The narrow-leaved, red Valerian. 8. The great water Valerian. 9. The wild Valerian, with hairy leaves. 10. The ſmall water Valerian. 11. The calcitropa-leaved Valerian. 12. The broad-leaved, annual Valerian.

The Valerians are, moſt of them, good cephalics; the ninth ſpecies is one of the beſt nervous ſimples the whole materia medica furniſhes us with. The root is given, in powder, in convulſions, head-achs, and all nervous complaints, with ſucceſs.

## CNEORUM.

THE calyx of the Cneorum is a ſmall permanent perianthium, compoſed of one leaf, and divided into five ſhort ſegments at the edges. The corolla conſiſts of three oblong petals, of a linear, but ſomewhat lanceolated, ſhape: they are concave, erect, and deciduous. The ſtamina are three ſubulated filaments, ſhorter than the corolla; the antheræ are ſmall. The germen of the piſtil is obtuſe and trilobous: the ſtyle is erect, firm, and of the length of the ſtamina; the ſtigma is trifid and patent. The fruit is a dry berry, of a globoſe, but ſomewhat trilobous, figure, and contains three cells, in each of which is a ſingle round ſeed. This genus takes in the chamelæa of Tournefort. There is but one known ſpecies of it.

CNEORUM.

The root of this little ſhrub is hard and woody, oblong, divided into ſeveral branches, and furniſhed with a multitude of fibres. The trunk is woody, half an inch in diameter, and covered with a ſmooth brown bark. It divides into many branches, and thoſe ſend out others ſmaller and ſhorter, and on theſe ſtand the leaves, which are oblong and broad, obtuſe at the points, and of a deep green colour: the flowers are ſmall and yellow.

This plant is a native of Spain, Italy, and ſome parts of France. It grows in many parts of Germany, alſo in dry, expoſed places. We have it in our green-houſes. C. Bauhine and others call it, Chamælæa tricoccos. Dodonæus, ſimply, Chamælæa. All the parts of this ſhrub are violently emetic and cathartic, when taken internally. In France they are given in dropſies, but ſuch violent medicines are better neglected.

## HIRTELLA.

THE calyx of the Hirtella is a perianthium, conſiſting of a ſingle leaf, divided into five ſegments of a ſomewhat oval form, reflex, equal in ſize, and permanent. The corolla conſiſts of five regular petals; they are roundiſh and hollow; it is ſmaller than the cup, and deciduous. The ſtamina are three, ſetaceous, very long, and ſomewhat flatted filaments; they are permanent, and, toward the ripening of the ſeed, are twiſted ſpirally: the antheræ are orbicular. The germen of the piſtil is roundiſh, compreſſed, declinatory, and hairy: the ſtyle is filiform, and is nearly of the length of the ſtamina, and takes it's origin from the depreſſed ſide of the germen; the ſtigma is ſimple. The fruit is a berry of a kind of oval figure, broadeſt at the top, a little compreſſed, and obſcurely trigonal. The germen and the ſtyle adhere to it's baſe: the ſeed is ſingle, and of the figure of the fruit.

Of this genus there is but one known ſpecies, which is ſufficiently diſtinguiſhable by theſe characters.

## OLAX.

THE calyx is a ſmall, permanent perianthium, compoſed of a ſingle leaf, and undivided at the edge: the corolla conſiſts of a ſingle petal, and is of the infundibuliform kind, and divided into three ſegments at the edge. The ſtamina are three; the ſtyle ſingle; and the nectarium is compoſed of four leaves. There is only one known ſpecies of it, which is ſufficiently diſtinguiſhable by theſe characters, nor needs any farther deſcription.

## TAMARINDUS.

THE calyx of the Tamarindus is a plane perianthium, compoſed of four leaves, equal in ſize, and of an oval figure. The corolla conſiſts of three petals of an oval figure, equal, flat, plicated, patent, ſmaller than the leaves of the cup, and inſerted into them: the lower ſegment being left without one. The ſtamina are three filaments placed together in the empty ſinus of the cup; they are of a ſubulated figure, and bent towards the corolla. The antheræ are ſimple: the germen of the piſtil is oval; the ſtyle is ſubulated, and bent towards the ſtamina: the ſtigma is ſimple: the fruit is an oblong legume compreſſed, formed of a double bark, with a pulpy matter between; it contains only one cell, in which there are three angulated compreſſed ſeeds.

There is only one known ſpecies of this genus, which is the tree that produces the officinal Tamarinds.

*Tamarindus.*

*The Tamarind-tree.*

The root of the Tamarind-tree is large and brachiated, the arms ſpreading every way, and penetrating deep. The tree riſes to the height of our walnut-trees, and is

very ramoſe and diffuſe, the branches ſpreading all about. The trunk is often ſo thick, that two men can ſcarce fathom it. It's bark is of a greyiſh brown, very thick; it's wood firm and reddiſh. It's branches extend every way, in a tolerably regular order, and diffuſe themſelves a great way. The leaves are long and pinnated; compoſed of eight, ten, or twelve rows of pinnæ, with no odd leaf at the end, tho' moſt of the figures of the tree give one. The pinnæ are three quarters of an inch long, and a quarter of an inch, or more, broad; they are of a pale green, obtuſely pointed, largeſt at the baſe, and, as it were, aurited; of an acid taſte, and of a pale, but bright green, colour, ſmooth on the upper ſide, and a little hairy underneath. The flowers grow from the alæ of the leaves; they ſtand in cluſters, and are of a pale roſe colour, variegated with lines of a deeper red, or blood colour. The fruit is like a bean-pod in ſhape and ſize, and has three or four protuberances in it: it's outer bark is rigid, thick, and brown; it's inner one green and tender. The ſpace between theſe contains a thick, blackiſh, pulpy matter, of an acid taſte, which is the matter we uſe in medicine, and is intermixed with a quantity of woody fibres.

The Tamarind-tree is a native of Egypt, Arabia, and of both the Eaſt and Weſt Indies. The pulp contained between the two ſkins of the pod is an agreeable acid; it is good to quench thirſt in fevers, and is a gentle cathartic; it is an ingredient in the lenitive electuary, and other compoſitions.

## MELOTHRIA.

THE calyx of the Melothria is a deciduous, campanulated, ventricoſe perianthium, conſiſting of a ſingle leaf, divided into five ſhort ſegments, and affixed upon the germen. The corolla is compoſed of a ſingle petal, and is of the rotated kind: the tube is of the length of the cup, and every-where grows to it. The limb is plane, and is divided into five very obtuſe ſegments, broadeſt toward the edge. The ſtamina are three conic filaments; they are affixed to the tube of the corolla, and are of the ſame length with it: the antheræ are didymous, roundiſh, and compreſſed. The germen of the piſtil is of an ovato-oblong and acuminated figure, and is placed under the receptacle of the flower. The ſtyle is cylindric, and of the length of the ſtamina; and the ſtigmata are three in number, thickiſh and oblong. The fruit is an oval, oblong body, divided within into three parts, and containing a number of oblong, compreſſed ſeeds.

Of this genus there is only one ſpecies, and that differs from the Monæciæ Syngeneſiæ, by it's hermophrodite ſex.

### MELOTHRIA.

The root of the Melothria is compoſed of a number of thick fibres. It's ſtalk is very weak and ſlender, but it extends itſelf to a very great length, ſix feet, or more, being common to it. It either creeps upon other things by means of it's tendrils, or elſe it crawls on the ground. The leaves ſtand irregularly on the ſtalks, one at a joint; their pedicles are about an inch long: the leaves themſelves of an obtuſely triangular figure, ſnch as approaches to roundneſs; a little auriculated at the baſe, and, from one auricle to the other, about an inch and half in diameter. The length is about equal to the breadth in this part, meaſuring from the inſertion of the pedicle to the point: they are rough to the touch, ſomewhat hairy, and a little crenated about the edges, and of a duſky green colour. From the alæ of the leaves ariſe the tendrils; they are green, very thin, and form themſelves into a kind of ſpiral ſcrews: the flowers alſo ariſe from the alæ; theſe are large, and yellow, and affixed on pedicles of an inch long. The fruit is of an oval ſhape, and of the ſize of a large gooſeberry; ſmooth on the ſurface, and black, when ripe. The ſeeds are flat, and the pulp they are incloſed in is of an inſipid taſte.

This plant is common in Canada, Virginia, and Jamaica. It grows on ditch-banks, and in uncultivated places; the fruit is pickled for the table in thoſe places. It is kept in ſome of our gardens. Tournefort calls it, Bryonia Canadenſis folio angulato, fructu nigro. Plukenet, Cucumis parva, repens, Virginiana, fructu minimo; and Sir Hans Sloane, Cucumis minima fructu ovali, nigro, levi.

POLYCNE-

## POLYCNEMUM.

THE calyx of the Polycnemum is a permanent, acute, ſubulated perianthium, compoſed of three leaves: the corolla is compoſed of five petals, very like the cup, but ſhorter. The ſtamina are three capillary filaments, ſhorter than the flower; the antheræ are obtuſe. The germen of the piſtil is roundiſh; the ſtyle is bifid, and of the length of the ſtamina, and the ſtigmata are obtuſe. The ſeed which follows every flower is ſingle; it remains in the cup, and has ſcarce any covering, at moſt, only a very thin membrane.

This genus comprehends the camphorata of Tournefort and Dillenius.

There is but one known ſpecies of it.

### POLYCNEMUM.

The root is large and tuberous: the ſtalks are numerous, hard, woody, and a foot and half high; whitiſh, hairy, conſiderably thick, and ramoſe. They are jointed at ſmall diſtances, and the knots are thick and protuberant. The leaves ſtand very thick at theſe joints; they are ſhort, narrow, hairy, and rigid: a third of an inch is about their uſual length. The flower is ſmall and greeniſh, the apices red; the ſeed oblong and black.

It is a native of France. C. Bauhine calls it, Camphorata hirſuta. J. Bauhine, Camphorata Monſpelienſium. Lobel, Camphorata Monſpelienſium, and Chamæpeuce Plinii.

*Claſs the Third. Order the Firſt.*

*Diviſion the Second.*

*Triandria Monogynia, which have ſpathaceous flowers, and trilocular capſules.*

## CROCUS.

THE calyx of the Crocus is a monophyllous ſpatha. The corolla is a ſimple tube, conſiſting of one petal. It's extremity is divided into ſix erect, equal ſegments, of an oblong, oval ſhape: the ſtamina are three ſubulated filaments, ſhorter than the flower; the antheræ are of a ſagittated figure. The germen of the piſtil is roundiſh; the ſtyle is filiform, and of the length of the ſtamina. The ſtigmata are three in number; they are convoluted and ſerrated. The fruit is a roundiſh, but trilobous, capſule, formed of three valves, and containing three cells in each, of which there are ſeveral round ſeeds.

1. *Crocus floribus fructui impoſitis tubo longiſſimo.*
*The long-tubed Crocus, with the flowers placed on the fruit.* **Saffron.**

The root of the ſaffron plant is roundiſh, and of the ſize of a nutmeg, or larger; it is white, and double or compoſed of two bulbs, one laid upon the other: the under one is always the larger; both are covered with ſome dry ſkins, and there are a number of fibres at the baſe. The leaves ariſe five, ſix, or eight from the root; they are eight inches long, as narrow as graſs leaves, and of a very deep-green colour. The ſtalk which ſupports the flower is ſhort and ſingle, one flower only grows on it's head: this is very large; the lower part of it is white, the upper part of a bluiſh purple, but in the colour there is almoſt infinite variety. The apices are yellow, and the ſtigmata are of a reddiſh-yellow colour, criſtated and fleſhy; theſe make what we call ſaffron in the ſhops. The leaves have a very ſingular character, in that a membranaceous hollowed line runs all along them.

The ſaffron plant is a native of ſome parts of Portugal, and is found wild in ſome other places. With us it is kept in gardens, and cultivated in fields to a great advantage;

tage; the Engliſh being the fineſt ſaffron in the world, and ſelling every-where at a great price. It is cultivated in Cambridgeſhire, and ſome other places, and might be in many more to very great advantage. The uſual way of propagating it is by the bulbs, a great quantity of which are produced annually: theſe bulbs are laid in the ground in ſpring, at ſix inches diſtance, or leſs; and in the firſt year they produce only leaves; but in the October, of the year following, they flower, and the ſaffron is collected from them. The flowers laſt but a day or two; after they are gone, there grow up leaves which endure the whole winter, but in ſpring fade, and are not ſeen during the whole ſummer. The time of gathering the ſaffron is morning and evening; the flowers are always gathered, as ſoon as well open, and a new ſucceſſion of them riſes daily for a month, or more. The bulbs are often taken up, after they have flowered, and kept in a dry place, in the open air, till ſpring, when they are put into the ground again.

The ſaffron produced from this flower is as powerful a ſimple as almoſt any the vegetable world affords us: it is a noble cordial, and ſudorific, and is good in nervous and hyſteric caſes. It is an ingredient in many of the compoſitions of the ſhops, and is frequent in extemporaneous preſcription.

The colour of the flower of this plant varies almoſt without end, whence there are a multitude of varieties beautiful enough, and honoured with the names of diſtinct ſpecies by authors; but theſe diſtinctions are the buſineſs of the floriſt, not of the botaniſt. Tournefort has given ſpecific names to near a hundred and fifty tulips, while in reality there is but one; and to almoſt twice as many hyacinths, while in reality there are but two ſpecies of that genus.

## IXIA.

THE calyx of the Ixia is a compound ſpatha, containing ſeveral flowers. The exterior ſquammæ are larger and thicker, the interior ones thinner; the former are of an ovato-lanceolate figure, and lacerated at the edges; the latter, or interior, are alſo lacerated at the edges, and are permanent, and ſeparate the germina. The corolla conſiſts of ſix equal petals of an oblong, lanceolated figure: the ſtamina are three ſubulated filaments, of not half the length of the flower; the antheræ are ſimple. The germen of the piſtil is oval and triquetrous; it is placed under the receptacle of the flower. The ſtyle is ſimple, erect, and of the length of the ſtamina: the ſtigma is trifid and thick. The fruit is a capſule of a triquetrous, ſuboval figure, compoſed of three valves, and containing three compreſſed cells, in each of which is a ſingle roundiſh ſeed.

*Ixia foliis enſiformibus, floribus remotis.*
*The Ixia, with ſword-like leaves, and remote flowers.*

The root of this ſpecies is tuberous, an inch, or more, in diameter; branched out into many ramifications, and creeping under the ſurface of the ground. The leaves are ten or twelve inches long; they riſe in cluſters, and are an inch, or more, in breadth; broadeſt toward the baſe, and tapering all the way to a point: they are of a tough, flexile ſtructure, and pale bluiſh-green colour: the flowers are yellow, ſpotted with orange colour.

## GLADIOLUS.

THE calyx of the Gladiolus is in a manner wanting; there are only two or three vague ſpathæ. The corolla conſiſts of ſix petals, which unite juſt at their baſe; they are all of an oblong figure, and obtuſe: the three upper ones bend toward one another, the three lower are reflex: the ſhort tube, which they form, when they unite at the baſe, is crooked. The ſtamina are three ſubulated filaments, inſerted into the alternate petals of the corolla; they are all covered by the connivent petals; the antheræ are oblong. The germen of the piſtil is placed below the receptacle; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is trifid and concave. The fruit is an oblong, bellied capſule, obſcurely trigonal, obtuſe, formed of three valves,

valves, and containing three cells. The ſeeds are numerous, roundiſh, and covered with a calyptra.

This genus comprehends the Gladiolus of Tournefort, Malpighi, and Rivinus.

### 1. *Gladiolus foliis enſiformibus bulbo duplici.*
### *The ſword-leaved Gladiole, with a double bulb.*

The root of this plant conſiſts of two bulbs, laid one over another; they are ſolid and fleſhy, and are covered with ſeveral reticular coats, and furniſhed with fibres at the bottom. The leaves grow in the manner of thoſe of the iris; they are long, and very narrow; ſtriated, of a bluiſh-green colour, and terminate in a point. From among theſe leaves riſes the ſtalk; it is round, ſlender, ſucculent, green, and two feet high. The flowers ſtand in a long ſeries toward the top of this ſtalk, ſix or eight in number: they are large, and of a beautiful roſe colour, but with more brightneſs than the roſe. They ſtand at an inch, or more, diſtance from one another, and all hang on one ſide of the ſtalk: the whole plant has a ſweetiſh, and ſomewhat acrid, taſte.

It is a native of Spain, Italy, and ſome parts of France. C. Bauhine calls it, Gladiolus floribus uno verſu diſpoſitis. J. Bauhine, Gladiolus ſive Xiphion. Parkinſon, Gladiolus Narbonenſis.

### 2. *Gladiolus foliis latis bulbo ſimplici.*
### *The broad-leaved Gladiole, with a ſingle bulb.*

The root of this ſpecies is a ſingle bulb, large, compreſſed, ſolid, covered with a few membranes, and furniſhed with ſeveral fibres. It's fleſhy part is of a deep red; it's taſte very acrid and burning. The leaves are oblong and broad, a foot and half in length, and two inches in breadth; they are of a bluiſh-green colour, and firm texture. The ſtalk grows from among them, and is uſually ſimple, ſometimes ramoſe; it is rounded, green, and very brittle: the flowers are large, and ſtand in double rows; they are of a deep purple on the outſide, and of a deep yellow, with ſome purple lines, within. The whole ſtalk is of a deep blackiſh purple, and the flowers ſtand on ſhort purple peduncles, covered each by two blackiſh-red leaves.

This is a native of the Cape of Good Hope; it is met with, however, in ſome of our ſtoves. C. Bauhine calls it, Gladiolus maximus Indicus; and Cornutus, Gladiolus Æthiopicus flore coccineo.

The other ſpecies of the Gladiolus are, 1. The great, Turkiſh, purple Gladiole. 2. The dwarf broad-leaved Gladiole. 3. The dwarf graſſy-leaved Gladiole. Theſe ſeem to be really diſtinct ſpecies: but, beſide theſe, Tournefort and others give names to ſeveral varieties of one or other of theſe, under the opinion of their being diſtinct ſpecies. The flowers are ſometimes white, ſometimes of a deeper, and ſometimes of a paler, red; and this, and their different diſpoſition, has given origin to theſe imaginary ſpecies.

## ANTHOLYZA.

THE Antholyza has no calyx; there are only ſome vague, alternate, imbricated, and permanent ſpathæ, which ſeparate the flowers. The corolla conſiſts of a ſingle petal: the baſe of it is a tube, which by degrees expands into a large, compreſſed, and ringent mouth. The upper lip is ſtrait, very long, ſlender and undulated, and at it's baſe has two ſhort laciniæ: the lower lip is ſhorter, divided into three ſegments, and the lower or middle one of theſe is propendent. The ſtamina are three long ſlender filaments; two of them are lodged under the upper lip, one upon the lower: the antheræ are acute. The germen of the piſtil ſtands under the receptacle: the ſtyle is filiform, and has the ſame length and ſituation with the two upper filaments: the ſtigma is trifid, capillary, and reflex. The fruit is a roundiſh, but obſcurely trigonal, capſule, formed of three valves, and containing three cells; in each of which are ſeveral angular ſeeds.

Of this genus we know only one ſpecies, which has been uſed to be ranked among the Gladioli.

### ANTHOLYZA.

The root of this plant is compoſed of two fleſhy bulbs, one lying over the other, and both ſurrounded with two or three reticular membranes. The leaves are eight or ten inches long, and not more than two thirds of an inch in breadth; they are of a bluiſh or greyiſh-green colour, and are broadeſt at the baſe, and terminate in a point. The ſtalk riſes from among theſe; it is ten, twelve, or more, inches in height, round, of a pale green, of the thickneſs of a large packthread, and hairy. The flowers ſtand in a long ſeries at the top, ſix or eight one over another, at ſome diſtance. They are large, and of an extreamly beautiful crimſon colour.

This is a native of Æthiopia, but we have it in ſome of our ſtoves. Commelin calls it, Gladiolo Æthiopico ſimilis planta, anguſtifolia, caule hirſuto, flore rubicundiſſimo; and Breynius, Gladiolus floribus rictum referentibus, coccineis, ſuprema lacinia erecta fiſtuloſa.

## IRIS.

THE Iris has no calyx; there are only ſome alternate, ſimple, imbricated, permanent ſpathæ, which ſeparate the flowers. The corolla is divided into ſix parts: the petals are oblong and obtuſe: the three exterior ones are reflex, the interior are erect, and more acute; they all adhere by their ungues or baſes. The ſtamina are three ſubulated filaments, lying on the reflex petals: the antheræ are oblong, ſtrait, and depreſſed; the germen of the piſtil is oblong, and placed beneath the receptacle; the ſtyle is ſimple, and very ſhort; the ſtigma is very large, and divided into three ſegments, which reſemble petals; they are broad and reflex: their apices are bifid. The fruit is an oblong angular capſule, compoſed of three valves, and formed into three cells, in each of which is contained a number of large ſeeds.

The nectarium, in ſome ſpecies of the Iris, is a longitudinal, hairy line on the baſe of the reflex petals; in others it is formed of three melliferous ſpots on the external part of the flower, near the baſe. The capſule in ſome is trigonal, in others it is hexagonal.

This genus comprehends the *Iris*, the *Xiphion*, the *Siſyrinchium*, and the Hermodactylus of Tournefort. The parts of fructification in all theſe are the ſame, the root and leaves only differ. In the Xiphion, the root is bulbous, and the leaves are ſubulated. In the Siſyrinchium, the root is compoſed of two bulbs laid one on the other. In the Hermodactylus, the root is tuberous, and the leaves tetragonal; and, in the Iris, the root is fleſhy, oblong, and creeping, and the leaves are enſiform.

1. *Iris corollis barbatis, caule foliis longiore multifloro.* **Common Flower de Luce.**
*The bearded-flowered Iris, with many flowers on a ſtalk longer than the leaves.*

The root of the common Iris is large, fleſhy, tuberous, and creeping; it is of an inch in diameter, and it creeps juſt under, or upon, the ſurface of the earth, with numerous ramifications joining in an irregular manner one to another. It is brown on the outſide, white within; very juicy, and of a very acrid and pungent taſte. The leaves ariſe in tufts, eight or ten together; they are near two feet long, about an inch broad, and of a pale green colour: they are broadeſt at the baſe, and terminate in a point. The whole cluſter of leaves unite at the baſe, receiving one another into their cavities. From the center of theſe leaves riſes a ſtalk of near three feet in height, round, ſucculent, and green, but covered with a whitiſh duſt, that eaſily rubs off: there are five or ſix joints in this ſtalk, at each of which ſtands a ſingle, ſhort leaf, and often it divides at top into two or three branches, on each of which there are two or three of thoſe ſhort leaves, which are affixed by no pedicle, but ſurround the ſtalk at the baſe. The flowers ſtand on the tops of theſe ſtalks; they are of a deep violet purple, and very large.

This is a native of ſome parts of Germany; it is common with us in gardens. C. Bauhine calls it, Iris vulgaris Germanica ſive ſylveſtris. J. Bauhine, Iris vulgaris violacea.

2. *Iris*

2. *Iris radice duplice bulboſa, foliis anguſtis mollibus.*
*The double bulbous Iris, with ſoft, narrow leaves.*

This is one of the ſpecies of Iris, commonly called Siſyrinchia. The root is compoſed of two moderately large bulbs, one lying upon the other; at the time when the plant is in flower, the upper one is larger, and more ſucculent, and the under one flaccid: the taſte is ſweetiſh and pleaſant, and the root eſculent. The leaves are long, and very narrow; they grow ſeveral together from the ſame root, and uſually lie upon the ground: they are ſtriated, ſoft to the touch, tender as the leaves of garlick, and of a deep green colour. The ſtalk is round, ſmooth, and firm, about ſix or eight inches high: the flowers are large, and of a fine deep blue, with three ſpots of yellow; four or five of them grow on every ſtalk, but only one opens generally at a time.

This ſpecies is a native of Spain; we have it frequently in our gardens, where it ſtands very well in the open beds. C. Bauhine calls it, Siſyrinchium majus flore lutea macula notato. Cluſius, Siſyrinchium majus; and J. Bauhine, Iridi bulboſæ affinis ſiſyrinchium majus.

3. *Iris tuberoſa radice, foliis tetragonis.*
*The tuberous-rooted and tetragonal-leaved Iris.*

This is the ſpecies of Iris, which Tournefort has formed a ſeparate genus of, under the name of Hermodactylus. It's root is tuberous, and compoſed of ſeveral oblong and thick pieces, odly joined together, ſometimes all united to a kind of head, and reſembling four or five fingers; from this there riſe three or four leaves, near two feet in length, and very ſlender; hard, rigid, and of a quadrangular ſhape, terminating in a ſharp point, and, when full grown, often drooping their tops to the ground. They are of a bluiſh-green colour, and at the baſe they are ſmaller than elſewhere, and ſurrounded with three or four membranes. The ſtalk riſes in the midſt of theſe; it is ſlender, rounded, and ſtriated; two leaves firmly ſurround it from the baſe almoſt to the top, receiving it into their ſinus's: toward the top there are two knots in it, placed near one another; theſe have each riſing from it a membranaceous, hollowed leaf; the lower of theſe is the larger. The flower is moderately large: the three reflex petals are of a fine, deep, gloſſy black; the others are greeniſh, or whitiſh, with a tinge of black.

This ſpecies is a native of Egypt and Arabia; we have it in ſome of our gardens, but it is not common. C. Bauhine calls it, Iris tuberoſa; and J. Bauhine, Iris tuberoſa Belgarum.

4. *Iris foliis margine conniventibus corollis imberbibus.* Blue bulbous Iris.
*The hollow-leaved Iris, with the edges almoſt meeting.*

This is one of thoſe Iris's called, by Tournefort and others, Xiphion. The root of this ſpecies is large and roundiſh, fleſhy, and covered with ſeveral black membranes: the leaves are large, broad, and carinated, or hollowed; the middle of the hollow is uſually covered with a kind of ſilver-like drops. The edges almoſt meet with one another, ſo as to give it the appearance of a round, hollow leaf, like that of a leek. The ſtalk is ſufficiently thick, but infirm and tender, and is uſually ſurrounded with four or five leaves: it grows to ten or twelve inches high, and ſometimes has only one, ſometimes two, flowers, rarely more on it. Theſe are large, and very beautiful, of a deep violet purple; ſometimes indeed paler, and ſometimes white, under which variation the plant has been deſcribed as a diſtinct ſpecies, and even when pale red, or ſtriated, as others.

This is a native of Spain, but it ſucceeds very well in our gardens. C. Bauhine calls it, Iris bulboſa cæruleo-violacea. J. Bauhine, Iris bulboſa tota violacea vel cærulea; and Tournefort, Xiphium cæruleo-violaceum.

Theſe four ſpecies may give a diſtinct idea of the principal diſtinctions of the genus, as they are ſelected from among thoſe diſtinguiſhed by authors, who have paid more regard to the roots and leaves of plants, than to their parts of fructification, into different genera. The other ſpecies of the Iris are very numerous, and their varieties deſcribed

deſcribed under the name of diſtinct ſpecies: more ſo, of thoſe called by authors Iris: the principal are, 1. The great, black and white-flowered Iris. 2. The blue, Aſiatic, many-flowered Iris. 3. The great, broad-leaved, blue, Roman Iris. 4. The yellowiſh German Iris. 5. The elder-ſmelling Iris. 6. The broad-leaved Iris, with no leaves on the ſtalks. 7. The dwarf purple Iris. 8. The dwarf yellow Iris, variegated with purple. 9. The great-flowered, white, Florentine Iris. 10. The common, yellow, water Iris, or flag-flower. 11. The ſtinking Iris, or gladwin. 12. The great maritime Iris. 13. The narrow-leaved Iris. 14. The greeniſh-yellow-flowered, Pyrenæan Iris. 15. The dwarf red-flowered Iris. 16. The dwarf variegated Iris. 17. The dwarf Iris, with pale yellow flowers. 18. The broad-leaved Iris, without a ſtalk.

Of thoſe called Siſyrinchia are, 1. The great Siſyrinchium, with flowers ſpotted with white. 2. The little Siſyrinchium.

Of the Hermodactylus, there is no ſpecies but that deſcribed above; and, finally, of thoſe called Xiphia, the principal are, 1. The blue Iris, without a ſtalk. 2. The early, variegated, Perſian Iris. 3. The blue, taller Iris. This, as well as the firſt ſpecies, varies into white, and pale red, and variegated flowers. 4. The broad-leaved, tall Xiphion. 5. The large-leaved and large-flowered Xiphion. 6. The narrow-leaved Xiphion. 7. The great, yellow-flowered Xiphion. 8. The little, blue Xiphion. 9. The yellow and black Xiphion.

The root of the common blue Iris, freſh, is a very violent cathartic, but, where the conſtitution can bear ſuch a medicine, will do great ſervice in dropſies. The Florentine Orrice or Iris root is the dried root of the ſame ſpecies, growing in a warmer climate. It is peeled, and carefully prepared in the drying; it is eſteemed a very good pectoral and attenuant, and is not only common in extemporaneous preſcription, but is an ingredient in many of the ſhop compoſitions.

## COMMELINA.

THE calyx of the Commelina is a very large, permanent ſpatha, compreſſed, connivent, and cordated. The flower conſiſts of ſix petals: the three exterior ones are ſmall, of an oval figure, concave, and reſemble a perianthium; the three interior ones are placed alternately with theſe, and are large, roundiſh, and coloured. The nectaria are three in number, and they reſemble ſo many antheræ; they ſtand on filaments, and are cruciform and horizontal. The ſtamina are three ſubulated filaments, reclinate, and agreeing in ſhape with the filaments of the nectaria, but placed below them: the antheræ are of an oval figure. The germen of the piſtil is roundiſh: the ſtyle is ſubulated, revolute, and of the length of the ſtamina: the ſtigma is ſimple. The fruit is a naked, globoſe, but triſulcoſe capſule, formed of three valves, and containing three cells, in each of which there are two angular ſeeds.

This genus comprehends the Commelina of Plumier and Dillenius, and the Zanonia of Plumier. The number of the parts is variable; if the petals are only four, ſmall, and equal, a third of the number of the other parts is to be excluded, and unity added to the nectarium, and all is right: in the Zanonia, the three exterior petals ſtand on the germen, and remain in figure of a perianthium; the three interior ones are equal.

### 1. *Commelina erecta corolla ampliore.*
### *The erect Commelina, with a large flower.*

The root is perennial, not creeping, but compoſed of a number of thick fibres, whitiſh and hairy. The radical leaves are ſix inches long, and two and a half broad, narrow at the baſe, and pointed at the ends. The ſtalk is round, ſtriated, and grows to two feet high: it is robuſt and erect. The leaves ſtand ſingly; they ſurround the ſtalk at the baſe, and are three inches long, and an inch broad, ribbed longitudinally, pointed at the extremity, and of a deep green. The flowers ſtand at the tops of the ſtalks and branches, and ariſe from among cluſters of leſſer leaves: they are of a pale blue, and of the breadth of a ſhilling: the antheræ are yellow. It is a native of Virginia. Dillenius calls it, Commelina erecta ampliore ſubcæruleo flore.

The other ſpecies are, 1. The annual, ſoapwort-leaved, procumbent Commelina. 2. The red-jointed, orpine-rooted Commelina. 3. The narrower-leaved Commelina. 4. The deep-flowered Commelina.

XYRIS.

Paderota

Justicia

Pinguicula

Piper

Rumphia

Valeriana

Anthobyza

Tamarindus

Cyperus

Iris

Scirpus

Gladiolus

Montia

Xyris

Tillea

Milium

B. Cole Sculp.

## XYRIS.

THE calyx of the Xyris is a ſpike of a roundiſh ſhape, compoſed of ſquammæ of a round concave figure, imbricated, and ſerving to ſeparate the flowers. The glume is ſmall and bivalve; the valves are navicular, compreſſed, arcuated, acute, and connivent. The corolla conſiſts of three petals, which are plane, patent, large, and crenated, and have narrow ungues of the length of the calyx. The ſtamina are three ſlender filaments, ſhorter than the corolla: the antheræ are erect and oblong. The germen of the piſtil is roundiſh, the ſtyle is filiform, and the ſtigma is triple. The fruit is a capſule contained within the cup; the figure round, and compoſed of three valves, and containing three cells; in each of which are a number of minute ſeeds.

Of this genus there is only one known ſpecies.

### XYRIS.

The root is compoſed of a few white fibres: the leaves are five or ſix inches long, and half an inch broad at the bottom; from thence they grow narrower to the extremity, where they terminate in a point. They are ribbed longitudinally, of a whitiſh colour at the bottom, and of a beautiful green all the way up beſide. The ſtalks are angular, and about a foot high; they are alſo whitiſh at the bottom, and green upwards: they are naked, and have no branches; at the top of each ſtands a head, of the bigneſs of a nutmeg, or more. Theſe are formed of ſquammoſe leaves, and from the alæ of theſe grow the flowers, which are of the breadth of a ſixpence, and of a bright, ſhining yellow.

It is a native of Malabar, and grows in watery places. It is deſcribed in the Hortus Mal. V. 9. p. 139, under the name of Kortsjiletti-pullu.

*Claſs the Third. Order the Firſt.*

*Diviſion the Third.*

*Triandria Monogynia, the flowers of which have an imbricated amentum, and naked ſeeds.*

## SCHÆNUS.

THE calyx of the Schænus is a common glume, containing ſeveral flowers; it is permanent, large, erect, and attenuated, and is compoſed of two valves. The proper corolla conſiſts of ſix petals, which are permanent, of a lanceolated figure, acute, and connivent; unequal in ſize and ſituation, diſpoſed in a kind of imbricated manner, and the exterior ones ſhorter than the reſt. The ſtamina are three capillary filaments; the antheræare oblong and erect. The germen of the piſtil is of a triquetrous, oval form, and obtuſe; the ſtyle is ſetaceous, and of the length of the corolla; the ſtigma is trifid and ſlender. There is no pericarpium; the ſeed is ſingle, gloſſy, of an oval, but ſomewhat triquetrous, form, and largeſt in the upper part, and is contained, till ripe, in the corolla. This genus comprehends the Cyperella and Pſeudo-Cyperus of Micheli.

There is a ſpecies of this genus, in which certain ſhort ſetæ form the proper receptacle round the ſeed.

1. *Schænus culmo ſubtriquetro folioſo, floribus faſciculatis, foliis ſetaceis.*
*The faſciculated-flowered, triquetrous-ſtalked Schænus, with ſetaceous leaves.*

The root of this ſpecies conſiſts of a few black fibres, formed at the top into a kind of head; from this riſe a great number of oblong, and very narrow, leaves; from among theſe grows a ſtalk a foot, or fourteen inches, high, obſcurely three-cornered in ſhape, and conſiderably hard, rigid, and firm. This has two or three joints, and from

each of these there grows a leaf like those which rise immediately from the root, only smaller; from the alæ of those leaves rise stalks of two or three inches long, and very slender; on the top of each of these stands a cluster of flowers, in form of a little umbel; and on the top of the main stalk stand two or three such clusters or umbels. The flowers are very singular in their appearance; being of a fine bright white, they give this a different look from all the other grasses.

This elegant grass is a native of England, and most other parts of Europe; it grows in boggy grounds. Scheukzer calls it, Gramen cyperoides palustre leucanthemum. Vaillant, Juncus palustris floribus albis.

2. *Schœnus culmo tereti, foliis margine et dorso aculeatis.*
*The round-stalked Schœnus, with leaves prickly at the back and edges.*

The root of this species is long, of the thickness of a goose-quill, and creeps a great way under the surface of the earth. The stalk is round, geniculated, and four, five, or six feet high: the leaves are very long; those on the stalks are a foot long, and half an inch wide, carinated, and terminate in a point: the back and edges are serrated and prickly. The tops of the stalks are ornamented with large panicles of flowers, like those of millet. The seeds are small and black.

This species is a native of England, but it is not common; it grows in boggy places. Haller calls it, Mariscus. C. Bauhine, Cyperus longus, inodorus, Germanicus.

3. *Schœnus culmo tereti nudo, capitulo ovato, involucri diphylli valvula altera subulata longa.*
*The round-stalked Schœnus, with an oval head, and one of the valves of the flower long and subulated.*

The root of this species is composed of a number of blackish fibres, collected into a kind of tuft. The leaves are four inches long, and triangular; they grow in great tufts. Among these rise the stalks; they are eighteen inches, or more, in height, and each supports a single head, of an oval figure, and brown colour. The seeds are whitish; the lower part of the stalks and leaves are usually purplish.

This species is not unfrequent in boggy grounds with us. Linnæus calls it, in his H. Cliff. Schœnus flosculis spicatis. Morison, Juncus lævis panicula glomerata nigricante; and Haller, Carex spica multipartita calycibus spicularum bifoliis. Scheuckzer, Junco affinis capitulo glomerato nigricante.

## CYPERUS.

THE calyx of the Cyperus is an imbricated spike, formed of oval, carinated, plano-inflex squammæ, separating the flowers: there is no corolla. The stamina are three very short filaments. The antheræ are oblong and sulcated. The germen is very small; the style is filiform and very long; the stigmata are three in number, and capillary. There is no pericarpium. The seed is single, of a triquetrous form, acuminated, and has no hairs or villi.

This genus comprehends the Cyperus of Micheli and Tournefort, and the Melanoschœnus of Micheli, and is very nearly allied to the Scirpus and Eriophorus kind.

1. *Cyperus culmo triquetro folioso, panicula foliosa supra decomposita, pedunculis nudis, spicis alternis.*
*The three-square stalked Cyperus, with a ramose panicle, and alternate spikes.*

Long Cyperus.

The root of this species consists of a number of oblong, geniculated branches, spreading various ways, and entangling irregularly with one another; these are succulent, tender, and of a blackish colour, and to these are affixed a number of fibres, some of which sustain tuberous bodies of an oval shape, and of the size of a walnut. From the upper part of the oblong branches of the root, arise leaves of an oblong, narrow, and carinated figure. The stalk rises in the midst of these, and is smooth,

and

and of a trigonal figure, ſtriated on the ſurface, and filled with a white pith within. On the top of this ſtalk ſtand a number of leſſer leaves, arranged into the form of a radiated ſtar; and from the center of theſe riſes the panicle, which is very diffuſe, and branched, and conſiſts of alternate ſpikes affixed to naked pedicles.

This ſpecies is frequent in England, and many other parts of Europe. It grows in wet places. C. Bauhine calls it, Cyperus odoratus radice longa. J. Bauhine, Cyperus panicula ſparſa ſpecioſa.

2. *Cyperus culmo triquetro nudo, panicula folioſa ſupra decompoſita, ſpicis confertis diſtiche compreſſis.*

*The triquetrous, naked-ſtalked Cyperus, with a folioſe, ramoſe panicle, and compreſſed, diſtichous ſpikes.*

This is a very elegant ſpecies of Cyperus, though not a large one. It's root is compoſed of a number of ſlender, oblong branches, creeping under the ſurface of the ground. The leaves are ſix inches long, ſlender, and carinated; the ſtalk riſes to five or ſix inches high, and is terminated by a very ramoſe panicle, which is of a yellowiſh colour, and is formed of a number of ſhort, compreſſed ſpikes.

This is frequent in boggy places in Ireland, and elſewhere. C. Bauhine calls it, Gramen Cyperoides minus panicula ſparſa ſubflaveſcente. J. Bauhine, Gramen parvum pulchrum panicula lata compreſſa. The panicle of this is ſometimes blackiſh, in which ſtate it has been deſcribed by authors, under the name of a different ſpecies.

3. *Cyperus culmo triquetro folioſo, panicula decompoſita minore, ſpicis diſtichis.* **Round Cyperus.**

*The triquetrous, folioſe-ſtalked Cyperus, with a ſmaller, decompound panicle.*

The root of this ſpecies conſiſts of a number of tuberous bodies, of an oval figure, and of the bigneſs of a large olive; of a browniſh colour, ſucculent, and ſtriated on the ſurface; which are hung to oblong fibres one above another, in the manner of the roots of the filipendula. The leaves are large, two feet long, three quarters of an inch broad, and deeply carinated: they are of a duſky green colour, and very rigid. The ſtalks ariſe to two or three feet high, and have on their ſummits a radiated ſet of ſhort leaves, from among which riſes the panicle: this is leſs compound than thoſe of the others before deſcribed; the peduncles are ſhort and ſlender, and the ſpikes diſtichous, and of a duſky brown colour.

This is a native of Arabia and Egypt; it is no where ſo plentiful as about the borders of the Nile. C. Bauhine calls it, Cyperus rotundus orientalis major; and Proſper Alpinus, Cyperus Hadneg Ægyptis.

The other more ſingular ſpecies of Cyperus are, 1. The round-rooted, narrow-leaved, eſculent Cyperus. 2. The graſſy Cyperus. 3. The golden, panicled, American Cyperus. 4. The dwarf Cyperus, with panicles very cloſely preſſed together. 5. The thin, panicled Cyperus. 6. The Cyperus, with a diffuſe panicle, and narrow, ſhort locuſtæ. 7. The broad-leaved, great Cyperus.

The roots of the Cyperi are all carminative and attenuant. Thoſe of the firſt and third ſpecies are uſed in medicine, under the names of Cyperus longus, and Cyperus rotundus. They promote the menſes, and are good in all chronic caſes ariſing from obſtructions of the viſcera.

## SCIRPUS.

THE calyx of the Scirpus is an imbricated ſpike, conſiſting of oval ſquammæ, of a plano-inflex figure, ſeparating the flowers: there is no corolla. The ſtamina are three oblong filaments; the antheræ are oblong. The germen of the piſtil is very ſmall: the ſtyle is filiform and long; the ſtigmata are three, and capillary: there is no fruit. The ſeed, after every flower, is ſingle, and of a triquetrous figure, acuminated, and has villi, or hairs, on it, longer than the cup; theſe villi are it's great diſtinction from the Cyperus: they are in ſome ſpecies affixed to the baſe of the ſeed, in others to it's apex.

This

This genus comprehends the Scirpus of Micheli and Tournefort, and the Scirpocyperus of Micheli.

1. *Scirpus culmo triquetro folioſo, panicula folioſa, pedunculis nudis ſupra decompoſitis, ſpicis confertis.*
*The triquetrous, folioſe-ſtalked Scirpus, with a folioſe, ramoſe panicle, and thick-ſet ſpikes.*

The root of this ſpecies is compoſed of a number of blackiſh, hard, and ſtrong fibres. The ſtalk riſes to a foot and half, or two feet, in height, and is ſurrounded, from it's baſe half way up, with leaves: theſe are oblong, broader than in the common graſs, and carinated, and they terminate in a point. At the top of the ſtalk there ſtand a number of ſhorter leaves, diſpoſed in a radiated manner like a ſtar, and from the center of theſe riſes the panicle, which is very ramoſe and diffuſe, and compoſed of ſhort and thick-ſet ſpikes affixed to naked peduncles. The panicle is very large, and makes a beautiful appearance.

It grows by river ſides in ſome parts of England, but is not very common. C. Bauhine calls it, Gramen Cyperoides miliaeum; and J. Bauhine, Cyperus gramineus.

2. *Scirpus culmo tereti nudo, ſpicis plurimis pedunculatis terminatricibus.* **Bulruſh.**
*The naked, round-ſtalked Scirpus, with numerous, pedunculated ſpikes.*

The root of this ſpecies is extreamly large and thick, of a dark, blackiſh-red colour on the outſide, and white within; it creeps, a long way horizontally, under the ſurface of the ground: from this ariſe a great number of ſtalks. They are round, ſmooth, and green, without knots or joints, and of four, five, or ſix feet high, ſoft to the touch, and full of a white, ſpungy pith. They are largeſt at the bottom, and gradually ſmaller to the top, where there ſtands a panicle compoſed of a number of brown, harſh, ſhort ſpikes, affixed to moderately long and naked peduncles.

This ſpecies is common in almoſt all ſtanding waters, and about the edges of rivers. C. Bauhine calls it, Juncus maximus ſeu ſcirpus major. Van Royen, Scirpus ſpicis copioſis.

3. *Scirpus culmo tereti nudo, ſpica ſubovata, imbricata, terminatrice.* **Club Ruſh.**
*The naked, round-ſtalked Scirpus, with an oval, imbricated ſpike on it's ſummit.*

The root of this ſpecies is oblong, ſlender, and creeping, and is furniſhed with a great number of fibres. From this ariſe ſeveral ſtalks, ſome a foot and half high, ſome not more than four inches; theſe are round, ſmooth, and full of a ſpungy pith, and are reddiſh at the bottom, elſwhere green. On it's ſummit ſtands a ſpike of an oval figure, and brown colour, of the bigneſs of a horſe-bean.

This ſpecies is very frequent in rivers and ponds, and in damp grounds. C. Bauhine calls it, Juncus capitulis equiſeti. Haller, Scirpus caule aphyllo, ſpica imbricata terete.

The other more ſingular ſpecies of Scirpus are, 1. The tall Scirpus, with ſerrated leaves. 2. The pentagonal-ſtalked Scirpus, flowering at the joints. 3. The geniculated, hollow-ſtalked Scirpus. 4. The Scirpus, with round, umbellated heads. 5. The Sea-Scirpus, with round-cluſtered heads. 6. The ſhort-headed, Mountain Scirpus. 7. The ſhort-headed, dwarf Scirpus. 8. The hairy-ſpiked Scirpus.

## ERIOPHORUM.

THE calyx of the Eriophorum is an imbricated ſpike, formed of plano-inflex ſquammæ, of an oblong, oval figure, ſeparating the flowers: there is no corolla. The ſtamina are three capillary filaments; the antheræ are erect, and of an oblong figure.

figure. The germen of the piſtil is very ſmall; the ſtyle is filiform, and of the length of the ſquammæ of the cup. The ſtigmata are three in number; they are longer than the ſtyle, and are reflex. There is no pericarpium: the ſeed is triquetrous and acuminated, and has hairs on it longer than the ſpike.

1. *Eriophorum culmo folioſo tereti, foliis planis.* Cotton Graſs.
*The round and folioſe-ſtalked Eriophorum, with flat leaves.*

The root of this ſpecies is compoſed of a number of reddiſh-brown fibres. From this riſe ſeveral flat, graſſy leaves, and among theſe the ſtalk; this is a foot, or more, in height, and is round, ſmooth, and in all things reſembles a ſmall ruſh: on the top of this ſtands a panicle, which, when ripe, is of the ſize of a walnut, and white as ſnow. It is compoſed of ſeveral ſpikes ſtanding on oblong pedicles, and ſeems formed of the fineſt white cotton, or of a ſubſtance ſtill finer than that.

This ſpecies is not unfrequent with us in boggy grounds. C. Bauhine calls it, Gramen pratenſe tomentoſum panicula ſparſa. Tournefort, Linagroſtis panicula ampliore; and Haller, Linagroſtis foliis planis, ſpicis multiplicibus.

2. *Eriophorum culmis teretibus, vaginatis, ſpica membranacea.* Horſetail Ruſh.
*The round, vaginated-ſtalked Eriophorum, with membranaceous ſpikes.*

The root of this ſpecies conſiſts of a great number of fibres of a brown colour, penetrating deep into the earth: the leaves are ruſhy and ſmall, and terminate in a point. Among a cluſter of theſe riſes the ſtalk, which grows to ſix, eight, or ten inches high, ſometimes more; it is round, ſtriated, and tender, and about it's baſe has ſeveral leaves ſurrounding it. At the top of each ſtalk ſtands a ſpike, compoſed of a number of ſquammæ, which are hoary, and covered with a tomentoſe matter, and feel as ſoft as velvet: the whole looks of a beautiful white.

This ſpecies is found on boggy ground, in ſeveral parts of England. C. Bauhine calls it, Juncus Alpinus capitulo lanuginoſo ſive ſchænolaguros. Moriſon, Gramen juncoides lanatum Danicum. Linnæus, in his Fl. Lap. calls it, Eriophorum ſpica erecta, caule tereti.

3. *Eriophorum culmis triquetris nudis, ſpica pappo breviore.*
*The triquetrous, naked-ſtalked Eriophorum, with ſpikes ſhorter than the down.*

The root of this ſpecies is compoſed of a number of ſmall, brown fibres, joined into a tuft at the top. From this ariſe a number of oblong, ſlender leaves, of a triangular form, and in the center of theſe ten or twelve ſtalks, not exceeding three or four inches in height. Theſe are triquetrous, green, ſoft, and filled with a ſpungy pith, and at the top of each ſtands a ſhort ſpike erect, formed of ſquammæ, and furniſhed with a fine ſnow white, and tolerably long cottony matter.

This ſpecies is not found in England, but in Denmark, Sweden, and ſome parts of Germany it is not uncommon. C. Bauhine calls it, Juncus Alpinus bombycinus. Haller, Linagroſtis foliis triquetris, ſpica unica oblonga. Linnæus, in his Fl. L. Eriophorum ſpica erecta, caule triquetro.

*Claſs the Third. Order the Second.*

## TRIANDRIA DIGYNIA.

*Plants which have three ſtamina and two ſtyli in each flower. Of theſe ſome have only one flower in each calyx, ſome ſeveral in every one.*

*Diviſion the Firſt.*

*Triandria Digynia, which have only one flower in each calyx.*

### BOBARTIA.

THE calyx is imbricated, and contains only a ſingle flower. The corolla is a glume, compoſed of two valves, and placed upon the germen: the ſtamina are three moderately long, ſlender filaments: the antheræ are thick and oblong: the germen is of an oval figure. The ſtyles are two, oblong and ſlender; the ſtigmata are rough; the ſeed is ſingle, and of an oval figure. Of this genus there is only one known ſpecies.

#### BOBARTIA.

The root is a cluſter of browniſh fibres, not very long, crooked, and tough; the radical leaves are long, moderately broad, ribbed, and of a dull duſky green. The ſtalk is round, hollow, jointed, and has four or five leaves on it, one at each joint, like the radical ones, but ſmaller. The flowers are numerous, not very large, and of a pale greyiſh-green.

It flowers in Auguſt and September.

### CORNUCOPIA.

THE calyx of the Cornucopia is a common perianthium, formed of one leaf, very large, and of an infundibuliform ſhape; it's mouth is crenated, obtuſe, and patenti-erect. The glume is formed of two valves, and contains only one flower; the valves are oblong, obtuſely pointed, and equal. The corolla is formed of a ſingle valve, and, in figure, ſituation, and ſize, greatly reſembles one of the valves of the cup. The ſtamina are three capillary filaments; the antheræ are oblong: the germen of the piſtil is turbinated: the ſtyles are capillary, and the ſtigmata cirroſe. There is no pericarpium: the corolla includes the ſeed, which is ſingle, of a turbinated figure, convex on one ſide, and plane on the other.

This genus includes the Cornucopioides of Scheukzer.

There is only one known ſpecies of it.

#### CORNUCOPIA.

The root is a congeries of thick and tough fibres, ſpreading various ways under the earth; the radical leaves are ſix or eight inches long, very narrow, and pointed at the extremities, of a firm ſubſtance, and pale green colour: the ſtalk is round and ſmooth, and grows to a foot and half high; at it's top is placed a cluſter of flowers, conſiderably large, and at firſt compact, afterwards much expanded.

It grows in wet places in the Eaſt. Petiver, who received it from Smyrna, calls it, Juncus clavatus vaginatus; and Monti, Gramen cornutum orientale.

### NARDUS.

THE Nardus has no calyx. The corolla is formed of two valves: the exterior is long, and of a lanceolato-linear figure; it terminates in an ariſta, or awn, and contains within it the other, which is ſmaller, and terminates in a ſhorter awn. The ſtamina are three capillary filaments, ſhorter than the corolla; the antheræ are oblong; the

the germen of the piſtil is oblong. The ſtyles are two in number, capillary, reflex, and hoary: the ſtigmata are ſimple: the ſeed is ſingle, of a linear, oblong figure, narrower at top than at bottom, and pointed at each end; the corolla ſurrounds it, by way of a pericarpium.

### 1. *Nardus ſpica recta.*
### *The upright-ſpiked Nardus.*

The root of this ſpecies is compoſed of a number of duſky coloured, creeping fibres. From this riſe a cluſter of leaves very ſmall and narrow, not more than three or four inches in length, and among theſe a number of ſtalks: theſe are ſurrounded at their baſe with leaves, and there appear ſomewhat thick; but, where they are naked, they are thin and tender. They do not riſe to more than five or ſix inches in height, and have no knots; from the middle to the top of theſe ſtalks reaches the ſpike. It is erect and ſlender, compoſed of oblong and rigid glumes, ſtanding in a ſeries on one ſide of the ſtalk, and all pointing one way. The leaves riſe from the root, three or four together in a cluſter, and are ſurrounded with a thin membrane of a whitiſh colour: they uſually droop toward the earth, when they leave theſe vaginæ. This ſpecies is frequent in England, and indeed throughout all Europe; it grows in dry paſtures, eſpecially in hilly places, and is of no value or uſe to the farmer, being too ſhort and low to be reached with the ſcythe. C. Bauhine calls it, Gramen ſparteum juncifolium. Moriſon, Gramen ſparteum junceo folio et minus. Other authors have diſtinguiſhed it into two ſpecies, a larger and a ſmaller, but without reaſon.

## SACCHARUM.

THE Saccharum has no calyx, but, in the place of one, it has a downy matter, including the flowers ſingly, and exceeding them in length. The corolla is compoſed of two valves, equal in ſize, and without awns; they are of an oblong, lanceolated figure, and hollowed, erect, and acuminated. The ſtamina are three capillary filaments, of the length of the corolla: the antheræ are oblong: the germen of the piſtil is ſubulated: the ſtyles are two in number, and cirroſe: the ſtigmata are ſimple. There is no pericarpium; every flower is ſucceeded by a ſingle ſeed, of an oblong, narrow, and acuminated figure, which it contains within it.

Of this genus there is but one known ſpecies.

### *Saccharum.*
### *The ſugar Cane.*

The root of the ſugar Cane is thick, oblong, geniculated, and furniſhed with many fibres. It runs obliquely under the ſurface of the ground, and is ſucculent, and very ſweet to the taſte. The plant riſes to eight or nine feet high: the ſtalk is round, jointed, and two or three inches in diameter at the bottom. The joints are three or four inches aſunder; and ſometimes, when the ſoil is rich, they are more. The colour is a greeniſh-yellow, and at the knots it is yellow in one part, and whitiſh on the other: the knots themſelves ſwell out beyond the reſt of the ſtalk, and the whole ſtalk is full of a whitiſh, ſucculent, and very ſweet matter. The leaves ſtand ſingly at the joints; they are very large, three feet in length, and but narrow in proportion; they ſtand erect, and are of a yellowiſh-green colour, ſomewhat ſcabrous on the ſurface, and wrapped about the ſtalk at their baſe. The top of the ſtalk is furniſhed with ſeveral leaves, and from among them produces a panicle very ramoſe, and of three feet in length.

The ſugar Cane is a native of the Eaſt Indies, the Canary Iſlands, and of the warmer parts of America, and is propagated by culture in many other places. It loves a rich and damp ſoil. In ſome places, particularly in the province of Rio de la Plata, the ſugar canes grow to the height and thickneſs of trees, and, in hot weather, cryſtals of ſugar are found on their ſurface. The ſtalk of this plant, bruiſed and preſſed, yields a ſweet liquor, which, boiled to a dryneſs, and properly refined, affords all our ſeveral kinds of ſugar.

## PHALARIS.

THE calyx of the Phalaris is a glume, compoſed of two valves, and containing a ſingle flower. It is very large, compreſſed, and obtuſe: the valves are navicular, compreſſed, carinated, obtuſe above, and have ſtrait edges, which run parallelly, and are ſomewhat connivent. The corolla is bivalve, and is ſmaller than the calyx: the exterior valve is oblong, acuminated, and convoluted; the interior is ſmaller. The ſtamina are three capillary filaments, ſhorter than the cup; the antheræ are oblong: the germen is roundiſh; the ſtyles are two; they are capillary, and the ſtigmata are villoſe. Inſtead of a pericarpium, the corolla itſelf adheres firmly round the ſeed, and does not open in any part. The ſeed is ſingle, ſmooth, and of a roundiſh, but acuminated, figure.

This genus comprehends the Plalaroidea of Scheukzer and Monti.

In ſome ſpecies there is alſo a ſmall calycine glume, bivalve, acuminated, and very ſmall, within the calyx deſcribed here.

### 1 *Phalaris radice annua.*
### *Phalaris, with an annual root.*

Canary Graſs.

The root of this ſpecies is formed of a little cluſter of tender, white fibres. It grows to a foot and half, or more, in height. It's ſtalk is ſlender, green, round, and jointed, in four or five places. At every one of the joints ſtands a ſingle leaf, oblong, narrow, and terminating in a point, like the leaves of the reſt of the graſſes. At the head of every ſtalk ſtands a ſingle, beautiful ſpike, an inch in length, of a turbinated figure, and formed of ſquammæ large and beautiful, variegated with a pale green and white.

This ſpecies is not a native of England; but in the Canary Iſlands, and in many of the warmer parts of Europe, it grows in the corn-fields, and in other dry places. C. Bauhine calls it, Phalaris major ſemine albo. J. Bauhine, and others, ſimply, Phalaris.

### 2. *Phalaris panicula oblonga.*
### *The oblong, panicled Phalaris.*

The root of this ſpecies is oblong, jointed, and creeping; the joints ſend out a number of fibres, which make their way deep into the mud, while the body of the root runs along but juſt under the ſurface. The plant riſes to four or five feet in height; it's ſtalk is very like that of the common reed, round, jointed, and ſmooth; the joints are ſix or ſeven on each ſtalk, and from each there grows a long and narrow graſſy leaf, of a deep green colour; this ſurrounds the ſtalk at it's baſe, and, when it leaves it, is an inch in breadth, and ſeven or eight in length. The upper ſurface of the leaf is ſmooth, but, if the finger be drawn over the under ſide, ſome roughneſs will be perceived. At the top of the ſtalk ſtands a panicle, not very diffuſe, of a purpliſh or whitiſh colour, and of ſix or ſeven inches in length.

This ſpecies is common with us about waters. C. Bauhine calls it, Gramen arundinaceum ſpicatum. Moriſon, Gramen arundinaceum aceroſa gluma.

### 3. *Phalaris ſpica cylindrica.*
### *The cylindric-ſpiked Phalaris.*

The root of this ſpecies is compoſed of a cluſter of fine white fibres. The ſtalk riſes to a foot and half, or more, in height; it is bulbous, as it were, at the bottom; ſlender, round, and jointed all the way up. The leaves, which grow immediately from the root, are ſix or eight inches long, of a pale greyiſh-green colour, and of a third of an inch in breadth, firm, and a little rough to the touch: at every joint of the ſtalk grows ſuch a leaf alſo, but ſhorter, ſurrounding the ſtalk a long way before it leaves it. The top of the ſtalk is terminated by a long, ſlender ſpike, not ill repreſenting the tail of a rat, four inches in length, and not ſo thick as a man's little finger,

of

of a greyiſh colour. This is ſoft to the touch, if the hand be drawn up; but very rough, if the contrary way.

This ſpecies is frequent with us in paſtures and meadows; it loves a damp ſoil. C. Bauhine calls it, Gramen typhoides aſperum. J. Bauhine, Gramen cauda muris majoris longa majus.

## PHLEUM.

THE calyx of the Phleum is a bivalve glume, containing a ſingle flower; it is oblong, linear, compreſſed, and opens with two points at the apex. The valves are ſtrait, hollow, equally compreſſed, and they terminate in ariſtæ, or awns. The corolla conſiſts of two valves, and is ſhorter than the cup: the exterior valve is larger than the interior, and ſurrounds it. The ſtamina are three capillary filaments, longer than the cup: the antheræ are oblong, and bifurcated. The germen is round; the ſtyles are two, and are capillary and reflex; the ſtigmata are plumoſe. There is no pericarpium; the calyx and corolla include the ſeed, which is ſingle and roundiſh.

This genus comprehends the Typhoidea of Scheukzer.

### 1. *Phleum ſpica cylindracea longiſſima.*
### *The very long cylindric-ſpiked Phleum.*

The root of this ſpecies is a ſmall, white tubercle, to which are affixed a great number of capillary fibres, white and inſipid to the taſte. The plant riſes to two or three feet in height. It's ſtalk is ſlender, round, green, and, when the ſpike is full grown, is ſcarce able to ſupport itſelf erect. The leaves which grow immediately from the root are ten or twelve inches long, and about a third of an inch broad: the ſtalk has three or four joints, and at each of them a leaf ſurrounding it a great way, then ſeparating from it, and reſembling the others; the top is terminated by a ſpike of four or five inches long, of the thickneſs of a man's little finger, and green at firſt, but white, when ripe.

This is not met with in England; in Germany, France, and Italy, it is common. It grows among buſhes. C. Bauhine calls it, Gramen typhoides maximum ſpica longiſſima.

### 2. *Phleum ſpica ovali-cylindracea.*
### *The oval-ſpiked Phleum.*

The root of this ſpecies conſiſts of a few fibres, whitiſh and divaricated at their extremities. The leaves are five inches long, and about a quarter of an inch in diameter; ſharp-pointed, and of a greyiſh-green colour. The ſtalk riſes to ten or twelve inches in height, and is ſlender, ſmooth, and jointed; at every joint ſtands a leaf, ſurrounding it ſtalk a great way. The part which ſurrounds the ſtalk is, indeed, in the upper leaves, longer than the reſt. The top is terminated by a ſhort ſpike, of an oblong figure, tending to oval; three quarters of an inch long, and about a third of an inch in diameter, ſmaller at the top than at the bottom; this is greeniſh at firſt, and appears hairy from the ariſtæ of the glumes; when fully ripe, it is black.

This is frequent in Germany, Sweden, and Lapland. I have alſo met with it at the ſide of a wood belonging to the ſeat of Th. H. Apreece, Eſq; at Waſhingley in Huntingtonſhire. Scheukzer calls it, Gramen typhoides Alpinum ſpica brevi denſa et veluti villoſa. Rudbeck, Gramen typhoides Alpinum ſpica nigra brevi.

## ALOPECURUS.

THE calyx of the Alopecurus is a bivalve glume, containing a ſingle flower. The valves are hollow, of an ovato-lanceolated figure, equal in ſize, and compreſſed. The corolla is univalve: the valve is concave, and of the length of the cup, and has a very long ariſta inſerted into it's back, near the baſe. The ſtamina are three capillary filaments: the antheræ are bifurcated at each end. The germen is roundiſh; the ſtyles are two in number; they are cirrous and reflex, and longer than the cup; the

ſtigmata are ſimple. There is no pericarpium. The corolla itſelf remains, and contains the ſeed, which is ſingle, and of a roundiſh figure.

This genus comprehends the Myoſmordea of Scheukzer.

1. *Alopecurus culmo erecto.*
*The erect-ſtalked Alopecurus.*

The root of this ſpecies conſiſts of a few white fibres, collected into a cluſter, and penetrating deep into the earth, but, ſeveral plants of it uſually growing together, the whole often forms a tuft of very conſiderable extent; from this there riſe a great number of leaves, long, narrow, ſmooth, and pointed at the ends. Among theſe riſe up ſtalks of different height; ſome two feet, or more, ſome leſs than a foot: they are round, ſlender, hollow, and ſmooth, of a pale green, and have four or five joints each. The joints are leſs protuberant than in moſt of the other ſpecies, and are each furniſhed with a ſingle leaf, which ſurrounds the ſtalk a great way before it leaves it. The top of the ſtalk is terminated by a long and very ſlender ſpike, three or four inches in length, and about a third of an inch in thickneſs. It is ſoft to the touch, and of a purple colour. The ſtalks are frequently alſo purple.

This ſpecies is frequent with us in corn-fields. C. Bauhine calls it, Gramen typhoides ſpica anguſtiore. Moriſon, Alopecuroides ſpica longa tenuiore. Scheukzer, Gramen ſpicatum ſpica cylindracea, tenuiſſima, longiore.

2. *Alopecurus culmo infracto.* **Spiked Float-graſs.**
*The crooked-ſtalked Alopecurus.*

The root of this ſpecies is a cluſter of ſmall, crooked, white, branched fibres. From theſe riſe a cluſter of leaves, ſix or eight inches long, a quarter of an inch broad, and of a fine green colour. From among theſe grows a ſtalk, round, hollow, and of a pale green colour: this grows to two or three feet in length, but does not ſtand erect; it is crooked from joint to joint, and frequently touches the ground at every, or almoſt every, joint; taking root, when it does ſo, and propagating itſelf abundantly. Every joint has it's ſeparate ſingle leaf, incloſing and ſurrounding the ſtalk a great way, and, when ſeparated from it, four, five, or more, inches long, and of a pale greyiſh-green colour. At the top of the ſtalk ſtands a ſpike, two or three inches long, and very ſlender, ſoft to the touch, and of a pale greyiſh-green colour.

This ſpecies is frequent with us; it uſually grows in wet places, ſometimes in the water: when it grows in water, it's ſtalks are very long and crooked, and it's lower leaves uſually wanting. C. Bauhine calls this, Gramen aquaticum, geniculatum, ſpicatum. Others, Gramen fluviatile ſpicatum. Linnæus, in his Fl. Laponica, calls it, Alopecurus ariſtis gluma longioribus; and a variety of it with ſhorter awns, Alopecurus ariſtis glumæ equalibus: this laſt always grows in water.

## PANICUM.

THE calyx of the Panicum is an involucrum, conſiſting of ſeveral leaves, and containing only a ſingle flower: the leaves are capillary, and unequal in their inſertion. The glume contains only a ſingle flower: it is compoſed of three valves; they are all of an ovato-acuminated figure, and the third is ſmaller than the reſt, and placed behind one of the others. The corolla conſiſts of two valves of an ovato-acuminated figure, one ſmaller and flatter than the other. The ſtamina are three ſhort capillary filaments; the antheræ are oblong. The germen is roundiſh; the ſtyles are two in number, and capillary. The ſtigmata are plumoſe: the corolla ſupplies the place of a pericarpium, adhering firmly every way to the ſeed, which is ſingle, roundiſh, and flat on one ſide.

This genus comprehends the Panicea of Scheukzer. The flat valve of the corolla is, in ſome of the ſpecies, terminated by an ariſta; and there is one ſpecies that has no involucrum.

1. *Panicum*

1. *Panicum floribus conglomerato-ſpicatis, levibus, ariſtæ dimidio brevioribus.*

*The conglomerate-ſpiked Panic, with flowers not half ſo long as the ariſtæ.*

The root of this ſpecies is compoſed of a great tuft of fibres, white, thin, branched, and penetrating every way into the ground, whence it is not eaſy to get them up. From theſe riſe a cluſter of ſhort, graſſy leaves, harſh to the touch, and of a whitiſh-green colour; and among theſe ſeveral ſtalks, round, jointed, of a pale green colour, and ſeldom exceeding five or ſix inches in height, often not above three or four. Every ſtalk has two or three joints, and at it's bottom is often procumbent, and takes root at thoſe which touch the ground. The ſeveral joints have each their ſingle, ſhort, narrow, and pointed leaf, of a pale greyiſh-green colour, and ſurrounding the ſtalk at the baſe. The top of the ſtalk is terminated by a ſpike, ſhort and thick, of a browniſh, or reddiſh, colour, rough to the touch, covered with prickly awns and even, ſticking to people's cloaths, who come in the way of it.

This ſpecies is common with us in damp paſtures. C. Bauhine calls it, Gramen panicum ſpica aſpera. Tournefort, Panicum ſpica ſimplici et aſpera; and Van Royen, Panicum ſpica compoſita ariſtis ſpica longioribus.

2. *Panicum ſpicis alternis, remotis, declinatis, compoſitis.*

*The compound, declinated, alternate, and remote-ſpiked Panic.*

The root of this ſpecies is a tuft of conſiderably large, white fibres, which ſpread every way in the earth, and fix themſelves very firmly there: there riſe from this a cluſter of leaves, long, narrow, and of a pale green colour; among theſe riſes a ſtalk, or ſometimes ſeveral, of three, four, or even five feet in height, ſmooth, round, green, jointed, and hollow; at every joint of this ſtalk ſtands a leaf, which ſurrounds it a long way at it's baſe, and afterwards extends to ſix or eight inches in length, and is of a pale green colour, and pointed at the extremity. At the top of the ſtalk ſtands a large cluſter of ſpikes, in the whole four or five inches in length, of a reddiſh, or blackiſh, colour, and formed of a number of ſhort ſpikes, placed very cloſe to one another. This ſpecies varies, ſometimes having ariſtæ on the ſpikes, ſometimes not. C. Bauhine has unneceſſarily made two ſpecies of it, from this variation.

It is frequent in damp places, and about the ſides of ponds and rivers, in England, and moſt other parts of Europe. C. Bauhine calls it, Gramen Paniceum ſpica diviſa. Tournefort, Panicum vulgare ſpica multiplici aſperiuſcula, and Spica multiplici longis ariſtis circumvallata.

3. *Panicum panicula laxa, flaccida, foliorum vaginis pubeſcentibus.*

*The lax and flaccid panicled Panic, with the vaginæ of the leaves hoary.* **Millet.**

This, though the plant which produces the common Millet, is properly, according to all it's characters, of the Panic kind; it's root conſiſts of a number of large and thick fibres. The plant riſes to two, three, or more feet in height: it's ſtalk is round, jointed, and hollow; the joints ſtand very cloſe to one another. The leaves are a foot, or more, in length, and an inch broad: they are hairy, all over, but principally in that part where they ſurround the ſtalk: they are ſtriated, and ſomewhat rigid. At the top of the ſtalk ſtands a large lax panicle, hanging in great part downward. It is of a dark blackiſh colour, and the pedicles are very long and ſlender.

This is known in many parts of Europe for the uſe of the table; it loves a light, rich ſoil. C. Bauhine calls it, Milium ſemine luteo; and deſcribes three other of it's varieties with a white, a black, and a yellowiſh red ſeed, under the name of ſo many different ſpecies.

4. *Panicum*

4. *Panicum ſpica compoſita ariſtis floſculo brevioribus.* Panic.
*The compoſit-ſpiked Panic, with awns ſhorter than the flower.*

The root of this ſpecies is compoſed of a cluſter of conſiderably thick fibres, white and ramoſe, and penetrating deep into the ground. The ſtalk riſes to four feet in height; it is round, jointed, hollow, and of a pale green colour; the joints ſwell out conſiderably beyond the reſt of the ſtalk, and ſtand pretty frequent. There are often ſix or eight of them on the ſtalk; at each of theſe ſtands a ſingle leaf, which ſurrounds it for two inches, or more, at the baſe, and then grows from it long, and three quarters of an inch in breadth, pointed at the end, and of a freſh and agreeable green colour. At the top of the ſtalk grows a panicle of a foot, or more, in length, but not very broad; it is ſo heavy, and it's peduncles ſo tender and weak, that it uſually bends toward the ground. It is of a gloſſy ſurface, and is ſometimes of a whitiſh, ſometimes of a yellowiſh, ſometimes of a reddiſh, colour, and the ſeed varies in colour in the ſame manner.

This is cultivated in many parts of Germany, and elſewhere; it loves a rich ſoil. It is a native of the Eaſt Indies, but thrives very well with us. Cluſius calls it, Panicum vulgare. C. Bauhine, Panicum Italicum ſive panicula majore.

## MILIUM.

THE calyx of the Milium is a glume compoſed of two valves, and containing only a ſingle flower. The valves are of an ovated figure, and acuminated. The corolla conſiſts of two valves, and is ſmaller than the cup; the valves are oval, and one of them is larger than the other. The ſtamina are three very ſhort capillary filaments; the antheræ are oblong. The germen of the piſtil is roundiſh; the ſtyles are two, and are capillary; the ſtigmata are formed like pencils: the corolla adheres to the ſeed, and ſupplies the office of a pericarpium: the ſeed is ſingle and roundiſh. The Milium differs from the panic, in that it's calyx has only two valves, that of the panic three.

1. *Milium floribus diſperſis.* Millet Graſs.
*The ſcattered-flowered Millet.*

The root of this ſpecies is thick, and of a reddiſh colour, and is furniſhed with a great number of fibres. The ſtalk is round, green, jointed, and ſmooth, and riſes to three feet in height. The joints ſtand at conſiderable diſtances from one another, and at each there is a leaf which ſurrounds the ſtalk for a great way at the baſe, and, when it leaves the ſtalk, it is half an inch broad, and four or five inches long. At the top of the ſtalk grows a panicle four or five inches long, and as much in diameter; ſometimes conſiderably larger, formed of ſmall flowers, and of a browniſh colour.

This ſpecies is frequent with us in woods, and ſometimes in corn-fields. C. Bauhine calls it, Gramen ſylvaticum panicula miliacea ſparſa. Lobel, Miliaceum gramen; and Linnæus, in his Hort. Cliff. Milium glumis dyphyllis.

## AGROSTIS.

THE calyx of the Agroſtis is a glume, conſiſting of two valves, and incloſing a ſingle flower; it is of an acuminated figure. The corolla is alſo of an acuminated figure, and compoſed of two valves: it is ſcarce ſo long as the cup, and one of the valves is larger than the other, and ariſtated. The ſtamina are three capillary filaments, longer than the corolla; the antheræ are furcated. The germen is roundiſh; the ſtyles are two in number; they are reflex and hairy, and the ſtigmata are like them. The corolla ſerves in the place of a pericarpium; it ſurrounds, and every way incloſes, the ſeed, which is ſingle, roundiſh, and pointed at each end.

1. *Agroſtis*

1. *Agroſtis petalo exteriore ariſtam rectam, ſtrictam, longiſſimam exſerente.*
*The Agroſtis, with an extreamly long and fine ariſta, growing from the exterior petal.*

The root of this ſpecies conſiſts of a number of long, whitiſh, crooked, and divaricated fibres. The ſtalk riſes to three or four feet in height; it is naturally of a yellowiſh-green colour, but often reddiſh. It is round, hollow, and jointed in two or three places. At every joint there ſtands a ſingle leaf, which ſurrounds the ſtalk a long way, and, when it leaves it, hangs down to a foot in length; it is narrow, and of a pale green colour; at the top of the ſtalk ſtands a panicle a foot, or more, in length, compoſed of very gloſſy flowers, uſually brown, ſometimes yellow, ſometimes of a fine purple. From the root there grow a great cluſter of leaves of a deeper green colour than thoſe on the ſtalks, and a foot and half in length,

This ſpecies is not unfrequent with us in woods, and ſometimes among corn, or even in meadows. C. Bauhine calls it, Gramen ſegetum altiſſimum panicula ſparſa. J. Bauhine, Gramen capillatum.

2. *Agroſtis panicula oblonga, petalo exteriori baſi villoſo, ariſta torta calyce longiore.*
*The oblong, panicled Agroſtis, with the exterior petal hairy at the baſe, and with a crooked, long awn.*

The root of this ſpecies conſiſts of a cluſter of white fibres, very long, and ſpreading under the ſurface. From theſe riſe a number of leaves a foot and half in length, and about half an inch in diameter, thin, and of a deep green colour. Among theſe riſe ſeveral ſtalks; they grow to four or five feet high, and are round, hollow, tender, and have three or four joints. At every joint there ſtands a ſingle leaf, which, at the baſe, ſurrounds the ſtalk for a great way, and, when it leaves it, is half an inch broad, and grows to eight or ten inches in length; at the top of the ſtalk ſtands a long and large panicle, contracted into the form of a ſpike, of a brown, or purpliſh-white, colour, and very gloſſy. From the middle of the back of the exterior petal, there riſes a fine crooked or twiſted awn, which is ſomewhat longer than the calyx.

This ſpecies is common in many parts of Europe, but leſs ſo in England than elſewhere. I have met with it in ſome of the woods in Leiceſterſhire. Scheukzer calls it, Gramen avenaceum montanum panicula anguſta et dilutiſſima, fuſco-albicante et pappoſa.

3. *Agroſtis culmo repente foliis radicalibus breviore, folii ſupremi vagina ventricoſa.*
*The creeping-ſtalked Agroſtis, with leaves longer than the ſtalks, and with a bellied vagina.*

The root of this ſpecies is compoſed of a cluſter of moderately large fibres. From this grow a great number of leaves a foot and half in length, not half an inch broad, and of a gloſſy green colour. Among theſe riſe a great number of ſtalks, round, hollow, jointed, and not more than eight or ten inches in height. Each ſtalk has two or three joints, and at every joint there ſtands a ſingle leaf, the baſe of which ſurrounds the ſtalk, and which is about three inches long, after it leaves it. The one or two under leaves form ſimple vaginæ round the ſtalk, like the other graſſes; but the upper one is not a ſimple, but an inflated, vagina, ſwelling out into a kind of belly; this is uſually of a whitiſh green, ſometimes purpliſh. At the top of the ſtalk ſtands a ſhort and ſoft ſpike, of a greeniſh colour, and ſoft to the touch.

This ſpecies is very frequent in moſt parts of Europe, but leſs ſo in England than elſewhere. I have found it, in ſome plenty, at the ſide of Waſhingley wood. Scheukzer calls it, Gramen caninum ſupinum minus. Parkinſon, Gramen caninum ſupinum arvenſe.

## LAGURUS.

THE calyx of the Lagurus is a glume, containing a ſingle flower, and conſiſting of two valves of an oblong, linear figure, compreſſed, very thin, patulous, and each terminating in a briſtle, pennated with ſeveral fine hairs. The corolla is alſo a bivalve glume; it is thicker than the cup: the exterior valve is long, and terminates in two ariſtæ, which are ſmall and ſtrait. The back of the ſame valve alſo ſends out from it's middle a third ariſta, of a reflex, twiſted figure: the interior valve is ſmall and acuminated.

The ſtamina are three capillary filaments; the antheræ are oblong. The germen of the piſtil is turbinated; the ſtyles are two in number, and ſetaceous: the ſtigmata are villoſe: the corolla ſerves the office of a pericarpium, and incloſes the ſeed, which is ſingle, oblong, and ariſtated. This genus comprehends the Alopecuroidea of Scheukzer.

### *Lagurus ſpica ovata.*
### *The oval-ſpiked Lagurus.*

The root of this ſpecies is compoſed of a great many fine white fibres. From this grow a number of leaves, four or five inches long, a third of an inch broad, and of a pale green colour: among theſe riſe the ſtalks, three, four, or more, from the ſame root; they grow to two feet, or more, in height, and are round, jointed, and hollow. At every joint there ſtands a ſingle leaf, ſurrounding the ſtalk with it's baſe, and growing three or four inches long from it; theſe, as well as the leaves, riſing immediately from the root, are very ſoft to the touch, and are covered with fine ſhort hairs. At the top of every ſtalk ſtands a ſingle ſpike, of about two inches long, and ſo thick, that it looks almoſt roundiſh. It is of a greyiſh-green colour, and furniſhed with a great number of ariſtæ, which ſtand a little way out from it.

This ſpecies is common in Italy and Germany, but is not a native of England. C. Bauhine calls it, Gramen alopecuroides ſpica rotundiore.

## DACTYLIS.

THE calyx of the Dactylis is of a roundiſh figure, obtuſe, and larger than the flower. It contains ſometimes only one flower, ſometimes two, and is formed of two valves, equal in ſize, but the exterior one ſomewhat bellied. The corolla is an obtuſe glume, compoſed of two valves, and covered by the calyx: the exterior valve is broader, and more bellied than the interior one, which is ſmaller and flatter. The ſtamina are three capillary filaments, of the length of the corolla: the antheræ are bifurcated. The germen of the piſtil is of a turbinated form; the ſtyles are two; they are capillary and patent: the ſtigmata are plumoſe. There is no pericarpium: the calyx and corolla both ſurround the ſeed, and at a proper time let it out. It is ſingle, roundiſh, depreſſed on one ſide, and convex on the other.

Some of the ſpecies of this genus have one flower in each glume, ſome two.

### 1. *Dactylis ſpicis numeroſis alteris patentibus, calycibus unifloris.*
### *The numerous, alternate-ſpiked Dactylis, with uniflorous cups.*

The root is a congeries of white and tough fibres: the leaves are long, narrow, thin, and of a bright green; the ſtalk is round, jointed, and tall; the top of it ſuſtains a long and large panicle, compoſed of a number of alternate ſpikes of a whitiſh, or greyiſh, green, conſiderably thick and naked. It is a native of Jamaica and New Spain. Sir Hans Sloane calls it, Gramen Dactylon majus panicula longa, ſpicis plurimis nudis craſſis.

The other ſpecies are, 1. The four-ſpiked Dactylis of Barbadoes. 2. The Dactylis, with two narrow, linear ſpikes, terminating the ſtalk. 3. The Dactylis, with numerous alternate ſpikes cloſe to the ſtalks.

## TRIANDRIA DIGYNIA.

### *Diviſion the Second.*

### *Such as have a number of flowers contained in every calyx.*

## MELICA.

THE calyx of the Melica is a glume, compoſed of two valves, and containing two flowers. The valves are of an oval figure, hollow, and nearly equal in ſize. The corolla is compoſed alſo of two valves; they are of an oval figure, not ariſtated, and one of them is hollow, the other flat. The ſtamina are three capillary filaments, of the length of the flower: the antheræ are oblong, and bifurcated at each end. The germen is of an ovato-turbinated figure: the ſtyles are two; they are ſetaceous and patent: the ſtigmata are oblong and villoſe. There is no pericarpium; the corolla includes the ſeed, which is ſingle, and of an oval figure, and, when mature, lets it fall out.

### *Melica floribus ſub culmo pendulis.*
### *The Melica, with flowers pendulous under the ſtalks.*

The root of this ſpecies is long, ſlender, and creeping; it runs a long way under the ſurface of the earth, and in it's progreſs ſends out a number of fibres. The ſtalk riſes ſingle, to the height of a foot, or more: it is very ſlender, round, hollow, jointed, and of a purple colour toward the bottom, green every-where elſe. At every joint there ſtands a ſingle leaf, which incloſes the ſtalk in a kind of vagina at the baſe, and grows from it to the length of three, four, or five inches; there are uſually three ſuch leaves on a ſtalk; a few leaves riſe alſo immediately from the root, and are ſhorter than thoſe of the ſtalk; both are very narrow. The ſtalk terminates in a kind of ſpike, very ſlender, and of a purpliſh colour, formed of a ſeries of flowers, all hanging on one ſide. It uſually ſtoops a little at the top, and the flowers ſtand ſingly on very ſlender peduncles.

This ſpecies is frequent in the woods in many parts of Europe; we have it in England, but it is more rare with us. I have met with it in Waſhingley-wood in Huntingtonſhire. C. Bauhine calls it, Gramen avenaceum locuſtis rubris montanum.

## AIRA.

THE calyx of the Aira is a glume, formed of two valves, equal in ſize, of an ovato-lanceolated figure, and acuminated; it contains two flowers. The corolla is compoſed of two valves, extreamly reſembling thoſe of the cup; one of theſe often produces an ariſta, near twice as long as the flower. The ſtamina are three capillary filaments, of the length of the flower: the antheræ are oblong, and furcated at each end. The germen of the piſtil is oval; the ſtyles are two; they are ſetaceous and patent. The ſtigmata are hoary: the corolla ſerves the office of a pericarpium, and incloſes the ſeed, which is ſingle, and of an oval figure. There are ſome ſpecies of this genus, in which male flowers are mixed with theſe hermaphrodite ones, under the ſame common cup; in this caſe the male flower produces an ariſta, the female does not.

### 1. *Aira panicula rara, calycibus albis.*
### *The open panicled Aira, with white cups.*

The root of this ſpecies conſiſts of a multitude of thin and long blackiſh fibres. From this grow four, five, or more, leaves, a foot long, and ſcarce a tenth of an inch broad, of a deep green colour, and covered with a few ſcattered white hairs. Among theſe riſes a ſtalk a foot and half high, and very ſlender, ſo as ſcarce to be able to ſupport itſelf; on the ſummit of this ſtalk ſtands a looſe, open panicle, compoſed of a few flowers, the cups of which diſtinguiſh themſelves, at a diſtance, by their fine white colour.

This

This ſpecies is frequent in ſome parts of Europe, but we have it not in England. C. Bauhine calls it, Gramen nemoroſum paniculis albis, capillaceo folio; and Scheukzer, Gramen Alpinum nemoroſum paniculatum, foliis anguſtiſſimis locuſtis ſplendentibus ariſtatis.

2. *Aira panicula rara, calycibus fuſcis.*
*The looſe-panicled Aira, with brown cups.*

The root of this ſpecies is compoſed of a multitude of ſmall white fibres; from this grow a cluſter of twenty, or more, leaves, five or ſix inches long, extreamly narrow, and ſomewhat rounded; among theſe riſe three or four ſtalks; they are very ſlender, and grow to five, ſix, or eight inches high; on every ſtalk there ſtand two, three, or four leaves, very narrow, and of a duſky green; and at the top a looſe panicle, compoſed of ſmall ſhining cups, of a purpliſh colour toward the baſe, and paler in the other parts, and collected together in form of a ſpike.

This is found in the woods in Germany, but it is not common in England. Scheuckzer calls it, Gramen avenaceum paniculatum Alpinum, foliis capillaceis brevibus locuſtis purpuro-argenteis, ſplendentibus, et ariſtatis.

3. *Aira foliis pubeſcentibus, panicula contracta, floſculo hermophrodito mutico, maſculo ariſta uncinata calyce breviore.*
*The ſoft, hoary-leaved Aira, with male flowers armed with ſhort ariſtæ, and female without any.*

The root of this ſpecies is compoſed of a number of large white fibres, which ſpread themſelves every way under the ſurface. From this grow ſix or eight leaves, ſix inches, or more, in length, about a third of an inch in breadth, very ſoft to the touch, and covered with a fine, ſhort, ſoft hoarineſs. Among theſe riſes a ſtalk of a foot and half, or more, in height; round, hollow, ſlender, and jointed: at every joint ſtands a ſingle leaf, which ſurrounds the ſtalk at it's baſe, and grows from it to four or five inches in length: both the ſtalk itſelf, and theſe leaves, are covered with the ſame white, hoary matter, with the lower leaves. At the top ſtands a panicle of a whitiſh, or pale reddiſh, colour, an inch and half long, and half an inch in diameter, ſoft to the touch, like the reſt of the plant.

This ſpecies is extreamly common with us every-where, in meadows and paſtures. Dalechampe calls it, Gramen lanatum. C. Bauhine, Gramen pratenſe paniculatum molle; and Van Royen, Aira floſculo maſculo ariſtato, fœminino mutico.

## POA.

THE calyx of the Poa is a glume, containing ſeveral flowers, arranged into a double or diſtichous ſpike, of an oblong, oval figure. It is formed of two valves, of an ovato-acuminated figure, and without awns. The corolla is compoſed of two valves, of an ovato-acuminated figure, hollow, compreſſed, and ſomewhat longer than the cup, and without awns. The ſtamina are three capillary filaments; the antheræ are bifurcated. The germen of the piſtil is roundiſh: the ſtyles are two; they are reflex and hairy, as are alſo the ſtigmata. The corolla ſupplies the place of a pericarpium; it adheres every way to the ſeed, which is ſingle, of an oblong figure, compreſſed, and pointed at each end.

1. *Poa panicula diffuſa, ſpiculis triſloris glabris, culmo erecto tereti.* Great Meadow Graſs.
*The erect Poa, with ſmooth, diffuſe, triflorous ſpiculæ.*

The root of this ſpecies conſiſts of a great number of capillary, whitiſh fibres, variouſly entangled one with another; from theſe ariſe a large cluſter of leaves, ſix or eight inches long, and a quarter of an inch broad. The ſtalk riſes from the midſt of theſe; it grows to about a foot and half in height, and is ſmooth, green, hollow, and jointed in three or four places. At every joint ſtands a leaf, whoſe baſe makes a vagina, ſurrounding

ſurrounding the ſtalk for three inches, ſometimes much leſs. From this it grows to three or four inches long, and is of the ſame breadth with the radical leaves, and pointed at the end. At the top of the ſtalk ſtands a panicle, diffuſed every way, but not drooping; it is two inches, or more, in length, an inch and half in diameter, and of a pale green colour. The panicle often has eight pair of peduncles, each ſupporting ſeveral flowers.

This ſpecies is extreamly common in our meadows. Theophraſtus calls it, Poa. C. Bauhine, and others, Gramen pratenſe paniculatum majus latiore folio.

2. *Poa panicula diffuſa, angulis rectis, ſpiculis obtuſis, culmo obliquo compreſſo.* Common Meadow Graſs.

*The diffuſe-panicled Poa, with an oblique, compreſſed ſtalk.*

This is the moſt common of all the graſſes with us, and makes principally the green covering of moſt of our fields and meadows. It's root is compoſed of a multitude of long, ſlender fibres, which penetrate deep into the earth, and uſually grow together in vaſt tufts; from theſe ariſe leaves long, narrow, and of a beautiful green, in vaſt numbers. The ſtalks riſe among theſe, and are ſcarce erect, uſually oblique; they are ſix or eight inches long, of a whitiſh colour, round and jointed, and have ſhort, diffuſe panicles, of a whitiſh colour, on their extremities.

This ſpecies is called by Ray, Gramen pratenſe minus et vulgatiſſimum. C. Bauhine calls it, Gramen pratenſe paniculatum minus.

## BRIZA.

THE calyx of the Briza is a bivalve glume, patent, and containing ſeveral flowers, which are arranged into a diſtichous ſpike, of a cordated figure. The two valves are cordated, hollow, and equal: the corolla is compoſed of two valves. The lower valve is of the ſize and ſhape of the cup: the upper valve is ſmall, plane, and roundiſh, and ſhuts up the hollow of the other. The ſtamina are three capillary filaments; the antheræ are oblong. The germen of the piſtil is roundiſh; the ſtyles are two; they are capillary and crooked: the ſtigmata are plumoſe. The corolla ſerves in the place of a pericarpium, incloſing the ſeed, and, when ripe, dropping it out. The ſeed is ſingle, very ſmall, roundiſh, and compreſſed.

This genus comprehends the Tremula of Scheukzer, and the Phalaroides of others.

1. *Briza ſpiculis ovatis, calyce floſculis breviore.* Common Quaking Graſs.

*The Briza, with ſhort ſpiculæ, and the cup ſhorter than the flower.*

The root of this ſpecies is compoſed of a few ſhort, greyiſh, or browniſh, fibres. From this riſes a cluſter of ten or twelve little leaves; they are three inches long, and moderately broad; among theſe riſes up ſometimes a ſingle ſtalk, but more uſually there are two, three, or more. The plant grows to eight or ten inches high; the ſtalk is round, and commonly has two joints; at each of theſe ſtands a ſingle leaf, which ſurrounds it, in manner of a vagina, for a long way at it's baſe, and from this grows looſe to the length of an inch or two, and is narrow, rigid, and pointed. The top of the ſtalk is furniſhed with a number of large and beautiful glumes, ſupported on long and extreamly ſlender peduncles, ſo that the leaſt breath of air ſets them a trembling. They are at firſt of a greeniſh, afterwards often of a browniſh-red, colour.

This ſpecies is common in our meadows and paſtures. C. Bauhine calls it, Gramen tremulum majus. J. Bauhine, Gramen tremulum. Moriſon, Gramen tremulum vulgare locuſtis rotundioribus.

This is the graſs, the piſtil of which is deſcribed in the Philoſophical Tranſactions, under the name of a plant in Semine. It's germen is called the bulbous root of the plant. The author of the paper is Mr Baker.

2. *Briza panicula ſpicata, ſpicis lanceolatis.* Love Graſs.
*The ſpike-panicled Briza, with lanceolated ſpikes.*

The root of this beautiful graſs is formed of a number of ſmall fibres, connected at the top into a kind of head: from this ariſe eight or ten leaves, which are four inches, or more, in length, and about a fifth of an inch broad, and of a whitiſh-green colour. In the midſt of theſe riſes the ſtalk; it grows to be a foot high, and is moderately thick, and uſually has two joints: at each joint is a leaf, the baſe of which makes a kind of vagina, ſurrounding the ſtalk, and from this part it grows looſe to an inch or two only in length, and is narrower than the radical leaves. At the top of the ſtalk ſtand a number of glumes, extreamly beautiful, three quarters of an inch long, and of a bright white colour. They reſemble the glumes of the common gramen tremulum in ſhape, but they are affixed to conſiderably ſtrong and rigid ſtalks, not ſuch tender ones as they are.

This ſpecies is not unfrequent in France, Germany, and Italy, but we have it not in England. C. Bauhine calls it, Gramen paniculis elegantiſſimis ſive eragroſtis major.

## UNIOLA.

THE calyx of the Uniola contains ſeveral flowers, and is compoſed of ſix valves laid together in a diſtichous, imbricated manner. They are ſubulated, or nearly of that figure, compreſſed, navicular, and carinulated; one of them ſhuts the other, and the laſt pair contains a ſpike of an oval, ſomewhat compreſſed figure, with an acute edge, and containing ſeveral flowers. The corolla is a bivalve glume: the valves are of a lanceolato-compreſſed figure, like thoſe of the cup, and the inner valve appears ſomewhat higher than the outer one. The ſtamina are three capillary filaments: the antheræ are oblong and linear. The germen is conic; the ſtyles are two, erect and ſimple; the ſtigmata are hoary. The corolla performs the office of a pericarpium, incloſing the ſeed, which is ſingle, and of an ovated, oblong figure.

Of this genus there is but one known ſpecies; it is ſufficiently diſtinguiſhed by it's characters, and needs no farther deſcription. Plukenet has figured it, T. 32. f. 6.

## CYNOSURUS.

THE calyx of the Cynoſurus is a partial involucrum, large, triphyllous, and lateral: the foliole pennated and permanent.

The glume is formed of two valves, and contains ſeveral flowers. The valves are equal, linear, and acuminated. The corolla conſiſts of two valves; the exterior is the longer, and is hollowed and ariſtated; the interior is ſhorter, plane, and has no ariſta. The ſtamina are three capillary filaments; the antheræ are oblong; the germen is turbinated; the ſtyles are two in number, villous and reflex; the ſtigmata are ſimple. The corolla ſerves the office of a perianthium, ſurrounding and covering the ſeed, which is ſingle, of an oblong figure, and pointed at each end.

1. *Cynoſurus bracteis pinnatifidis.* Creſted Graſs.
*The Cynoſure, with pinnatifid bracteæ.*

The root of this ſpecies conſiſts of a great number of ſlender, white fibres, collected into a head, and diſperſing themſelves every way into the earth. From this riſes a cluſter of ſmall leaves, not more than two or three inches long, and very narrow; in the midſt of theſe riſes a ſtalk of two feet high, very ſlender, and jointed; at every joint ſtands a leaf, which, after it has ſurrounded the ſtalk for ſome inches in form of a vagina, grows to two or three inches in length from it, and is very narrow and pointed. The ſtalk is terminated by a ſpike of flowers of a peculiar figure; it is formed of two ſeries of criſtated and fimbriated glumes, turning the ſame way; it is an inch and a half in length, and about a fifth of an inch in thickneſs; it's colour is a browniſh-green.

This ſpecies is frequent in our meadows and paſtures. C. Bauhine calls it, Gramen criſtatum ſive ſpica criſtata lævi. J. Bauhine, Gramen criſtatum. Parkinſon, Gramen criſtatum

criſtatum Anglicum. A variety of this is deſcribed by C. Bauhine, alſo, under the name of a different ſpecies, with a hairy ſpike.

2. *Cynoſurus ſpicis quaternis terminatricibus horizontalibus.* Cock's-
*The Cynoſure with four horizontal, terminatory ſpikes.* Foot Graſs.

The root of this ſpecies is white, creeping, and of a ſweet taſte: from this riſe, at two different ſeaſons of the year, two kinds of ſtalks and leaves. In the ſpring it produces a number of long, flexile, jointed ſtalks, which trail upon the ground, and take root at the knots; from theſe joints, oppoſite to the roots, there riſe cluſters of ſhort, hairy leaves, ſurrounding one another: in the ſummer it produces other ſtalks, which are erect, and grow to a foot high; theſe are ſlender, jointed, and have, at every joint, a ſingle leaf, ſurrounding the ſtalk at it's baſe, and afterwards hairy, but ſhort and narrow. The top of the ſtalk is terminated by a number of ſpikes, uſually four, ſometimes five or ſix; they are ſhort, narrow, and imbricated.

This ſpecies is extremely common in France, Italy, and Spain, but it is not a native of England. C. Bauhine calls it, Gramen dactylon folio arundinaceo majus.

3. *Cynoſurus panicula ſecunda glomerata.* Hard Mea-
*The glomerated-panicled Cynoſurus.* dow Graſs.

The root of this ſpecies is compoſed of a few thick, white fibres: from this riſe ſix or eight leaves, of a pale greyiſh-green, five inches long, a fifth of an inch broad, and very rough to the touch. Among theſe riſes a ſtalk, a foot and a half high, round, jointed, moderately thick, and furniſhed with a leaf at every joint, like the radical leaves, but ſhorter, very rough to the touch, and embracing the ſtalk at it's baſe, in form of a vagina. The top of the ſtalk ſupports a panicle, formed of three parts, conglomerated at top, and alſo harſh to the touch, an inch and a half long, and of a browniſh, or reddiſh, colour.

This ſpecies is very frequent in our meadows, and diſcovers itſelf to the touch by it's roughneſs. C. Bauhine calls it, Gramen ſpicatum folio aſpero; Læſelius, Gramen pratenſe ſpica compacta divulſa.

## BROMUS.

THE calyx of the Bromus is a bivalve, patent glume, containing ſeveral flowers, collected into an oblong, oval ſpike. The valves are of an ovato-oblong figure, pointed, but without awns, and the under one is ſmaller than the other. The corolla conſiſts of two valves; the lower one is the larger; it is of the ſize and figure of the cup, hollow, obtuſe, and, below it's point, it emits a ſtrait ariſta; above the inſertion of this ariſta it is bifid: the upper valve is ſmall, of a lanceolated figure, and has no ariſta: the ſtamina are three capillary filaments, ſhorter than the flower: the antheræ are oblong: the germen of the piſtil is turbinated: the ſtyles are two; they are ſhort, reflex, and villoſe: the ſtigmata are ſimple: the corolla ſerves the office of a pericarpium; it ſhuts cloſe over the ſeed, and covers it every way. The ſeed is ſingle and oblong, convex on the one ſide, and hollowed on the other.

This genus comprehends the Feſtuca of Scheuchzer, and the Ægilops of Dillenius.

1. *Bromus panicula nutante, ſpiculis ovato-oblongis.* Tall Oat
*The bending-panicled Bromus, with ovato-oblong ſpikes.* Graſs.

The root of this ſpecies is compoſed of a great number of ſlender, white fibres, variouſly interwoven with one another. From this ariſe twenty or thirty leaves, each five or ſix inches long, and more than a quarter of an inch broad: they are of a pale green, and hairy at the edges. In the midſt of theſe is a ſtalk, and, as this grows up, the radical leaves wither: this ſtalk is, when full grown, two or three feet high, very ſlender, and jointed in five or ſix places; theſe joints have each a leaf, ſurrounding the ſtalk at it's baſe, and growing to four or five inches in length from it, ſomewhat broad, and pointed at the end. At the top ſtands a large, diffuſe panicle, the ſeveral parts of which hang on long, and very ſlender, filaments. C. Bauhine calls this, Feſtuca avenacea ſterilis elatior; J. Bauhine, Ægilops forte Matthioli.

2. *Bromus*

2. *Bromus panicula diffusa, spiculis teretibus.* Bush Oat
*The diffuse-panicled Bromus, with rounded spikes.* Grass.

The root of this species is composed of a great number of white, and somewhat thick, fibres. From this rise eight or ten leaves, a foot, or more, in length, and about a third of an inch in breadth; these wither, soon after the stalk appears. The stalk grows to three feet, or more, in height, and has usually four joints, with a single leaf at each, surrounding them at the base, in the manner of the vagina: while they surround the stalk, they are striated, and hairy; afterwards, they are almost smooth, and grow to a foot in length. The top of the stalk is terminated by a a diffuse panicle, composed of small, rounded spikes, hung on very long pedicles. The leaves are of a pale yellowish-green, the panicle of a pale-brown. Ray calls this species, Gramen avenaceum dumetorum panicula sparsa; C. Bauhine, Festuca graminea latifolia mollis.

3. *Bromus paniculæ ramis conjugato-binatis.*
*The Bromus, with conjugate-double branches in the panicle.*

The root of this species is a tuft of white fibres: from this rise six or eight leaves, eight inches long, a third of an inch broad, and striated; among these rises the stalk: it grows to a foot and a half high, and has four or five joints, at each of which there stands a single leaf: this is a foot long, and more than a third of an inch broad; it surrounds the stalk at the base, and is not at all hairy. At the top of the stalk stands a lax panicle, composed of conjugate, little spikes, with very long and capillary aristæ.

This species is found about London. Ray calls it, Gramen avenaceum glabrum panicula e spicis raris, strigosis, composita, aristis tenuissimis.

## FESTUCA.

THE calyx of the Festuca is a glume, containing several flowers. It is composed of two valves, and is erect, and the flowers are arranged in it in a slender spike: the valves are of an oblong linear figure, acuminated, and without awns; the lower valve is smaller than the upper: the corolla consists also of two valves; the lower valve is the larger, and of the shape of the cup, and somewhat exceeds it in size; it is of a kind of cylindric figure, but pointed at the end, and is terminated by a strait arista, or awn. The stamina are three capillary filaments, shorter than the flower. The antheræ are oblong; the germen of the pistil is turbinated: the styles are two in number, short and reflex: the stigmata are simple; the corolla serves in the place of a pericarpium, surrounding and including the seed: the seed is single, of an oblong figure, very thin, very sharp-pointed at each end, and marked with a longitudinal furrow.

This genus comprehends the Festuca of Dillenius, and the Bromoides of Scheukzer; it is very nearly allied to the last; the terminatory arista is the great distinction.

1. *Festuca panicula spicata, nutante, calycibus minutissimis muticis, floribus scabris.* Capon's-Tail
*The spike-panicled Festuca, with a bending head, and scabrous flowers.* Grass.

The root of this species consists of a number of small, reddish fibres. From these arises a cluster of small leaves, two or three inches in length, very narrow, pointed at the ends, and usually of a reddish, or brownish, colour: among these rise two or three stalks from each root; they are six or eight inches long, very slender, and jointed: at every joint stands a single leaf, surrounding the stalk at it's base, narrow, short, and pointed; on the top of every stalk there stands a panicle, in form of a spike, six inches long, not half an inch broad, and bending with it's own weight: this is of a green, or brownish, colour.

The plant is common on old walls, and flowers in June and July. Ray calls it, Gramen murorum spica longissima; others, Gramen alectruonurus.

*2. Feſtuca panicula erecta, ſpiculis ſubovatis muticis, calyce floſculis majore. The erect-panicled Feſtuca, with ſubovate ſpikes, and the cups larger than the flowers.*

The root of this ſpecies is compoſed of a few fibres: the leaves, which riſe immediately from it, are ſhort, ſomewhat broad, and hairy. The ſtalks are a foot long, often leſs; they are very weak, and do not ſtand erect, but uſually bend to the ground: they have three or four joints, and at each joint a ſingle ſhort leaf, incompaſſing the ſtalk at the baſe. At the top ſtands a ſmall panicle, formed of oval, turgid, little ſpikes, and thoſe ſupported on rigid, and not very long, pedicles, ſo that they ſtand firm and erect.

This ſpecies is very frequent, in our meadows and paſtures, in June. Ray calls it, Gramen avenaceum parvum, procumbens paniculis non ariſtatis; Scheuckzer, Gramen avenaceum montanum locuſtis muticis tumentibus piloſum.

3. *Feſtuca ſpiculis viviparis.* Proliferous Oat Graſs.
*The Feſtuca with viviparous ſpikes.*

The root of this ſpecies conſiſts only of three or four ſhort white fibres; from this riſe ten or twelve leaves, very narrow, ſharp-pointed, and about four inches in length: among theſe there comes up a ſtalk, which grows to about ten inches high; it has three or four joints, and, at each, a ſhort, pointed leaf, ſurrounding the ſtalk at the baſe; at the top ſtands a ſhort panicle, ſlender, and reſembling a ſpike. It is about an inch and a half long, a third of an inch in diameter, and, before the ſeeds are ripe in it, there grow blades of graſs, or young plants, from almoſt every flower.

This is frequent on the Welch mountains; I alſo found it in Mr Apreece's park at Waſhingley. Ray calls it, Gramen ſpicatum montanum, ſpica foliacea graminea; Scheuckzer, Gramen ſparteum Alpinum, panicula ſpadiceo viridi uno plerumque verſu diſpoſita.

## AVENA.

THE calyx of the Avena is a glume, compoſed of two valves, and containing ſeveral flowers, arranged laxly together; the valves are lanceolated, acute, and bellied, large, and without awns. The corolla conſiſts of two valves; the lower valve is of the ſize of the cup, and harder, rounded, bellied, and pointed at each extremity; and, from it's back, there grows a ſingle, crooked, and, as it were, jointed, contorted, ariſta or awn. The nectaria are two; they are of an ovated, lanceolate figure, and grow on the upper ſide of the germen. The ſtamina are three capillary filaments: the antheræ are oblong and bifurcated: the germen of the piſtil is obtuſe: the ſtyles are two, reflex and hairy: the ſtigmata are ſimple: the corolla ſerves in the office of a pericarpium, ſurrounding and incloſing the ſeed, which is ſingle, of an oblong figure, very ſharp-pointed at each end, and has a longitudinal furrow.

The flowers in the cup are ſometimes two, ſometimes more, and there is one ſpecies whoſe calyx conſiſts of a ſingle valve. The ariſta at the back of the corolla, which is jointed and intorted, conſtitutes the eſſential character.

This genus comprehends the Avena of Tournefort, &c. and the Avenacea of Scheuckzer, &c.

1. *Avena calycibus diſpermis, ſeminibus lævibus.* Common Oat.
*The Oat, with two ſmooth ſeeds in each calyx.*

The root of this ſpecies conſiſts of a great number of fibres. The ſtalks are round, and four feet high; they have each four or five joints, and have a graſſy leaf or two at the baſe: at every joint there ſtands a ſingle leaf, long and narrow, and forming a vagina round the ſtalk at it's bottom. At the top of the ſtalk ſtands a panicle, ſomewhat like that of the common reed, the flowers ſtanding on long pedicles.

This ſpecies is ſown in fields. C. Bauhine calls it, Avena vulgaris; J. Bauhine, Avena alba: theſe, and ſome other authors, erroneouſly make another ſpecies, from a variety of this, which they call, Avena nigra.

2. *Avena panicula laxa, calycibus triflоris brevibus, floribus omnibus ariſtatis.*
*The lax-panicled Oat, with three flowers in a cup, all of them criſtated.*

The root of this ſpecies conſiſts of a few fibres: the ſtalk riſes to two feet in height, and is ſlender, geniculated, and ſomewhat hairy. The leaves are narrow, five or ſix inches long, and hairy on both ſides. The top of the ſtalk ſupports a ſhort panicle, of a yellowiſh colour, diffuſe, but not bending, it's ſeveral parts being ſupported on very rigid and firm pedicles.

It is common, in our meadows and paſtures, in June. Ray calls it, Gramen avenaceum pratenſe elatius, panicula flaveſcente locuſtis parvis.

3. *Avena calycibus biflоris, floſculo hermaphrodito mutico, maſculo ariſtato.*
*The Avena with two flowers in the calyx, and with ariſtated male flowers, and naked hermaphrodite ones.*

The root of this ſpecies conſiſts of a long ſeries or ſtring of bulbs, or tuberous bodies, laid one over another, and furniſhed with a great number of fibres; the taſte is ſlightly acid: from this ariſe ten or twelve leaves, moderately broad, but not hairy, though rough, if the hand be drawn from the point toward the baſe. The ſtalk riſes to three feet, or more, in height, and has four or five joints, at each of which there ſtands a ſingle leaf, which forms a vagina round it, reaching almoſt up to the next joint; when it ſeparates from this, it is four inches long, and very broad. The top of the ſtalk ſupports a panicle ſix inches long, and diffuſe: the pedicles which ſupport it are ſlender, and the ſpiculæ are often nutant, often all turned to one ſide. The glumes are very beautiful, of a mixt purpliſh and ſilvery white.

We have this ſpecies among corn, and in our fields and hedges. C. Bauhine calls it, Gramen nodoſum avenacea panicula; J. Bauhine, Gramen nodoſum; Gerard, Gramen caninum nodoſum.

## ARUNDO.

THE calyx of the Arundo is a glume, formed of two oblong, acuminated valves, not ariſtated, one longer than the other; it is erect, and contains, in ſome ſpecies, one; in others, ſeveral flowers. The corolla is formed of two valves; they are of the length of the cup, of an oblong, acuminated figure, and have, at their baſe, a lanuginous matter, of the length of the flower. The ſtamina are three capillary filaments: the antheræ are bifurcated at each end: the germen of the piſtil is oblong: the ſtyles are two; they are capillary, reflex, and hairy: the ſtigmata are ſimple: the corolla adheres to the ſeed, and ſerves as a pericarpium: the ſeed is ſingle, oblong, pointed, and downy at the baſe.

1. *Arundo panicula laxa, floſculis quinis.* **Common Reed.**
*The lax-panicled Reed, with five flowers in a cup.*

The root of this ſpecies is creeping; it is long, thick, contorted, and knotty, of a whitiſh colour, with ſome caſt of red; it is very hard and woody, and ſpreads a long way under the ground: it's young ſhoots are ſweet and eſculent. The ſtalk is ſix or ſeven feet high, of the thickneſs of a man's little finger, jointed and hollow: from every joint of the ſtalk grows a ſingle leaf, which ſurrounds it at it's baſe, and grows from it to a foot, or more, in length, and is ſtriated, about two inches in breadth, and rigid to the touch. At the top of the ſtalk ſtands a beautiful, large, diffuſe, purpliſh panicle, which, by degrees, becomes more and more pappoſe, or downy, and of a paler colour, and finally is of a greyiſh-brown. It is compoſed of a multitude of parts, and thoſe affixed to ſlender pedicles, ſo that it plays about in a beautiful manner in the wind.

This ſpecies is common about ponds, ditches, and rivers. Authors call it, Arundo vulgaris, Arundo vallatoria, and Phragmites.

2. *Arundo culmo ramoſo.*
*The branched-ſtalked Arundo.*

The root of this ſpecies is compoſed of a great number of ſhort, but thick, fibres: from this riſe ten or twelve leaves, hard and rigid to the touch, five or ſix inches long, and ſtriated, narrow, and terminating in a ſharp point. In the midſt of theſe riſes a ſtalk, two feet, or more, in height, firm, rigid, and dry; it has about three joints, and at each a leaf, like the radical ones, but ſurrounding the ſtalk a great way at it's baſe. At the top ſtands a panicle, large, diffuſe, and compoſed of long ſpikes, of a purpliſh colour at firſt, but growing downy, white, and ſhining, as they ripen.

This ſpecies is not frequent in England; I met with it, however, in the borders of ſome corn-fields about Waſhingley. C. Bauhine calls it, Gramen arundinaceum panicula ſpadicea molli majus; others, Gramen tomentoſum.

3. *Arundo foliorum lateribus convolutis, acumine pungente.*
*The rounded-leaved Arundo, with pungent points.*

The root of this ſpecies conſiſts of a cluſter of fibres: from this riſe ten or a dozen leaves, a foot and a half in length, and about a third of an inch in breadth at firſt, but their ſides ſoon curl in, and render them very narrow and rounded, but ſharp at the end. Among theſe riſes a ſtalk, ſcarce ſo high as the leaves, and compoſed of two or three joints; at every joint ſtands a leaf, like thoſe at the root, but ſhorter, and ſurrounding the ſtalk a little at the baſe. At the top ſtands a panicle, four inches long, and not half an inch wide, reſembling a ſpike; it is ſmalleſt at the ends, and ſomewhat thickeſt in the middle.

This ſpecies is common on our ſea-coaſts, where it's leaves prick people's legs, and will fetch blood. C. Bauhine calls it, Gramen ſparteum ſpicatum foliis mucronatis longioribus; and Scheukzer, Gramen ſparteum ſpicatum maritimum ſpica longiore.

## LOLIUM.

THE calyx of the Lolium is a glume, containing ſeveral flowers, and conſiſting of a ſingle valve, oblong, linear, acuminated, ſomewhat rigid, and containing the flowers, arranged in diſtichous ſpikes, placed cloſe to the ſtalks. The corolla conſiſts of two valves; the lower is narrow, lanceolated, convoluted, acuminated, and of the length of the cup; the other is ſhort, linear, obtuſe, and hollowed upwards. The ſtamina are three capillary filaments, ſhorter than the flower: the antheræ are oblong: the germen of the piſtil is turbinated: the ſtyles are two, capillary and reflex: the ſtigmata are plumoſe: there is no pericarpium. The corolla incloſes the ſeed, which is ſingle, oblong, compreſſed, convex on one ſide, and plane and ſulcated in the middle on the other.

This genus comprehends the Lolium and Loliacea of Scheuckzer and others. The ſpikes are always ſeſſile, and placed in the ſame plane with the ſtalk, ſo that the ſtalk itſelf performs the office of the oppoſite and deficient valve of the glume.

1. *Lolium ſpicis ariſtatis, radice annua.* White Darnel.
*The ariſtated-ſpiked Lolium, with an annual root.*

The root of this ſpecies conſiſts of a multitude of fibres, with numerous capillaments iſſuing from them. From this riſes a cluſter of leaves, conſiderably long, narrow, and of a ſhining green colour, ſomewhat thick and ſharp at the points: among theſe riſes the ſtalk, which is two or three feet high, much reſembling the ſtalk of wheat, but that it is thinner: it has four or five joints, and, at every joint, a leaf, like thoſe at the bottom, but ſmaller and ſhorter; theſe ſurround the ſtalk from the joint they ariſe at, almoſt to the next, and terminate in a point. The ſtalk terminates in a ſpike of a foot in length, though but very narrow and flat, formed of alternate glumes, on the two oppoſite ſides of the ſtalk.

This ſpecies is very common in our corn-fields. C. Bauhine calls it, Gramen loliaceum ſpica longiore; others, Lolium vulgare, and Lolium album.

2. *Lolium*

2. *Lolium ſpicis muticis, radice perenni.* Red Dar-
*The naked-ſpiked Darnel, with a perennial root.* nel.

The root of this ſpecies is long and creeping, of the thickneſs of a crow-quill, and jointed, ſending out many fibres from the joints: from the oppoſite ſide of theſe joints ariſe alſo cluſters of leaves, five or ſix inches long, very narrow, of a deep green colour, thick and flattiſh; among theſe riſes a ſtalk round, jointed, and a foot, or more, in height: from the lower joints of this there alſo frequently ariſe other ſecondary ſtalks. At every joint of theſe ſtands a ſingle leaf, ſurrounding the ſtalk at the bottom, very like the radical leaves, but narrower and ſhorter: at the top ſtands a thin, flat ſpike, four or five inches long, and uſually of a reddiſh colour, and compoſed of alternate glumes.

This ſpecies is common by way-ſides. C. Bauhine calls it, Gramen loliaceum anguſtiore folio et ſpica; others, Lolium rubrum.

## TRITICUM.

THE calyx of the Triticum is a glume compoſed of two valves, and uſually containing three flowers: the valves are of an ovated figure, and obtuſe. The corolla conſiſts of two valves, nearly equal in ſize, and of the bigneſs of thoſe of the cup. The exterior valve is bellied with an obtuſe end, terminated by a point; the interior valve is plane. The ſtamina are three capillary filaments; the antheræ are oblong, and bifurcated: the germen of the piſtil is turbinated: the ſtyles are two; they are capillary and reflex; the ſtigmata are plumoſe. The corolla ſerves in the place of the pericarpium, incloſing the ſeed, which is ſingle, oblong, obtuſe, and furrowed on one ſide.

This genus comprehends the Triticum and the Triticea of Scheuckzer, Pontedera, &c.

1. *Triticum radice annua, glumis ventricoſis, lævibus, imbricatis, ſubmuticis.*
*The annual, bellied-glumed Triticum, with imbricated glumes without awns.* Wheat.

The root of this ſpecies conſiſts of a great number of fibres, ſlender, but moderately long; from this ariſe firſt a number of long, narrow, and thin leaves, of a pale green; afterwards ſeveral ſtalks, which are tall, large, hollow, and jointed. At every joint ſtands a ſingle leaf, which ſurrounds the ſtalk a long way, and, when it leaves it, is like the radical leaves. At the top ſtands a long and thick ſpike, ſurrounded with ſhort and ſcarce ſenſible ariſtæ or awns. The ſeeds are ſometimes white, ſometimes reddiſh, and are much larger or ſmaller, according to the culture and nature of the ſoil.

This is ſown every-where in our fields, and is properly a biennial plant. C. Bauhine calls it, Triticum biennium ariſtis carens. Lobel, Siligo ſpica mutica. Starch is principally made from this wheat.

2. *Triticum calycibus truncatis quadrifloris, floſculis ariſtatis hermaphroditis, intermedio neutro.*
*The truncated cup four-flowered Triticum, with various flowers.* Spelt Corn.

This plant, in it's general appearance, much reſembles the common wheat. It's root conſiſts of a cluſter of moderately thick, and not very long, fibres; from this ariſe firſt a number of long and narrow leaves, very thin, and of a pale green; among theſe afterwards riſe ſeveral ſtalks, hollow, jointed, ſlender, and about three feet high. At every joint ſtands a leaf, which ſurrounds the ſtalk, for a great way, at the baſe, and, after it leaves it, grows to five or ſix inches in length; at the top of the ſtalk ſtands a ſpike, five or ſix inches long, and ſomewhat compreſſed. The valves of the corolla ſtick ſo cloſe about the ſeed, that they are very difficultly ſeparated; but, when the ſeed is cleared from them, it is ſcarce diſtinguiſhable from wheat.

This ſpecies is cultivated in fields in ſome places, and is a biennial. C. Bauhine calls it, Zea dicoccos ſive Zea major, others, Spelta.

3. *Triticum*

3. *Triticum radice repente foliis viridibus.* **Couch Graſs.**
*The green-leaved Triticum, with a creeping root.*

The root of this ſpecies is compoſed of ſeveral long ramifications, of the thickneſs of a crow-quill, white and ſweet to the taſte. Theſe ſpread ſeveral ways under the ſurface of the ground, and terminate in ſharp, hard, and pungent ſhoots. From the ſeveral parts of this root ariſe cluſters of leaves; they are long, narrow, and of a pale green; among theſe riſe the ſtalks; they grow to three or four feet high, and have each four or five joints: at every joint ſtands a ſingle leaf, which ſurrounds the ſtalk almoſt to the next joint, and, when it ſeparates from it, grows to ſix or eight inches in length, and generally droops downward. At the top of the ſtalk ſtands a ſpike like that of wheat, but much thinner, reddiſh in colour, and ſurrounded with a ſet of ſhort awns.

This ſpecies is frequent in our fields, and under hedges. It's root is the graſs-root uſed in medicine; it is diuretic and attenuant. C. Bauhine calls the plant, Gramen caninum arvenſe ſive gramen Dioſcoridis; others, Gramen caninum.

## SECALE.

THE calyx of the Secale is an involucrum, compoſed of two leaves, and containing two flowers. The leaves ſtand oppoſite, and are erect, linear, and acuminated, and are ſmaller than the corolla: the corolla conſiſts of two valves: the exterior valve is rigid, ventricoſe, acuminated, and compreſſed; it's lower edge is ciliated, and it terminates in a long ariſta: the interior valve is lanceolated and plane. The nectaria are two in number; they are ovated and erect: the ſtamina are three capillary filaments, hanging out of the flower: the antheræ are oblong and furcated. The germen of the piſtil is turbinated: the ſtyles are two, reflex and villoſe; the ſtigmata are ſimple. The corolla ſerves the office of a pericarpium, incloſing the ſeed, and, at a proper time, opening and dropping it out. The ſeed is ſingle, oblong, and almoſt cylindric in figure.

This genus comprehends the Secale and the Secalina of Scheuckzer, &c. In ſome ſpecies the flowers are all hermaphroditic; in others there are ſome of them only males: and often there are two ſeſſile flowers, with a third fixed on a pedicle between them.

1. *Secale glumarum ciliis ſcabris.* **Rye.**
*The Secale, with rough ciliæ.*

The root of this ſpecies conſiſts of a cluſter of fibres, long, ſlender, and variouſly implicated, and interwoven with one another; from theſe riſe a number of long, narrow, and pointed leaves, thin and reddiſh at their firſt appearance, but afterwards green, and longer and narrower than thoſe of wheat. Among theſe there riſe ſeveral ſtalks, ſeldom leſs than ſix or ſeven from the ſame root, often many more. Theſe riſe to five feet high; they are thinner than thoſe of wheat, but more rigid and firm. They riſe out of a gramineous vagina, and have each four or five joints, and at every joint a ſingle, long, and narrow leaf, ſurrounding the ſtalk a long way at the baſe, and growing to ſome length from it: the ſpike is long, and moderately thick, and has ſhort but rigid awns. The ſeed is longer and thinner than wheat, and of a blackiſh colour.

This ſpecies is ſown in our fields. C. Bauhine calls it, Secale hybernum, and Secale vernum, from the different times of ſowing it; and adds, majus to the former, and minus to the latter; but they are not diſtinct ſpecies.

2. *Secale ſpiculis geminatis.* **Sea Dog's Graſs.**
*The double-ſpiked Secale.*

The root of this ſpecies is compoſed of ſeveral ramifications, of the thickneſs of a crow-quill, and of a foot, or more, in length, which creep in various directions under the ſurface: from theſe, in ſeveral parts, ariſe tufts of leaves, thirty, or more, together:

together: theſe are ſix or eight inches long, a third of an inch broad, and of a bluiſh green colour, while freſh; but, as they begin to decay and dry up, their edges turn in, and they grow roundiſh, and of a whitiſh colour; and this is the ſtate they are moſt frequently ſeen in: amongſt theſe riſes the ſtalk, which is ſlender, and grows to two or three feet high. It is firm and rigid, and has about four joints, at each of which ſtands a ſingle leaf like the radical ones, and ſurrounding the ſtalk to ſome diſtance at the baſe. At the top of the ſtalk ſtands a ſpike or ear, very like that of wheat, but not ſo thick, though equal to it in length.

This ſpecies is common about the ſea-ſhores in England. Ray calls it, Gramen caninum maritimum ſpica triticea. Tournefort, Gramen loliaceum radice repente maritimum; and Van Royen, Triticum foliis acuminatis pungentibus.

## HORDEUM.

THE calyx of the Hordeum is a partial involucrum, compoſed of ſix leaves, and containing three flowers: the leaves are erect, linear, acuminated, and two of them are placed under every flower; there is no glume. The corolla conſiſts of two valves; the inferior valve is angular, of an ovato-acuminated figure, bellied, and longer than the cup, and terminates in a very long ariſta: the interior valve is lanceolated, plane, and ſmaller. The ſtamina are three capillary filaments, ſhorter than the flower: the antheræ are oblong: the germen of the piſtil is of a turbinated, oval figure: the ſtyles are two in number, and are reflex and hairy; the ſtigmata are ſimilar. The corolla ſerves as a pericarpium, ſurrounding the ſeed, and not letting it out. The ſeed is oblong, ventricoſe, angulated, pointed at each end, and marked with a longitudinal furrow.

This genus comprehends the Hordeum and the Gramen ſecalinum of Ray.

In ſome of the ſpecies all the three flowers, contained in the common cup, are hermaphrodite and fertile; in others the two lateral flowers are only males, and the intermediate one hermaphrodite.

1. *Hordeum floſculis lateralibus maſculis, muticis, angularibus imbricatis.*
*The Hordeum, with the lateral flowers male and naked, the angular ones imbricated.* Barley.

The root of this ſpecies is compoſed of a cluſter of ſmall, white, and long fibres; from this riſe ten or twelve leaves, long, narrow, of a pale green, and very thin, very like thoſe of wheat, but ſomewhat narrower; among theſe riſe the ſtalks: they grow to two feet, or more, in height, but not nearly ſo high as thoſe of wheat: they are hollow, but very firm, and have uſually about ſix joints; at each joint ſtands a ſingle leaf, which is nearly as broad as the wheat-leaf, and at the bottom ſurrounds the ſtalk to ſome diſtance from the joint. At the top ſtands a ſpike or ear, about four inches long, and half an inch thick, and every way ſurrounded with very long ariſtæ or awns.

This ſpecies is ſown in our fields. C. Bauhine calls it, Hordeum diſtichum; and moſt other writers uſe the ſame name.

2. *Hordeum floſculis lateralibus maſculis, ariſtatis.*
*The Hordeum, with the lateral flowers, male and ariſtated.* Rye Graſs.

The root of this ſpecies is compoſed of a great number of ſlender, white fibres, variouſly interwoven with one another. From this riſe ſeveral oblong, graſſy leaves; they are four or five inches long, a third of an inch broad, and pointed at the end; of a pale green colour, and ſomewhat rigid to the touch. Among theſe riſes the ſtalk; it ſeldom exceeds five or ſix inches in height, and is often oblique, rather than erect: it has three or four joints, and at each a ſingle leaf, ſurrounding it almoſt to the next joint. At it's top ſtands a long ſpike or ear, very much reſembling an ear of barley, and furniſhed with ariſtæ as long and frequent.

This ſpecies is very frequent by way-ſides, and in barren places, often on walls. It was long called barley-graſs; of late it has been called rye-graſs, but Linnæus has properly

perly referred it to the barleys again. C. Bauhine calls it, Gramen Hordeaceum minus et vulgare. Ray, Gramen ſecalinum et ſecale ſylveſtre.

## ELYMUS.

THE calyx is a common involucrum, containing ſeveral flowers in two ſpiculæ, placed near one another on the ſame denticle of the ſpike. It conſiſts of four leaves, which are erect, acute, and narrow. The corolla is compoſed of two valves: the ſtamina are three ſhort and ſlender filaments; the antheræ are oblong. The germen is oval; the ſtyles are two, and their ſtigmata ſimple. The ſeed is oblong.

### 1. *Elymus ſpica flaccido-pendula.*
### *The Elymus, with a flaccido-pendulous ſpike.*

The root of this ſpecies is compoſed of a cluſter of moderately thick fibres; from this ariſe eight or ten leaves; they are ten inches long, and more than half an inch broad, of a pale green colour, ſtriated and rough to the touch, both on the upper and under ſurfaces, if the hand be drawn backward over them. Among theſe riſe ſeveral ſtalks; they are hollow, jointed, round, and grow to two or three feet in height; at each joint ſtands a ſingle leaf, ſurrounding the ſtalk a great way at the baſe, in form of a vagina; and, when it ſeparates from it, of the form of the radical leaves. At the top of the ſtalk ſtands a ſpike of ſix or ſeven inches long, and of a lax ſtructure, not erect, but bending; the ſtalk itſelf between the ſpiculæ being compreſſed and very thin, and thence too feeble to ſupport itſelf upright. It is compoſed of two rows of theſe little ſpikes, and furniſhed with very long ariſtæ.

This ſpecies is a native of Siberia. Gmelin calls it, Triticum radice perenni ſpiculis binis longiſſime ariſtatis.

### 2. *Elymus ariſtis ſpicula longioribus, involucris magnis.*
### *The Elymus, with very large involucra, and with ariſtæ longer than the ſpiculæ.*

The root of this ſpecies is compoſed of a number of oblong ramifications, creeping under the ſurface of the earth. From the ſeveral joints of theſe ariſe cluſters of leaves ſix or eight inches long, not very broad, and terminating in a point. Among theſe riſes a ſtalk a foot, or more, in height, round, jointed, of a pale green colour, and hollow. At every joint of this ſtands a leaf, ſurrounding it at the baſe, and growing to a conſiderable length from it: at the top ſtands a ſpike, three inches in length, and moderately thick, compoſed of a double ſeries of ſhort ſpiculæ; the flowers are ſmall, the involucra larger and thicker, and the whole ſpike covered with ariſtæ or awns.

This ſpecies is a native of Virginia, and many other parts of North America, and is called by Gronovius, Hordeum floſculis omnibus hermaphroditis, involucris floſculos craſſitie et longitudine ſuperantibus.

*Claſs the Third. Order the Third.*

## TRIANDRIA TRIGYNIA.

*Plants which have in every flower three ſtamina, and three ſtyles.*

## ERIOCAULON.

THE calyx of the Eriocaulon is a common perianthium, of a globoſe, depreſſed form; imbricated, and formed of permanent ſquammæ, of an equal ſize, and lanceolated ſhape. The general corolla is uniform and convex: the proper corolla is formed of three petals of a lanceolated figure, obtuſe, hairy at the top, and ſmall at the baſe, where they coaleſce and form a hairy ſtyliform body. The ſtamina are three capillary filaments growing on the germen: the antheræ are oblong and verſatile. The germen is ſlender, and placed within the corolla, under the ſtamina. The ſtyles are three

three in number, ſhort and capillary: the ſtigmata are ſimple. There is no pericarpium. The calyx remains unaltered, and contains the ſeed, which is ſingle.

Of this there is only one known ſpecies.

### ERIOCAULON.

The root is fibrous; the radical leaves are two or three inches long, very narrow and graſſy of a pale green colour, and ſpread circularly on the ground. The ſtalks are very ſlender, round, naked, ſix or eight inches high, and are covered with a blackiſh, gloſſy hairineſs: on their tops ſtand ſmall, round, or oval, cluſters of whitiſh or reddiſh flowers.

It is a native of North America, and grows principally about the ſea-ſide. Petiver calls it, Planta marina capitulis albis conglobatis.

## MONTIA.

THE calyx of the Montia is a perianthium compoſed of two leaves, concave, of an oval, obtuſe figure, erect and permanent. The corolla conſiſts of a ſingle petal, and is divided at the extremity into five parts; three of the ſegments are ſmaller than the others, and produce ſtamina; theſe ſtand alternately with the two larger. The ſtamina are three capillary filaments, of the length of the corolla, into which they are inſerted. The antheræ are ſmall: the germen of the piſtil is turbinated. The ſtyles are three in number, villoſe and patent: the ſtigmata are ſimple. The fruit is a turbinated, obtuſe capſule, covered by the cup, compoſed of three valves, and having three cells. The ſeeds are three in number, and roundiſh. This genus comprehends the Cameraria of Dillenius, and the Alſinoides of Vaillant. The calyx often varies, and is compoſed of three leaves; and in this caſe the flower has five ſtamina.

Of this genus there is only one known ſpecies. Micheli makes two, but erroneouſly, from a variety of this.

### MONTIA. Blinks.

The root of this plant conſiſts of a great number of fine, capillary, white fibres; from this riſe ſeveral ſtalks, round, of a reddiſh colour, procumbent, and often ſending forth new roots at the joints, as they lie on the ground. They are often not an inch long; ſeldom much more than two, knotty, and often much branched. The leaves ſtand two at each joint; they are ſmall, like thoſe of the ſerpyllum, but narrower, of a pale green, and ſomewhat fattiſh. The flowers grow from the alæ of the leaves principally about the top of the plant, ſometimes all the way along it: they ſtand on peduncles half an inch in length, though ſometimes ſingly, ſometimes two or three together. They are extreamly ſmall, and ſeldom quite open; they are white. The taſte of the whole plant is bitter.

It is frequent with us in damp places; ſometimes, in rainy ſeaſons, in corn-fields. C. Bauhine calls it, Portulaca arvenſis. Dillenius, Cameraria arvenſis minor. Vaillant, Alſinoides annua verna; and Ray, Alſine parva paluſtris, tricoccos, portulacæ aquaticæ ſimilis.

## PROSERPINACA.

THE calyx is a perianthium, compoſed of a ſingle leaf, divided at the extremities into three narrow, pointed ſegments. There is no corolla. The ſtamina are three ſlender filaments: the antheræ are moderately large, and oblong; the germen is oval, and ſtands beneath the cup; the ſtyles are three, and ſlender; the ſtigmata are ſmall; the ſeed is ſingle.

There is but one known ſpecies of this genus, and that ſo ſufficiently diſtinguiſhed by theſe characters, that it needs no farther deſcription.

## TILLÆA.

THE calyx of the Tillæa is a plain perianthium, conſiſting of a ſingle leaf, divided into three large, oval ſegments. The corolla conſiſts of three oval, acute, plane petals, ſomewhat ſmaller than the ſegments of the cup. The ſtamina are three ſimple filaments, ſhorter than the corolla: the antheræ are ſmall. The germina of the piſtil are three in number: the ſtyles are ſimple; the ſtigmata are obtuſe. The fruit conſiſts of three oblong, acuminated capſules, reflex, and of the length of the flower, which, when ripe, ſplit open longitudinally upwards. The ſeeds are of an oval figure, and are contained two in each capſule.

Micheli firſt diſtinguiſhed this plant to be a diſtinct genus. There is only one ſpecies of it, and that Vaillant calls a ſpecies of Sedum.

### TILLÆA.

The root is ſmall, white, woody, and divaricated into two or three parts. The radical leaves are of an oval figure, and about a tenth of an inch long, ſomewhat thick, and of a duſky green: the ſtalk is about an inch and half in length, round, ſlender, and furniſhed with a number of leaves, ſtanding in pairs, of the ſhape of the radical ones, but ſmaller, and without any pedicles. Sometimes the ſtalk is ſimple; ſometimes there grow branches from the alæ of all the leaves. The flowers are very minute; the ſeeds oval.

It grows out of the cracks of rocks in Italy and Spain. Bocconi calls it, Sempervivum, omnium minimum, repens, muſcoſum polygoni facie; and, in another place, Polygonum muſcoſum minimum.

## MOLLUGO.

THE calyx of the Mollugo is a perianthium, compoſed of five leaves, which are permanent, oblong, coloured on the inſide, and erecto-patulous in their ſituation. There is no corolla, except the calyx be called by that name. The ſtamina are three ſetaceous filaments, ſhorter than the flower, and placed very near the piſtil: the antheræ are ſimple. The germen of the piſtil is oval and triſulcated: the ſtyles are three in number, and very ſhort: the ſtigmata are obtuſe. The fruit is a capſule of a ſomewhat oval figure, formed of three valves, and containing three cells, in each of which there are a number of kidney-ſhaped ſeeds.

There is only one known plant of this genus, and that is called, in the Hort. Lugd. Batavus, a ſpecies of Alſine.

### MOLLUGO.

The root of this plant conſiſts of a number of white, moderately thick, and long fibres. The ſtalk is ſlender and round; it lies cloſe upon the ground, and is divided into a multitude of branches, in a dichotomous order. It is jointed, and between the joints ſomewhat ſtriated; and at the joints is larger than elſewhere, and of a red colour. At every joint of the ſtalk there ſtands a cluſter of leaves, uſually five, ſometimes ſeven. They are diſpoſed in a radiated manner, and are of a lanceolate figure, ſomewhat cruciform, and pointed at the extremities, and are ſmooth and hollowed. The flowers ſtand in circles round the ſtalk, each on it's own pedicle, which are ſhorter than thoſe of the leaves, and very ſlender. The calyx is oblong, green on the outſide, and within. The ſeeds are ſtriated, and of a reddiſh-brown colour.

This plant is a native of Virginia, and ſome other parts of North America. Gronovius calls it, Mollugo foliis ſæpius ſeptenis lanceolatis. Plukenet, Alſine ſpergula marina latiori folio, floribus ad nodos pediculis curtis circa caulem inſidentibus, calycibus punctatis.

*Claſs the Fourth.*

## TETRANDRIA.

*Plants which have in every flower four ſtamina.*

OF the Tetrandria, ſome have only one ſtyle in the flower, ſome two, and ſome four. They are therefore conveniently arranged into three orders: the firſt containing thoſe which have four ſtamina, and only a ſingle ſtyle, under the name of Tetrandria Monogynia. The ſecond, thoſe which have four ſtamina, and two ſtyles, under the name of Tetrandria Digynia; and the third, thoſe which have four ſtamina, and four ſtyles, under that of Tetrandria Tetragynia.

*Claſs the Firſt. Order the Firſt.*

## TERANDRIA MONOGYNIA.

*Plants which have four ſtamina, and only one ſtyle, in every flower.*

THIS order contains ſo great a number of genera, that it is neceſſary to arrange them, according to their ſeveral principal and more obvious differences, into five diviſions. The *firſt*, containing thoſe which have ſeveral flowers in the ſame common calyx, and have naked ſeeds. The *ſecond*, ſuch as have monopetalous flowers, placed on didymous fruit, with a bifid ſtyle. The *third*, thoſe which have monopetalous flowers, without theſe characters. The *fourth*, thoſe which have compleat tetrapetalous flowers. The *fifth*, thoſe which have incompleat tetrapetalous flowers.

*Claſs the Firſt. Order the Firſt.*

*Diviſion the Firſt.*

*Tetrandria Monogynia, which have aggregated flowers in the ſame common cup, and have after every flower a ſingle, naked ſeed.*

### LEUCODENDRON.

THE calyx of the Leucodendron is a common perianthium, of an imbricated figure, compoſed of unequal, permanent ſquammæ, very various in their figure and proportion. The general corolla is uniform and convex: the peculiar corolla is oblong, hoary on the outſide, and is compoſed of two petals. The upper petal has a long, linear unguis, and it's limb is lanceolated, undivided, and in it's lower part is firmly joined to the lower petal: the lower petal has alſo a long unguis, of a linear figure, but three times as broad as that of the upper petal. The limb is oblong, of a ſemicylindric figure, and is divided into three ſegments. The ſtamina are four very ſhort filaments, of a ſubulated figure; they are inſerted into the limb of the corolla, one between every ſegment. The anthera ſeems ſingle, and is erect and tubulated, of an oblong figure; it conſiſts of four proper antheræ, which coaleſce into a kind of cylindric body. The germen of the piſtil is oblong, and terminates in a very long, ſubulated ſtyle: the ſtigma is ſimple; there is no pericarpium. The cup, ſcarce at all altered, ſerves in the place of it, containing in it's cavity a ſingle, roundiſh ſeed, coronated with hairs. The receptacle is ſometimes naked, and ſometimes hairy, and there is one ſpecies, otherwiſe truly of this genus, in which the calyx is not a common one, but contains only a ſingle flower.

This genus comprehends the Lepidocarpodendron, the Hypophyllocarpodendron, and the Conocarpodendron of Boerhaave; though not all the ſpecies of the laſt; alſo the Scolymocephalus of others.

1. *Leucodendron foliis oblongis, latis, obtuſis.*
*The oblong, broad, and obtuſe-leaved Leucodendron.*

This is a large and tall tree. It's root is very long, thick, and branched: it's trunk grows to three feet in diameter: the wood is very hard and knotty, and of a fine yellow colour: the bark is rough, and full of cracks; it is of a browniſh colour, with ſome tinge of yellow on the trunk, but, on the young branches, it is of a fine ſtrong purple. The branches are very numerous, and the leaves ſtand very thick on them, in an irregular manner; they are like thoſe of ſome of our willows, oblong, broad, obtuſe, of a pale green, and ſomewhat thick and fleſhy: the middle rib is yellow, and there is uſually a border of purple all round the edge: at the extremities of the branches ſtand the flowers. The cup is very large, and conſiſts often of eight ſucceſſive ſeries of ſquammæ; theſe are purple on the outſide, and of a greyiſh-yellow within: the flowers are very numerous, but ſmall in proportion to the ſize of the cup. The tree grows to twenty or thirty feet high, and, when in flower, is one of the moſt beautiful trees in the world.

It is a native of the Cape of Good Hope. It's bark is an aſtringent, and is uſed with ſucceſs by the Africans againſt diarrhœas. Herman calls it, Scolymocephalus foliis oblongis, glabris, craſſioribus, latioribus. Boerhaave, Lepidocarpodendron folio ſaligno lato, caule purpuraſcente.

2. *Leucodendron foliis apice trifido, glabris.*
*The ſmooth, trifid-leaved Leucodendron.*

This is a very beautiful ſpecies, as well as the former, but it does not grow to ſuch a ſtature. It's root is large, woody, and branched: from this riſe a number of woody ſhoots, which grow to three or four feet high, rarely more: the bark is of a duſky brown, ſmooth and gloſſy; the wood hard, and of a whitiſh colour. The leaves ſtand irregularly, and have no pedicles; they ſtand at diſtances from one another, and are ſmall, narrow, and divided into three parts at the extremity; the lower ones have only this trifid top of the leaf red; the reſt are red throughout, and make a very beautiful appearance. The flowers grow at the extremities of the branches, affixed to theſe red leaves, and make a very beautiful appearance.

This is alſo a native of the Cape of Good Hope. Boerhaave calls it, Hypophyllocarpodendron foliis inferioribus apice trifido rubro, ſuperioribus penitus rubris glabris; Herman, Scolymocephalus Africana foliis anguſtis brevioribus, trilobis in ſummitate.

3. *Leucodendron foliis craſſis, nervoſis, lanuginoſis, extremitatibus crenatis.*
*The Leucodendron with thick, nervous, lanuginous leaves, crenated at the top.*

The root of this ſpecies is large, woody, and branched: from this riſes a very ſhort trunk, which often grows, however, to four feet in diameter; from the head of this, which ſeems as if cut off, there riſe a vaſt number of branches, which grow to a conſiderable length. The bark of the trunk is brown and cracked, that of the young ſhoots green and hairy. The leaves ſtand very thick together, and are rigid, nervous, very thick and hairy, crenated at the extremity, and tinged with purple at the edge. At the tops of the branches ſtand the flowers, among cluſters of leaves; they are large, very beautiful, and of a deep yellow. The common calyx finally becomes a fruit, of a conic figure, which eaſily falls off.

This is, like the others, a native of the Cape of Good Hope. Herman calls it, Leucodendros Africana foliis ſerratis; and Boerhaave, Conocarpodendron folio craſſo, nervoſo, lanuginoſo, flore aureo, cono facile deciduo.

The other ſpecies of the Leucodendron are, 1. The round-leaved kind, with large purple flowers. 2. The Leucodendron with hairy ſquammæ. 3. The narrow willow-leaved, violet-flowered Leucodendron. 4. The Leucodendron with ſhort leaves and a variegated calyx. 5. The ſhort-fruited Leucodendron. 6. The long conic-fruited Leucodendron. 7. The Leucodendron with long, narrow leaves ſurrounding the fruit. 8. The ſmall-fruited, herbaceous Leucodendron. 9. The variegated, cupped, herbaceous, and procumbent Leucodendron. 10. The graſſy-leaved Leucodendron. 11. The Leucodendron with ſhort, cluſtered, ſilky leaves. 12. The round, rigid-leaved

leaved Leucodendron, with a long, variegated fruit: and, 13. The Leucodendron with leaves deeply ſerrated at their extremities.

## PROTEA.

THE calyx of the Protea is a common perianthium, of a roundiſh figure, and imbricated ſtructure, formed of ſquammæ of a ſomewhat oval ſhape. The univerſal corolla is uniform, and is a little longer than the cup: the peculiar corolla is monopetalous: it's tube is of the length of the cup: it's limb is divided into four ſegments, and is ſmooth, patent, equal, and of the length of the tube. The ſtamina are four ſetaceous filaments, and are longer than the flower: the antheræ are incumbent: the germen of the piſtil is of a roundiſh figure: the ſtyle is ſetaceous and erect; the length of it is the ſame with that of the ſtamina: the ſtigma is obtuſe. There is no pericarpium: the calyx remains unaltered, and contains the ſeeds, which are ſingle, roundiſh, and naked: the receptacle is of a conic figure, and ſeparated by paleæ. Boerhaave deſcribes this genus under the name of Conocarpodendron; Tournefort, after Plukenet, calls it Leucodendros; and Commelin, Argyrodendros: Ray, Conophoros.

### 1. *Protea foliis anguſtis rigidis, apicibus integris.*
### *The narrow, rigid-leaved Protea, with undivided extremities.*

The root of this ſpecies is compoſed of a number of thick and variouſly extended ramifications. The trunk riſes ſingle, four inches in diameter, and covered with a yellowiſh bark, rough and full of cracks. From the trunk there riſe a number of branches, robuſt and thick, and variouſly divided into others: in the whole it grows to about eight feet high. The leaves ſtand irregularly, and not thick together; they are long, narrow, and much reſemble thoſe of the common willow, but that they are rigid to the touch: they are of a blue-green colour, but the middle rib is yellow. There grow cluſters of leaves at the extremities of the branches, which form a kind of circular congeries, from the center of which riſes a conic head, of the bigneſs of a cone of the larix, containing the flowers, which are very ſmall, and of which ſcarcely any thing but the ſtamina appear.

This ſpecies is frequent about the Cape of Good Hope. Sherard, in Ray's Hiſtory, calls it, Scolymocephalus oleæ folio. Boerhaave, Conocarpodendron folio rigido, craſſo, anguſto, cono laricis parvo.

### 2. *Protea foliis anguſtis rigidis, apicibus tridentatis.*
### *The Protea with narrow, rigid leaves, tridentated at the extremities.*

The root of this ſpecies is compoſed of a number of creeping, very long, and ſlender ramifications. The ſtem is procumbent, and does not riſe ſingle, but uſually ſeveral together: from the main ſtalk there proceed a great number of branches, all long and weak, ſo that they alſo, in part, trail upon the ground. The leaves ſtand irregularly on theſe; they have ſcarce any pedicles; they are oblong, and are very narrow at the baſe, from whence they gradually become wider to the extremity, where they are conſiderably broad and obtuſe, but terminated by a tridentated apex: this part is red, the reſt of a pale green. At ſeveral different parts of the branches, among the leaves, grow the cones; they are ſmall and ſquammoſe, purpliſh toward the ſummit, and yellowiſh toward the baſe. The flowers are ſmall and yellow; they every-where ſurround the ſurface of the cone.

This ſpecies grows abundantly in many parts of Africa. Herman calls it, Scolymocephalus humilis, foliis in apice tridentatis. Boerhaave, Conocarpodendron folio rigido anguſto, apice tridentate rubro, flore aureo.

### 3. *Protea foliis anguſtis brevibus.*
### *The ſhort and narrow-leaved Protea.*

The root of this ſpecies is compoſed of a number of large ramifications, running under the ſurface of the ground. The whole ſhrub rarely exceeds three or four feet in height: it riſes with a thick ſtem, or trunk, which ſoon divaricates into a multitude of branches, ſo as to form a very beautiful tuft. The wood is green, the bark yellowiſh:

yellowiſh: the leaves are narrow and ſhort, rigid to the touch, ſmooth, and of a bluiſh-green colour. At the extremities of the branches there ſtand cluſters of yellowiſh leaves, in a circular order, which form a kind of calyx, from the center of which riſes the cone, which is ſmall, ſquammoſe, and variegated with red and yellow: the baſe of the cone is it's extremity; it adheres by the apex: the flowers are very ſmall, the ſeeds blackiſh.

This ſpecies is frequent on the rocky mountains of Africa. Herman calls it, Scolymocephalus Africana foliis brevibus. Boerhaave, Conocarpodendron folio anguſto rigido breviore, cono parvo aureo corona foliacea cincto.

The other ſpecies of the Protea are, 1. The broad, ſilvery-leaved Protea, called the Atlas-tree. 2. The roundiſh-leaved Protea. 3. The very long and narrow-leaved Protea: and, 4. The very narrow and thin-leaved water Protea. Boerhaave has deſcribed ſeveral other ſpecies of the Conocarpodendron, but they belong to the former genus, not this.

## CEPHALANTHUS.

THE calyx of the Cephalanthus conſiſts of a common perianthium, which contains ſeveral flowers, collected into a kind of head, and of a proper perianthium, which is erect, permanent, and divided into four ſegments. The corolla conſiſts of a ſingle petal: the tube is ſlender: the limb is divided into four parts, acute, reflex, and of the length of the tube. The ſtamina are four filaments, inſerted into the corolla, and ſhorter than it's limb; the antheræ are ſimple: the germen of the piſtil is placed within the flower: the ſtyle and the ſtigma are both ſimple. The fruit is an oblong capſule, containing only one cell: ſeveral of theſe grow together, and form a roundiſh head. The ſeeds are numerous, and oblong: the flower has it's limb ſometimes divided into five ſegments; inſtead of four, and then the proper perianthium has alſo five ſegments, and there are five ſtamina.

Vaillant and Van Rheede call this genus, Platanocephalus; Petiver, Valerianoides.

### 1. *Cephalanthus foliis oppoſitis ternatiſque.*
### *The Cephalanthus, with oppoſite and ternate leaves.*

The root of this ſpecies conſiſts of a number of ramifications, ſpreading various ways under the ſurface. The ſtem is firm and woody, and grows to a conſiderable ſize: the branches grow to a conſiderable length: the bark is green; the wood reddiſh, with ſome yellowiſh circles, and a greeniſh heart: the leaves are oblong and broad; they are of a bright green, narrow at the baſe, and terminate in a point at the extremity: they ſtand uſually three together, ſurrounding the ſtalks; they are ſomewhat rough to the touch, and of a bitter taſte. The flowers grow in cluſters, at the tops of the branches, and are of a yellowiſh colour.

This ſpecies is a native of North America; we have it in ſome of our greenhouſes. Vaillant calls it, Platanocephalus foliis ex adverſo ternis; Petiver, Valerianoides Americana flore globoſo, folio piſhaminis; Plukenet, Scabioſa dendroides Americana ternis foliis.

## GLOBULARIA.

THE common perianthium of the Globularia is imbricated, and of the length of the floſcules: the proper perianthium is formed of a ſingle leaf, tubulated, and divided into five ſegments at the extremity: the univerſal corolla is nearly equal: the proper corolla is formed of a ſingle petal, tubular at the baſe, and divided into four ſegments at the edge; the upper ſegment is ſmall and reflex; the three lower ones are larger, equal in ſize, and form a kind of lower lip. The ſtamina are four ſimple filaments, of the length of the corollula: the antheræ are diſtinct: the germen of the piſtil is of an oval figure: the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is obtuſe: there is no pericarpium: the proper perianthium cloſes at it's top, and contains the ſeed, which is ſingle, and of an oval figure. The common receptacle is oblong, and divided by paleæ.

This genus comprehends the Globularia of Tournefort, &c. and the Alypum of Niſſole and Dillenius.

1. *Globularia caule herbaceo, foliis radicalibus tridentatis, caulinis integerrimis.*
*The herbaceous-ſtalked Globularia, with the radical leaves tridentated, the others intire.*

The root of this ſpecies is oblong and ſlender, reddiſh on the outſide, and white within, hard, woody, and furniſhed with a few white fibres. From this riſe a number of ſhort, and ſomewhat broad, leaves, thick, nervous, and ſmooth, and tridentated at the extremities: among theſe riſes the ſtalk, uſually ſingle, but ſometimes three or four grow together. It grows to five or ſix inches high, ſometimes to more than twice that height; it is round, ſtriated, and uſually of a reddiſh colour, and has on it a number of leaves, not divided, like thoſe which riſe immediately from the root, but ſhorter, and intire. At the top of the ſtalk ſtands a roundiſh, or oval, head, or cluſter of flowers; they are of a beautiful blue colour, ſmall, and arranged cloſe together.

This is not a native of England, but is frequent in France, Germany, Sweden, and many other parts of Europe. Cluſius calls it, Globularia; C. Bauhine, Bellis cerulea caule folioſo; Anguillara, Aphyllanthes.

2. *Globularia caule herbaceo nudo.*
*The Globularia, with a naked, herbaceous ſtalk.*

The root of this ſpecies conſiſts of a cluſter of white fibres, of the thickneſs of a ſmall packthread. From this ariſes a cluſter of oblong, and broad, leaves, of a dark green colour, and ſmooth ſurface: from the center of this tuft of leaves riſes a ſingle ſtalk, round, ſomewhat ſtriated, and of eight or ten inches in height; it has no leaves on it, but is perfectly naked to the top, where there ſtands a roundiſh head, compoſed of a great number of flowers, of a beautiful pale blue.

This ſpecies is a native of the mountainous parts of Germany. C. Bauhine calls it, Bellis cærulea caule nudo. Tournefort, Globularia Pyrenaica caule nudo.

3. *Globularia fruticoſa, foliis brevibus tridentatis.* Alypum of Montpelier.
*The ſhrubby Globularia, with ſhort, tridentated leaves.*

This ſpecies is a ſmall ſhrub; it's root is thick, oblong, of a blackiſh colour, and very hard and woody. It's ſtem grows to three quarters of an inch, or more, in diameter, and divides into a number of thin, but firm and woody, branches, covered with a ſmooth, reddiſh bark: the whole ſhrub grows to about three feet in height. The leaves ſtand irregularly on the ſtalks, and are uſually reddiſh; they are about three quarters of an inch in length, and are very narrow at the baſe, and thence grow broader to the extremity, where they are uſually terminated by three points: they are thick, and very bitter to the taſte. The flowers ſtand at the tops, and along the ſides of the branches; they are collected into a kind of ſmall heads, and are of a reddiſh or purpliſh colour.

This ſpecies is not met with native in England, but it is very frequent in Germany, Italy, and ſome parts of France. Authors call it, Thymelæa and Alypum. It is a violent cathartic and emetic, and is ſometimes given in dropſies, with ſucceſs; but it is to be uſed with caution. It's bark contains it's principal virtues.

The other ſpecies of the Globularia are, 1. The little, creeping, woody-ſtalked Globularia. 2. The ſhrubby, African Globularia, with hoary, ſhort leaves. 3. The ſpinoſe Globularia. 4. The little, Alpine, origanum-leaved Globularia: and, 5. The Globularia, with flowers in the alæ of the leaves.

## DIPSACUS.

THE common perianthium of the Dipſacus is compoſed of many leaves, and contains many flowers: the leaves are narrow, longer than the flowers, and permanent: the proper perianthium is ſcarce viſible; it ſtands on the germen. The corolla is formed of a ſingle petal, which is ſtrait, tubular all the way, and divided into four

ſegments

ſegments at the mouth: the exterior ſegment is larger than the others, and acute. The ſtamina are four capillary filaments, longer than the corolla: the antheræ are incumbent: the germen of the piſtil ſtands within the proper perianthium: the ſtyle is capillary, of the length of the corolla: the ſtigma is ſimple: there is no pericarpium. The ſeeds are ſingle, and of a columnar figure, and are coronated with an undivided edge: the common receptacle is conic, and formed of a ſpungy body, with a multitude of paleæ.

1. *Dipſacus capitulis florum conicis.* Common Teaſel.
*The conic-headed Dipſacus.*

The root of this ſpecies is oblong, white, thick, and furniſhed with ſeveral fibres. The leaves, which riſe in a cluſter from this, are a foot, or more, in length, and four inches in breadth, with large ribs, and ſome ſpines on them. The ſtalk is ſingle; it grows to five feet high, and is whitiſh, round, and hollow, beſet with prickles, eſpecially toward the top. The leaves ſtand two at a joint, and their baſes are joined, and ſurround the ſtalk in ſuch a manner as to form a kind of baſon, in which ſtands uſually a quantity of water: theſe have a few ſerratures at their edges, and a row of hooked ſpines along the middle rib. Toward the top of the ſtalk there grow out branches in pairs; from the alæ of the leaves, and on the ſummits of theſe, as well as of the main ſtalk, ſtand the heads; they are of an obtuſely conic figure, and of the ſize of a hen's egg: the flowers are ſmall, and of a reddiſh colour.

This ſpecies is frequent with us in uncultivated places, and by road-ſides. C. Bauhine calls it, Dipſacus ſylveſtris aut virga paſtoris major; others, Labrum veneris.

2. *Dipſacus capitulis florum ſubgloboſis.* Little Teaſel.
*The round-headed Dipſacus.*

This is a ſmaller plant than the former. It's root is oblong and white, furniſhed with a number of fibres, and does not deſcend very deep into the ground: the ſtalk is of the thickneſs of a man's finger, round, hollow, greeniſh, and rigid on the ſurface, with ſharp ſpines on the ridges; toward the top it is divided into many branches. The leaves ſtand in pairs on the ſtalk, and both theſe and the radical ones are very like thoſe of the common Dipſacus, but ſmaller, and do not embrace the ſtalk, or form a cavity about it, as in that ſpecies: at the baſe of each leaf there are two auriculæ: the pedicle is an inch in length, and the leaf broadeſt in the middle, ſerrated at the edges, and armed with ſpines on the under ſurface. At the tops of the ſtalks and branches ſtand round heads, of the bigneſs of a nutmeg, furniſhed with numerous, ſmall, white flowers.

This ſpecies is frequent with us by road-ſides, and in dry paſtures. C. Bauhine calls it, Dipſacus ſylveſtris capitulo minore, ſive virga paſtoris.

The other ſpecies of Dipſacus are, 1. The laciniated-leaved Dipſacus. 2. The ſmooth, four-leaved Dipſacus, with ſcabious-like leaves. 3. The great Indian Dipſacus, with cluſtered heads: and, 4. The jagged-leaved Dipſacus, with ſmooth, oval heads. Authors deſcribe alſo what they call a Dipſacus ſativus; but this is only the firſt ſpecies deſcribed here, rendered larger by culture. The heads of this kind are uſed in dreſſing cloaths, and the leaves are a good ſtomachic, but they are not much known as ſuch.

## SCABIOSA.

THE common perianthium of the Scabioſa is formed of many leaves, ſurrounding the receptacle in ſeveral ſeries, and fixed on it; the inner ones of theſe are ſmaller than the outer; the whole is patent, and contains many flowers. The proper perianthium is double; both, however, are fixed on the germen; of theſe the exterior one is permanent, ſhort, membranaceous, and plicated; the interior one is divided into five ſubulato-capillaceous ſegments. The corolla conſiſts of a ſingle petal; this is erect, tubulated, narroweſt at the baſe, and thence gradually wider, and ſlightly divided into either four or five ſegments, of which the exterior ones are the larger. The ſtamina are four ſubulato-capillary, weak filaments: the antheræ are oblong and incumbent: the germen of the piſtil is placed below the receptacle of the floſcule,

and

and is ſurrounded with a peculiar vagina, by way of another cup. The ſtyle is filiform, and of the length of the corolla: the ſtigma is obtuſe, and obliquely emarginated. There is no pericarpium; but the common receptacle, which is of a convex figure, ſupplies the place of one: the ſeeds are ſingle, and of an ovato-oblong figure, crowned with their proper calyx.

The figure in this genus is very irregular and uncertain. The exterior corollulæ are often larger than the others, and unequal: the coronæ of the ſeeds alſo are of various ſhapes. This genus comprehends the Scabioſa of Tournefort, &c. and the Aſterocephalus, Pterocephalus, and Succiſa, of Vaillant.

1. *Scabioſa corollulis quadrifidis, corollis radiatis.* **Common Scabious.**
*The radiated Scabious, with quadrifid flowers, and hairy ſtalks.*

The root of this ſpecies is ſingle, white, and long. From this ariſes a cluſter of oblong, hairy leaves, of a whitiſh-green colour: among theſe riſe two or three ſtalks, which grow to near three feet high; they are round, hollow, and hairy: the leaves ſtand in pairs, at the joints of the ſtalks, which are very diſtant from one another; they are oblong, and variouſly laciniated at the edges, of a whitiſh-green, and very hoary. At the top of the ſtalk, and of the ſeveral branches, ſtand the flowers, in large numbers together, collected into roundiſh, but depreſſed, heads: they are uſually of a a beautiful blue colour, ſometimes reddiſh.

This ſpecies is very common in our corn-fields, and in dry paſtures. C. Bauhine calls it, Scabioſa pratenſis hirſutaquæ officinarum; others, Scabioſa major vulgaris.

2. *Scabioſa corollulis quadrifidis, caule ſimplici, ramis approximatis, foliis lanceolato-ovatis.* **Devil's-Bit.**
*The quadrifid-flowered Scabious, with lanceolato-ovated leaves.*

The root of this ſpecies is of the thickneſs of a man's little finger, but ſhort, and ſeeming as if bitten off at the extremity, from whence there iſſue a multitude of fibres. From this riſes a cluſter of leaves, oblong, broadeſt in the middle, of a dark green colour, and pointed at the ends, a little hairy, and, for the moſt part, even at the edges: among theſe riſe the ſtalks; they are ſimple, round, and ſolid, not hollow, as in the common Scabious. The leaves ſtand in pairs, at the joints, which are very far aſunder; and at the top of the main ſtalk and of the branches, which iſſue from the alæ of the leaves at the ſides, there ſtand round heads, compoſed of blue flowers, all of the ſame ſize.

This ſpecies is frequent with us, in meadows and paſtures. C. Bauhine calls it, Succiſa glabra; J. Bauhine, Succiſa ſive morſus diaboli.

3. *Scabioſa capitulis oblongis, corollulis majuſculis, foliis diſſectis.* **Muſk Scabious.**
*The long-headed, large-flowered Scabious, with diſſected leaves.*

The root of this ſpecies conſiſts of a multitude of white fibres. From this ariſes a cluſter of oblong leaves, of a dark green colour, crenated, more or leſs, deeply about the edges: among theſe riſe a great number of ſtalks, which grow to two or three feet high; they are very ſlender, and have at every joint two leaves, deeply diſſected and laciniated, and not at all like thoſe which grow immediately from the root. Toward the top of the ſtalk there grow a great number of branches, and, at the extremities of theſe, ſtand the heads: the flowers are of a deep blackiſh-purple, and ſmell not ſo much like muſk as civet.

This ſpecies is a native of the Eaſt Indies, but it is very frequent in our gardens. C. Bauhine calls it, Scabioſa peregrina capitulo oblongo nigricante, odore zibethi.

Beſide theſe, there are a great number of ſpecies of Scabious, and a very great number of varieties deſcribed as ſpecies. The moſt ſingular and certainly diſtinct are, 1. The blue-flowered, ſhrubby Scabious. 2. The agrimony-leaved, annual Scabious.

3. The

3. The yellow-flowered, multifid-leaved Scabious. 4. The broad-leaved, proliferous Scabious. 5. The narrow-leaved, proliferous Scabious. 6. The great, centaury-leaved Scabious. 7. The red-flowered, jagged-leaved Scabious. 8. The great, long-headed, red-flowered Scabious. 9. The round-headed, ſmall, field ſcabious. 10. The great-leaved, ſtellate, Spaniſh Scabious. 11. The little, ſtellate Scabious, called by Columna, Phyteuma. 12. The ſhrubby Scabious, with procumbent branches. 13. The great, African, arboreſcent Scabious. 14. The graſs-leaved Scabious. 15. The fraxinella-leaved Scabious. 16. The auricula-leaved Scabious. 17. The yellow-flowered, great, centaury-leaved Scabious. 18. The great, ſcorzonera-leaved Scabious.

The common-field Scabious, internally, is a pectoral, and it's leaves are a common ingredient in decoctions of that kind. Externally, it cures breakings out in the ſkin. The way of uſing it is boiling the juice to the conſiſtence of an ointment with lard.

## KNAUTIA.

THE common perianthium of the Knautia is ſimple, cylindric, oblong, and erect. It contains a number of floſcules, arranged into a ſimple, orbicular ſeries, and is formed of a number of ſubulated ſegments, equal to that of the flowers, and placed cloſe to one another. The proper perianthium is very ſmall, and forms a kind of corona on the germen. The univerſal corolla is equal: the proper, or ſimple, corolla is unequal; it conſiſts of a ſingle petal, the tube of which is of the length of the cup, and the limb is divided into four unequal ſegments; the exterior one of which is larger than the reſt, and of an oval figure. The ſtamina are four filaments, larger than the tube of the flower, and inſerted in the receptacle: the antheræ are oblong and incumbent. The germen of the piſtil is placed below the proper receptacle of the flower: the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is ſomewhat thick and bifid. There is no pericarpium; it's office is performed by the common receptacle, which is plane, naked, and ſcarce obſervable. The ſeeds are ſingle, of a ſquare figure, and hairy at the top

This genus is nearly allied to the Scabious, but differs in the calyx, being tubulated, and the flowers placed in a ſimple, orbicular ſeries. Boerhaave calls it, Lychni ſcabioſa.

Of this ſingular genus there is only one known ſpecies.

### KNAUTIA.

The root of the Knautia conſiſts of a number of white fibres, variouſly implicated and entangled: from this riſes a cluſter of leaves of a pale green colour, oblong, and indented at the edges; among theſe grow up ſeveral ſtalks, round, ſlender, green, and hairy. The leaves ſtand two at every joint, and are alſo hairy, and of paler green than thoſe which riſe immediately from the root; at the tops of the ſtalk and branches ſtand the heads; they are not round, but compreſſed, and have only one row of flowers ſurrounding the baſe. Theſe are moderately large, and of a beautiful red colour; and the whole compound flower, from their particular arrangement, has rather the appearance of that of ſome of the lychnis-kind, than of what it really is, till nearly examined.

The Knautia is a native of the Eaſt Indies, but it is a hardy plant, and bears the open air in ſome of our gardens. Boerhaave calls it, Lychni ſcabioſa flore rubro annua; and Vaillant, Scabioſa orientalis caryophylli flore.

*Claſs the Fourth. Order the Firſt.*

*Diviſion the Second.*

*Tetrandria Monogynia, with monopetalous flowers placed on didymous fruits, and with a bifid ſtyle in the flower. This diviſion comprehends the Herbæ Stellatæ of Ray, and others.*

## ASPERULA.

THE calyx of the Aſperula is a ſmall perianthium, placed on the germen, and conſiſting of a ſingle leaf, divided into four ſhort ſegments at the edge. The corolla conſiſts of a ſingle petal: the tube is cylindric and long; the limb is divided into four obtuſe, oblong, reflex ſegments. The ſtamina are four filaments, affixed to the upper part of the tube: the antheræ are ſimple. The germen is didymous, roundiſh, and ſituated below the cup. The ſtyle is filiform, and bifid at top: the ſtigmata are capitated. The fruit conſiſts of two round, dry berries, growing to one another: the ſeeds are ſingle, round, and large.

1. *Aſperula foliis ſenis, floribus ſeſſilibus.* **Blue Woodruff.**
*The ſix-leaved Aſperula, with ſeſſile flowers.*

The root of this ſpecies conſiſts of a cluſter of whitiſh fibres; the ſtalk is ſquare, rigid, and thick, and grows to a foot and half in height. At every joint there ſtand ſix, or more, oblong, ſlender, pointed leaves, of a duſky green colour; at the top of the main ſtalk, and at the extremities of the ſeveral branches, there ſtand on long pedicles cluſters of flowers, all ſeſſile, and thick-ſet together; they are moderately large, and of a beautiful blue colour, and every cluſter is ſurrounded with a ſeries of leaves, diſpoſed in a radiated manner, and exceeding the flowers in length.

This ſpecies is not a native of England, but is very common in the corn-fields of France and Germany. C. Bauhine calls it, Aſperula cærulea arvenſis.

2. *Aſperula foliis octonis lanceolatis, floribus faſciculatis pedunculatis.* **Common Woodruff.**
*The eight-leaved, lanceolate Aſperula, with faſciculated flowers on pedicles.*

The root of this ſpecies is ſmall, oblong, and creeping, and is furniſhed with a number of fibres. The ſtalks are ſquare; they grow to about a foot in height, but they are weak. At every joint there ſtand about eight leaves, of a dark green colour, oblong, narrow, and pointed at the extremities; they are diſpoſed in a radiated manner. The ſtalk divides near the top into two or three ramifications, and on the ſummits of theſe ſtand cluſters of moderately large, white flowers, each ſtanding on a ſomewhat long pedicle: theſe have a very ſweet ſmell.

This ſpecies is frequent in our woods; it flowers in May. C. Bauhine calls it, Aſperula ſive rubeola montana, odora. Dodonæus, Aſperula odorata; and Tournefort, Aparine latifolia humilior montana.

3. *Aſperula foliis quaternis linearibus, floribus trifidis.* **Squinancy Wort.**
*The four-leaved Aſperula, with linear leaves, and trifid flowers.*

The root of this little plant is very long, and penetrates deep into the earth; it is black, hard, and woody, and is furniſhed with a multitude of ſmall fibres. From this riſe a number of ſmall, weak ſtalks, four or five inches long, and in great part procumbent: they are ſquare, and of a pale green colour, and they often grow greatly beyond their uſual length, but are in that caſe procumbent, and take root at the joints.

On

On the lower part of the ſtalk the joints ſtand very thick; higher up, they are more diſtant from one another: at every joint there ſtand four ſmooth, narrow leaves, except at the ſummits of the branches, where there uſually are only two at a joint. The flowers ſtand in cluſters on the tops of the ſtalks, and form a kind of umbels; they are of a pale red colour, and ſweet ſmell.

This ſpecies is found in many parts of England, in mountainous, but wet, places; it flowers in June. C. Bauhine calls it, Rubia ſynanchica; others, Synanchica. Tournefort calls it, Rubeola vulgaris quadrifolia lævis floribus albidis.

## SHERARDIA.

THE calyx of the Sherardia is a ſmall perianthium, formed of a ſingle leaf, placed upon the germen, quadridentated at the edge, and permanent. The corolla conſiſts of a ſingle petal; the tube is cylindric and long; the limb divided into four ſegments, acute and plane. The ſtamina are four filaments, placed at the top of the tube; the antheræ are ſimple. The germen is didymous and oblong, and placed below the receptacle: the ſtyle is filiform, and divided into two parts toward the top: the ſtigmata are capitated: there is no pericarpium. The fruit is compoſed of two ſeeds, and is oblong, coronated, and eaſily ſplits longitudinally. The ſeeds are oblong, and have three points at the top, and are flat on one ſide, and convex on the other.

Of this genus there is only one known ſpecies, and that has been, by moſt authors, ranked among the Rubiæ.

### SHERARDIA. Little Field Madder.

The root of this little plant is oblong and ſlender, and penetrates deep into the ground; it is hard and woody, and of a reddiſh colour. From this grow ſeveral ſtalks, which lie procumbent on the earth; they grow to ſix or eight inches long, and are ſquare and hairy, ſometimes branched, and uſually of a reddiſh colour; at every joint of the ſtalk there ſtand ſeveral leaves arranged, in form of a radiated ſtar; they are ſmall, hairy, rough to the touch, broad, but terminating in a point: at the tops of the branches ſtand cluſters of ſmall, blue flowers, ſurrounded with a corona of leaves.

This plant is frequent in our corn-fields, and is deſcribed by all the old writers in botany. C. Bauhine calls it, Rubeola arvenſis repens cærulea. Boerhaave, Aſperula cærulea repens; and Tournefort, Aparine ſupina flore cæruleo.

## SPERMACOCE.

THE calyx of the Spermacoce is a ſmall perianthium, formed of a ſingle leaf, quadridentated at the edge, affixed upon the germen, and permanent. The corolla conſiſts of a ſingle petal: the tube is cylindric, and longer than the cup; the limb is divided into four parts, patenti-reflex, and obtuſe. The ſtamina are four ſubulated filaments, ſhorter than the corolla; the antheræ are ſimple. The germen is roundiſh, compreſſed, and placed below the receptacle; the ſtyle is ſimple and bifid at the top, and the ſtigmata are obtuſe. The fruit conſiſts of two oblong capſules, growing together, gibbous on one ſide, plane on the other, and obtuſe; and each of them has two horns, or points. The ſeeds are ſingle and roundiſh.

### 1. *Spermacoce verticillis globoſis.*
### *The globular cluſtered Spermacoce.*

The root is white and fibrous: the ſtalks are numerous, ſquare, of a yellowiſh colour at the bottom, and green at the top. The leaves ſtand two at each joint; they are ſmooth, of a deep green, about an inch long, a third of an inch broad in the middle, narrow at the baſe, and pointed at the end. The radical leaves are of the ſame length, but broader: the plant riſes to a foot and half high; the flowers ſtand in thick cluſters at the tops of the ſtalks, and round the upper joints: they are ſmall and white, and the cluſters are about as big as a nutmeg.

It is a native of Africa, but is in ſome of our gardens. Dillenius calls it, Spermacoce verticillis globoſis.

The other ſpecies are, 1. The broader-leaved Spermacoce, with ſmaller cluſters; 2. The larger-flowered Spermacoce.

## HEDYOTIS.

THE calyx is a ſmall perianthium, divided into four ſhort ſegments at the edge: the corolla conſiſts of a ſingle petal. It is of an infundibuliform ſhape, and very open at the mouth. The ſtamina are four moderately thick filaments: the antheræ are ſimple and large; the germen is roundiſh; the ſtyle is ſmall, and the ſtigma obtuſe: the fruit is a capſule, containing two cells, and in them a great number of ſmall ſeeds.

There is but one known ſpecies of this genus, and that is ſo well diſtinguiſhed by theſe characters, that it needs no farther deſcription.

## KNOXIA.

THE calyx is a perianthium, compoſed of a ſingle leaf, divided into four ſegments, one of which is larger than the reſt. The corolla conſiſts of a ſingle petal, of an infundibuliform ſhape: the ſtamina are four oblong, ſlender filaments; the antheræ are large and ſimple. The germen is roundiſh; the ſtyle ſimple, and moderately thick; the ſtigma ſmall; the ſeeds are two, and ſulcated.

This genus is very nearly allied to the Hedyotis. There is but one known ſpecies of it, and that is ſo ſufficiently diſtinguiſhed by it's characters, as to need no farther deſcription.

## DIODIA.

THE calyx of the Diodia is a perianthium, compoſed of two leaves, which are equal, of a ſubovate figure, and are affixed upon the germen, and permanent. The corolla is compoſed of a ſingle petal, and is of the ringent kind: the tube is ſlender, and longer than the cup: the upper lip is erect and bifid; the lower lip is patent, and divided into two lanceolated ſegments. The ſtamina are four erect, ſetaceous filaments, the two oppoſite ones ſomewhat longer than the other two; the antheræ are oblong and verſatile. The germen is of a roundiſh, but ſomewhat obſcurely ſquared, figure: the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is bifid. The fruit is an oval, quadrangular capſule, coronated and formed of two valves, and containing two cells: the ſeeds are ſingle, of an ovato-oblong figure, ſmooth and flat on one ſide, and convex on the other.

Of this genus there is but one known ſpecies; it approaches greatly to the Melampyrum, but it is a diſtinct genus. It is too well diſtinguiſhed by it's characters, to need any farther deſcription. It is a native of Virginia.

## CRUCIANELLA.

THE calyx of the Crucianella is compoſed of three leaves of a lanceolated figure, hollowed, pointed, and rigid, ſomewhat compreſſed and connivent. The corolla conſiſts of a ſingle petal: the tube is cylindric, filiform, and longer than the cup; the limb is ſmall, and divided into four parts. The ſtamina are four filaments, placed in the mouth of the tube: the antheræ are ſimple. The germen is compreſſed, and placed between the calyx and the corolla; the ſtyle is filiform, and of the length of the tube; and the ſtigmata are two in number, and obtuſe; one of theſe terminates the ſtyle, and the other ſtands ſeſſile below it's extremity. The fruit conſiſts of two capſules, which grow together: the ſeeds are ſingle and oblong.

This genus comprehends the Rubeola of Tournefort.

1. *Crucianella*

1. *Crucianella erecta foliis ſenis.* Narrow-leaved, ſpiked Madder.
*The erect, ſix-leaved Crucianella.*

The root of this ſpecies is oblong and hard, of a duſky reddiſh colour, and furniſhed with a great number of fibres. From this there uſually ariſe ſix or eight ſtalks; they are ſquare, rough, and frequently jointed: from every joint there grow ſeveral branches oppoſite to one another, and at every joint there ſtand ſix leaves, oblong, narrow, ſomewhat rough, and pointed at the ends. On the tops of the ſtalks ſtand long and narrow ſpikes, of whitiſh flowers. The whole plant grows to ten or twelve inches high, and is very well able to ſupport itſelf erect.

We have it not native in England, but in France it is common, and alſo in Germany. Tournefort calls it, Rubeola anguſtiore folio. C. Bauhine, Rubia anguſtifolia ſpicata.

2. *Crucianella procumbens foliis quaternis.*
*The procumbent Crucianella, with four leaves at a joint.*

The root of this ſpecies is moderately large, oblong, crooked, woody, of a reddiſh colour, and furniſhed with a number of fibres. From this riſe ſeveral ſtalks, which are ſquare, and ſomewhat hairy, but they trail upon the ground. At every joint of theſe ſtalks there ſtand four leaves, diſpoſed in form of a radiated ſtar, and of a lanceolated figure; from the alæ of theſe leaves there alſo grow ſtalks all the way up the plant, ſo that, when full grown, it makes a very buſhy figure. At the top of the main ſtalk, and of ſeveral of the branches, there ſtand ſpikes of flowers very long, appearing of a kind of ſquare figure, and greeniſh colour: the flowers themſelves are very ſmall and greeniſh.

This ſpecies is a native of ſome parts of France, and is common in the Iſlands of the Archipelago. We have it in ſome of our gardens. Tournefort calls it, Rubeola latiore folio. C. Bauhine, Rubia latifolia ſpicata.

## HOUSTONIA.

THE calyx of the Houſtonia is an extreamly ſmall perianthium; it is erect, permanent, and quadridentated. The corolla conſiſts of a ſingle petal, and is of an infundibuliform ſhape: the tube is cylindric, and long; the limb is patent, and is divided into four roundiſh ſegments. The ſtamina are four very ſmall filaments, ſituate in the neck of the corolla: the antheræ are ſimple; the germen is roundiſh and compreſſed: the ſtyle is ſimple, and ſhorter than the ſtamina: the ſtigma is bifid and acute. The fruit is a roundiſh, didymous capſule, compoſed of two valves, and containing two cells, in each of which is a ſingle ſeed.

Of this genus there is only one known ſpecies.

### HOUSTONIA.

The root is fibrous; the radical leaves are about half an inch long, narrow, and pointed at the ends; they lie expanded circularly on the ground. The ſtalks are numerous, round, ſmooth, and three or four inches high; they run up naked to about two inches, where they have a knot, at which grow two or three leaves: at this place alſo the ſtalk divides into two or three parts, and on the ſummit of each of theſe ſtands a ſingle flower, moderately large, and of a beautiful blue colour.

It is a native of Virginia. Moriſon calls it, Paronychiæ facie planta tetrapetaloides Virginiana flore cæruleo.

## GALLIUM.

THE calyx of the Gallium is a very ſmall perianthium, compoſed of one leaf, quadridentated at the edge, and fixed upon the germen. The corolla conſiſts of a ſingle petal, which has no tube, but is divided into four ſegments, plane and acute: the ſtamina are four ſubulated filaments, ſhorter than the corolla: the antheræ are ſimple: the germen is didymous, and ſtands below the receptacle: the ſtyle is filiform,

of the length of the ſtamina, and ſemibifid; the ſtigmata are capitatad. The fruit conſiſts of two dry berries of a globoſe figure, growing cloſe together, but not cohering: the ſeeds are ſingle, large, and umbilicated.

This genus comprehends the Gallium and the Aparine of Tournefort, and others, nay even of Linnæus himſelf; for, tho' there are the characters of theſe delivered ſeparately in his Genera Plantarum, 97 and 98, as of two genera, and under the two names of Gallium and Aparine, on compariſon they will be found to be the ſame; the very words are almoſt literally repeated.

1. *Gallium foliis plurimis linearibus, ramis floriferis brevibus.*
*The many-leawed Gallium, with ſhort flowering branches.*

Yellow Ladies Bedſtraw.

The root of this ſpecies creeps a long way under the ſurface of the ground, and is ſlender, woody, and brown. From the ſeveral parts of this riſe ſtalks, which grow to two feet in height; they are roundiſh, and often red. At the joints ſtand numbers of very narrow leaves, in form of a ſtar, of a blackiſh-green colour, and pointed at the ends; there are uſually eight or nine at a joint: at each joint there commonly are alſo two branches; at the tops of theſe, as well as of the main ſtalks, ſtand cluſters of beautiful yellow flowers.

The plant is frequent in our paſtures, and by way-ſides. C. Bauhine calls it, Gallium luteum. Haller, Gallium foliis octonis graciliſſimis, ſpica florea caulem terminante.

2. *Gallium foliis pluribus acutis, caule flaccido, ramis patentiſſimis.*
*The acute and many-leaved Gallium, with a flaccid ſtalk, and patent branches.*

White Ladies Bedſtraw.

The root of this ſpecies creeps under the ſurface, and is ſlender, jointed, and furniſhed with a multitude of fibres; from the joints riſe ſtalks, which grow to two feet, or more, in length, but are weak, and ſcarce able to ſupport themſelves quite erect. They are ſquare, and their joints ſtand at conſiderable diſtances: at every joint there are placed about eight leaves, in a radiated form; they are oblong, and pointed, and ſomewhat broad. At the top of the ſtalk, and of the branches, which are very numerous, ſtand great cluſters of white, ſmall flowers.

This ſpecies is very frequent with us in paſtures. Tournefort calls it, Gallium album vulgare. Haller, Gallium caule quadrangulo foliis octonis glabris, acuminatis.

3. *Gallium caule ſubaſpero, foliis lineari-lanceolatis ſpinulis terminatis.*
*The rough-ſtalked Gallium, with lineari-lanceolated leaves, terminated by ſpines.*

Little Cleavers.

This is one of the Galliums commonly known under the name of an Aparine, but it differs greatly from the ſpecies, called Common Cleavers. It's root is ſlender and creeping, and from every joint ſends up two or three ſtalks; theſe are ſquare, but weak, and grow to about eight inches high. At every joint there ſtand four, five, or ſix leaves, narrow, and pointed at the extremity, ſomewhat rough to the touch, and of a greyiſh-green colour: at the top of the ſtalk ſtand little cluſters of white flowers, larger than thoſe of the common cleavers, though the plant itſelf is ſo much ſmaller.

This ſpecies is frequent with us under hedges in ſpring. Tournefort calls it, Aparine paluſtris minor Pariſienſis flore albo. Haller, Gallium caule ſubaſpero, foliis quaternis et ſenis ſpinula terminatis.

The other more ſingular ſpecies of this genus are, 1. of thoſe called Gallia: 1. The broad-leaved, branched, mountain Gallium. 2. The narrow-leaved, purple-flowered Gallium. 3. The annual, yellow Gallium. 4. The verticillate, yellow Gallium. 5. The glaucous-leaved Gallium. 6. The little moſſy Gallium. 2. Of thoſe called Aparines,

Aparines, there are, 1. The common Aparine. 2. The ſmall-fruited Aparine. 3. The verrucous Aparine. 4. The echinated Aparine. 5. The little, narrow-leaved Aparine. 6. The purple, hoary-leaved Aparine.

The common Aparine is in ſome eſteem as an antiſcorbutic. The yellow Gallium is ſpoken of by ſome as ſingular, in that it yields an acid liquor in diſtillation: analyſes of plants were not common, when this was advanced: I know ſcarce any plant that does not yield ſuch an acid.

## RUBIA.

THE calyx of the Rubia is a very ſmall perianthium, formed of one leaf, quadridentated, and affixed on the germen. The corolla conſiſts of a ſingle petal, without a tube; it is divided into four ſegments, plane, acute, and hollowed at the baſe: the ſtamina are four ſubulated filaments, ſhorter than the flower; the antheræ are ſimple: the germen is didymous; the ſtyle is filiform, and bifid at the top; the ſtigmata are capitated. The fruit conſiſts of two ſucculent, ſmooth, round berries, growing together: the ſeed is ſingle, roundiſh, and umbilicated.

### 1. *Rubia foliis ſenis.* *The ſix-leaved Madder.* Madder.

The root of this ſpecies is long, moderately thick, and diſperſes itſelf under the ſurface every way; it is of a reddiſh colour, ſucculent and tender in the outer part, but with a woody fibre in the middle. It's taſte is partly ſweet, partly acute, and ſomewhat bitteriſh. The ſtalks grow to two or three feet; they are ſquare, weak, and rough to the touch, having a kind of ſharp, hooked ſpines ſet all the way down them. At every joint there ſtand ſix leaves in a radiated form; they are oblong, moderately broad, pointed, and rough to the touch: at the top of the ſtalk, and of the branches growing from the alæ of the leaves, ſtand cluſters of ſmall flowers of a greeniſh yellow colour.

This plant is not a native of England; it is cultivated in Germany, for the root. C. Bauhine calls it, Rubia tinctorum ſativa; others, Rubia hortenſis.

### 2. *Rubia foliis quaternis.* *Four-leaved Madder.* Wild Madder.

The root of this ſpecies is compoſed of a number of long, ſlender ramifications, ſpreading every way under the ſurface; it is hard, of a browniſh colour, and of an auſtere taſte: the ſtalk riſes to a foot high, and at every joint has a ſet of leaves, uſually four, diſpoſed in a radiated form; theſe are ſhort, ſomewhat broad, pointed at the ends, and rough to the touch. At the top of the branches and of the main ſtalk ſtand cluſters of ſmall yellow flowers.

This ſpecies is a native of England, but not common. I met with it this year, near Colſterworth in Lincolnſhire, in conſiderable abundance. C. Bauhine calls it, Rubia ſylveſtris aſpera quæ ſylveſtris Dioſcoridis.

The root of the firſt ſpecies is uſed in dying; and alſo in medicine, as a deobſtruent.

*Claſs the Fourth. Order the Firſt.*

*Diviſion the Third.*

*Tetrandria Monogynia, with monopetalous flowers, without the peculiar characters of the ſecond diviſion.*

## SIPHONANTHUS.

THE calyx is a ſmall perianthium: the corolla conſiſts of a ſingle petal, which is extreamly long, and placed below the germen. The ſtamina are four ſlender filaments; the antheræ are oblong, and thick: the fruit is a congeries of four roundiſh and moderately large berries, in each of which is contained a ſingle ſeed.

Theſe

Theſe characters render the diſtinction of the Siphonanthus from the Cateſbæa, and all the other plants of this claſs, too obvious to let it need any farther deſcription.

## CATESBÆA.

THE calyx of the Cateſbæa is a very ſmall perianthium, quadridentated, acute, and permanent. The corolla conſiſts of a ſingle petal, and is of a funnel-like ſhape: the tube is moſt remarkably long, ſtrait, and thicker upwards than at the baſe: the limb is broad, lightly divided into four ſegments, and erecto-plane: the ſtamina are four filaments, ſituate within the tube of the corolla: the antheræ are oblong, erect, and reach to the extremity of the corolla: the germen is roundiſh, and placed below the calyx; the ſtyle is filiform, and of the length of the corolla: the ſtigma is ſimple: the pericarpium is an oval, coronated, unilocular berry: the ſeeds are numerous and angular.

This ſhrub is deſcribed by the late Mr Mark Cateſby, from whom it is named, under the name of Lycium.

## IXORA.

THE calyx of the Ixora is a very ſmall perianthium, quadridentated, erect, and permanent. The corolla conſiſts of a ſingle petal; the tube is cylindric, very long and ſlender: the limb is plane, and divided into four oval ſegments: the ſtamina are four filaments, ſituate in the diviſions of the corolla; they are very ſhort and crooked; the antheræ are oblong: the germen is roundiſh; the ſtyle is filiform, and of the length of the tube; the ſtigma is bifid; the fruit is a berry of a roundiſh figure, with only one cell: the ſeeds are four in number, convex on one ſide, and angular on the other.

There is but one ſpecies of this genus, which is deſcribed in the ſecond volume of the Hortus Malabaricus, T. 13, 14.

## AVICENNA.

THE calyx of the Avicenna is a perianthium, conſiſting of one leaf, divided into five ſegments, acuminated, erect, and permanent. The corolla conſiſts of a ſingle petal, and is plane, and divided into four ovato-acuminated ſegments: the ſtamina are four ſubulated filaments, ſhorter than the corolla; the antheræ are bifid. The germen is oval; the ſtyle is ſubulated, ſhort, and permanent: the ſtigma is acute. The perianthium is a coriaceous capſule, oval, but terminating in a point, containing only one cell, and not ſplitting open: the ſeed is ſingle, compreſſed, and of an elliptic figure, and germinates within the pericarpium.

There is but one known ſpecies of this genus, which is deſcribed in the fourth volume of the Hortus Malabaricus, F. 45.

## PENÆA.

THE calyx of the Penæa is a perianthium, conſiſting of two leaves; theſe are hollow, equal, coloured, of a lanceolated figure, placed oppoſite to one another, lax, deciduous, and but of about half the length of the corolla. The corolla conſiſts of a ſingle petal, and is of the campanulated kind: the limb is much ſhorter than the tube, and is patulous, and divided into four acute ſegments: the ſtamina are four very ſhort filaments, and are affixed to the tube of the corolla, between the ſegments, and are erect and naked: the antheræ are erect, plane, and emarginated at each end: the germen is of an oval figure, but quadragonal: the ſtyle is rendered quadrangular alſo by four longitudinal, membranaceous alæ affixed to it: the ſtigma is cruciform, obtuſe, and permanent. The fruit is a quadragonal capſule, with it's ſtyle remaining affixed to it; it is formed of four valves, and contains four cells. The ſeeds are two in each cell, and are oblong and obtuſe.

The Sarcocolla of the ſhops has been ſuppoſed to be the produce of this plant, but erroneouſly.

PAVETTA.

## PAVETTA.

THE calyx is a ſmall perianthium, divided into four ſegments at the extremity: the corolla conſiſts of a ſingle petal, which is of an infundibuliform ſhape, and ſtands upon the germen: the ſtamina are four ſubulated filaments: the germen is roundiſh, the ſtyle ſlender, and the ſtigma crooked. The fruit is a roundiſh, moderately large berry, containing only a ſingle ſeed.

The curvature of the ſtigma of the Pavetta is ſo obvious a diſtinction, that there needs no farther deſcription of it.

## CALLICARPA.

THE calyx is a perianthium, divided into four ſegments at the edge: the corolla is expanded, and divided alſo into four ſegments: the ſtamina are four ſlender filaments: the antheræ are tumid and oblong: the germen is roundiſh; the ſtyle ſlender, and the ſtigma ſimple. The fruit is a ſingle, roundiſh berry, containing ſix ſeeds.

The number of ſeeds in the berry is a ſufficient diſtinction of the Callicarpa. We could wiſh to have had opportunity of being longer on all the genera, but it is neceſſary, in a work circumſcribed within the limits of ours, to be ſhort on the leſs eſſential parts, ſo nothing neceſſary to the knowledge of the ſcience is omitted, that we may have room to be ſufficiently large on the more intereſting particulars.

## BLÆRIA.

THE calyx of the Blæria is a perianthium, compoſed of four little, erect, linear leaves, ſomewhat ſhorter than the corolla, and permanent: the corolla is formed of a ſingle petal: the tube is cylindric, of the length of the cup, and pervious: the limb is ſmall, and is divided into four oval, reflex ſegments: the ſtamina are four ſetaceous filaments, inſerted into the cup, and of the length of the tube of the flower: the antheræ are oblong, erect, compreſſed, obtuſe, and emarginated. The germen is quadragonal and ſhort: the ſtyle is ſetaceous, and much longer than the corolla: the ſtigma is obtuſe. The fruit is an obtuſe, quadrangular capſule, containing four cells, and opening at the corners; in each cell there are ſeveral roundiſh ſeeds: the antheræ, though emarginated, are not bicornate. Theſe characters are ſufficient, without the addition of a deſcription.

## POLYPREMUM.

THE calyx is a perianthium, compoſed of four pointed leaves: the corolla is compoſed of a ſingle petal, and is of the rotated form, divided into four ſegments, which are broad, and obverſely cordated. This ſtructure of the corolla alone is ſo different from that of all the other plants of this claſs, that there need no farther characters.

## EXACUM.

THE calyx is a perianthium, compoſed of four leaves: the corolla conſiſts of a ſingle petal, formed into a tube, of a ſomewhat globoſe figure, and divided at the extremity into four ſegments. The ſtamina are four ſlender filaments: the antheræ are ſhort: the germen is oval, and marked with two furrows: the ſtyle is ſlender; the ſtigma ſimple. The fruit is a capſule, opening at the top, marked with two deep furrows, and containing two cells.

Theſe characters are ſo obvious a diſtinction of the Exacum from all the other plants of this genus, as to render a farther deſcription unneceſſary.

## BUDDLÆA.

THE calyx of the Buddlæa is a very ſmall, permanent perianthium; it is compoſed of one leaf, lightly divided into four ſegments, acute and erect. The corolla conſiſts of a ſingle petal, lightly divided into four oval, acute ſegments, and three times as large as the cup. The ſtamina are four very ſhort filaments, placed at the diviſions of the flower: the antheræ are ſimple, and very ſhort: the germen is oval: the ſtyle is ſimple, and of ſcarce half the length of the corolla: the ſtigma is obtuſe: the fruit is an oval, oblong capſule, marked with two furrows, and containing two cells. The ſeeds are very numerous, and very ſmall.

Of this genus there is but one known ſpecies; it is an American, deſcribed by Houſton.

## PLANTAGO.

THE calyx of the Plantago is a perianthium, divided into four parts, erect, very ſhort, and permanent. The corolla conſiſts of a ſingle petal, and is of very ſhort duration: the tube is of a cylindraceo-globoſe figure: the limb is divided into four oval, acute ſegments: the ſtamina are four erect, capillary, and extremely long filaments: the antheræ are oblong, compreſſed, and incumbent. The germen of the piſtil is oval: the ſtyle is filiform, and ſcarce of half the length of the ſtamina: the ſtigma is ſimple. The fruit is a capſule of an oval figure, containing two cells, and opening longitudinally: the ſeeds are numerous, and very ſmall. The calyx in moſt ſpecies is equal, in ſome unequal.

This genus comprehends the Plantago, Coronopus, Pſyllium, Scoparia, and the Gramen junceum of ſome authors.

1. *Plantago foliis ovatis glabris.* Common broad-leaved Plantain.
*The ſmooth and oval-leaved Plantain.*

The root of this ſpecies is of the thickneſs of a man's finger, but ſhort, and, as it were, cut off, and is furniſhed with a great number of fibres: from this ariſe ſix or eight leaves, which are ſomewhat hairy at their firſt appearance, but afterwards ſmooth, broad, obtuſe, and marked with three ſtrong longitudinal ribs on each ſide of the principal or middle one. From the center of this cluſter riſe a number of ſtalks, round, moderately thick, ſucculent, and ſomewhat hairy, ten or twelve inches in height; the greater part of theſe is formed into the ſpike of flowers, which is ſlender and cylindric: the apices are purple.

This ſpecies is common every-where with us, by way-ſides. C. Bauhine calls it, Plantago latifolia vulgaris.

The beautiful Roſe Plantain is only a variety of this common ſpecies.

2. *Plantago foliis linearibus, pinnato-dentatis.* Buck's-horn-Plantain.
*The linear and pinnato-dentated-leaved Plantain.*

The root of this ſpecies is long, white, moderately thick, and of a ſweet and pleaſant taſte. From this ariſes a cluſter of leaves, ſpreading themſelves every way from the center, ſo as to appear radiated. They are four or five inches long, narrow, and divided at the edges into long and ſlender ſegments, giving ſome diſtant reſemblance of the figure of a ſtag's-horn: among theſe riſe ſeveral ſtalks, round, hairy, and four or five inches in length, often much more: at the top ſtands a long, ſlender ſpike, like that of the common Plantain.

This ſpecies is frequent with us on heaths, and in barren places. C. Bauhine calls it, Coronopus ſylveſtris hirſutior; others, ſimply, Coronopus.

3. *Plantago*

3. *Plantago caule ramoſo, foliis dentatis, ſpicis nudis.*
*The dentated-leaved, naked-ſpiked, branched Plantain.* **Common Fleawort.**

The root of this ſpecies is long, ſlender, and white, and has a few fibres. From this riſes the ſtalk, which grows to a foot, or more, in height, and is round, ſolid, erect, hairy, and branched almoſt from the bottom to the top: at every joint of the ſtalk ſtand two leaves, long, narrow, and dentated on the edges, ſo as, in ſome meaſure, to reſemble thoſe of the coronopus, or buck's-horn Plantain. The tops of the branches are ſomewhat viſcid to the touch: from the alæ of the leaves there grow long pedicles, on the tops of which ſtand ſhort and thick ſpikes, compoſed of cluſters of little, whitiſh flowers, which are ſucceeded by beautiful, gloſſy, black ſeeds; which, thrown into boiling water, make a fine mucilage.

This ſpecies is not a native of England, but we have it in ſome of our gardens. C. Bauhine calls it, Pſyllium Dioſcoridis, vel Indicum, foliis crenatis. The ſeeds of this ſpecies are, or ought to be, uſed in the ſhops; thoſe of the great Pſyllium are uſually ſold in their place.

4. *Plantago ſcapo unifloro.*
*The ſingle-flowered Plantain.* **Long-threaded Rush-graſs.**

The root of this little plant is compoſed of a great number of conſiderably long and thick fibres: from this riſe ſeveral oblong, narrow, thick, and ſucculent leaves; they are two or three inches in length, and ſcarce an eighth of an inch in breadth, and lie upon the earth in a radiated manner. From the center of theſe grow ſeveral ſtalks, often not half an inch high; each has on it's ſummit a ſingle flower, ſmall, and compreſſed, but with four very remarkably long ſtamina riſing from it.

This little plant is found in boggy places, in many parts of England; I met with it this year in Borough-fen near Peterborough. Tournefort calls it, Plantago paluſtris gramineo folio monanthos. Moriſon, and others, Gramen junceum minus capitulis longiſſimis filamentis donatis.

The other ſpecies of Plantain are very numerous; of the common Plantain kind the more ſingular are, 1. The broad-leaved, hoary Plantain. 2. The narrow-leaved Plantain. 3. The ſerrated, narrow-leaved Plantain. 4. The ſhrubby, narrow-leaved Plantain. 5. The hairy, bulbous Plantain. 6. The narrow-leaved, ſea Plantain. 7. The graſſy-leaved Plantain. 8. The hairy, ſea Plantain. Of the Pſyllium kind are, 1. The common great Pſyllium. 2. The great procumbent Pſyllium. 3. The little Pſyllium.

The leaves of the common Plantain are refrigerating and diuretic: the root of the Coronopus is eſculent: the ſeeds of the Pſyllium make a mucilage much uſed in fevers.

## CENTUNCULUS.

THE calyx of the Centunculus is a perianthium, divided into four, acute, lanceolated ſegments, longer than the corolla, and permanent: the corolla conſiſts of a ſingle petal: the tube is inflated, and of a ſomewhat globular figure: the limb is plane, and is divided into four ſuboval ſegments: the ſtamina are four filaments, nearly of the length of the flower: the antheræ are ſimple: the germen is roundiſh, and placed within the tube of the corolla: the ſtyle is filiform, of the length of the corolla, and is permanent: the ſtigma is ſimple: the fruit is a globoſe capſule, containing only one cell, and opening horizontally: the ſeeds are roundiſh, very numerous, and very ſmall.

This genus comprehends only the plant called Anagallidaſtrum by Micheli, and Anagallidis ſpecies, by Vaillant, 4. f. 2.

## CENTUNCULUS.

The root of this little plant is a ſlender, white fibre, divided into two or three ramifications toward the bottom, and furniſhed with a few capillaments. From this ariſe four or five ſtalks, round, two or three inches long, and procumbent: the leaves ſtand alternately, and at conſiderable diſtances; they are ſmall, ſhort, and ſomewhat broad, and pointed at the end: in the ala of every leaf ſtands a very minute, white flower, ſcarce viſible, and fading very ſoon; but in it's place there comes a capſule, round, and very large, for the bigneſs of the plant.

This little plant is a native of England, but is not common; I found it this year on Hounſlow-heath.

## SANGUISORBA.

THE calyx of the Sanguiſorba is a perianthium, compoſed of two very ſhort leaves, placed oppoſite to one another, and ſoon falling off. The corolla is formed of a ſingle petal, plane, and divided into four parts; the ſegments are oval, obtuſe, and connected only by the extremities. The ſtamina are four filaments, of the length of the corolla, broader at the top than elſewhere: the antheræ are ſmall and roundiſh: the germen of the piſtil is quadrangular, and is ſituated between the calyx and corolla: the ſtyle is filiform, and very ſhort: the ſtigma is obtuſe: the fruit is a ſmall, bilocular capſule; the ſeeds are ſmall.

1. *Sanguiſorba ſpicis ovatis.* Great Burnet.
*The oval-ſpiked Sanguiſorba.*

The root of this ſpecies is thick, oblong, and of an acrid, bitteriſh taſte. From this riſe pinnated leaves, of ſix or eight inches in length, compoſed of a number of pinnæ, ſet in pairs, and reſembling the leaves of betony, but more deeply indented, ſmooth, and gloſſy: among theſe riſe ſeveral ſtalks, three feet high, round, ſtriated, not hairy, and hollow; on theſe ſtand leaves, like the radical ones, but ſmaller, alternately, and at conſiderable diſtances. At the tops of the branches ſtand the flowers, arranged into ſhort, oval ſpikes, of a brown colour.

This ſpecies is frequent in meadows, in ſome parts of England. C. Bauhine calls it, Pimpinella ſanguiſorba major; Haller, Pimpinella foliis oblonge cordatis, ſpica brevi.

2. *Sanguiſorba ſpicis oblongis.* American Burnet.
*The oblong-ſpiked Sanguiſorba.*

The root of this ſpecies is very large, oblong, and whitiſh: the radical leaves are a foot and half long, compoſed of a great number of large pinnæ, dentated at the edges, and of a cordated, oblong figure. The ſtalk grows to four feet high, and has leaves like the radical ones, but ſmaller, placed alternately on it: toward the top it ſends out many branches, and, at the top of each, ſtands a ſpike of flowers, two or three inches long, and of the thickneſs of a finger; the flowers are ſmall, and of a greeniſh-white.

This ſpecies is a native of North America, but we have it in our gardens. Cornutus calls it, Pimpinella maxima; Gerard, and others, Pimpinella Canadenſis, and Hortenſis maxima.

The other ſpecies of Sanguiſorba are, 1. The auriculated-leaved, tall Sanguiſorba. 2. The great, glomerated-headed Sanguiſorba. 3. The great, purple-ſpiked Sanguiſorba. 4. The agrimony-leaved Sanguiſorba. 5. The little, hairy Sanguiſorba. 6. The little, ſmooth Sanguiſorba. 7. The ever-green Sanguiſorba.

The great Sanguiſorba is celebrated as a cordial, or ſudorific, and aſtringent, but, though great cures are ſaid to have been performed by it, the preſent practice neglects it.

## CISSUS.

## CISSUS.

THE calyx is a plane perianthium: the corolla is compoſed of a ſingle petal, lightly divided into four ſegments at the edge: the ſtamina are four ſlender filaments: the antheræ are oblong, and tumid: the germen is roundiſh: the ſtyle is ſhort: the ſtigma ſimple. The fruit is a roundiſh berry, containing only a ſingle ſeed, and is lodged within the corolla.

Theſe characters are ſufficiently diſtinctive and obvious, without any farther deſcription.

*Claſs the Fourth. Order the Firſt.*

*Diviſion the Fourth.*

*Tetandria Monogynia, with tetrapetalous compleat flowers.*

## EPIMEDIUM.

THE calyx of the Epimedium is a deciduous perianthium, compoſed of four oval, obtuſe, hollow, little leaves, placed immediately under the petals of the corolla, not alternately with them: the corolla conſiſts of four oval, obtuſe, hollow petals: the nectaria are four in number; they are formed like cups; their bottom is obtuſe; they are of the ſize of the petals, and are incumbent on them, and the edge of their opening is affixed to the cup: the ſtamina are four ſubulated filaments, compreſſing the ſtyle: the antheræ are oblong, erect, and bilocular, formed of two valves, and ſplitting longitudinally: the germen is oblong: the ſtyle is ſhorter, and is only of the length of the ſtamina: the ſtigma is ſimple: the fruit is an oblong pod, pointed at the end, formed of two valves, and having only one cell: the ſeeds are numerous, and of an oblong figure.

Of this genus there is only one known ſpecies.

*Epimedium.*
*Barrenwort.*

The root of the Epimedium is very long, ſlender, and creeping: the radical leaves ſtand on pedicles of five inches long, round, ſlender, and gloſſy; theſe divide at their top into three ramifications, and each of theſe is again divided into three; and, at the extremity of each of theſe laſt ramifications, ſtands a ſingle leaf, an inch, or more, in length, half an inch in breadth, of a pale green, auriculated, and pointed at the end; nine of theſe compoſe the compleat radical leaf: three or four of theſe uſually ariſe from the ſame part of the root, and among them a ſtalk, a foot, or ſomewhat more, in height, round, rigid, ſmooth, and furniſhed with one compound leaf about it's middle; above this it divides into three or four branches, and each ſuſtains five or ſix very beautiful purple flowers, with a mixture of yellow.

This elegant plant is a native of England: I have found it in ſome of the woods in Yorkſhire; it grows alſo abundantly in a wood near Thorndon in Eſſex, but this has probably been from roots thrown out of the late lord Petre's garden.

## CORNUS.

THE calyx of the Cornus is double: the common involucrum is formed of four leaves, and contains ſeveral flowers, with their peduncles: the leaves it is compoſed of are coloured, of an oval figure, and deciduous; the two oppoſite ones are ſmaller than the others. The proper perianthium is alſo deciduous; it is very ſmall, and is placed on the germen; it is formed of a ſingle leaf, dentated in four places on the rim: the corolla conſiſts of four oblong, acute, plane petals, ſmaller than the involucrum: the ſtamina are four erect, ſubulated filaments, longer than the corolla: the antheræ are roundiſh and incumbent: the germen is roundiſh, and is placed beneath the receptacle: the ſtyle is filiform, and of the length of the corolla: the ſtigma is obtuſe. The fruit

is a roundiſh, umbilicated drupe: the nut within it is oblong, and umbilicated, and contains two cells, in each of which is a ſingle, oblong kernel.

This genus comprehends the Cornus of authors, and the Virga ſanguinea of Dillenius.

1. *Cornus umbellis involucrum æquantibus.* The Cornelian Cherry.
*The Cornus, with the umbellæ equalling the involucrum.*

This ſpecies grows to a large and tall tree, and is much branched. The bark is greyiſh, or reddiſh; the wood white, ſolid, and hard: the leaves are oblong and broad, ſmooth on the ſurface, even at the edges, and full of large ribs: at the extremity of the branches ſtand cluſters of flowers, ſmall, and diſpoſed in umbels: after theſe come fruits, reſembling an olive, but not ſo thick; they are green at firſt, and afterwards of a beautiful red, ſtaining the hands, when bruiſed; they are, at firſt, of an acerb taſte, but, when quite ripe, of an agreeable mixture of ſweet and acid. C. Bauhine calls this, Cornus hortenſis mas. J. Bauhine, Cornus ſativa ſeu domeſtica.

It is a native of Miſnia, Auſtria, and ſome other places: it ſucceeds very well in our gardens.

2. *Cornus umbellis involucro multoties longioribus.* The Female Cornell.
*The Cornus, with umbels many times longer than the involucrum.*

This ſpecies riſes to about four or five feet, and is not much branched. It's bark is of a dark brown; it's wood white, and very firm and ſolid: it's trunk ſeldom exceeds three quarters of an inch in diameter. The leaves are two inches long, an inch and a half broad, full of large veins, even at their edges, and they terminate in a point. The flowers are ſmall, and of a greeniſh-white; they ſtand in umbels at the tops of the branches, and are ſucceeded by oblong fruits, of the bigneſs of a pea, and of a green colour at firſt, but blackiſh, when ripe.

This ſpecies is frequent in our hedges. The bark of it's younger ſhoots is often red, as are alſo many of the leaves, in which caſe it makes a ſingular and beautiful figure. C. Bauhine calls this, Cornus fœmina; others, Virga ſanguinea.

The other ſpecies of Cornus are, 1. The great, yellow-fruited Cornell. 2. The white-fruited, ſhort-leaved Cornell. 3. The American Cornell, with corymboſe flowers, and a large, white perianthium: and, 4. The herbaceous Cornus, called by authors Chamæpericlymenum, or the Dwarf Honeyſuckle.

## EUONYMUS.

THE calyx of the Euonymus is a plane perianthium, formed of one leaf, divided into four roundiſh and hollow ſegments: the corolla conſiſts of four plane, oval, patent petals, and is larger than the cup: the ſtamina are four erect, ſubulated filaments, ſhorter than the corolla, and inſerted on the germen: the antheræ are didymous: the germen is acuminated: the ſtyle is ſhort and ſimple: the ſtigma is obtuſe. The fruit is a ſucculent, coloured capſule, of a quadragonal figure, formed of four valves, terminating in as many points, and forming as many cells: the ſeeds are ſingle, of an oval figure, and covered with a calyptra.

There are ſometimes five ſtamina, petals, &c. and ſometimes no filaments but the points of the receptacle.

1. *Euonymus foliis oblongo-ovatis.* The Spindle-tree.
*The oblongo-oval leaved Euonymus.*

This is a ſhrub of ſix or eight feet high: the bark of the ſtem is brown, the wood white and firm, the root large and brachiated. The bark of the young ſhoots is green, and forms four ridges at nearly equal diſtances, ſo that they appear ſquare: the leaves are two inches long, of a bright green colour, moderately broad, and terminate in a point. The flowers are very ſmall and greeniſh; the fruit is a very elegant one, of the bigneſs of a ſmall nut, green at firſt, but of a beautiful ſcarlet, when ripe.

This

This ſpecies is frequent in our hedges. C. Bauhine calls it, Euonymus vulgaris granis rubentibus; others, Euonymus Theophraſti, and Tetragonia.

2. *Euonymus foliis lato-lanceolatis ſerratis*
*The Euonymus, with broad, lanceolated, and ſerrated leaves.*

**Virginian Spindle-tree.**

This is a moderately large and very beautiful tree. It's bark is ſmooth, brown on the trunk, and greeniſh on the branches: the leaves are of a beautiful green, ſmooth on the ſurface, and elegantly ſerrated at their edges: the flowers are very ſmall, and of a yellowiſh-green: the fruit is of the ſize of a large pea, of a beautiful red colour, and verrucoſe. It conſiſts of five capſules, not of four, as that of our Euonymus, and therefore is pentangular: the calyx alſo is divided into five ſegments, and the flower has five petals, and five ſtamina.

This ſpecies is a native of Virginia; it ſtands very well in our gardens. Plukenet calls it, Euonymus Virginianus pyracanthæ foliis, capſula verrucarum inſtar exaſperata rubente. Gronovius, Euonymus foliis lanceolatis.

The other ſpecies of Euonymus are, 1. The red-flowered Enonymus, with black fruit. 2. The broad-leaved Euonymus. 3. The African Euonymus, with lucid, ſerrated leaves; and, 4. The broad-leaved, American Euonymus, with cluſtered, pentagonal, black fruit.

## TOMEX.

THE calyx is a perianthium, formed of a ſingle leaf, of a cylindric ſhape, and divided into four ſhort ſegments at the edge; the corolla conſiſts of four petals; the ſtamina are four very long filaments: the antheræ are ſmall; the germen is roundiſh, the ſtyle is long and ſlender, and the ſtigma is emarginated. Theſe characters are ſo diſtinctive and obvious, that no farther deſcription is neceſſary.

## PTELEA.

THE calyx of the Ptelea is a ſmall perianthium, divided into four parts. The corolla conſiſts of four petals, of an ovato-lanceolate figure, plane, patent, and larger than the cup: the ſtamina are four ſubulated filaments; the antheræ are roundiſh: the germen is orbiculated and compreſſed; the ſtyle is ſhort; the ſtigmata are two, and are acute. The fruit is a roundiſh, perpendicular membrane, having a cavity in it's center for the ſeed, which is ſingle, and of a cylindric figure.

The fruit of the Ptelea is extreamly like that of the elm, but all the other parts of the fructification are different. The ſtamina, ſegments of the cup, &c. are ſometimes five inſtead of four.

Of this genus there is only one known ſpecies, called, Frutex ulmi facie, by Dillenius and others. The characters render a deſcription unneceſſary.

## LUDWIGIA.

THE calyx of the Ludwigia is a permanent perianthium, ſituate on the germen, and formed of a ſingle leaf, divided into four lanceolated ſegments, patent, and of the length of the corolla: the corolla conſiſts of four plane, patent, equal petals, of an obverſely, cordated figure: the ſtamina are four ſhort, erect, ſubulated filaments: the antheræ are ſimple, oblong, and erect: the germen is tetragonal, and cloathed with the baſe of the cup: the ſtyle is cylindric, and of the length of the ſtamina: the ſtigma is obſcurely tetragonal and capitated: the fruit is a quadragonal, obtuſe capſule, ſurrounded by the cup, and coronated with it at the extremity; it contains four cells, and opens in four places at once: the ſeeds are numerous and ſmall.

*Ludwigia*

*Ludwigia capſulis cubicis apice perforatis.*
*The Ludwigia, with cubic capſules perforated at the baſe.*

**Virginian yellow Willow-herb.**

This plant grows to a foot high: the ſtalk is erect, firm, and branched: the leaves ſtand alternately, and are of a lanceolated figure, and undivided at their edges: the flowers ſtand ſingly down the ſides of the upper part of the ſtalks; they are large, and of a beautiful yellow: the root is compoſed of a multitude of fibres: the capſule is ſhorter than the cup, ſmooth, of a cubic figure, and perforated at the extremity.

It is a native of Virginia, but ſtands very well in our gardens. Plukenet calls it, Lyſimachia non pappoſa, flore luteo majore, ſiliqua caryophylloide minore ex Virginia.

## OLDENLANDIA.

THE calyx of the Oldenlandia is a permanent perianthium, placed upon the germen, and formed of a ſingle leaf, divided into four ſubulated ſegments. The corolla conſiſts of four oval petals, patent, and twice as long as the ſegments of the cup: the ſtamina are four ſimple filaments: the antheræ are ſmall: the germen is roundiſh, and placed under the cup: the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is emarginated. The fruit is a coriaceous globular capſule, containing two cells: the ſeeds are numerous, and very ſmall.

There is but one known ſpecies of this genus. It is an American, deſcribed by Plumier.

## AMMANIA.

THE calyx of the Ammania is a permanent perianthium, of a campanulated figure, oblong, erect, quadrangular, marked with eight ſtriæ and plicæ, and divided into eight denticular ſegments, at the extremity the alternate ones. The corolla, when not wanting, conſiſts of four petals inſerted into the calyx, placed vertically and patent: the ſtamina are four ſetaceous filaments, of the length of the calyx, and inſerted into it: the antheræ are didymous: the germen is large, and of a ſomewhat oval figure: the ſtyle is ſimple, and very ſhort; the ſtigma is capitated. The fruit is a roundiſh capſule, ſurrounded by the cup, and containing four cells: the ſeeds are numerous and ſmall. Houſton figures the four petals from his American plants; they are wanting in thoſe which flower with us.

*Ammania foliis ſemiamplexicaulibus.*
*The Ammania, with leaves almoſt ſurrounding the ſtalks.*

This is a ſhrubby plant: it grows to a foot, or two, in height; it's ſtem is woody, the bark brown and ſmooth: the leaves ſtand two at a joint, oppoſite one to another. They are an inch and a half long, and not more than an eighth of an inch broad at the baſe, where they are broadeſt, and ſurround part of the ſtalk; from thence they grow narrower all the way, till they terminate in a point; they are hollowed, ſmooth, and even at the edges. The flowers ſtand in the alæ of the leaves: the fruit in the cup, when full grown, is of the ſize of a pea: the root is formed of a number of woody fibres.

This is a native of Barbadoes, and the neighbouring iſlands. Sir Hans Sloane, Ray, &c. call it, Aparines folio vaſculo ſeminali rotundo, ſeminibus minutiſſimis.

## TRAPA.

THE calyx of the Trapa is a permanent perianthium, formed of one leaf, and divided into four acute ſegments. The corolla conſiſts of four petals, vertically ovated, and larger than the cup: the ſtamina are four filaments, of the length of the cup: the antheræ are ſimple: the germen is oval; the ſtyle is ſimple, and of the length of the cup; the ſtigma is capitated and emarginated. The fruit is a hard oſſeous capſule, of an oblong, oval figure, containing only one cell, and armed with four ſharp, thick

thick ſpines, placed oppoſitely in the middle of the ſides, and patent; theſe were before the leaves of the calyx: the ſeed is a ſingle, covered nucleus, of an oval figure.

There ſeem to be four other ſteril ſtamina, beſide the four which have antheræ on them.

There is only one known ſpecies of this genus, which is deſcribed by authors under the name of Tribulus Aquaticus, and Tribuloides.

## TRAPA. Water Caltrop.

The root of this ſingular plant is compoſed of a great number of oblong, ſlender bodies, partly ſwimming in the water, partly immerſed in the mud at the bottom, and from different parts of theſe there grow ſeveral tufts of fibres, ſhort and ſlender. From this there riſe a number of leaves, in ſome degree reſembling thoſe of the poplar, an inch and half long, ſmooth on the upper ſide, rugoſe underneath, and ſtanding on pedicles four or five inches long, hollow or fungous, and having a tuberoſity a little above their inſertion. The flowers grow on ſeparate pedicles; they are ſmall and white; the fruit is of the bigneſs of a ſmall walnut; the kernel eſculent.

It is frequent in many parts of Europe in ſtanding waters, with muddy bottoms; but it is not a native of England. C. Bauhine calls it, Tribulus aquaticus. Tournefort, Tribuloides vulgaris aquis innatans.

### *Claſs the Fourth. Order the Firſt.*

### *Diviſion the Fifth.*

### *Tetrandria Monogynia, with tetrapetalous, incompleat flowers.*

## DORSTENIA.

THE calyx of the Dorſtenia is double; the common involucrum is very large, plane, angulated, and covered with a common receptacle, which grows to it, and with very numerous and very ſmall flowers growing on it's diſk. The proper perianthium is quadrangular and hollow; it is immerſed in the receptacle, and grows to it. There is no corolla: the ſtamina are four very ſmall, filiform filaments; the antheræ are roundiſh: the germen is roundiſh; the ſtyle is ſimple, and the ſtigma obtuſe. There is no fruit; but the common receptacle becomes thick and fleſhy: the ſeeds are ſingle, roundiſh, and acuminated.

Of this genus there is only one known ſpecies; but, that from the variation of the leaves and receptacle in their different periods of growth, has been deſcribed under two names, as if two ſpecies.

## DORSTENIA. The Contrayerva Plant.

The root of the Dorſtenia is oblong, of the thickneſs of a man's little finger, of an irregularly protuberant ſurface, and of a reddiſh-brown colour on the outſide, and white within. It's texture is fibrous; it's taſte extreamly acrid; it deſcends obliquely into the ground, and is furniſhed with a great number of large fibres. From this riſe five or ſix leaves, each on it's ſeparate pedicle: the pedicles are five inches long, round, and reddiſh; the leaves at firſt are of a kind of triangular figure, and only undulated at the edges; but afterwards they become more and more deeply ſinuated, till at length they reſemble thoſe of the common Sphondylium: they are four or five inches long, and nearly as much in breadth. Among theſe riſe ſeveral pedicles, ſix or ſeven inches high, ſupporting each one common involucrum, with it's receptacle, and a multitude of flowers. The ſhape of this common involucrum varies alſo, as it is more or leſs mature; and is at ſome periods roundiſh, at others angular. It is very thick and fleſhy, when mature, and the ſeeds are white.

This plant is a native of South America. Houſton deſcribes it twice, under it's two ſtates of maturity, under the names of Dorſtenia dentariæ radice, ſphondylii folio, placenta ovali, and Dorſtenia dentariæ radice, folio minus laciniato, placenta quadrangulari et undulata. It's root is the Radix Contrayervæ of the ſhops. It is a noble ſudoriſic and alexipharmic. It ſtrengthens the ſtomach, diſſipates flatulencies, and is excellent, in the form of the lapis contrayerva of the ſhops, in fevers; and as a ſtomachic, infuſed in wine, in ſmall quantities.

## ISNARDA.

The calyx of the Iſnarda is a campanulated perianthium, lightly divided into four acute, patent ſegments. There is no corolla: the ſtamina are four filaments, growing out of the middle of the cup; the antheræ are ſimple. The germen is lodged within the ſubſtance of the cup; the ſtyle is ſimple, and longer than the ſtamina; the ſtigma is thick: the fruit is formed of the ſquare baſe of the cup; it has four cells, and in them a few ſeeds of an oblong figure.

This genus comprehends the Dantia of Petit, and the glaucis, ſpecies 84. of Boccone. The characters render a farther deſcription unneceſſary.

## ELÆAGNUS.

THE calyx of the Elæagnus is a perianthium, conſiſting of a ſingle leaf, very lightly divided into four ſegments, ſtrait, campanulated, ſcabrous on the outſide, coloured within, and deciduous: there is no corolla. The ſtamina are four very ſhort filaments, inſerted below the diviſures of the calyx: the antheræ are oblong, and incumbent: the germen is roundiſh, and placed below the receptacle: the ſtyle is ſimple, and a little ſhorter than the cup: the ſtigma is ſimple. The fruit is a drupe of an oval figure, obtuſe, ſmooth, and punctated at the top, in which is an oblong, obtuſe kernel.

### *Elæagnus foliis lanceolatis.*
### *The lanceolated-leaved Elæagnus.*

The root of this tree ſpreads a great way under the ſurface, and is formed of long and thick ramifications. The tree grows to fifteen or twenty feet high, and ſpreads it's branches every way to a conſiderable extent: the bark is whitiſh, rough, and cracked on the trunk; ſmooth, and often downy, on the young ſhoots. The leaves are an inch and half long, three quarters of an inch broad, and all over white, eſpecially on the under ſide; they adhere to ſhort pedicles, and ſtand irregularly on the branches; they are pointed at the ends, and ſoft to the touch. The flowers ſtand in the alæ of the leaves; they are ſmall and white; the fruit is like an olive, only ſmaller; it's pulpy part fungous, but well taſted.

This tree is common in Syria and Cappadocia, as alſo in Bohemia and Spain. C. Bauhine calls it, Olea ſylveſtris folio molli incano. Dodonæus, Zizyphus Cappadocica.

## BRABEJUM.

THE Brabejum has no calyx. The corolla conſiſts of four linear, obtuſe petals, in their lower part erect, and forming a kind of tube; in the upper turned backward. The ſtamina are four capillary filaments, inſerted in the ungues of the petals, and ſcarce ſo long as the corolla: the antheræ are ſmall, and ſplit ſideways: the germen is very ſmall and hairy; the ſtyle is filiform, of the length of the ſtamina, and ſomewhat thicker above than below; the ſtigma is ſimple. The fruit is a drupe of the drier kind, of an oval figure, and hairy; the kernel is oval.

There is but one known ſpecies of this genus. It is figured by Breynius in his Cent. f. 1. The characters are ſufficient, without any farther diſtinction.

## CAMPHOROSMA.

THE calyx of the Camphoroſma is formed of a ſingle leaf, and is of a hollowed, bellied, and urceolar figure, with two oppoſite and alternate, very ſmall teeth. The corolla is incompleat; the ſtamina are four ſlender filaments; the antheræ are roundiſh; the germen is oval; the ſtyle is ſhort, and the ſtigma capitated. The fruit is a ſmall capſule, containing only a ſingle ſeed.

The ſhape of the calyx in this plant, and the capſule containing but one ſeed, ſufficiently diſtinguiſh it from all the others of this claſs.

## RIVINA.

THE calyx of the Rivina is a permanent perianthium, coloured and divided into four parts: the ſegments are of an oblong, oval figure, and obtuſe: there is no corolla. The ſtamina are four filaments, ſhorter than the cup, and permanent: the

anthera

anthera is ſmall: the germen is large and roundiſh; the ſtyle is very ſhort: the ſtigma is ſimple and obtuſe. The fruit is a globoſe berry, containing only one cell, and ſtanding on a green, reflex cup: the ſeed is ſingle, roundiſh, compreſſed, and ſcabrous.

This genus comprehends the Rivina of Plumier, the Solanoides of Tournefort, and the Phytolacæ ſpecies of Boerhaave. Plumier very erroneouſly figures eight ſtamina in the flower. There is only one known ſpecies of it.

### RIVINA.

The Rivina is a very luxuriant tree, puſhing out a vaſt number of long branches: it's root is formed of a number of long ramifications. It's ſtem covered with a pale, brown bark; it's ſmaller branches with a green one. It's leaves remain freſh all the winter; they are oblong, broad, and pointed at the end, two inches, or more, in length, and near an inch and half in diameter, hoary and ſoft to the touch. The flowers are coloured, though there is no corolla: the berries, when ripe, afford a rich purple juice, that ſtains every thing it touches.

The tree is a native of Barbadoes, Jamaica, and many other of the iſlands thereabout. Tournefort calls it, Solanoides Americana circææ foliis caneſcentibus. Commelin, Amaranthus baccifer circææ foliis.

## SALVADERA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into four revolute ſegments; there is no corolla. The ſtamina are four filaments, of the length of the cup: the antheræ are roundiſh, and furrowed, reſembling, in ſome degree, a purſe. The germen is round; the ſtyle is ſimple and ſhort; the ſtigma is obtuſe and umbilicated: the fruit is a round berry, containing only one cell, in which is incloſed a ſingle, round ſeed, incloſed in a ſpotted, callous ſkin.

There is but one known ſpecies of this genus.

### SALVADERA.

The root is divaricated and ſpreading, the trunk woody; the bark is of a greyiſh brown, and full of cracks. It ſometimes grows to the ſize of a moderately large tree, but more uſually it is a ſhrub of eight or ten feet high: the leaves ſtand uſually in pairs; they are oblong and lanceolated, two inches in length, and about an inch in breadth; they are of a bright green, and often ſpotted with black. The flowers ſtand in cluſters, and are of a pale, yellowiſh colour.

It is a native of the Eaſt. The ſhores of the Perſic gulph abound with it. The natives uſe it's leaves, as a remedy, for the bite of the ſcorpion.

## ALCHEMILLA.

THE calyx of the Alchemilla is a permanent perianthium, formed of one leaf, ſubulated and divided at the extremity into eight ſegments, alternately larger and ſmaller: there is no corolla. The ſtamina are four very ſmall, erect, ſubulated filaments, inſerted in the rim of the cup: the antheræ are roundiſh; the germen is oval: the ſtyle is filiform, and of the length of the ſtamina; it is inſerted at the baſe of the germen: the ſtigma is globoſe. There is no fruit: but the neck of the calyx ſhuts, and it contains a ſingle ſeed of an elliptic figure, and ſomewhat compreſſed.

1. *Alchemilla foliis palmatis.* **Common Ladies Mantle.**
*The palmated-leaved Alchemilla.*

The root of this ſpecies is oblong, of the thickneſs of one's little finger, and furniſhed with a number of fibres; of an aſtringent and acerb taſte. The radical leaves ſtand on pedicles of two or three inches long; they are of a ſomewhat roundiſh figure, but ſinuated, deeply plicated, and of a pale yellowiſh-green colour, and an inch and half in diameter. The ſtalks are eight or ten inches long, round, thick, but not erect: the leaves on theſe are like the radical ones, but ſmaller, and with very ſhort pedicles. The flowers are ſmall, and ſtand in a kind of umbels; they are of a greeniſh-yellow.

This is a native of England; I found it this ſummer in ſome low grounds in Lincolnſhire. C. Bauhine calls it, Alchemilla major vulgaris. Linnæus, Alchemilla foliis ſimplicibus. As it grows in more wet, or more dry, places, it's leaves are more or leſs hairy.

2. *Al-*

2. *Alchemilla foliis digitatis.* Cinquefoil Ladies
*Digitated-leaved Alchemilla.* Mantle.

The root of this elegant little plant is oblong, ſlender, blackiſh, and furniſhed with many fibres. The radical leaves ſtand on pedicles of three inches long; they are half an inch in diameter, and are divided, down to the pedicle, into five parts, and theſe ſerrated at their edges: they are of a bright green on the upper ſide, and of a ſilvery white underneath. The ſtalks are four or five inches long, round, whitiſh, and procumbent; on theſe ſtand leaves like the radical ones, but ſmaller, formed of fewer ſegments, and without thoſe long pedicles, and at their tops ſtand cluſters of little greeniſh-white flowers.

This is a native of England, but is a very ſcarce plant with us. I have met with it on the hills in the northern counties. Ray calls it, Alchemilla Alpina pentaphyllæa. C. Bauhine, Tormentilla Alpina folio ſericeo; and Tournefort, Alchemilla quinquefolia folio ſubtus argenteo.

The other ſpecies of Alchemilla are, 1. The cinquefoil Alchemilla, with fimbriated lobes. 2. The narrow-leaved, erect Alchemilla. 3. The narrow-leaved, procumbent Alchemilla.

*Claſs the Fourth Order the Second.*

## TERANDRIA DIGYNIA.

*Plants which have four ſtamina and two ſtyles in each flower.*

### APHANES.

THE calyx of the Aphanes is a permanent perianthium of a tubulated figure, conſiſting of a ſingle leaf, divided into eight ſegments at the edge, and thoſe alternately larger and ſmaller: there is no corolla. The ſtamina are four erect, ſubulated filaments; they are very ſmall, and are inſerted in the rim of the calyx: the antheræ are roundiſh. The germina are two, and of an oval figure: the ſtyles are capillary, of the length of the ſtamina, and inſerted into the germina at the baſe: the ſtigmata are capitated. There is no fruit, but the calyx cloſes at the mouth, and contains two oval, acuminated ſeeds, compreſſed, and of the length of the ſtyle.

This genus approaches greatly to the Alchemilla, but is evidently diſtinct in the piſtil. There is only one known ſpecies of it.

APHANES. Parſley Piert.

The root of this little plant is oblong, ſmall, and ſimple, and furniſhed with ſeveral fibres. The ſtalks riſe five or ſix together; they are three inches long, round, hairy, and procumbent: the leaves ſtand very thick upon them; they are roundiſh, but divided, as it were, into three parts, and thoſe deeply ſerrated at their edges. All along the branches ſtand cluſters of ſmall, greeniſh-white flowers, arranged into a double ſeries. The whole plant is of a greyiſh, or whitiſh-green, colour.

It is extreamly common in our corn-fields. Dillenius and others call it, Percepier Anglorum. Columna, Alchemilla Alpina minor; and C. Bauhine, Chærophyllo nonnihil accedens.

### HAMAMELIS.

THE calyx of the Hamamelis is an erect perianthium, conſiſting of four equal, oblong, and obtuſe leaves. The corolla conſiſts of four linear, equal, and very long petals: the ſtamina are four ſubulated filaments, of the length of the calyx; the antheræ are ſimple: the germen is oval and hairy. The ſtyles are two in number, and of the length of the ſtamina: the ſtigmata are ſimple. The fruit is a bivalve capſule, containing two cells: the ſeed is a ſingle nucleus, of an oblong, oval figure, and ſmooth ſurface.

This is an American, deſcribed by Gronovius in his Flora Virginica. The characters ſufficiently diſtinguiſh it, without a farther deſcription.

CUS-

## CUSCUTA.

THE calyx of the Cuſcuta is a perianthium, formed of one leaf, of a cyathiform figure, obtuſe, lightly divided into four ſegments, and fleſhy at the baſe. The corolla conſiſts of a ſingle petal, of an oval figure, a little longer than the cup, and divided lightly into four obtuſe ſegments at the mouth: the ſtamina are four ſubulated filaments, of the length of the cup; the antheræ are roundiſh; the germen of the piſtil is roundiſh; the ſtyles are two, erect and ſhort; the ſtigmata are ſimple; the pericarpium is roundiſh, fleſhy, and formed into two cells, opening horizontally; the ſeeds are two in number.

This genus comprehends the Cuſcuta of authors, and the Baſella of the Hortus Malabaricus; the Baſella, indeed, produces a ſingle ſeed, naked, and placed in a ſucculent, baccated calyx; the flower is ſometimes divided into ſix ſegments, and the ſtyle in that caſe is triple.

1. *Cuſcuta nuda repens filiformis.*
*The filiform, naked, creeping Cuſcuta.* Dodder.

The root of this ſingular plant conſiſts of a number of ſhort fibres: from this riſe ſeveral naked, round, reddiſh ſtalks, which twiſt themſelves about any plant that is near them: as ſoon as theſe are well faſtened to the plant, the root in the earth dies away, and the whole plant is afterwards fed by the juices of that it has ſeized upon; theſe ſtalks continue always naked of leaves; but they ſend out, at different parts, cluſters of fibres, which pierce the bark of the other plant, and thence take in their nouriſhment. The flowers ſtand in cluſters, on ſeveral parts of the ſtalks; they are hollow, ſmall, and of a pale reddiſh, or whitiſh, colour.

This plant is common in England, and in all other parts of Europe, and has been called by different names, according to the different plants it has been found about, as Epurtica, Eperica, and Epithymum; the laſt is ſtill, by many, ſuppoſed a diſtinct ſpecies, but erroneouſly.

The Cuſcuta has been celebrated as a cathartic, but it is a very languid one, and is now out of uſe.

## HYPECOUM.

THE calyx of the Hypecoum is a ſmall perianthium, formed of two leaves, which are of an oval, acute figure, and ſtand erect, and oppoſite to one another, and are deciduous. The corolla conſiſts of four petals; the two exterior petals are broad, trilobated, and obtuſe, and are placed overagainſt one another; the two interior ones ſtand alternately with the others: they are lightly divided into three ſegments, of which the middle one is hollow, compreſſed, and erect. The ſtamina are four erect, ſubulated filaments, covered by the ſegments of the two inner petals: the antheræ are erect and oblong: the germen is oblong and cylindric: the ſtyles are two, and are very ſhort: the ſtigmata are acute. The fruit is a long, compreſſed pod: the ſeeds are of a roundiſh figure, but compreſſed, and are placed ſingly in the articulations of the pod.

1. *Hypecoum ſiliquis arcuatis, compreſſis, articulatis.*
*The Hypecoum, with crooked, compreſſed, articulated pods.*

The root is oblong and ſlender, ſometimes bifid, ſometimes ſimple, and of a yellowiſh-brown colour: the radical leaves ſtand on moderately long pedicles; they are variouſly divided, and, in ſome degree, reſemble thoſe of the fumaria: the ſtalks are procumbent, and ſomewhat compreſſed, and run up naked a great way, but, toward the top, where the flowers appear, they have leaves, like the radical ones, but ſmaller, and without thoſe long pedicles. The flowers are ſmall and yellow: the pods are long, and bent like a ſickle: the ſeed is black.

This is not a native of England, but it is common in moſt other parts of Europe. C. Bauhine calls it, Hypecoum; J. Bauhine, Hypecoon ſiliquoſum; others, Cuminum ſiliquoſum.

2. *Hypecoum ſiliquis pendulis, teretibus, equalibus.*
*The Hypecoum, with cylindric, equal, pendulous pods.*

The root of this ſpecies is oblong and ſlender: the radical leaves are ſupported on pedicles of two inches long, and reſemble thoſe of the carui plant: the ſtalks are five

or ſix inches high, and, though very ſlender, they ſtand erect; they have leaves on them, like the radical ones, but leſs divided, and on ſhort pedicles. The flowers are moderately large, and yellow: the pods are ſtrait, and hang downwards, on rigid pedicles.

This is a native of many parts of Germany, and Italy. Tournefort calls it, Hypecoon tenuiore folio; Dalechamp, Cuminum ſilveſtre ſiliquatum Ponæ.

3. *Hypecoum ſiliquis erectis, teretibus, toruloſis.*
*The Hypecoum, with erect, rounded, torulated pods.*

The root of this ſpecies is oblong, ſlender, and whitiſh: the radical leaves ſtand on long pedicles, and are very finely divided: the ſtalks are round and ſmooth: the leaves on them are very fine and ſmall; the flowers are yellow, and nearly of the breadth of a ſhilling: the pods ſtand on ſhort, rigid pedicles, and are erect, rounded, and knotty, each protuberance containing a ſingle, yellow ſeed.

This is a native of Ruſſia. Amman calls it, Hypecoum tenuifolium ſiliquis erectis teretibus.

*Claſs the Fourth. Order the Third.*

## TETRANDRIA TETRAGYNIA.

*Plants which have in each flower four ſtamina and four ſtyles.*

### ILEX.

THE calyx of the Ilex is a very ſmall, permanent perianthium, divided into four ſegments at the verge: the corolla conſiſts of a ſingle, plane petal, divided into four large, roundiſh, hollow, patent ſegments, cohering only at the ungues: the ſtamina are four ſubulated filaments, ſhorter than the corolla: the antheræ are ſmall; the germen is roundiſh: there is no ſtyle, but there are four roundiſh ſtigmata: the fruit is a roundiſh berry, containing four cells: the ſeeds are ſingle, oſſeous, oblong, and obtuſe, gibbous on one ſide, and angulated on the other.

This genus comprehends the Aquifolium of Tournefort, and the Dodonæa of Plumier, only the Dodonæa excludes a fourth part of the number in all the parts of fructification. The tree, commonly called Ilex, is of the oak kind, and has no place here, nor any right to a generical name diſtinct from Quercus.

*Ilex foliis ovatis, acutis, ſpinoſis.* Common Holly.
*The Ilex, with oval-pointed, prickly leaves.*

The common Holly is an ever-green ſhrub, uſually riſing to eight or ten feet high, ſometimes growing to a tree. The branches are very flexile and tough; the bark is greyiſh on the trunk, and greeniſh on the branches; the leaves are of an oblong, oval figure, prickly at the points, and about the edges: the flowers are ſmall, and of a greyiſh-white; the berries, which ſucceed them, are green at firſt, but red, when ripe.

The Holly is a native of England, and almoſt all other parts of Europe. C. Bauhine calls it, Ilex aculeata baccifera folio ſinuato; others, Agrifolium, and Aquifolium vulgare. Tournefort mentions what he calls ten ſpecies of Holly, but they are only varieties of this common kind, with variegated leaves, and other variations, owing to accident or to culture.

### RUPPIA.

THE calyx of the Ruppia conſiſts of a ſmall and thin ſpatha, ſcarcely diſtinguiſhable from the vagina of the leaves: the ſpadix is ſubulated, ſtrait, ſimple, and, when the fruit is ripe, becomes crooked, and is furniſhed with fructifications, placed in a double ſeries. There is no corolla, nor any filaments, but a number of ſeſſile antheræ, of a kidney-like ſhape, bivalve, and fixed longitudinally: the piſtil conſiſts of four thin, capillary ſtyles, each having an oval germen, and a ſimple ſtigma: the fruit conſiſts of four oval, cortical ſubſtances, pointed, oblique, ſtanding on the elongated ſtyles, and in each is contained a ſingle, roundiſh ſeed.

This very ſingular genus comprehends, ſo far as is yet known, only one ſpecies.

## RUPPIA.

The Ruppia is an aquatic plant. It's root is long and creeping, of the thickneſs of a crow-quill, and jointed; the joints are about a third of an inch diſtant, and at every one it ſends down a fibre into the mud, and a ſtalk upwards in the water: the ſtalk is ſingle, round, and ſlender: the leaves ſtand alternately; they are three inches long, very narrow, and graſſy; large and hollow at the baſe, where they ſurround the ſtalk, and, more or leſs, ſharp at the point. The plant riſes to ſix or eight inches high; the leaves ſtand at an inch and a half diſtance: from the alæ of every leaf there grows a branch, furniſhed with two or three other ſuch leaves, and with the fructifications: the ſtyles ſupporting the germen are near an inch long.

It loves ſalt-water ditches. I have met with it on Canvey Iſland in Eſſex, and Sheppey in Kent. Ray calls it, Potamogeiton maritimum puſillum; C. Bauhine, Fucus fœniculi folio longiore; and Gramen maritimum fluitans cornutum. Plukenet, Potamogeiton fructu fere umbellato; Micheli, Bucca ferrea.

## POTAMOGETON.

THE Potamogeton has no calyx: the corolla conſiſts of four roundiſh, obtuſe, hollow, patent, and unguiculated petals: the ſtamina are four very ſhort, plane, obtuſe filaments: the antheræ are ſhort, and didymous: the germina are four, and of an oval, acuminated figure: there are no ſtyles: the ſtigmata are obtuſe: there is no pericarpium: the ſeeds are four in number, roundiſh, and acuminated, gibbous on one ſide, and compreſſed and angulated on the other.

1. *Potamogeton foliis oblongo-ovatis, petiolis natantibus.* Broad-leaved
*The oblong, oval-leaved Potamogeton.* Pond-Weed.

The root of this is long and creeping, of the thickneſs of a quill, white, and jointed; from every joint there deſcend fibres into the mud, and ſtalks riſe upwards; theſe ſtalks are very long, round, jointed, branched, and extend themſelves to the ſurface of the water; at every joint of the ſtalk ſtands a leaf; thoſe immerſed in the water are narrow and graſſy; thoſe which float on the ſurface are broad, oblong, and oval, of a browniſh-green colour, and ſomewhat like the leaves of plantain, but broadeſt at the baſe, and terminating in an obtuſe point; theſe ſtand on pedicles of four or five inches long: at that part of the ſtalk from whence the ſpike of flowers grows, there are two leaves, placed oppoſite, and, at the origin of each, is a thin, pellucid membrane, of a pointed figure; this ſtands within the alæ of the pedicle, and ſurrounds the ſpike, while young: the ſpike, when full grown, is two or three inches long; the flowers are ſmall and yellowiſh.

This is very frequent in our ponds and ditches. C. Bauhine calls it, Potamogeton rotundifolium; J. Bauhine, Potamogeiton rotundiore folio; others, Fontalis major vulgaris.

2. *Potamogeton foliis cordatis amplexicaulibus.* Perfoliate
*The Potamogeton, with cordated leaves ſurrounding the ſtalk.* Pond-Weed.

The root is long, creeping, white, and jointed: the ſtalk is round, tender, and often three or four feet long: the leaves ſtand alternately; they are broad at the baſe, and ſurround the ſtalk; from thence they gradually grow ſmaller to the point; they are thin, pellucid, and of a ſhining ſurface, and are ribbed longitudinally, as thoſe of the plantain are: where the ſpike of flowers is inſerted, there are two leaves, placed oppoſite to one another: the ſpike is ſhort, and is ſupported on a thick pedicle, an inch and a half long: the flowers are ſmall and yellowiſh.

This is common in ponds, where it uſually makes it's way up to the ſurface. Ray calls it, Potamogeton perfoliatum; C. Bauhine, Potamogeiton foliis latis ſplendentibus.

3. *Potamogeton*

3. *Potamogeton foliis linearibus obtuſis, caule compreſſo.*
*Graſſy, obtuſe-leaved Potamogeton, with flat ſtalks.*

The root of this ſpecies is compoſed of a cluſter of fibres: the ſtalk grows to two or three feet in length, immerſed all the way in water: it ſends out many branches, and is ſlender, and ſomewhat compreſſed; at every joint ſtands a leaf, graſſy, long, and thin, but terminating obtuſely, not in a point; each leaf has three longitudinal ribs, and alſo a pellucid, thin membrane at it's baſe: the leaves ſtand alternately, except, where the ſpikes of flowers are inſerted, there they ſtand oppoſite: the ſpike is ſhort, the flowers ſmall and greeniſh, but with a little redneſs towards the center.

This is common in our rivers. Ray calls it, Potamogeiton caule compreſſo, folio graminis canini.

The other ſpecies of the Potamogeton are, 1. The long and broad, acute-leaved Potamogeton. 2. The long, ſerrated-leaved Potamogeton. 3. The branched, narrow-leaved Potamogeton. 4. The narrow, undulated-leaved Potamogeton. 5. The many-leaved, graſſy Potamogeton. 6. The little, round-ſtalked, graſſy-leaved Potamogeton. 7. The curled-leaved Potamogeton. 8. The narrow, undulated-leaved Potamogeton.

## SAGINA.

THE calyx of the Sagina is a perianthium, compoſed of four oval, hollow, patent, and permanent leaves: the corolla conſiſts of four oval, obtuſe, patent petals, ſhorter than the calyx: the ſtamina are four capillary filaments: the antheræ are roundiſh; the germen is globoſe; the ſtyles are four, ſubulated, bent backward, and hoary: the ſtigmata are ſimple: the fruit is an oval, covered capſule, formed of four valves, and contains four cells: the ſeeds are numerous, very ſmall, and affixed to the receptacle.

This genus comprehends the Alſinella of Dillenius, and ſome of the Alſines of other authors.

1. *Sagina ſcapis uniflоris.* **Smooth, ſpring Chickweed.**
*The Sagina, with one flower on the ſtalk.*

The root of this beautiful little plant is compoſed of a tuft of white, ſhort, and ſlender fibres: from this riſe ſix or eight leaves, a quarter of an inch long, not half ſo much in breadth, broadeſt at the baſe, terminating in a point, ſmooth and gloſſy on the ſurface, and even at the edges: among theſe riſes a ſtalk, two or three inches high, ſlender, round, and ſmooth; at every joint of this ſtand two leaves, like the radical ones, and without pedicles; at the top ſtands a ſingle flower, large in proportion to the plant, and very beautiful, of a ſnow white.

This is frequent in ſpring in Hyde-park, and on Black-heath, &c. Magnol, and others, call it Alſine verna glabra.

2. *Sagina ramis procumbentibus.*
*The procumbent-branched Sagina.*

The root of this ſpecies is compoſed of a few, white, capillary fibres: the radical leaves are half an inch long, very narrow, ſmooth on the ſurface, and are diſpoſed in a radiated form on the ground. The ſtalks grow to four or five inches long; they are very ſlender, procumbent, and jointed; the leaves on them are ſhorter than the radical ones, and narrow and ſmooth. The flowers ſtand ſingly, on ſhort pedicles, ariſing from the alæ of the leaves; they are very ſmall, milk-white, and fall off very ſoon.

This is frequent about Paris, but we have it not in England. Tournefort calls it, Alſine minima flore fugaci; Dillenius, Alſinella muſcoſo flore repens.

## COLDENIA.

THE calyx is a perianthium, compoſed of four leaves: the corolla is of the infundibuliform kind, and is compoſed of four oblong petals: the ſtamina are four ſlender filaments; the antheræ are moderately large, and tumid; the germen is quadriſulcous; the ſtyles are four, and ſhort; the fruit is compoſed of four ſeeds.

There is but one known ſpecies of this genus; it is a native of North America, and is too ſufficiently charactered by this fructification, to need any farther deſcription.

### *Claſs the Fifth.*

## PENTANDRIA.

### *Plants which have in every flower five ſtamina.*

OF this claſs ſome have only one ſtyle, ſome two, ſome three, ſome four, ſome five, and ſome yet more. The genera comprehended under it are thence arranged into ſix orders, according to the number of the ſtyles; under each of which, being alſo very numerous, they will be again diſpoſed, according to certain common and obvious characters, into a number of diviſions.

### *Claſs the Fifth. Order the Firſt.*

## PENTANDRIA MONOGYNIA.

### *Plants which have in each flower five ſtamina and one ſtyle.*

OF this order there are little leſs than a hundred genera, one ſet of which have monopetalous flowers, ſucceeded each by four ſeeds; another have monopetalous flowers, with the capſules contained within them; a third have monopetalous flowers, with the germen placed below the flower; a fourth have declinated ſtamina; a fifth have monopetalous flowers, with berries placed above the receptacle; and, finally, a ſixth have polypetalous flowers. Theſe are arranged ſeparately under ſo many diviſions.

### *Claſs the Fifth. Order the Firſt.*

### *Diviſion the Firſt.*

### *Pentandria Monogynia, with monopetalous flowers, ſucceeded by four ſeeds each.*

### *The Herbæ Aſperifoliæ, in general, of Ray.*

## HELIOTROPIUM.

THE calyx of the Heliotropium is a permanent perianthium, formed of one leaf, tubulated, and divided into five parts at the edge; the corolla conſiſts of a ſingle petal; the tube is of the length of the cup; the limb is plane, divided lightly into five ſegments, and obtuſe: the ſmaller ſegments ſtand alternate, and are acute; the larger are placed between; the mouth is cloſed by five prominent ſquammulæ, which, bending toward one another, form a little ſtar: the ſtamina are five very ſhort filaments, placed in the mouth of the flower; the antheræ are ſmall, and covered: there are four germina; the ſtyle is capillary, and of the length of the ſtamina; the ſtigma is emarginated: there is no pericarpium; the calyx remains unaltered, and contains four oval, acuminated ſeeds.

1. *Heliotropium foliis ovatis integerrimis, ſpicis conjunctis.*
*The oval, whole-leaved Heliotrope, with conjunct ſpikes.*

The root is oblong, ſingle, hard, and whitiſh: the ſtalk is round, fungous, white, and downy. It grows to ſix or eight inches high: the leaves ſtand ſimple; they are of a roundiſh, but ſomewhat oblong, figure, an inch in length, and more than three quarters of an inch in diameter, when largeſt; but often not a third part ſo large: they are even at the edges, but hoary and white, as the ſtalk. From the alæ of every leaf grows a branch, and, at the tops of theſe, as well as of the main ſtalk, ſtand long and ſlender ſpikes of flowers, the tops of which turn inward, in the manner of thoſe of the myoſotis, and other plants, called ſcorpion-tailed ones: the flowers are ſmall and white, and are arranged very cloſe to one another.

This is not a native of England, but it is frequent in moſt other parts of Europe. C. Bauhine calls it, Heliotropium majus Dioſcoridis; J. Bauhine, Heliotropium majus flore albo.

2. *Heliotropium floribus glomeratis.*
*The cluſter-flowered Heliotrope.*

The root of this ſpecies is compoſed of a cluſter of white, rigid fibres: the radical leaves ſtand on moderately long pedicles; they are oblong, broad, obtuſe, and hoary, ſoft to the touch, and white: the ſtalk is procumbent, and full of branches; it grows to five or ſix inches long; the leaves on it are ſomewhat ſhorter than the radical ones, approaching more to roundneſs; they are very white and hoary. The flowers are large, and very numerous; they ſtand at the extremity of the ſtalk, in a kind of glomerated cluſters: they are ſweet, and ſoon fall.

This is a native of Sicily. Boccone calls it, Heliotropium majus flore amplo odorato.

The other ſpecies of the Heliotrope are, 1. The little, procumbent Heliotrope. 2. The blue, clary-leaved Heliotrope. 3. The narrower-leaved, blue, clary-like Heliotrope. 4. The narrow-leaved, glaucous Heliotrope. 5. The ſhrubby, woolly, ſea Heliotrope.

The plant, called Heliotropium tricoccon, is not of this claſs, but is deſcribed in it's place.

## MYOSOTIS.

THE calyx of the myoſotis is an oblong, erect, acute, and permanent perianthium, divided into five ſhort ſegments at the extremity: the corolla conſiſts of a ſingle petal; the tube is cylindric and ſhort; the limb is plane, and lightly divided into five ſegments; the ſegments are emarginated and obtuſe, and the opening of the flower is cloſed by five convex, prominent ſquammæ, which bend toward one another: the ſtamina are five very ſhort filaments, placed in the neck of the tube: the antheræ are ſmall, and covered; the germina are four; the ſtyle is filiform, and of the length of the tube of the corolla; the ſtigma is obtuſe; the cup becomes larger afterwards, and is erect, and contains in it's cavity four oval, acuminated, ſmooth ſeeds.

1. *Myoſotis foliorum apicibus calloſis.* Mouſe-ear Scorpion-graſs.
*The Myoſotis, with callous apices to the leaves.*

This is a plant which ſometimes grows in barren, dry grounds, and ſometimes in the mud, about ſhallow waters, or the edges of rivers, &c. in theſe two ſtates it makes ſo very different an appearance, that all the botanical writers, till Linnæus, have deſcribed it under two names, Myoſotis paluſtris, and Myoſotis arvenſis, as two ſpecies; but the one, carried to the place of growth of the other, ſoon ſhews the difference, however, to be merely accidental. The root conſiſts of a number of white fibres; the radical leaves are an inch long, a third of an inch broad, and terminate in an obtuſe point; the ſtalks are round and hairy; thick, when in a wet ſoil; ſlender, when in a dry one: they grow to ſix, eight, or more inches in length; the leaves ſtand alternately on them, and are like the radical ones; the flowers ſtand in long ſpikes, curled up at the extremity.

tremity. When in wet places, they are large, and of a beautiful blue colour; when in dry ones, much ſmaller; uſually blue, but ſometimes yellow.

The plant is frequent with us in both it's ſtates, and is deſcribed under them by C. Bauhine, under the names of Echium ſcorpoides paluſtre, and Echium ſcorpioides arvenſe. Ray calls it, Myoſotis ſcorpiodes paluſtris, and Myoſotis ſcorpioides arvenſis; and Tournefort, Lithoſpermum paluſtre, and Lithoſpermum arvenſe minus.

2. *Myoſotis ſeminibus echinatis.* **Little, blue Hound's-tongue.**
*Echinated-ſeeded Myoſotis.*

The root is oblong, ſlender, black, and of a ſweet taſte; the radical leaves are oblong, narrow, white, hoary, and pointed. The ſtalk is ſlender, hairy, angular, and eighteen inches high; the leaves ſtand alternately on it, at very ſmall diſtances, ſo that it is, in a manner, covered with them; they are ſhaped like the leaves of gromwell, oblong, ſomewhat broad, pointed, and ſoft to the touch; they are covered with very long hairs. The ſtalk is divided into four or five ramifications; toward the top theſe ſtand obliquely, and are long, ſlender, and curled up at the ends; the lower part of theſe is thick-ſet with ſmall, alternate leaves; the upper part with flowers, placed alſo alternately; they are ſmall, but of a beautiful colour.

This is not a native of England, but is frequent in many other parts of Europe. Linnæus calls it, Myoſotis ſeminibus aculeatis triglochidibus; C. Bauhine, Cynogloſſum minus; Tournefort, Bugloſſum ſemine echinato.

## LITHOSPERMUM.

THE calyx of the Lithoſpermum is a permanent perianthium, oblong, and divided into five ſubulated and hollowed ſegments: the corolla conſiſts of a ſingle petal, of the length of the calyx; the tube is cylindric; the limb lightly divided into five ſegments, obtuſe and erect, and the mouth open: the ſtamina are five very ſhort filaments; the antheræ are oblong, and appear in the mouth of the corolla; the germina are four; the ſtyle is filiform, and of the length of the tube of the corolla; the ſtigma is obtuſe and bifid: there is no pericarpium, but the cup becomes patulous and long, and contains four hard, oval, acuminated ſeeds.

1. *Lithoſpermum ſeminibus lævibus, corollis vix calycem ſuperantibus.* **Common Gromwell.**
*The ſmooth-ſeeded Lithoſpermum, with corollæ ſcarce longer than the cup.*

The root is perennial, of the thickneſs of a finger, woody, and furniſhed with many fibres: the ſtalk is round, hard, rigid, rough to the touch, and two or three feet high; it is divided toward the top into a number of branches, and is beſet with leaves, alternately placed, at ſmall diſtances, of a duſky green colour, two inches long, an inch broad, and terminating in a ſharp point; they have no pedicles, and thoſe placed toward the top of the ſtalk are broader, in proportion to their length, than the reſt: the flowers ſtand all along the upper part of the branches; they are ſmall and white: the ſeeds are whitiſh, and very gloſſy.

This is frequent with us, by road-ſides, and in dry fields. C. Bauhine calls it, Lithoſpermum majus erutum; others, Lithoſpermum vulgare.

2. *Lithoſpermum ſeminibus rugoſis, corollis vix calycem ſuperantibus.* **Baſtard Alkanet.**
*The rough-ſeeded Lithoſpermum, with corollæ ſcarce longer than the cups.*

The root is annual; it is ſimple, oblong, reddiſh, and woody. The plant grows to a foot, or more, in height: the ſtalk is round, thick, rough to the touch, and, at the top, is divided into three or four branches: the leaves are an inch and a half long, half an inch broad, of a pale green colour, hairy, and ſoft to the touch. The flowers ſtand on ſhort pedicles, in the alæ of the leaves; they are white and ſmall; the ſeeds are rugoſe.

This

This is very common in our corn-fields, in May. C. Bauhine calls it, Lithoſpermum arvenſe radice rubra; others, Anchuſa degener facie milii ſolis, and Anchuſa ſylveſtris.

## ANCHUSA.

THE calyx is an oblong, cylindric, acute perianthium, divided into five ſegments, and permanent: the corolla conſiſts of a ſingle petal; the tube is cylindric, and of the length of the cup; the limb is lightly divided into five ſegments, erecto-patent, and obtuſe; the opening is cloſed by five oblong, convex, prominent, and connivent ſquammulæ; the ſtamina are five very ſhort filaments, placed in the mouth of the corolla; the antheræ are oblong, incumbent, and covered: there are four germina; the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is obtuſe, and emarginated; the cup becomes larger, and ſerves as a fruit, containing in it's cavity four oblong, obtuſe, and gibbous ſeeds.

This genus comprehends the Anchuſa of authors, and the Bugloſſum of Tournefort and others.

1. *Anchuſa foliis linearibus.* **Narrow-leaved Alkanet.**
*Linear-leaved Anchuſa.*

The root is oblong, thick, and of a reddiſh colour. The plant grows to two feet high; the ſtalks are rigid and woody, ſmooth in the lower part, but hairy toward the top; the leaves are an inch, or more, in length, very narrow, and pointed at the end, much reſembling the leaves of the common roſemary: the flowers ſtand on the upper parts of the branches, and are ſmall, and of a purple, ſometimes a bluiſh, colour.

This is not a native of England, but it is frequent in France and Italy. C. Bauhine calls it, Anchuſa anguſtifolia; Lobel, and others, Anchuſa lignoſior anguſtifolia.

2. *Anchuſa foliis cuneiformibus.* **Broad-leaved Alkanet.**
*The Anchuſa, with cuneiform leaves.*

The root is oblong, a third of an inch in diameter, and of a red colour: the radical leaves are two inches long, hairy, and a third of an inch broad at the top, whence they grow gradually ſmaller to the baſe: the ſtalk riſes to eight or ten inches high, and is round, thick, and hairy: the leaves ſtand alternately on it, and are in ſhape like thoſe of the root, and covered with long hairs: the flowers ſtand in cluſters, about the tops of the branches; they are ſmall, and of a bright purple colour; the ſeeds are large, and greyiſh.

This is a native of many parts of Europe, but not of England. C. Bauhine calls it, Anchuſa minor puniceis floribus; J. Bauhine, Anchuſa Monſpeliana.

3. *Anchuſa foliis lanceolatis ſpicis, imbricatis.* **Common Bugloſs.**
*The lanceolated-leaved Anchuſa, with imbricated ſpikes.*

The root is thick, black, and hard, and lives many years. The radical leaves are oblong, broad, and pointed at the extremity: the ſtalk grows to two feet high, and is round and hairy: the leaves ſtand irregularly on it, and very near one another; they are oblong, narrow, and of a bluiſh-green colour; they terminate in a ſharp point, are hairy on both ſides, and even at the edges: the tops of the main ſtalk and branches ſuſtain numbers of flowers, which are ſmall, blue, or reddiſh, and quickly fall off; the tops of the branches curl up, before the flowers open, and are often red.

It is a native of ſome parts of Germany; we have it only in gardens. C. Bauhine calls it, Bugloſſum anguſtifolium minus; J. Bauhine, and others, Bugloſſum vulgare.

The other ſpecies of Anchuſa are, 1. The borrage-leaved, ever-green Anchuſa. 2. The ſinuated-leaved Anchuſa. 3. The great, black-flowered Anchuſa. 4. The great, Cretic Anchuſa. 5. The little, field Anchuſa, called wild Bugloſs. 6. The bullated, Cretic Anchuſa. 7. The narrow-leaved, dentated Anchuſa. 8. The gromwell-leaved, ſhrubby Anchuſa. 9. The little, yellow-flowered Anchuſa. 10. The long and narrow-leaved Anchuſa. 11. The hoary, ſea Anchuſa. 12. The procumbent, acaulous Anchuſa. 13. The tree Anchuſa. 14. The tall, narrow-leaved Anchuſa; and, 15. The yellow-flowered, oriental Anchuſa.

## CYNOGLOSSUM.

THE calyx is an oblong, acute, permanent perianthium, divided into five ſegments at the edge; the corolla conſiſts of a ſingle petal, of the length of the cup; the tube is cylindric, and ſhorter than the limb, which is lightly divided into five ſegments, and obtuſe; the mouth of the corolla is cloſed up by five convex, prominent, and connivent ſquammulæ; the ſtamina are five very ſhort filaments in the mouth of the corolla; the antheræ are roundiſh and naked; the germina are four; the ſtyle is ſubulated, and of the length of the ſtamina; the ſtigma is emarginated, and the ſtyle is permanent; the fruit conſiſts of four roundiſh, ſcabrous, depreſſed capſules: the ſeeds are ſingle, of an oval figure, gibbous, acuminated, and ſmooth. The eſſential character is in the four monoſpermous capſules, with the permanent ſtyle.

This genus comprehends the Cynogloſſum, and the Omphalodes of authors.

1. *Cynogloſſum foliis lanceolato-ovatis, corollis calycem equantibus.* **Common Hound's-tongue.**
*The Cynogloſſum, with ovato-lanceolate leaves, and corollæ of the ſize of the cup.*

The root is thick, large, and black on the outſide, white within, of a diſagreeable ſmell, and ſweetiſh taſte. The radical leaves are ſix or eight inches long, and an inch or two in breadth, of a blue green colour, ſoft to the touch, and full of large ribs. The ſtalk riſes to two feet high; it is round, hairy, and thick-ſet with leaves, which are long, narrow, and pointed at the ends; of a ſtrong ſmell, and pale glaucous colour. The top of the ſtalk is divided into ſeveral branches, and on theſe ſtand long ſeries of flowers, ſmall, and of a duſky reddiſh colour.

It is common with us in barren places, and by way-ſides. C. Bauhine calls it, Cynogloſſum majus vulgare. J. Bauhine and others, Cynogloſſum vulgare. It's root is kept in the ſhops, and is eſteemed a pectoral and narcotic.

2. *Cynogloſſum ſtaminibus corollam equantibus.* **Great Northern Hound's-tongue.**
*The Cynogloſſum, with ſtamina as long as the corolla.*

The root is thick, long, black on the outſide, and biennial. The radical leaves are a foot long, very ſoft, of a pale glaucous colour, three inches broad, and terminate in a point. The ſtalk riſes to three feet high; the leaves ſtand irregularly, and very thick on it; they are whitiſh, oblong, and pointed: the flowers are placed in long ſeries, on the tops of the branches; they are moderately large, of a fine deep purple, and have the ſtamina ſo long, that they riſe to the top of the corolla, or a little beyond it.

It is a native of Italy. Columna calls it, Cynogloſſa montana maxima frigidarum regionum.

3. *Cynogloſſum corollis parvis, foliis anguſtioribus.* **Green-leaved Hound's-tongue.**
*The ſmall-flowered, narrow-leaved Cynogloſſum.*

The root is long, and black on the ſurface. The radical leaves are ſix inches long, narrow, of a bright green colour, and ſoft to the touch: the ſtalk riſes to three feet high, and is green, hollow, round, hairy, and branched. The leaves ſtand thick on it; they are oblong and narrow, of a deep green on the upper ſurface, and white underneath, ſoft to the touch, and ſomewhat hairy. They have not the rank ſmell of the common Hounds-tongue: the flowers are ſmall and of a duſky ferrugineous-red.

This is a native of England, but is not common. I have met with it, near Thorndon, in Eſſex. C. Bauhine calls it, Cynogloſſum ſempervirens. J. Bauhine, Cynogloſſa folio virente.

The other principal ſpecies of Cynogloſſum are, 1. The great Belgic Cynogloſſum. 2. The large-flowered, green-leaved Cynogloſſum. 3. The cluſtered-flowered Cynogloſſum. 4. The umbilicated Cynogloſſum. 5. The great, broad-leaved, ſtinking, Cretic Cynogloſſum. 6. The narrow, ſilver-leaved, Cretic Cynogloſſum. 7. The Spaniſh, gromwel-leaved Cynogloſſum. 8. The woolly-cupped, oriental Cynogloſſum.

ſum. 9. The echium-leaved, oriental Cynogloſſum. 10. The plantain-leaved Cynogloſſum; and 11. The bugloſs-leaved Cynogloſſum. To theſe we are to add three others, called by authors Omphalodes: 1. The flax-leaved Cynogloſſum. 2. The tall, larger-leaved Cynogloſſum. 3. The comfrey-leaved, vernal Cynogloſſum.

## SYMPHYTUM.

THE calyx of the Symphytum is an erect, acute; pentangular, permanent perianthium, divided into five parts at the edge: the corolla conſiſts of a ſingle petal, formed into a very ſhort tube, and a tubulated, ventricoſe limb, ſomewhat thicker than the tube, and divided into five ſegments at the edge, obtuſe and reflex. The opening is furniſhed with five ſubulated rays, ſhorter than the limb, and connivent, ſo as to form a cone. The ſtamina are five ſubulated filaments, placed alternately with the radii of the aperture: the antheræ are acute, erect, and covered; the germina are four; the ſtyle is filiform, of the length of the corolla; the ſtigma is ſimple. There is no pericarpium, but the calyx grows larger, and contains four gibbous, pointed ſeeds, placed with their apices connivent.

This genus comprehends the Symphytum of Tournefort, and the Conſolida of Rivinus.

1. *Symphytum foliis ovato-lanceolatis.* Common Comfrey.
*The Symphytum, with ovato-lanceolate leaves.*

The root is oblong, irregularly ſhaped, an inch thick, black on the outſide, white within, and extreamly viſcous. The radical leaves are a foot long, three or four inches broad in the middle, even at the edges, rough to the touch, of a pale green, and terminate in a point. The ſtalk grows to two feet, or more, in height; the ſhape is round, but it is edged with membranes from the baſes of the leaves; it is as thick as a finger, green, hairy, and rough to the touch; toward the top it is divided into ſeveral branches, which are covered with long ſeries of flowers, moderately large, and of a white colour, ſometimes purple, ſometimes yellow: this variation of the colour on the flower, has by ſome been made the diſtinction of two different ſpecies, but erroneouſly.

The plant is a native of England, and is common in watery places. C. Bauhine calls it, Symphytum conſolida major; others, Conſolida major, and Symphytum majus, or Vulgare. The root of this is a powerful agglutinant, good in the fluor albus.

2. *Symphytum foliis oblongis anguſtioribus.*
*The oblong, narrow-leaved Symphytum.*

The root is tuberous, long, branched, and brittle, black on the ſurface, white within. The radical leaves are eight inches long, and two and a half in breadth, of a pale bright green colour, and not ſo rugoſe or rough to the touch, as thoſe of the common Comfrey. The ſtalk is green, ſucculent, and edged with membranes from the baſes of the leaves, ſo that it looks pentangular: the leaves ſtand at diſtances on it; they are oblong, narrow, pointed, and of a bright green: the flowers are of a whitiſh colour, longer, but not thicker than thoſe of the common Comfrey.

This is frequent in the woods of Germany, and other places. It varies much in ſize, and has been deſcribed by C. Bauhine, in theſe ſtates, as two ſpecies, under the names of Symphytum majus tuberoſa radice, and Minus.

## PULMONARIA.

THE calyx of the Pulmonaria is a permanent, cylindric, and ſomewhat pentangular perianthium, formed of one leaf, and divided into five ſegments at the edge. The corolla conſiſts of a ſingle petal: the tube is cylindric, and of the length of the cup: the limb is lightly divided into five ſegments, obtuſe, and erecto-patent. The mouth is open; the ſtamina are five very ſhort filaments, placed in the mouth of the corolla: the antheræ are erect and connivent: there are four germina: the ſtyle

is

4

5

Ilex

Cuscuta

Alchymilla

Elæagnus

Euonymus

Cornus

Hypecoum siliquis pendulis terebus equalibus

Epimedium

Plantago

Potamogeton

Trapa

B. Cole Sculp.

Lysimachia

Ipomœa

Pulmonaria foliis radicalibus lanceolatis

Samolus

Borrago

Primula

Genipa

Polemonium

Echium

Soldanella

Phyteuma

Cerinthe

Menianthes

Androsace

Hydrophyllum

Campanula

Trachelium

is filiform, and ſhorter than the cup; the ſtigma is obtuſe and emarginated. There is no pericarpium: the calyx, unaltered, contains four roundiſh, obtuſe ſeeds.

1. *Pulmonaria foliis radicalibus ovato-cordatis.*
*The Pulmonaria, with ovato-cordated, radical leaves.*

Sage of Jeruſalem.

The root is compoſed of a cluſter of white and moderately thick fibres. The radical leaves are five or ſix inches long, and three or four inches broad, of a duſky green colour, even at the edges, covered with a long hairineſs, and ſoft to the touch. The ſtalk grows to ſix, eight, or ten inches high; it is hairy, angular, and often purpliſh: the leaves that ſtand on it are placed irregularly, and have no pedicles: they are oblong, and an inch in breadth. The tops of the ſtalks uſually are curled, before the flowers are all opened; the flowers are moderately large, and of a blue or purpliſh colour; often ſome are blue, others purple, on the ſame branch; ſometimes alſo they are white. The radical leaves are ſometimes alſo plain and uniform, ſometimes they are blotched with white.

This is a native of many parts of Europe, but with us is only kept in gardens. C. Bauhine calls it, Symphytum maculoſum ſive Pulmonaria maculoſa. J. Bauhine, Pulmonaria maculoſa. The leaves are accounted pectoral and cardiac, but are not uſed in the preſent practice.

2. *Pulmonaria foliis radicalibus lanceolatis.*
*The Pulmonaria, with lanceolated, radical leaves.*

Echium-leaved Pulmonaria.

The root conſiſts of a great number of thick, white fibres. The radical leaves are five inches long, and about two and a half broad, and are ſhaped much like thoſe of the bugloſs: they are hairy, and of a duſky green colour. The ſtalk is angular and thick; it grows ſometimes to a foot high, and is furniſhed all the way up with oblong, narrow leaves; at the top it divides into two or three ſhort ramifications, which are curled at the ends, and on which ſtand three or four flowers at a time; theſe are large, and of a beautiful red colour, ſometimes white.

This is ſaid to be a native of England, and found in woods in Hampſhire. C. Bauhine calls it, Pulmonaria anguſtifolia rubente cæruleo flore; others, Pulmonaria foliis echii.

The other more ſingular ſpecies are, 1. The roundiſh-leaved Pulmonaria. 2. The narrow-leaved, blue Pulmonaria. 3. The ſtrawberry-ſcented Pulmonaria. 4. The Cretic Pulmonaria, with inflated cups. 5. The tunnel-flowered, narrow-leaved, oriental Pulmonaria.

## BORRAGO.

THE calyx of the Borrago is a permanent perianthium, divided into five ſegments at the top. The corolla conſiſts of a ſingle, petal of the length of the cup: the tube is ſhort; the limb divided into five ſegments, and plane; the opening coronated, with five obtuſe, emarginated prominences. The ſtamina are five ſubulated and connivent filaments: the antheræ are oblong and connivent; they are affixed to the middle of the inner ſide of the ſtamina: the germina are four; the ſtyle is filiform, and longer than the ſtamina; the ſtigma is ſimple. There is no pericarpium, but the cup grows larger and inflated, and contains four ſeeds of a roundiſh figure, rugoſe, carinated outwardly from the point, globoſe at the baſe, and inſerted into a hollowed receptacle.

This genus comprehends the Borrago of authors, and the Borraginoides of Tournefort, and Cynogloſſoides of Iſnard. The figure of the ſegments of the calyx, or of the ſize of the tube of the corolla, are not to be ſuppoſed ſufficient characters for diſtinguiſhing of genera.

1. *Bor-*

1. *Borrago foliis omnibus alternis, calycibus patentibus.*
*The Borrage, with all the leaves alternate, and with patent cups.*

Common Borrage.

The root is oblong, half an inch thick, white, and full of a viſcid juice. The radical leaves are ſix or eight inches long, and four or five broad, of a blackiſh green colour, very rugoſe, and plicated, and very rough to the touch; they lie ſpread on the ground, and have a kind of little black ſpines all over them. The ſtalks are thick, tender, green, hollow, and hairy; they grow to two feet high, and have all the leaves placed in an alternate order on them, like the radical ones, only ſmaller: the ſtalk divides toward the top into three or four branches, and on theſe ſtand the flowers; they have pedicles an inch, or more, in length, and are large, and uſually of a beautiful blue, ſometimes red, ſometimes white.

The plant is not a native of England, but it is common in our gardens. J. Bauhine calls it, Borrago floribus cæruleis.

2. *Borrago foliis ramificationum oppoſitis, calycis foliolis ſagittatis.*
*The Borrage, with oppoſite leaves at the ramifications, and ſagittated ſegments of the cup.*

The root is large, white, and oblong; the radical leaves are oblong and narrow, of a pale green colour, and rugoſe: the ſtalk is green, round, and hairy: the leaves ſtand alternately, except at the baſe of the ramifications, where there are always two oppoſite one to another: they are oblong and narrow, and ſurround the ſtalk at the baſe. The flowers are large, and of a beautiful pale blue, and the ſegments of the cup are of a ſagittated figure.

This is a native of Ceylon, but we have it in ſome of our ſtoves. Iſnard calls it, Cynogloſſoides folio caulem amplexante. Boerhaave, Boraginoides anguſtifolia flore palleſcente cæruleo.

## LYCOPSIS.

THE calyx of the Lycopſis is a permanent perianthium, divided into five oblong, acute, patulous ſegments. The corolla conſiſts of a ſingle petal: the tube is cylindric and crooked: the limb is lightly divided into five ſegments: the mouth or opening of the flower is ſhut up by five connivent, prominent, convex ſquammulæ: the ſtamina are five very ſmall filaments, ſituate at the flexure of the corolla: the antheræ are ſmall and covered; the germina are four: the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is obtuſe and bifid. The calyx ſupplies the place of a pericarpium; it becomes large and inflated, and contains four ſeeds of an oblong figure. The great diſtinguiſhing character of this genus is in the flexure of the tube of the corolla.

It comprehends the Lycopſis of authors, the Echioides of Rivinus and Dillenius, the Bugloſſoides of Rivinus, and ſome of the Bugloſſa of Moriſon.

1. *Lycopſis foliis lanceolatis, calycibus florum erectis.*
*The lanceolate-leaved Lycopſis, with erect flower-cups.*

The root is white, ſimple, and oblong; the radical leaves are oblong and hairy: the ſtalks riſe to a foot high, or more; they are round, tender, and rough to the touch, and toward the top divided into ſeveral branches. Along the ſtalks, from the bottom, ſtand alternately leaves an inch and half long, and not half an inch broad, rough, hairy, and of a duſky green; toward the tops of the branches ſtand the flowers, and under them a peculiar kind of leaves of a triangular figure, ſhort, pointed, and ſurrounding part of the ſtalk at their baſe. The flowers ſtand ſingle, on very ſhort pedicles, riſing from the alæ of theſe leaves: they are ſmall, and of a pale blue colour.

This is frequent in our corn-fields. C. Bauhine calls it, Bugloſſum ſylveſtre minus. J. Bauhine, Echium Fuchſii ſive Borrago ſylveſtris.

2. *Ly-*

2. *Lycopſis foliis repandis dentatis calloſis, caule decumbente corollis cernuis.*
*The procumbent Lycopſis, with callous, dentated leaves, and bending corollæ.*

The root is ſmall, white, and oblong; the radical leaves are oblong, narrow, and dentated at the edges, rough to the touch, and covered with little white protuberances or bullæ. The ſtalk grows to ſix or eight inches long, and lies procumbent on the ground, and has a number of oblong, narrow, bullated leaves, placed alternately on it, and bending backward; at the top of the ſtalks and branches ſtand the flowers; they are ſmall, but of a beautiful blue, and variegated.

This grows out of the fiſſures of walls in the iſland of Crete, and elſewhere, in that part of the world. Moriſon calls it, Bugloſſum annuum humile foliis bullatis, flore cæruleo eleganter variegato. We have it ſometimes in our gardens.

3. *Lycopſis foliis integerrimis, calycibus fructuum inflatis pendulis.*
*The whole-leaved Lycopſis, with pendulous cups, when in ſeed.*

The root is white, oblong, and ſimple: the radical leaves are three inches long, and an inch broad: the ſtalk grows to ſix or eight inches high; it is ſolid, but infirm, and ſcarce able to ſupport itſelf erect. The leaves ſtand alternately on it; they are broadeſt at the baſe, and go narrower to the point; they are about an inch and a half long, and not half an inch broad, and covered with a white, hoary matter. The flowers ſtand at the tops of the branches; they are very ſmall and black: the cup they ſtand in is inflated, and, after they are fallen, it becomes much more ſo, repreſenting, in ſome degree, the caſe or huſk of the winter cherry.

This ſpecies is a native of Hungary; we have it in our gardens. Rivinus calls it, Echioides flore pullo. Moriſon, Bugloſſum procumbens annuum pullo minimo flore.

## ECHIUM.

THE calyx of the Echium is a permanent perianthium, divided at the edge into five erect, ſubulated ſegments: the corolla conſiſts of a ſingle petal: the tube is very ſhort; the limb is erect, and grows gradually wider: at the extremity it is divided into five ſegments; two of the upper ſegments are longer than the reſt, and the lower one is ſmall, acute and reflex. The ſtamina are five ſubulated filaments, of the length of the corolla; the antheræ are oblong and incumbent: the piſtil has four germina; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is obtuſe and bifid: there is no pericarpium. The cup becomes rigid, and contains in it four roundiſh and obliquely acuminated ſeeds.

1. *Echium caule ſimplici, foliis caulinis lanceolatis hiſpidis, floribus ſpicatis lateralibus.* Viper's Bugloſs.
*The ſimple-ſtalked, lanceolate-leaved Echium, with ſpiked lateral flowers.*

The root is four inches long, and half an inch thick, brown, hard, and inſipid. The radical leaves are oblong and narrow: the ſtalk grows to a foot and half high, and is round, rough, and beautifully ſpotted with red and black: the leaves ſtand very cloſe, and are oblong, and pointed at the ends: the flowers grow all up the ſtalk, from near the bottom to the top; they are large, and very beautiful, of a fine blue, with an admixture of red in various degrees.

This is common in dry places, and by way-ſides. C. Bauhine calls it, Echium vulgare. The powder of it's root is recommended againſt epilepſies, but it is not uſed.

2. *Echium corollis vix calycem excedentibus margine villoſis.*
*The little-flowered Echium, with villoſe edges to the flower.*

The root is ſimple, oblong, and brown; the radical leaves are two inches and a half long, half an inch wide, and pointed at the ends: the ſtalk grows to two feet high, and is very robuſt, and beautifully ſpotted: the leaves ſtand thick on it; they are an inch and a half long, and ſcarce more than a third of an inch broad, of a pale green colour, and hairy, but not ſo rough as thoſe of the common Echium. The flowers are ſmall, ſcarce appearing beyond the cup, and are of a bluiſh-white colour.

It is a native of Italy, and is alſo wild with us. C. Bauhine calls it, Echium majus et aſperius flore albo, and Lycopſis; Camerarius, Echium flore albo.

3. *Echium calycibus fructiferis diſtantibus.*
*The Echium, with diſtant, fructiferous cups.*

The root is long and black; the radical leaves are two inches long, and approach to an oval figure: the ſtalks riſe to twelve or fourteen inches high, and are round, firm, hairy, and beautifully ſpotted: the leaves ſtand thick on them, and are an inch, or more, in length, and very narrow; the ſtalk is divided into ſeveral branches toward the top, and has a number of flowers on it; they are large and red.

It is a native of Hungary, and many parts of Germany, and is alſo common in the Eaſt. C. Bauhine calls it, Echium Creticum anguſtifolium et latifolium rubrum. Ray, Echium flore rubro.

The other more ſingular ſpecies are, 1. The great-leaved, Portugal Echium. 2. The great-flowered, narrow-leaved, very rough Echium. 3. The great-flowered, Sea-Echium. 4. The narrow, hairy-leaved Echium. 5. The roſemary-leaved Echium.

## ASPERUGO.

THE calyx of the Aſperugo is a permanent perianthium, compoſed of a ſingle leaf, erect, and divided into five ſegments at the edge, with two denticles beween each pair of the ſegments. The corolla conſiſts of a ſingle petal; the tube is cylindric, and very ſhort: the limb is ſmall, and divided into five ſegments: the opening of the flower is cloſed up by five prominent and connivent convex ſquammulæ. The ſtamina are five very ſhort filaments, in the mouth of the corolla; the antheræ are oblong, and covered: the germina are four, and compreſſed; the ſtyle is filiform and ſhort; the ſtigma is obtuſe. There is no pericarpium, but the cup becomes very large, erect, compreſſed, and connivent, in manner of two parallel plates, and having five teeth on it's rim. The ſeeds are four, and oblong: the cup, containing the ſeeds, is the great characteriſtic of this genus, of which there is only one known ſpecies.

### ASPERUGO.

The root of the Aſperugo is white, oblong, and ſlender: the radical leaves are three inches long, narrow at the baſe, and broadeſt in the middle, terminating in an obtuſe point. The ſtalks grow to two feet in length, but they do not ſtand erect, but lie on the ground: they are much branched, angular, hollow, and armed with a kind of crooked ſpines, ſo that they ſtick to every thing they touch. The leaves ſtand ſingle and alternate; on the lower part of the ſtalks, toward the top, there are ſometimes two or three together: they are two inches long, near half an inch broad in the middle, and narrower at each end; the lower ones are more obtuſe than the upper; they are all hairy: the flowers ſtand ſingly in the alæ of the leaves or divarications of the branches; they are very ſmall, and of a deep purpliſh blue. As ſoon as the flower is fallen, the cup aſſumes the ſingular figure, which ſome have likened to a gooſe's foot.

It is found in ſome parts of England, but is not common. I met with it, this year, near Lincoln-heath. Tournefort calls it, Aſperugo vulgaris; C. Bauhine, Blugloſſum ſylveſtre caulibus procumbentibus; Rudbeck, Alyſſon echioides Germanorum.

## CERINTHE.

THE calyx of the Cerinthe is a permanent perianthium, divided into five oblong, equal ſegments. The corolla conſiſts of a ſingle petal: the tube is ſhort and thick; the limb is a little thicker than the tube, and is ſomewhat bellied; it is divided into five ſegments, and the mouth is open and pervious. The ſtamina are five very ſhort, ſubulated filaments; the antheræ are acute and erect: the germen is divided into four parts; the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is obtuſe. The fruit conſiſts of two hard oſſeous bodies, of an oval figure, gibbous on the outſide, plane within, acute, emarginated, and containing each two cells; the ſeeds are ſingle, roundiſh, and acuminated.

This genus comprehends the Cerinthe and the Cerinthoides of Boerhaave. The Cerinthoides has four diſtinct ſeeds, but, the eſſential character being in the flower, this is not to be regarded as a generical character.

1. *Cerinthe foliis cordatis ſeſſilibus.* Purple Honey-wort.
*The Cerinthe, with heart-faſhioned leaves without pedicles.*

The root is oblong, white, thick, and furniſhed with many fibres. The ſtalks grow to two feet in height; they are round, thick, and green, and are divided from the very root into a number of ramifications: the leaves ſtand very thick upon them; they are oblong, broad, and obtuſely pointed, of a bluiſh green colour, and ſpotted with blotches of white: the branches bend downward toward their tops, and are furniſhed with a great many flowers, each on it's ſeparate pedicle. They are ſmall, and of a purpliſh colour; ſometimes yellowiſh or whitiſh.

It is a native of moſt of the ſouthern parts of Europe; we have it in our gardens. C. Bauhine call it, Cerinthe flore ex rubro purpuraſcente; and, as if another ſpecies, a ſecond time, Cerinthe flavo flore aſperior.

2. *Cerinthe foliis anguſtioribus, corollis brevibus.*
*The narrow-leaved, ſhort-flowered Cerinthe.*

The root is oblong, as thick as a finger, and blackiſh: the radical leaves are three inches long, and moderately broad, ſomewhat rough to the touch, and of a bluiſh-green. The ſtalks are a foot, or more, in length, but weak and procumbent: the leaves ſtand alternately, and are ſmall, oblong, and of a bluiſh colour, with a ſilvery caſt, narrow, and even at the edges. The flowers ſtand in the alæ of the leaves: they are large, and red, before they open; but when fully expanded, blue.

This is a native of England; we have it by the ſea-coaſts, in ſome of our northern counties, in abundance. Boerhaave calls it, Cerinthoides argentea flore pulchre cæruleo; Ray, Echium marinum. Moriſon makes it a Cynogloſſum, and others a Bugloſſum, but it's characters ſhew it a true Cerinthe.

The other ſpecies are, 1. The little, yellow Cerinthe. 2. The Alpine Cerinthe, with ſtriated flowers. 3. The narrower and rougher-leaved Cerinthe.

## MESSERSMIDIA.

THE calyx is a ſhort, hairy perianthium, divided into five ſegments; the corolla conſiſts of a ſingle petal of a cylindric form, but open at the mouth: the ſtamina are five long, ſlender, filiform filaments; the antheræ are tumid; the germen is formed of four parts; the ſtyle is very ſlender, and moderately long: the fruit conſiſts of four ſeeds. Of this genus there is only one known ſpecies.

### MESSERSMIDIA.

The root is long, thick, and of a browniſh colour. The radical leaves are three inches long, two and a half broad, and of a lanceolated ſhape: the ſtalk is branched, round, and hairy; it grows to a foot in height: the leaves on it ſtand alternately; they are two inches long, more than an inch broad, and lanceolated of a duſky greeniſh colour. The flowers ſtand in cluſters about the tops of the ſtalks; their pedicles are more than an inch long, and grow from the alæ of the leaves: the calyx is hairy. The whole habit of the plant has much the appearance of a cerinthe. It

It is a native of Ruſſia, and grows there in barren, ſandy places. Amman calls it, Arguſia montana.

## TOURNEFORTIA.

THE calyx of the Tournefortia is a ſmall permanent perianthium, divided into five lanceolated ſegments: the corolla conſiſts of a ſingle petal; the tube is oval, and longer than the cup; the limb is lightly divided into five ſegments, and patent; the ſegments broad and acute. The ſtamina are five ſubulated filaments, of the length of the tube of the corolla; the antheræ are ſimple, and placed in the mouth: the germen is globoſe, and placed under the receptacle of the flower: the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is ſimple. The fruit is a globoſe, bilocular berry: the ſeeds are two, of an oval figure, and ſeparated by a pulp.

### *Claſs the Fifth. Order the Firſt.*

### *Diviſion the Second.*

### *Pentandria Monogynia, with monopetalous flowers, and with capſules within the flowers.*

## ANDROSACE.

THE calyx of the Androſace is double; the univerſal involucrum is very ſmall, but compoſed of many leaves, and contains many flowers: the perianthium is permanent, and of a pentagonal figure, formed of one leaf, and divided into five ſegments, at the top erect and acute. The corolla conſiſts of a ſingle petal; the tube is of an oval figure, and is ſurrounded by the calyx: the limb is divided into five obtuſe, entire ſegments, of an ovato-oblong figure: the ſtamina are five very ſhort filaments, placed within the tube of the flower: the antheræ are oblong, erect, and included; the germen is globoſe; the ſtyle is filiform, and very ſhort; the ſtigma is globoſe, and included. The fruit is a globoſe capſule, ſtanding on a plane cup, containing one cell, and dividing into five parts at the top; the ſeeds are numerous, and roundiſh, gibbous on one ſide, and plane on the other; the receptacle is erect and free.

1. *Androſace foliis lanceolatis dentatis glabris, perianthiis corolla brevioribus angulatis.*

*The ſmooth, dentated, lanceolato-leaved Androſace, with a ſhort, angulatod, perianthium.*

The root is oblong, ſlender, and reddiſh; the radical leaves are numerous, and ſpread on the ground; they are ſmall, oblong, and crenated at the edges: the ſtalks are numerous, two or three inches high, naked, a little hairy, and firm: at the ſummit of each ſtands a kind of little umbel, compoſed of eight or ten flowers, ſuſtained each on it's ſeparate, oblong pedicle; they are ſmall and white.

This is not a native of England, but is found in moſt other of the northern parts of Europe. C. Bauhine has deſcribed it three times. Amman mentions what he calls another ſpecies, under the name of Androſace coronopi foliis; but the ſeeds ſent by himſelf, and ſown, prove it to be the ſame with this. Buxbaum calls it, Androſace montana flore minore; Ray, Alſine verna Androſaces capitulis.

2. *Androſace perianthiis maximis.*

*The great cupped Androſace.*

The root is ſmall, oblong, and white; the radical leaves are very numerous; they lie ſpread on the ground, and are two inches long, half an inch broad, hairy, ribbed in the manner of plantain leaves, ſomewhat crenated, and of a pale green colour.

The

The ſtalks are numerous; they are five or ſix inches high, round, naked, a little hairy, and of a green or purpliſh colour: at the top ſtand ſix or eight pedicles, an inch long, and forming a kind of umbel; on each of theſe ſtands a very large perianthium, with a ſmall, white flower in it.

This is a native of Auſtria. It is kept in ſome of our gardens. Tournefort calls it, Androſace vulgaris latifolia annua. Cluſius, Androſace altera.

The other ſpecies of Androſace are, 1. The narrow-leaved, ſmooth, perennial Androſace. 2. The narrow-leaved, hairy, many-flowered Androſace; and, 3. The ſingle-flowered, narrow-leaved Androſace, The two laſt ſpecies are called, by moſt authors, Sedusm.

## PRIMULA.

THE common involucrum of the flowers of the Primula is ſmall, formed of many leaves, and contains ſeveral flowers: the perianthium is formed of one leaf; it is tubulous, pentangular, divided into five ſegments, erect, acute, and permanent. The corolla conſiſts of a ſingle petal; the tube is cylindric, and of the length of the cup, and terminated by a ſmall hemiſpheric neck: the limb is patent, and divided into five obtuſe, emarginated, and obverſely cordated ſegments: the ſtamina are five very ſhort filaments, placed within the neck of the corolla: the antheræ are acuminated, erect, connivent, and included: the germen is globoſe; the ſtyle is filiform, and of the length of the cup: the ſtigma is globoſe. The pericarpium is a cylindric capſule, nearly of the length of the cup, covered, unilocular, and opening in ten places at the top. The ſeeds are numerous and roundiſh; the receptacle is of an ovato-oblong figure, and free.

This genus comprehends the Primula veris, and the Auricula urſi, of authors.

1. *Primula foliis denticulatis rugoſis.*
*The denticulate and rugoſe-leaved Primula.* **Cowſlip.**

The root is compoſed of a great number of thick, whitiſh fibres, very long, furniſhed with other ſmaller fibres at their ſides, and affixed to a ſmall, reddiſh, ſquammoſe tuberoſity or head. The radical leaves are two inches and a half long, an inch and a half broad, of a duſky green, very rugoſe, and ſomewhat denticulate. The ſtalk is ſix or eight inches high, ſingle, naked, round, of a pale, whitiſh colour, and a little hairy. The flowers ſtand in a kind of umbel at the top, eight or ten together, each on a pedicle of an inch, or more, in length: they are ſmall, yellow, and very ſweet.

It is very common in our meadows in April. J. Bauhine calls it, Primula veris odorata flore luteo ſimplici. C. Bauhine, Verbaſculum pratenſe odoratum.

It is a plant which eaſily runs into varieties, and has been too generally deſcribed under theſe, as if of a different ſpecies. In the fields, the whole plant is ſometimes larger, the flowers broader and paler coloured, and their pedicles longer; in this caſe the common people call it, the great Cowſlip, or Oxlip; and J. Bauhine calls it, Primula veris caulifera pallido flore inodoro. C. Bauhine, Verbaſculum pratenſe inodorum. In gardens, among a multitude of other varieties, the moſt beautiful and moſt ſingular is that in which the calyx aſſumes the appearance of a corolla. This variety is called, by Tournefort and others, Primula veris prolifera flore purpureo; with us, the Polyanthos. This elegant variety is wild, in the eaſtern parts of the world; with us, only in gardens.

The flowers of the common Cowſlip are gently narcotic; a ſyrup of them uſed to be kept in the ſhops, with this intent, but a conſerve anſwers the purpoſe better.

2. *Primula foliis crenatis glabris, limbo florum plano.*
*The ſmooth, crenated-leaved Primula, with the limb of the flower plane.* **Bird's Eye.**

The root conſiſts of a number of long and thick fibres, affixed to a ſhort, ſmall, ſquammoſe head. The radical leaves are ſpread on the ſurface of the ground; they are an inch and a half long, near an inch broad, and ſerrated about the edges; ſmooth on the ſurface, not rugoſe, or wrinkled, as thoſe of the cowſlip, and of a much pa-

ler green colour. The ſtalk is four inches high, round, thick, and firm; at it's top ſtand a number of flowers, ten, or more, each on a pedicle of half an inch long; they are uſually of a beautiful pale red, ſometimes of a deep red, and ſometimes white.

This is a native of the North of England. Linnæus calls it, Primula floribus erectis faſtigiatis. Cluſius, Primula veris flore rubro. C. Bauhine, Verbaſculum umbellatum Alpinum minus.

3. *Primula foliis ſerratis carnoſis glabris.* The Auricula, or Ricloſe.
*The ſerrated, thick-leaved Primula.*

The root conſiſts of a thick, ſquammoſe head, from which grow a multitude of white, long, and thick fibres: the radical leaves are oblong and broad, three inches in length, two in breadth, ſerrated round the edges, and obtuſely pointed, of a pale bluiſh-green colour, and uſually duſty or farinaceous. The ſtalk is round, moderately thick, ſimple, naked, and four or five inches high; at it's top ſtand ten, or more, flowers, on long pedicles, forming a kind of umbel; they are larger than the flowers of the common cowſlip, and of a paler yellow, and their calyx is ſhorter.

This is the native wild ſtate of the plant, from whoſe natural varieties, aſſiſted by culture, all our beautiful auriculas in the gardens are produced.

Theſe natural varieties are only four: 1. The ſmooth, green-leaved kind, with the ſegments of the flower bifid, the limb erect and purple, and the mouth of the flower yellow. 2. The farinaceous-leaved kind, with the ſegments of the corolla emarginated, the limb plane and red, the mouth yellow. 3. The farinaceous-leaved kind, with the ſegments of the corolla undivided, the limb erect and red, the mouth whitiſh; and, 4. The farinaceous-leaved kind, with the ſegments of the corolla bent back, the limb of a blackiſh purple, the opening yellow in the middle, and white at the edges. From the ſeeds of theſe ſeveral varieties collected from plants, which have ſtood among others, and whoſe ſeeds have accidentally been impregnated by the farina of the neighbouring plants, ariſe all thoſe beautiful variations of flowers, which are the pride of the Britiſh and Dutch floriſts, and of thoſe of many other parts of the world. Tournefort mentions ſixteen of theſe varieties, as really diſtinct ſpecies; Cluſius five, and C. Bauhine ſix.

The principal other ſpecies of the Primula are, 1. of the cowſlip and primroſe kind: 1. The hoary-leaved Primula. 2. The folioſe-ſtalked Primula. 3. The common Primroſe. 4. The oriental Primula, of which there are a number of varieties. 2. Of the auricula kind, or ſuch as are ranked with the auriculæ by authors, though not properly ſuch, are, 1. The round-leaved Primula. 2. The narrow-leaved Primula. 3. The whole-leaved Primula. 4. The little, broad-leaved Primula.

## CORTUSA.

THE calyx of the Cortuſa is a ſmall, patent perianthium, permanent, and divided into five obtuſe ſegments, with reflex tops. The corolla conſiſts of a ſingle petal, and is of the rotated kind: the tube is ſcarce diſcernible; the limb is large, plane, and divided into five roundiſh ſegments, and at the baſe of each of theſe is a round, prominent tubercle. The ſtamina are five ſhort, obtuſe filaments; the antheræ are compoſed of two lamellæ; they are oblong, erect, and affixed to the exterior part of the filaments: the germen is oval; the ſtyle is filiform, and ſcarce equal to the ſtamina: the ſtigma is ſimple; the fruit is a capſule of an ovato-oblong figure, acuminated, furrowed longitudinally on each ſide, formed of two valves, with their ſides involuted, and containing only one cell. The ſeeds are numerous, oblong, obtuſe, and ſmall.

1. *Cortuſa foliis laciniatis.* Bear's Ear Sanicle.
*Jagged-leaved Cortuſa.*

The root conſiſts of a ſhort and thick tuberous head, from which there grow a multitude of fibres, long, moderately thick, and black. The radical leaves are deeply divided into the ſegments, of a pale green colour, ſhining on the upper ſurface, not underneath,

underneath, but no where at all duſty; and of an acrid taſte. The ſtalk is round, ſlender, and about three inches high, naked, and uſually of a purpliſh colour; at the top ſtand ten or twelve flowers on long pedicles, forming a kind of umbel; they are large, of a rotated form, and pendent, like ſo many bells; their colour is a deep blood-red, the mouth yellow.

This is found on the mountains, in the northern parts of Europe. J. Bauhine calls it, Cortuſa. C. Bauhine, Sanicula montana latifolia laciniata.

## CYCLAMEN.

THE calyx of the Cyclamen is a round, permanent perianthum, divided into five oval ſegments: the corolla conſiſts of a ſingle petal, of a rotated form; the tube very ſhort, the mouth prominent: the figure of the tube is globoſe; the ſize twice that of the cup, yet ſmall and nutant. The limb is large, and turns upward, and is divided into five ovato-lanceolate ſegments: the neck prominent. The ſtamina are five very ſmall filaments, in the tube of the corolla: the antheræ are ſtrait, acute, and, in the neck, the germen is roundiſh; the ſtyle is filiform, ſtrait, and longer than the ſtamina; the ſtigma is acute; the fruit is a globoſe berry, opening in five places at the top, and containing only one cell: the ſeeds are numerous, of a ſub-oval, angular figure: the receptacle is oval and free.

1. *Cyclamen foliis cordatis corolla reflexa.* **Autumnal Sowbread.**
*The cordated-leaved Cyclamen, with reflex flowers.*

The root is large, tuberous, and of a roundiſh figure, furniſhed with a few fibres; the radical leaves ſtand on pedicles of three inches long; they are about three quarters of an inch in diameter, roundiſh, but cordated, of a dark green, uſually ſpotted with white on the upper ſide, and purple underneath: the flowers ſtand ſingly, on long pedicles; they are large, red, and of a ſweet ſmell.

It is a native of ſome of the northern parts of Europe, and grows in damp, ſhady places; we have it frequent in our gardens. Cluſius calls it, Cyclamen odorato purpureo flore. C. Bauhine, Cyclamen orbiculato folio ſubtus purpuraſcente.

2. *Cyclamen foliis anguloſis corolla reflexa.*
*The angular-leaved Cyclamen, with reflex flowers.*

The root is very large, roundiſh, and depreſſed, black on the ſurface, white within, and has a few fibres. The radical leaves ſtand on pedicles of four inches long; they are an inch long, and near as much in breadth, ſinuated in ſuch manner, as to reſemble the leaves of ivy, and ſerrated round the edges; of a deep green, ſpotted with white on the upper ſurface, and purpliſh underneath. The flowers are large, of a deep purple, like that of the violet, and, bend downward; they are affixed ſingly to long, ſlender, naked ſtalks.

This is a native of Italy, but is frequent in our gardens.

The varieties of theſe two ſpecies of Cyclamen, owing to culture, are almoſt innumerable. Tournefort has mentioned more than thirty of them, under the titles of different ſpecies.

## SOLDANELLA.

THE calyx of the Soldanella is a permanent perianthium, divided into five lanceolated ſegments. The corolla conſiſts of a ſingle petal; it is of a campanulated form, and jagged at the edge: the ſtamina are five ſubulated filaments; the antheræ are ſimple; the germen is roundiſh; the ſtyle is filiform, of the length of the corolla, and permanent: the ſtigma is obtuſe. The fruit is an oblong, cylindric capſule, obliquely ſtriated, containing only one cell, and opening in ten places at the point: the ſeeds are numerous, acuminated, and ſmall, the receptacle columnar and free.

1. *Soldanella*

1. *Soldanella foliis ſubrotuudis.* Sea Bind-
*Roundiſh-leaved Soldanella.* weed.

The root is fibrous and white: the radical leaves ſtand on pedicles of two or three inches long; they are roundiſh, but ſomewhat broader than long, of a duſky green colour, and full of a milky juice: the ſtalks are procumbent and creeping, ſix or eight inches long, ſometimes much more, and take root at the joints. The flowers riſe from the alæ of the leaves, which are like the radical ones; they ſtand ſingly, on pedicles of two or three inches long, and are large, and of a fine purple, not leſs than half an inch in diameter at the mouth.

It is frequent on our ſea-ſhores. C. Bauhine calls it, Soldanella maritima minor; J. Bauhine, Braſſica marina ſive Soldanella.

2. *Soldanella foliis cordatis.* Sicilian ſea
*Cordated-leaved Soldanella.* Bind-weed.

The root is a tuft of large fibres: the radical leaves ſtand on pedicles of about an inch in length; they are ſhort and broad, rounded at the extremity, and deeply cordated at the baſe, and uſually emarginated at the top, an inch and a half long, an inch broad, and of a duſky green, thick, ſucculent, and full of a milky juice. The ſtalks are in part procumbent, in part erect; where they lie upon the ground, they take root at every joint: where they are erect, they have leaves, ſomewhat like the radical ones in ſhape, but doubly auriculated, and, as it were, pinnated at the baſe; theſe ſtand alternately, on ſhort pedicles. The flowers are very large, and of a fine red, broader, in proportion to their length, than thoſe of the former.

This is frequent on the ſhores of Sicily. C. Bauhine calls it, Soldanella ſeu Braſſica maritima major.

## MENYANTHES.

THE calyx is an erect, permanent perianthium, formed of one leaf, and divided into five ſegments at the edge: the corolla conſiſts of a ſingle petal; the tube is ſhort, and of a cylindric figure, but widening at top; the limb is deeply divided into five reflexo-patent, obtuſe, and hairy ſegments; the ſtamina are five ſhort, ſubulated filaments; the antheræ are acute, erect, and bifid at the baſe; the germen is conic; the ſtyle is cylindric, and nearly of the length of the corolla, and the ſtigma bifid and compreſſed. The fruit is an oval, unilocular capſule, ſurrrounded by the cup; the ſeeds are ſmall, numerous, and oval.

This genus comprehends the Menyanthes and Nymphoides of Tournefort, and the Acopa of Moriſon.

1. *Menyanthes foliis ternatis.* Buck-
*The trifoliate Menyanthes.* bean.

The root is long, white, jointed, and a third of an inch in diameter; it creeps under, or on, the ſurface, and ſends out fibres at every joint: the radical leaves ſtand on pedicles, four inches long, round, thick, green, and fungous within; on each of theſe pedicles ſtand three leaves; they are two inches long, an inch and a half broad, and reſemble, in ſome degree, the pinnæ of the bean leaf: the ſtalk grows to a foot high; it is thick, round, and of a pale green; on it's top ſtand a number of flowers, in a kind of thick ſpike; they are red, before they open, but, when open, white, very beautiful, and hairy.

It is common in wet grounds, with us. C. Bauhine and others call it, Trifolium paluſtre; Moriſon, Acopa.

2. *Menyanthes foliis ſubrotundis.* Fimbriated
*Roundiſh-leaved Menyanthes.* Water-lily.

The root is compoſed of a cluſter of thick, white fibres: the ſtalks are procumbent, and take root, as they lie upon the mud, ſending fibres from every joint; the leaves are large

large and roundiſh, thick, gloſſy, and of a deep green; they ſwim on the ſurface of the water, being affixed to long, round, and thick pedicles. The flowers ſtand alſo on long pedicles; they are large, yellow, hairy, and fimbriated at the edges of the ſegments; they do not at all reſemble the flowers of the nymphæa, but perfectly thoſe of the common menianthes, except in ſize and colour.

This a native of England, but it is not common; I found great plenty of it, this year, near Peterborough, in Northamptonſhire. Tournefort calls it, Nymphoides aquis innaſcens; C. Bauhine, Nymphæa lutea minor flore fimbriato. The leaves of this ſpecies are ſometimes ſpotted with purple, the flowers ſometimes white.

## HOTTONIA.

THE calyx is a perianthium, formed of one leaf, divided into five linear, erect, patulous ſegments: the corolla conſiſts of a ſingle petal; the tube is of the length of the calyx; the limb is plane, and divided into five ovato-oblong, emarginated ſegments; the ſtamina are five ſhort, erect, ſubulated filaments, placed oppoſite to the ſegments of the corolla; the antheræ are oblong; the germen is globoſe, but acuminated; the ſtyle is filiform, and ſhort; the ſtigma is globoſe: the fruit is a globoſe, acuminated capſule, placed on the cup, and having only one cell; the ſeeds are numerous and round; the receptacle large and alſo round.

This genus comprehends the Hottonia of Boerhaave, and the Stratiotes of Vaillant, but not the Stratiotes of authors in general, that being a diſtinct genus.

Of this there is only one known ſpecies.

### HOTTONIA. Water Violet.

The root is a cluſter of white fibres, moderately thick, and very long, deſcending deep into the mud: the radical leaves are pinnated, the pinnæ divided into long and narrow ſegments, and, as they lie expanded in the water, making a very beautiful appearance: the ſtalks which ſuſtain the flowers are round, ſlender, naked, and a foot, or more, in length; they are jointed, as it were, toward the top, and, at every joint, there ſtand four or five beautiful, moderately large, white flowers, diſpoſed in a radiated form, and placed on pedicles of an inch, or more, in length; they are white, and the apices in their center yellow.

It is frequent with us in ditches, and other ſhallow waters; the whole plant is generally immerſed in the water, the top, with the flowers, only being above the ſurface. C. Bauhine calls it, Millefolium aquaticum, ſive Viola aquatica caule nudo; Vaillant, Stratiotes vulgaris flore albo; Ruppius, Myriophyllum Rivini.

## LYSIMACHIA.

THE calyx is an acute, erect, permanent perianthium, divided into five ſegments; the corolla conſiſts of a ſingle petal; the tube is ſcarce diſcernible; the limb is divided into five ovato-oblong ſegments; the ſtamina are five ſubulated filaments, nearly cohering at their baſes, and of about half the length of the corolla; the antheræ are acuminated; the germen is roundiſh; the ſtyle is filiform, of the length of the ſtamina; the ſtigma is obtuſe: the fruit is a capſule, of a globoſe figure, compoſed of two valves, and having only one cell; the ſeeds are numerous, and angulated; the receptacle globoſe, large, and punctated.

### 1. *Lyſimachia foliis lanceolatis racemo compoſito terminatrice.* Yellow Willow-herb.
*The lanceolated-leaved, cluſter-flowered Lyſimachia.*

The root is creeping, oblong, of the thickneſs of a finger, jointed, and of a reddiſh colour: the ſtalk grows to five feet high; it is ſtriated, hairy, firm, and of a pale green: the leaves ſtand three, four, or five at a joint; they are three inches long, an inch and a half wide, broadeſt in the middle, and terminate in a point; at the top of the main ſtalk and branches are ſpikes of very beautiful yellow flowers.

It grows in damp places, with us. C. Bauhine calls it, Lyſimachia lutea major; Rivinus, Nummularia erecta.

2. *Lyſimachia racemis ſimplicibus lateralibus.*
*The Lyſimachia, with ſimple cluſters of flowers from the ſides.*

Globoſe-flowered, yellow Willow-herb.

The root is long, black, and creeping, frequently jointed, and of the thickneſs of a gooſe-quill: the ſtalk riſes to a foot high; it is ſtriated, hollow, ſlender, and brittle: the leaves grow two at a joint, and the joints ſtand very cloſe; the leaves are an inch and a quarter long, three quarters of an inch broad, and of a pale green: from the alæ of theſe grow pedicles, ſlender, and about an inch in length, on the ſummit of which ſtand roundiſh, or oval, cluſters of ſmall, yellow flowers, the whole cluſter of the bigneſs of a nutmeg.

It is frequent about lakes and rivers, in Denmark; we have it alſo in England, but very rare. C. Bauhine calls it, Lyſimachia bifolia flore globoſo; Linnæus, Lyſimachia ex alis foliorum thyrſifera; Rudbeck, Lyſimachia ſalicaria.

2. *Lyſimachia foliis ſubrotundis, floribus ſolitariis, caule repente.*
*The creeping, round-leaved, ſingle-flowered Lyſimachia.*

Yellow Moneywort.

The root is compoſed of a few white fibres: the ſtalks trail upon the ground, and take freſh root at every joint; they are a foot, or more, in length: the leaves ſtand in pairs; they are roundiſh, of a bright green, and very thin: the flowers grow from the alæ of the leaves; they are very large, and yellow.

The whole plant makes a beautiful appearance, and is common with us in damp places. Tournefort calls it, Lyſimachia humifuſa rotundiore folio, flore luteo; C. Bauhine, Nummularia flore luteo.

The principal ſpecies, beſide theſe, are, 1. The willow-leaved, white-flowered Lyſimachia. 2. The great, broad-leaved, Canada Lyſimachia. 3. The little, purple Moneywort of authors. 4. The pointed-leaved Lyſimachia. 5. The narrow-leaved Lyſimachia, called Linum ſtellatum. 6. The oriental, purple-ſpiked Lyſimachia.

## ANAGALLIS.

THE calyx is a permanent perianthium, divided into five carinated ſegments: the corolla conſiſts of a ſingle petal; there is no tube; the limb is plane, and is divided into five ſegments, of an ovato-orbicular figure, with convex ungues: the ſtamina are five erect filaments, ſhorter than the corolla, and hairy in the lower part; the antheræ are ſimple; the germen is globoſe; the ſtyle is filiform, and lightly declinate; the ſtigma is capitate; the fruit is a globoſe capſule, containing only one cell, and dividing horizontally into two hemiſpheres; the ſeeds are numerous, and angular; the receptacle globoſe and large.

1. *Anagallis foliis ovatis, indiviſis.*
*The oval, undivided-leaf Anagallis.*

Red Pimpernel.

The root is ſmall, oblong, white, and furniſhed with a few fibres; the ſtalks grow to four or five inches long, ſometimes to ten or twelve; they are not erect, but trail on the ground, and are ſquare, ſmooth, of a pale green, and hollow: the leaves ſtand in pairs; they have no pedicles, but are an inch long, and more than half as much broad, of a duſky green on the ſurface, and ſpotted with red underneath. The flowers ſtand on ſlender pedicles, of an inch long, growing out of the alæ of the leaves; they are ſmall and red, with us, ſometimes white; in many other parts of Europe they are blue.

The plant is common in our corn-fields and gardens. C. Bauhine calls it, Anagallis flore Phœniceo. It is eſteemed an alexipharmic and ſudorific, but is little uſed.

2. *Anagallis*

2. *Anagallis foliis lanceolatis.*
*Lanceolate-leaved Anagallis.*

The root is a cluſter of white fibres; the ſtalks are a foot, or more, in length, of a pale green, and hollow: the leaves ſtand uſually two, ſometimes three, ſometimes, but rarely, more, at a joint; they are oblong, very narrow, and lanceolated. The flowers ſtand on long pedicles, produced from the alæ of the leaves, uſually one from each; the flowers are larger than thoſe of the former ſpecies, and of a beautiful blue.

The place whence this plant originally came is unknown; Monellus ſent Cluſius ſome ſeeds of it from Cadiz, and, from the plants raiſed from them, the ſtock has been ever ſince kept up in our gardens.

## DIAPENSIA.

THE calyx is a perianthium, compoſed of eight leaves; the five interior ones diſpoſed in a circle, the other three laid in an imbricated manner, all of them equal in ſize, of an oval figure, obtuſe, erect, and permanent: the corolla conſiſts of a ſingle petal, and is of the hypocrateriform kind; the tube is cylindric, open, and of the length of the cup; the limb is divided into five ſegments, obtuſe and plane; the ſtamina are five erect, linear, compreſſed filaments, ſhort, and placed at the ſegments of the petal; the antheræ are ſimple; the germen is roundiſh; the ſtyle is cylindric, and of the length of the ſtamina; the ſtigma obtuſe: the fruit is a capſule, formed of three valves, containing three cells, and the ſeeds are numerous and round.

Of this genus there is but one known ſpecies.

### DIAPENSIA.

The root conſiſts of a number of white fibres, and is perennial: the radical leaves are very numerous, very narrow, obtuſe, and linear, extremely thin, and of a pale green colour: the ſtalk is procumbent, an inch or two long, and ramoſe, producing tufts of leaves, and cluſters of fibres at every joint; the peduncles which ſupport the flowers are ſlender, naked, ſcarce an inch in length, and of a pale green colour; every peduncle ſuſtains only a ſingle flower, which is large and white.

It is a native of Denmark, Sweden, and Lapland, and we have it on ſome of the Northern mountains in our own kingdom. C. Bauhine calls it, Sedum Alpinum gramineo folio, lacteo flore. Tournefort, Androſace Alpina perennis flore ſingulari.

## HYDROPHYLLUM.

THE calyx is a perianthium, divided into five ſubulated ſegments, patent, permanent, and nearly as long as the corolla: the corolla conſiſts of a ſingle, campanulated petal, lightly divided into five erect, obtuſe, emarginated ſegments: the nectarium is a fiſſure, cloſed by two longitudinal, connivent lamellæ, ſituate between the ſegments, and below the middle of the petal: the ſtamina are five ſubulated filaments, longer than the corolla; the antheræ are incumbent, and oblong; the germen is of an ovato-acuminated figure: the ſtyle is ſubulated, and of the length of the ſtamina: the ſtigma is bifid, acute, and patent. The fruit is a globoſe capſule, formed of two valves, and having only one cell: the ſeed is ſingle, round, and large.

This genus comprehends the Hydrophyllum of Tournefort, and the Dentariæ facie of Moriſon.

There is only one known ſpecies of it.

### HYDROPHYLLUM.

The root is oblong, moderately thick, and of a reddiſh colour: the radical leaves are pinnated, ſmall, but like thoſe of the dentaria, conſiſting of two or three pair of oblong pinnæ, and a long, terminatory one, or rather of ſo many deep ſegments, reſembling pinnæ, for they are not divided quite to the rib: the ſtalk is round, ſlender, and of a pale green colour; it grows to ſix inches high, and has on it's top five

or

or ſix flowers, large, and much like thoſe of the echium; the colour a deep blue, ſometimes a pale blue, ſometimes red, ſometimes white.

It is a native of Germany, and grows in moiſt places. Morinus gave it the name of Hydrophyllon; others have called, it Dentariæ affinis, echii flore.

## THEOPHRASTA.

THE calyx of the Theophraſta is a ſmall, permanent perianthium, divided into five obtuſe ſegments, making obtuſe angles alſo with one another: the corolla conſiſts of a ſingle petal, of a campanulated figure, divided, in the manner of the cup, into five obtuſe ſegments at the rim: the ſtamina are five ſubulated filaments, ſhorter than the corolla: the antheræ are ſimple: the germen is oval: the ſtyle is ſubulated, and ſhorter than the corolla: the ſtigma is acute. The fruit is a large, globoſe capſule, containing only one cell: the ſeeds are numerous, and of a roundiſh figure, and are affixed to every part of the receptacle.

This genus comprehends the Ereſia of Plumier; it is an American, of which there is but one ſpecies, and that wanting no farther deſcription.

## PATAGONULA.

THE calyx is a very ſmall, permanent perianthium, divided into five ſegments: the corolla is compoſed of a ſingle petal: there is ſcarce any tube: the limb is plane, and divided into five oval, acute ſegments: the ſtamina are five filaments, of the length of the corolla: the antheræ are ſimple: the germen is of an oval, acute figure: the ſtyle is bifid at the end, and it's diviſions are bifid again; it is of the length of the ſtamina, and permanent: the ſtigmata are ſimple. The fruit is an oval, acuminated capſule, placed on a very large cup, with oblong, emarginated ſegments; this conformation of the cup is the eſſential diſtinction of the genus.

There is but one ſpecies of this genus; it is an American, and needs no farther deſcription than is contained in the generical character.

## SPIGELIA.

THE calyx is a monophyllous perianthium, ſmall, permanent, and divided into five ſegments: the corolla conſiſts of a ſingle petal, of the ſhape of a funnel: the tube is much longer than the cup, and is narrower below than above: the limb is patent, and divided into five ſegments; the ſegments broad, and acuminated: the ſtamina are five ſimple filaments; the antheræ are ſimple: the germen is compoſed of two globes: the ſtyle is ſingle, ſubulated, and of the length of the tube: the ſtigma is ſimple: the perianthium conſiſts of two globoſe fruits, growing together, and ſituate on the cup: the ſeeds are roundiſh, very ſmall, and numerous.

This genus comprehends the Arapabaca of Plumier; an American, needing no farther deſcription than is contained in the generical character.

## AZALEA.

THE calyx is a ſmall, erect, acute, coloured, and permanent perianthium, divided at top into five ſegments: the corolla conſiſts of a ſingle petal; this is twice as long as the cup, and is erect, patulous, narrow at the baſe, and at the ſummit divided into five ſegments, the ſides of which bend backwards: the ſtamina are five filiform filaments, inſerted into the receptacle, and free: the antheræ are ſimple: the germen is roundiſh: the ſtyle is filiform, of the length of the corolla, and permanent: the ſtigma is obtuſe. The fruit is a roundiſh capſule, formed of five valves, and containing five cells: the ſeeds are numerous, and roundiſh: the figure of the petal is, in ſome, infundibuliform, in ſome campaniform.

1. *Azalea ramis diffuſis procumbentibus.*
*The diffuſe, procumbent Azalea.*

The root is woody, fibrous, and perennial: the ſtem is woody, and of the thickneſs of a gooſe-quill; it ſoon divides into a number of branches, and theſe, as well as itſelf, all lie on the ground, ſpread in an irregular manner. The whole plant ſeldom exceeds ten or twelve inches in length, and often is as much in extent: the leaves ſtand in pairs, very cloſe to each other; they are of the ſize and ſhape of thoſe of thyme, and are green all winter; they ſtand on very ſhort pedicles, and their edges are reflex; they are of a deep green on the upper ſurface, paler below, and have a hollow, longitudinal line on the upper ſurface, and a prominent one below, formed by the main rib. The flowers uſually ſtand three together, at the ends of the branches, each on it's own ſhort, red pedicle. The calyx is red; the flower moderately large, and of a bright red.

It is frequent in Denmark, Sweden, and Lapland, over-running whole tracts of land, as the erica does with us. The whole plant lies as flat on the earth as a preſſed ſpecimen in a hortus ſiccus, yet it does not take root from the branches. Tournefort calls it, Chamærhododendros Alpina ſerpyllifolia; Rudbeck, Lychnis Alpina fruteſcens minima flore ruberrimo; C. Bauhine, Anonymus fruticoſa foliis ericæ baccifera.

2. *Azalea ramis compoſitis ſuberectis.*
*The compoſite, and erect-branched Azalea.*

The root is fibroſe, woody, and perennial: the ſtem is woody, tough, and ſhrubby: it grows to ſix or eight inches high. The branches are numerous, and three or four often grow from the ſame point of the ſtem, from the top of the branch of the preceding year; they ſtand very diſtant, and are covered with a rough bark, which, after a time, falls off, a new one appearing under it ready formed: the leaves are ſmall, of an elliptic figure, rigid, and have their edges bent backward. The middle rib forms a cavity on the upper ſurface of the leaf, and is prominent below; the upper ſurface is of a deep green, ſprinkled over, as it were, with hard, round prominencies: the under ſurface is whitiſh, and has more of theſe protuberances, but they are very ſmall, and of a ferrugineous colour. The leaves ſtand in cluſters, ten or twelve together, at the tops of the branches, the other part being naked. The flowers riſe from the midſt of theſe tufts, uſually three from each; they are long, and of a beautiful bluiſh-purple, or violet, colour, and ſtand each on a ſhort, reddiſh pedicle: the calyx is green.

This beautiful plant is a native of the mountains of Lapland. Linnæus, who diſcovered it, ſuppoſed it, at that time, to be the Chamærhododendros Alpina glabra of Tournefort, the Ledum Alpinum foliis ferruginea rubigine nigricantibus; but he afterwards allowed this to be an error, and the plant a new ſpecies.

## OPHIORRHIZA.

THE calyx is an erect perianthium, ſmall, and divided into five ſegments at the edge: the corolla is oblong, narrow at the baſe, and divided alſo into five ſhort ſegments at the edge: the ſtamina are five moderately long, ſlender filaments: the antheræ are tumid and ſhort: the germen is bifid: the ſtigmata are two, and the fruit a capſule conſiſting of two lobes; the ſeeds are numerous, and roundiſh.

This plant approaches greatly to the azalea, but it's bifid germen and bilobous fruit ſufficiently diſtinguiſh it both from this and all the other genera of this claſs.

## PLUMBAGO.

THE calyx is a ſcabrous, pentagonal perianthium, formed of one leaf, of an ovato-oblong, tubulated figure, divided into five ſegments at the extremity, and permanent: the corolla conſiſts of a ſingle petal, of an infundibuliform ſhape: the tube is cylindric, but narroweſt above, and longer than the cup: the limb is divided into five oval, erecto-patent ſegments: the ſtamina are five ſubulated filaments, free, and placed within the tube of the corolla, and annexed, at their baſes, to as many obtuſe ſquammæ: the antheræ are ſmall, oblong, and verſatile: the germen is oval, and very ſmall: the ſtyle is ſimple, and of the length of the tube: the ſtigma is ſlender, and divided into five parts: there is no pericarpium: the ſeed is ſingle, of an oval figure, and included.

*Plumbago foliis petiolatis.*
*The Plumbago, with petiolated leaves.*

The root is oblong, moderately thick, and of a very acrid taſte; the radical leaves are roundiſh, three inches long, and of a deep green colour: the ſtalk riſes to three or four feet high, but is not very robuſt, and ſeldom perfectly erect. It is round, articulated, woody, but tortuous, and of a green, ſhining ſurface: it uſually grows among ſhrubs, and is, in part, ſupported upright by them. The leaves ſtand on the ſtalks, on very ſhort pedicles; they are roundiſh, ſometimes rather oblong, two inches in length, and of a deep ſhining green, ſmooth on the ſurface, and very thin: the flowers ſtand in ſpikes at the top of the ſtalk and branches; they have no pedicles, but adhere by the baſe of the cup, which is viſcous, ſtriated, and, as it were, ſpinoſe; the flowers are white, and much like thoſe of the common white Lychnis, only ſomewhat ſmaller.

It is a native both of the Eaſt and Weſt Indies; we have it frequently in our gardens. Ray calls it, Dentillaria lychnoides ſylvatica ſcandens flore albo; Commelin, Lychnis Indica ſpicata fructibus lappaceis oblongis, radice urente.

The other ſpecies of the Plumbago are, 1. The beet-leaved, American Plumbago; and, 2. The ſmaller-leaved, ſcandent, and prickly, American Plumbago, with ſmaller flowers.

## PHLOX.

THE calyx is a cylindric but decangular perianthium, formed of a ſingle leaf, divided into five ſegments at the edge, and permanent: the corolla conſiſts of a ſingle petal, and is of the hypocrateri-form kind: the tube is cylindric, and three times the length of the cup, narrow below and crooked: the limb is plane, and divided into five roundiſh, equal, obtuſe ſegments, ſhorter than the tube: the ſtamina are five filaments placed in the tube of the flower, two of which are longer, one ſhorter than the other two: the antheræ are placed in the mouth of the corolla: the germen is conic; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is trifid and acute: the fruit is an oval, but ſomewhat trigonal, capſule, formed of three valves, and containing three cells: the ſeeds are ſingle and oval.

This genus comprehends the Lychnidea of Dillenius.

1. *Phlox foliis lineari-lanceolatis caule recto, corymbo terminali.*
*The narrow, lanceolate-leaved Phlox, with a cluſter of flowers terminating the ſtalk.*

The root is oblong, ſlender, white, and furniſhed with a few fibres; the radical leaves are three inches long, narrow, and pointed at the ends, of a pale green colour, and thin: the ſtalk is round, ſmooth, and robuſt; it riſes to two feet high, and toward the top has ſome branches: the leaves ſtand two at a joint; they are an inch and a half long, narrow, and pointed at the ends, of a very pale green, and ſmooth on the ſurface: the flowers ſtand in a kind of umbels at the tops of the ſtalks and branches; they are large and white, ſometimes reddiſh.

The plant is common in Virginia, and many other parts of North America; we have it in our gardens. Dillenius calls it, Lychnidea folio melampyri.

2. *Phlox foliis ovatis, corymbo terminatrice.*
*The oval-leaved Phlox, with terminatory cluſters of flowers.*

The root is oblong, thick, and woody, white, and furniſhed with a number of fibres. The radical leaves are four inches long, very numerous, of a pale green, ſmooth and even at the edges, and near three inches in breadth: the ſtalk riſes to two or three feet high: the leaves ſtand in pairs, at three or four inches diſtance; they are of an oval figure, and obtuſely pointed, two inches and a half long, and more than an inch and a half in breadth. The ſtalk towards the top ſends out ſix or eight branches in pairs, oppoſite

oppoſite to each other, from the alæ of the leaves: theſe all riſe to the height of the main ſtalk, and are terminated by cluſters of large white flowers, together forming a ſurface, often of ten or twelve inches.

This is frequent in Penſylvania, whence we have often received it from John Bartram.

## CONVOLVULUS.

THE calyx is a very ſmall perianthium, of an obtuſe, oval, connivent figure, formed of one leaf, divided into five ſegments. The corolla conſiſts of a ſingle petal; the ſhape is campanulated and patent; it is large, plicated, and very lightly divided at the rim. The ſtamina are five ſubulated filaments, of about half the length of the corolla; the antheræ are oval and compreſſed: the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina: the ſtigmata are two, oblong and broad. The fruit is a capſule of a roundiſh figure, contained within the cup, and formed of one, two, or three valves: the ſeeds are two, roundiſh and often acute: the corolla is uſually cut in ten places; but there are ſpecies, in which theſe crenæ are but five.

This genus comprehends the Convolvulus of authors, and the Volubilis of Dillenius. The Volubilis has in a cluſter ſome larger, others ſmaller, flowers; and the ſeeds are elated, but theſe are ſpecific, not generical, diſtinctions.

1. *Convolvulus foliis ſagittatis poſtice truncatis.* **Great Bind-weed.**
*The Convolvulus, with ſagittated leaves truncated behind.*

The root is oblong, white, and creeping, of the thickneſs of a crow-quill, and of an acrid taſte: the ſtalks are round, ſlender, and infirm, but by the help of buſhes, on which it climbs, they grow ſometimes to eight or ten feet high: the leaves ſtand ſingly, and at conſiderable diſtances; their pedicles are an inch long; they are broad, ſagittated at the baſe, and terminate in a point: their colour is a pale green, their texture thin, and the two points at the baſe are truncated. The flowers ſtand ſingly on long pedicles, ariſing from the alæ of the leaves; they are very large, and of a ſnow white.

The plant is common in our hedges. C. Bauhine calls it, Convolvulus major albus.

2. *Convolvulus calycibus tuberculatis piloſis.* **Round-leaved, blue Bindweed.**
*The Convolvulus, with tuberculoſe, hairy cups.*

The root is oblong, creeping, of a reddiſh colour, and of the thickneſs of a crow-quill: the ſtalk is round, ſlender, and tortuous, hairy, and uſually of a reddiſh colour, and, when properly ſupported, will grow to four or five feet high: the leaves ſtand ſingly, and at conſiderable diſtances on the ſtalks; they have pedicles of an inch long, reddiſh and hairy: their ſhape is very uncertain; they are ſometimes roundiſh, ſometimes angulated, like the leaves of ivy, and this in a greater or leſſer degree: they are always of a pale green and hairy, both on the upper and under ſurfaces. The flowers are diſpoſed in a very ſingular manner; a common pedicle of three inches long riſes from the ala of a leaf, and at the top of this ſtand three other pedicles, each an inch long, and each ſupporting a ſingle flower: the flowers are large, and of a beautiful purple colour: the cups blackiſh, hairy, and full of little tubercles: the flowers are only open in the morning and evening; they ſhut up, when the ſun is out: hence ſome have called the plant Flos noctis.

It is a native of Syria, and many other of the warmer countries. It's leaves differ ſo extreamly in figure, that they have miſled many authors into the deſcribing the plant three times over, as if of ſo many different ſpecies. C. Bauhine calls it, in the round-leaved ſtate, Convolvulus purpureus folio ſubrotundo; in it's angulated-leaved ſtate, Convolvulus hederaceus cæruleus anguloſo folio; and Dillenius, when the leaves are yet more angulated, calls it, Convolvulus cæruleus hederaceo folio magis anguloſo. It uſually has round leaves in Syria; ivy-like leaves in many parts of Aſia, Africa, and America; and the more angular-leaved plants have been from Æthiopia. What

ſhews,

ſhews, however, that theſe are only varieties of the ſame ſpecies, is, that the leaves alter their form, even in our own ſtoves.

3. *Convolvulus foliis lanceolato-ovatis nudis, caule recto, floribus ſolitariis.*
*The Convolvulus, with oval-lanceolated, naked leaves, an erect ſtalk, and ſingle flowers.*

The root is oblong, ſlender, and of a browniſh colour: the ſtalks are numerous, round, and firm; they grow to a foot, or eighteen inches, in height, and ſtand erect; they are hairy, and divided into many branches. The leaves ſtand ſingly, but very cloſe to one another; they are oblong, and moderately broad: the lower ones are often four inches long, and an inch and a half broad; they grow ſmaller as they come nearer the top of the ſtalk, and are a little hairy. From the alæ of almoſt every leaf there riſes a pedicle very ſlender, and near an inch long; on the top of which ſtands a ſingle, large, and very beautiful blue flower, but variegated in a very elegant manner: about the edges the blue is very deep; within it is ſomewhat paler, farther toward the center of the flower it becomes yellow, and the very central ſpot is white.

It is a native of Spain and Portugal; but we have it frequent in our gardens. C. Bauhine calls it, Convolvulus cæruleus peregrinus folio oblongo. Moriſon, Convolvulus flore triplici colore inſignito.

The other ſpecies of the Convolvulus are very numerous: the more ſingular are, 1. The auriculate-leaved, purple Convolvulus. 2. The white Indian Colvolvulus. 3. The violet-leaved Convolvulus. 4. The yellow, many-flowered Convolvulus. 5. The round-leaved, white Convolvulus. 6. The great purple, heart-leaved, American Convolvulus. 7. The thick-leaved, Ceylon Convolvulus. 8. The little, field Convolvulus. 9. The little, branched Convolvulus. 10. The little African Convolvulus. 11. The Syrian Convolvulus. 12. The linear-leaved, erect Convolvulus. 13. The creeping, ſilvery, acaulous Convolvulus. 14. The umbellated, erect, ſilvery Convolvulus. 15. The piloſella-leaved Convolvulus. 16. The nummularia-leaved Convolvulus. 17. The great, alated, Indian Convolvulus. 18. The laciniated-leaved Convolvulus. 19. The cinque-foil Convolvulus. 20. The tripartite-leaved Convolvulus. 21. The betony-leaved Convolvulus. 22. The laciniated, ſilvery-leaved Convolvulus. 23. The ſagittated, Græcian Convolvulus. 24. The broad-leaved, erect, hairy Convolvulus. 24. The oblong, hairy-leaved Convolvulus, with bright red flowers.

## IPOMOEA.

THE calyx is a very ſmall, oblong perianthium, divided into five ſegments, and permanent: the corolla conſiſts of a ſingle petal, of an infundibuliform ſhape; the tube is nearly cylindric, and very long; the limb is patent, and is divided into five ſemi-lanceolate, plane ſegments: the ſtamina are five ſubulated filaments, nearly of the length of the corolla: the antheræ are roundiſh: the germen is roundiſh; the ſtyle is filiform, and of the length of the corolla; the ſtigma is capitate and trifid: the fruit is a roundiſh capſule, containing three cells: the ſeeds are oval, and are ſeveral in each cell.

1. *Ipomoea foliis pinnatifidis linearibus, floribus ſolitariis.* American Jaſmine.
*The linear, pinnatifid-leaved Ipomoea, with ſingle flowers.*

The root is oblong, creeping, and woody: the ſtalks are woody, and grow to a great length; they are weak, however, and muſt be ſupported. The leaves ſtand ſingly on long pedicles, of a deep red colour; they are very beautifully divided into a number of oblong, and very narrow, ſegments, down almoſt to the middle rib, ſo as to appear pinnated. The number of ſegments is often very great, and the whole leaf is terminated by a ſingle ſegment or point: the flowers are large, and of a beautiful bright red colour.

It is a native both of the Eaſt and Weſt Indies. J. Bauhine and others call it ſimply, Quamoclit; Columna, Convolvulus pennatus exoticus rarior; C. Bauhine, Jaſminum millefolii folio.

2. *Ipomoea foliis palmatis, lobis ſeptenis lanceolatis integerrimis.* Spaniſh Wood-bine.
*The palmated-leaved Ipomoea, with ſeven whole lanceolated lobes.*

The root is tuberous, roundiſh, and of the bigneſs of a man's head: the ſtalk is angular, firm, and tortuous; it winds itſelf about trees, and grows thus to twenty feet high: it is very much branched, and of a browniſh colour. The leaves ſtand ſingly at four inches diſtance from one another: their pedicles are two inches, or more, in length; the leaf is divided into ſeven oblong ſegments; they are narroweſt at the baſe, broader in the middle, and thence ſmaller again to the point: the middle ſegment is four inches long, and an inch broad; the others are gradually ſmaller, as they recede from it: the flowers are large, of a bright yellow colour, very beautiful, and ſweet-ſcented: they ſtand ſingly on pedicles of three or four inches long, ariſing from the alæ of the leaves.

It is a native of Jamaica, but we have it in ſome of our ſtoves. Sir Hans Sloane calls it, Convolvulus major heptaphyllus flore ſulphureo odorato.

The other ſpecies of Ipomoea are, 1. The cordated-leaved, many-flowered Ipomoea. 2. The hairy-ſtalked, digitated-leaved Ipomoea. 3. The ſcarlet, digitated, narrow-leaved Ipomoea. 4. The great cordated-leaved Ipomoea. 5. The umbellated, ſcarlet Ipomoea. 6. The angulated-leaved, ſmall, ſcarlet-flowered Ipomoea. 7. The ſolanum-leaved Ipomoea, with ſcarlet flowers.

## POLEMONIUM.

THE calyx is a cyathiform perianthium, compoſed of a ſingle leaf, divided into five ſegments, acute and permanent: the corolla conſiſts of a ſingle petal; the tube is ſhorter than the cup, and is ſhut up by five valves placed at it's top; the limb is large and plane, divided into five roundiſh, obtuſe ſegments: the ſtamina are five filaments, inſerted in the valves of the tube; they are filiform, inclinated, and ſhorter than the corolla. The antheræ are roundiſh and incumbent; the germen is of an oval figure, and acute; the ſtyle is filiform, and of the length of the corolla; the ſtigma is bifid and revolute: the fruit is a trigonal, covered capſule, approaching toward an oval form, compoſed of three valves, and containing three cells: the ſeeds are numerous, irregular, and acute.

Of this genus there are only two known ſpecies.

1. *Polemonium calycibus glabris.* Jacob's Ladder.
*The ſmooth-cupped Polemonium.*

The root is oblong, ſlender, whitiſh, pyxidated, and creeping: the radical leaves are very beautifully pinnated; they are four or five inches long, and are compoſed of twelve, or more, pairs of pinnæ, placed very cloſe to one another, and terminated by an odd one: the pinnæ are half an inch long, and moderately broad, pointed at the end, and of a deep green colour; theſe leaves remain green the whole winter. The ſtalk is moderately thick, of a pale green colour, ſtriated and hollow; it uſually runs up ſingly to two feet high, and near the top ſends out ſome lateral branches: the leaves ſtand alternately, and are three inches long, and an inch and a quarter broad in the whole. They are beautifully pinnated like the radical leaves; the pinnæ very thick-ſet, broadeſt at the baſe, and narrower to the point. At the top of the ſtalk and branches ſtand cluſters of very beautiful flowers, large, of a deep blue, and ſometimes a white, colour.

It is a native of Denmark, Sweden, and other northern countries; I have met with it wild in Lancaſhire, but would not be too confident that it was native there, as we have it frequently in our gardens, and it might be thrown out of ſome of them. Tour-

nefort calls it, Polemonium vulgare cæruleum; C. Bauhine and others, Valeriana Græca.

2. *Polemonium calycibus lanatis.*
*The woolly-cupped Polemonium.*

The root is compoſed of a multitude of long fibres moderately thick, and very tough; the radical leaves are ſix inches long, and compoſed of a great number of pairs of pinnæ, ſet crowding on one another with an odd pinna at the end; they are about half an inch long, not a third of an inch broad, and pointed at the end. The ſtalk is round, ſmooth, ſlender, hairy, and hollow; it uſually grows ſingle, and is about a foot and half high. All the way up there ſtand pinnated leaves, like the radical ones, but much ſmaller; the upper ones very ſmall. The flowers ſtand in cluſters, and are of a beautiful blue colour; they are twice as large as thoſe of the former ſpecies, and their cups make a ſingular appearance, being woolly and white.

It is a native of Siberia, and has not been deſcribed before. Linnæus mentions it, under the name of Polemonium calycibus lanatis.

## *Claſs the Fifth Order the Firſt.*

## *Diviſion the Third.*

## *Pentandria Monogynia, with monopetalous flowers, and the germen placed under the corolla.*

## CAMPANULA.

THE calyx is a perianthium, divided into five parts, erecto-patent, acute, and placed on the germen: the corolla conſiſts of a campanulated, ſingle petal, the baſe broad and impervious: the limb lightly divided into five ſegments, broad, acute, and patulous: the nectarium is ſituate in the bottom of the corolla, and is formed of five acute, connivent valves: the ſtamina are five very ſhort, capillary filaments, inſerted on the ſummits of the valves, which form the nectarium: the antheræ are longer than the filaments, and compreſſed: the germen is angular, and placed below the receptacle; the ſtyle is filiform, and longer than the ſtamina: the ſtigma is oblong, thick, divided into three parts, and thoſe bent backwards. The fruit is an angulated capſule, of a figure approaching to round, containing either three or five cells, and having ſo many foramina in the ſides for letting out the ſeeds. The ſeeds are numerous and ſmall, and the receptacle fixed and columnar.

This genus comprehends the Campanula, Trachelium, Rapunculus and Medius of Knaut, and the Speculum Veneris. The figure of the pericarpium is not perfectly determinate: in the Trachelium it is ſcabrous, hairy, and trilocular; in the Rapunculus it is ſmooth, oval, and trilocular; in the Medius it has five valves, and is quinquelocular; and, in the Speculum Veneris, it is columnar, priſmatic, and trilocular. As the reſt of the characters, however, are alike in all, theſe can properly be only made ſpecific diſtinctions, not generical, as Ray, Knaut, and others have made them.

1. *Campanula foliis radicalibus reniformibus, caulibus linearibus.* Round-leaved
*The Campanula, with the radical leaves kidney-ſhaped, the others linear.* Bell-flower.

The root is oblong, thick, white, and of a pleaſant taſte: the radical leaves are eight or ten in number; they are of a roundiſh, or rather kidney-like, ſhape, of the breadth of a ſixpence, of a deep green colour, and have pedicles of an inch long: the ſtalk is round, ſmooth, and ſix or eight inches high; at the bottom it has four or five leaves of an angulated, oblong figure, ſomewhat like thoſe of ivy; the reſt are placed irregularly, all the way up the ſtalk, pretty cloſe to one another; they have no reſemblance of the radical or lower leaves, but are an inch long, narrow, graſſy, and pointed

pointed at the ends; at the top of the ſtalk ſtand four or five flowers, large, and of a beautiful blue, ſometimes a reddiſh, ſometimes a white, colour.

It is common with us by way-ſides. C. Bauhine calls it, Campanula minor rotundifolia vulgaris; and, deſcribes twice afterwards, under the names of Campanula minor rotundifolia floribus albis, and Campanula Alpina linifolia cærulea.

2. *Campanula foliis lanceolatis, caulinis acute ſerratis, floribus paniculatis nutantibus.*

*The lanceolated, ſerrated-leaved Campanula, with nutant, paniculated flowers.*

The root is oblong, white, moderately thick, and eſculent; the radical leaves ſtand on pedicles of three inches long; they are two inches and a half long, an inch and a half broad, pointed at the extremity, and of a deep green colour. The ſtalk is rigid, hollow, and two feet high: the leaves ſtand ſingly on it; their pedicles are moderately long; their ſhape like that of the common ſtinging nettle, but narrower; they are ſharply ſerrated at the edges, and, before the flowers appear, there is a tuft of theſe leaves on the ſtalks like a roſe, but theſe, when the flowers are ripe, are diſpoſed, like the reſt, along the ſtalk: they are all ſmooth, of a deep green colour, and rigid to the touch: the flowers ſtand in a kind of panicles; they are ſmall, blue, and nutant.

This is a native of Ruſſia, but we have it in ſome of our gardens. Amman calls it, Campanula urticæ foliis anguſtioribus glabris rigidiſque.

3. *Campanula capſulis quinquelocularibus tectis, calycis ſinubus reflexis.* **Coventry Bells.**

*The quinquelocular fruited, long-leaved Campanula.*

The root is large and oblong, white, eſculent, and of a very pleaſant taſte; the radical leaves are oblong, moderately broad, crenated at the edges, and terminate in a point: they ſtand on pedicles of two inches long, and are of a pale green, and hairy: the ſtalk grows to three feet high: the leaves ſtand irregularly on it, and are oblong, narrow, hairy, and crenated like thoſe of the root; the tops of the branches ſupport a number of flowers, large, oblong, ventricoſe, and of a beautiful blue, ſometimes purpliſh, and ſometimes white, colour.

It is a native of Germany and Italy, and is very common in our gardens. Camerarius calls it, Medium; Dodonæus, Viola Mariana; C. Bauhine, Campanula hortenſis folio et flore oblongo.

4. *Campanula foliis undatis, radicalibus lanceolato-ovatis panicula coarctata.* **Rampions.**

*The undulated-leaved Campanula, with a narrow panicle.*

The root is long, white, and thick, ſometimes ſimple, ſometimes multiple: the radical leaves are numerous, oblong, broad, and of a bright green colour: the ſtalk riſes to two or three feet; it is ſlender, ſtriated, angular, and hairy: the leaves ſtand thick upon it without any order; they are long and narrow, broad at the baſe, where they adhere to the ſtalk without any pedicle, and thence gradually narrower to the point, and very finely ſerrated at the edges: toward the top the ſtalk ſends up many branches, and at the tops of theſe ſtand the flowers; they are large, beautiful, and of a fine blue, with lines of red; they are deeply divided into five ſegments, and each ſegment has three red lines or ſtriæ on it: the whole plant is full of a milky juice; it's root is eaten raw.

It is a native of Germany, but is frequent in our gardens. C. Bauhine calls it, Rapunculus eſculentus; Dodonæus, Rapunculum.

5. *Campa-*

5. *Campanula caule angulato, calycibus pedunculatis ſimplicibus, laciniis ciliatis.* Canterbury Bells.
*The angular-ſtalked Campanula, with ſingle pedunculated cups, with ciliated ſegments.*

The root is oblong, white, and eſculent; the radical leaves are large, broad, cordated, and ſerrated at the edges: the ſtalk is large, angular, hairy, and two or three feet high: the leaves ſtand alternately on it, and much reſemble thoſe of the common ſtinging nettle; the lower ones have long pedicles, the upper ſhorter: the flowers ſtand on pedicles ariſing from the alæ of the leaves; they are large, blue, and hairy within.

We have this, in many parts of England, by road-ſides, and in dry paſtures. Cluſius calls it, Trachelium vulgare; Dodonæus, Cervicaria major; C. Bauhine, Campanula foliis urticæ.

6. *Campanula caule ſubdiviſo, foliis oblongis crenatis, calycibus corolla longioribus.* Venus Looking-glaſs.
*The divided-ſtalked, oblong, crenated-leaved Campanula, with long cups.*

The root is ſmall, oblong, white, ſingle, and furniſhed with large fibres: the radical leaves are an inch long, near half an inch broad, and crenated at the edges: the ſtalk is weak, eight or ten inches high, and divided into ſeveral branches, almoſt immediately from the root, and theſe often divided again into others: the leaves ſtand irregularly; they are ſhort, ſmall, crenated round the edges, and obtuſe at the ends: the flowers grow from the alæ of the leaves; they are large, and of a beautiful purple colour.

It is a native of England, and is frequent in the corn-fields of ſome parts of the kingdom. Ray calls it, Speculum Veneris; C. Bauhine, Campanula arvenſis erecta.

The other ſpecies of Campanula are very numerous. The principal are, 1. The great, broad-leaved, blue Campanula. 2. The narrower, nettle-leaved Campanula. 3. The tall, pyramidal Campanula. 4. The tuberous, atriplex-leaved Campanula. 5. The hoary-leaved Campanula. 6. The Spaniſh Campanula, with divided leaves. 7. The long, livid-leaved, Alpine Campanula. 8. The round-headed Campanula. 9. The teucrium-leaved Campanula. 10. The echium-leaved, hairy-flowered Campanula. 11. The tragopogon-leaved Campanula. 12. The peach-leaved Campanula. 13. The ſingle-flowered Campanula. 14. The patulous-flowered, rigid-leaved Campanula. 15. The daiſy-leaved Campanula. 16. The flax-leaved Campanula. 17. The ivy-leaved Campanula. 18. The ſerpyllum-leaved Campanula. 19. The divided-leaved Campanula. 20. The great-pentagonal Campanula, with long and broad leaves. 21. The perfoliate, pentagonal Campanula. 22. The pyramidal-ſpiked Campanula. 23. The corniculate Campanula. 24. The ſcabious-headed Campanula. 25. The procumbent, long-flowered Campanula. 26. The long, divided-leaved Campanula. 27. The round-leaved, ſmall-flowered Campanula. 28. The laciniated-leaved Campanula, with hard, woolly fruit. 29. The ragwort-leaved Campanula. 30. The ſingle-flowered, lychnis-leaved Campanula. 31. The crenated-leaved, patulous-flowered Campanula. 32. The poppy-headed Campanula. 33. The dwarf Campanula, with flowers only on one ſide.

## ROELLA.

THE calyx is a permanent perianthium, formed of one leaf of a turbinated figure, divided into five large lanceolated, acute, dentated ſegments, and placed on the germen: the corolla conſiſts of a ſingle petal, and is deciduous; it is of an infundibuliform ſhape. The tube is a little ſhorter than the cup: the limb is erecto-patent, divided into five parts, and longer than the cup: the nectarium is formed of five ſquammæ, placed in the bottom of the flower, and connivent: the ſtamina are five ſubulated filaments, ſituate on the nectarium: the antheræ are ſubulated and connivent,

nivent, of the length of the filaments, and of the height of the cup: the germen is oblong, and placed under the receptacle of the flower: the ſtyle is filiform, and of the length of the ſtamina: the ſtigmata are two, oblong, depreſſed, and patent: the fruit is a cylindric capſule, ſhorter than the cup, compoſed of a ſingle valve, but containing two cells, and coronated with the cup, grown larger than at firſt: the ſeeds are numerous and angular.

## PHYTEUMA.

THE perianthium is formed of a ſingle leaf, divided into five ſegments, erecto-patent, and placed on the germen: the corolla is compoſed of a ſingle petal, ſtellated, patent, and divided into five parts; the ſegments of a linear figure, acute and bent backwards. The ſtamina are five filaments, ſhorter than the corolla: the antheræ are oblong; the germen is placed below the receptacle: the ſtyle is filiform, of the length of the corolla, and crooked: the ſtigma is tripartite, oblong, and revolute: the capſule is roundiſh, and contains three cells; the ſeeds are numerous, ſmall, and roundiſh.

1. *Phyteuma foliis laciniatis, floribus pyramidatis.* Cretic Rampions.
*The laciniated-leaved Phyteuma, with pyramidated flowers.*

The root is large, oblong, white and eſculent; the radical leaves are large, broad, like thoſe of ſuccory in ſhape, and laciniated at the edges: they ſtand in large cluſters, and are of a deep green above, and ſomewhat purpliſh below: the ſtalk is round, ſtriated, and thick; it grows to three or four feet high: the leaves ſtand cloſe on it, and are like the radical ones, but narrower: the flowers are moderately large, and of a beautiful purple; they ſtand on the tops of the ſtalks and branches, in thick pyramidal ſpikes.

This is a native of the eaſtern parts of the world, but we have it frequently in our gardens. C. Bauhine calls it, Rapunculus Creticus ſive Pyramidalis altera; J. Bauhine, Rapunculus Creticus petromarula; and Pontedera, Petromarula ſive lactuca petræa.

2. *Phyteuma foliis anguſtioribus, floribus glomeratis.*
*The narrow-leaved, glomerated-flowered, Phyteuma.*

The root of this ſpecies is very large, tuberous, and of a ſweet taſte; the radical leaves are of an oval figure, obtuſe at the point, crenated round the edges, and of a deep green colour; they ſtand on very long pedicles: the ſtalk is ſlender, ſtriated, and not more than ſix inches high: the leaves ſtand cloſely and irregularly on it; they are oblong, narrow, and crenated round the edges; at the top of the ſtalk ſtands a cluſter of five or ſix of them, and from this riſe the flowers, twenty, or more, of which are cloſe ſet together, in a kind of head: they are moderately large, and of a beautiful purpliſh-blue colour.

This is a native of ſome of the northern parts of Europe; we have it alſo in our gardens. C. Bauhine calls it, Rapunculus Alpinus corniculatus.

The other ſpecies of Phyteuma are, 1. The blue-ſpiked, comoſe Phyteuma. 2. The yellow and narrow-leaved Phyteuma. 3. The long-leaved, orbicular-ſpiked Phyteuma. 4. The graſſy-leaved Phyteuma. 5. The ſcabious-headed Phyteuma. 6. The narrow, dentated-leaved Phyteuma. 7. The narrow-leaved, many-flowered Phyteuma. 8. The long and rigid-leaved Phyteuma. 9. The tall, ſmooth, and rigid-leaved Phyteuma. 10. The roundiſh-leaved Phyteuma.

## TRACHELIUM.

THE calyx is a very ſmall perianthium, divided into five ſegments, and placed on the germen: the corolla conſiſts of a ſingle petal, of the infundibuliform kind: the tube is cylindric, very long and ſlender; the limb is patulous, ſmall, and divided into five parts: the ſegments are oval and concave: the ſtamina are five capillary filaments, of the length of the corolla: the antheræ are ſimple; the germen is of a triquetrous, but roundiſh, figure, and placed below the receptacle: the ſtyle is filiform, and twice as long as the corolla; the ſtigma is globoſe; the fruit is a roundiſh, obtuſely

tuſely trilobous capſule, compoſed of three valves, and containing three cells. The ſeeds are numerous and very ſmall.

This genus comprehends the Trachelium of Tournefort; but the plants, commonly called Trachelia by others, are Campanulæ, already deſcribed in their places.

1. *Trachelium foliis ovatis ſerratis, caule umbella terminato.*
*The oval, ſerrated-leaved Trachelium, with umbellated flowers.*

The root is compoſed of a number of large fibres, thick, and full of a milky juice. The radical leaves ſtand on moderately long pedicles; they are of an oval figure, ſerrated round the edges, and of a deep green colour: the ſtalk riſes to two feet high, and ſends out a great number of branches: the leaves are oval, but ſomewhat narrower than the radical ones, ſerrated at the edges, and placed very cloſe: the flowers are moderately large, and of a fine purple, and are diſpoſed in a kind of umbels at the tops of the ſtalks.

It is a native of Italy, and is kept in ſome of our gardens. Tournefort calls it, Trachelima azureum umbelliferum; C. Bauhine, Cervicaria valerianoides cærulea.

2. *Trachelium folio longo laciniato, floribus glomeratis.*
*The long, laciniated-leaved Trachelium, with glomerated flowers.*

The root is compoſed of a number of large fibres, and full of a milky juice. The radical leaves are very long; they have no pedicles, and are cut in deeply at the edges: the ſtalk is round, ſtriated, and hollow; it grows to four feet high: the leaves are oblong and broad, deeply cut in at the edges, and affixed to the ſtalk by a broad baſe. At the top ſtands a cluſter of moderately large, and very long, white flowers.

It is a native of North America. Plumier calls it, Trachelium Americanum ſonchi folio, flore albo longiſſimo.

The other ſpecies are, 1. The laciniated-leaved, violet-coloured, umbelliferous Trachelium. 2. The hairy Trachelium, with cluſters of flowers from the alæ of the leaves. 3. The little cluſter-flowered Trachelium. 4. The little Trachelium, with flowers growing all along the ſtalks. This is an African.

## SAMOLUS.

THE calyx is a perianthium, obtuſe at the baſe, and divided into five narrow, erect, and permanent ſegments: the corolla conſiſts of a ſingle petal; the tube is very ſhort, only of the length of the cup, and patulous: the limb is plane, and divided into five ſegments, and there are placed five connivent ſquammulæ at the baſe of the ſinus of the limb: the ſtamina are five ſhort filaments, each placed under one of the ſquammulæ of the corolla: the antheræ are connivent and covered: the germen is placed below the receptacle: the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is ſimple; the fruit is an oval capſule, ſurrounded by the cup, and containing only one cell. The ſeeds are numerous, oval, and ſmall.

Of this genus there is only one known ſpecies.

### SAMOLUS.

The root is compoſed of a number of moderately thick, white fibres. The radical leaves are two inches long, and more than an inch broad: they are narrow at the baſe, and thence gradually extend in breadth, terminating in a rounded extremity; they are thick, ſmooth, of a pale green colour, and not ſerrated about the edges: the ſtalk is eight, or more, inches in height, round, of a pale green colour, and tolerably firm: the leaves ſtand alternately on it, at ſome conſiderable diſtance: they are ſhorter than the radical ones, roundiſh and affixed by the baſe, without any pedicle: the ſtalk is, toward the top, divided into ſeveral ſhort branches; the flowers are ſmall and white; they ſtand ſingly on pedicles of half an inch long each, and are not placed very near one another.

This is a native of England, and is not unfrequent in watery places. C. Bauhine calls it, Anagallis aquatica rotundifolia non crenata; J. Bauhine, Samolus Valerandi.

RONDE-

## RONDELETIA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, divided into five acute ſegments, and placed on the germen: the corolla conſiſts of a ſingle petal, and is of the infundibuliform kind: the tube is cylindric, and longer than the cup, and ventricoſe at the top: the limb is divided into five roundiſh ſegments, which bend backwards: the ſtamina are five ſubulated filaments, nearly of the length of the corolla: the antheræ are ſimple, the germen is roundiſh, and placed below the receptacle of the flower: the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is obtuſe. The fruit is a roundiſh, coronated capſule, containing two cells; the ſeeds are numerous and ſmall.

This genus comprehends the Rondeletia and the Chomelia of Linnæus: the characters of both are the ſame, and the words almoſt tranſcribed, ſo that it is ſurpriſing he did not ſee it. The Rondeletia is an American, deſcribed by Plumier; the Chomelia an Aſiatic, figured in the Hortus Malabaricus, v. 2.

## BELLONIA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into five lanceolated, acute ſegments, and permanent: the corolla conſiſts of a ſingle petal, and is of the rotated kind: the tube is very ſhort, the limb large, and divided into five ſegments. The ſtamina are five very ſhort, erect, ſubulated filaments: the antheræ are ſhort, erect, and connivent: the germen is placed below the receptacle of the flower: the ſtyle is ſubulated, ſtrait, and longer than the ſtamina: the ſtigma is acute. The fruit is a capſule of a turbinato-oval figure, ſurrounded by the cup, and has a kind of roſtrum, or beak, proceeding from it's top, formed by the connivent ſegments of the cup; it contains only one cell, in which are numerous, very ſmall, roundiſh ſeeds.

It is an American, deſcribed by Plumier; the characters are ſufficient to make it known, without a deſcription.

## GENIPA.

THE calyx is a ſhort perianthium, forming a kind of undivided margin, or rim, on the top of the germen: the corolla conſiſts of a ſingle petal, of the rotated kind: the tube is very ſhort, and of a funnel-like ſhape: the limb is large, divided into five ſegments, and patent; the ſegments are of an oval figure, and acute: the ſtamina are five ſubulated, reflex filaments, ſhorter than the corolla: the antheræ are roundiſh and connivent: the germen is oval, and placed under the receptacle: the ſtyle is ſimple and ſhort; the ſtigma is of an ovato-oblong figure, large, and of the length of the ſtamina. The fruit is a fleſhy berry, of an oval figure, ſmall at each end, truncated, and contains two cells, in each of which are a number of depreſſed, angulated ſeeds.

Of this genus there is only one known ſpecies, which the characters ſufficiently diſtinguiſh, without a farther deſcription.

## CINCHONA.

THE calyx is a very ſmall, permanent perianthium, formed of one leaf, divided into five ſegments at the edge. The corolla conſiſts of a ſingle petal, and is of the infundibuliform kind: the tube is cylindric and long; the limb is patulous, divided into five ſegments, ſerrated and acute. The ſtamina are five very ſmall filaments: the antheræ are oblong, and are placed within the tube of the corolla: the germen is roundiſh, and placed beneath the receptacle of the flower. The ſtyle is of the length of the corolla: the ſtigma is thick, oblong, and ſimple. The fruit is a roundiſh capſule, coronated with the cup, compoſed of two cells, and opening into two parts, longitudinally, from the baſe to the apex: the ſeeds are numerous, oblong, compreſſed, and marginated.

Of this genus there is only one known ſpecies, which is the tree whoſe bark is the famous cortex Peruvianus.

## CINCHONA. The Peruvian-bark Tree.

The Cinchona is a moderately large tree. It's root is very large and ſpreading, and covered with a thick bark, greyiſh on the outſide, and yellowiſh within, which the Spaniards prefer for medicinal purpoſes before that of the other parts of the tree. The trunk grows to a foot in diameter, and is covered with a thick, rough, reddiſh-brown bark; the branches with a thinner and ſmoother; it ſends out a number of branches, and grows to about eighteen or twenty feet high. The leaves ſtand oppoſite one another, in pairs; they are of an oblong-oval figure, ſharp-pointed, and undivided at the edges; they are three inches long, two inches broad, moderately thick, and affixed to pedicles, from which a large rib extends along the middle, and ſends off a number of oblique ramifications to the ſides. The flowers ſtand in tufts, at the tops of the branches; they are ſmall, and, before they are open, much reſemble the flowers of lavender, both in ſhape and colour: the common peduncle of the whole tuft of flowers riſes from the ala of ſome leaf, and ſoon divaricates into a number of ſmaller peduncles, each of which ſuſtains on it's top a ſingle flower. The flower is of a duſky red colour on the outſide, with a whitiſh down on it, but of a very bright and beautiful red within, eſpecially toward the center, for it is ſomewhat paler about the edges. The ſtamina are yellow, the ſtyle white, the ſtigma greeniſh.

The tree is a native of South America, and is no where ſo plentiful as on the mountains about Loxa. Authors have called it, Quinquina, China-china, and Gannaperide. Linnæus has named it Cinchona, from the name of the viceroy of Peru who firſt occaſioned it's being brought into repute in Europe.

The virtues of the bark of this tree, in the cure of intermittent fevers, are ſo great, that they have thrown all the other febrifuges into neglect: it is alſo an excellent aſtringent and ſtomachic.

## COFFEA.

THE calyx is a very ſmall perianthium, divided into four ſegments at the edge, and placed on the germen: the corolla conſiſts of a ſingle petal, of an in fundibuliform ſhape: the tube is cylindric and ſlender, and many times longer than the cup: the limb is plane, longer than the tube, and divided into five ſegments of a lanceolated figure, with their edges bent backward. The ſtamina are five ſubulated filaments, placed on the tube of the corolla: the antheræ are incumbent, of a linear figure, and of the length of the filaments. The germen is roundiſh, the ſtyle is ſimple, and of the length of the corolla: the ſtigmata are two, reflex, ſubulated, and thick. The fruit is a roundiſh berry, with an umbilicated point: the ſeeds are two, of an elliptico-hæmiſpheric figure, gibboſe on one ſide, plane on the other, and wrapped in a membrane.

Of this genus there is only one known ſpecies, the ſeeds of which are the Coffee we uſe.

## COFFEA. The Coffee Tree.

The root is compoſed of a number of long, and not very thick, ramifications. The ſtem is round, two or three inches thick, when well grown, and the tree ten, twelve, or fourteen high. It ſends out branches from near the bottom, and thence all the way to the top; theſe ſtand two together, on the oppoſite ſides of the trunk; they are, while young, very flexile, and covered with a whitiſh bark, but, as they grow older, this becomes of the ſame brown colour with that of the trunk. The leaves ſtand two at a joint; they are, in ſhape, much like the common bay-leaf, but larger, thinner, and ſofter, and of a paler green colour: they ſtand on ſhort pedicles, and are four or five inches long, and two inches wide, broadeſt in the middle, narrow at the baſe, and terminate in a very long, narrow point; and they are ſomewhat undulated; they are of a pale green colour on the upper ſide, and whitiſh underneath. The flowers ſtand in little cluſters, four or five together, in the alæ of the leaves; they have a ſhort pedicle, and are white, or a little reddiſh, moderately large, and of a ſweet ſmell. The berries are green at firſt, afterwards red, and, when full ripe, black: they are of the bigneſs of a ſmall cherry, and have within them a mucilaginous, fleſhy matter, ſurrounding the two ſeeds, which, when ſeparated from this pulp, and from their

their membranes, are what we call Coffee, and, after roaſting, drink the decoction, or infuſion, of.

The tree is a native of Arabia Fœlix and Ethiopia, and flowers all the year round. The fruit is gathered three times a year, in great abundance. Juſſieu calls it, Jaſminum Arabicum lauri folio cujus ſemen, apud nos, Coffé dicitur, but very improperly: it has not even the claſſical character of the jaſmines.

The people of the eaſtern nations are as fond of Coffee for a drink as we are, but the great people among them make it only of the membranes ſurrounding the ſeeds, not of the ſeeds themſelves, as we do. A decoction of the raw or unroaſted ſeeds is a powerful diuretic and ſudorific.

## MORINDA.

THE common receptacle of the fructifications is roundiſh, and forms the flowers, which are ſeſſile, into a kind of globular cluſter. The perianthium is placed on the germen, and is divided into five ſegments, but it is ſo ſmall as to be ſcarce perceptible. The corolla conſiſts of a ſingle petal, of an infundibuliform ſhape: the tube is cylindric: the limb divided into five ſegments, acute, and erecto-patent. The ſtamina are five compreſſed filaments, ſhorter than the corolla, and inſerted under the diviſures of it: the antheræ are ſimple: the germen is ſituate under the perianthium: the ſtyle is ſimple: the ſtigma is bifid, and thick. The fruit is a berry of a ſubovate, angular figure, truncated, containing only one cell, and every-where compreſſed by the adjoining ones: the ſeed is ſingle, oſſeous, angular, and truncated.

This genus comprehends the Phyllereaſtrum of Vaillant, and the Rojoc of Plumier. It is a native of South America.

## CONOCARPUS.

THE calyx is a very ſmall, erect perianthium, formed of one leaf, and divided, at the extremity, into five ſubulated ſegments; it is placed on the germen, and is permanent. There is no corolla: the ſtamina are five: the germen is large, compreſſed, obtuſe, thickeſt toward the point, and placed under the receptacle of the flower: the ſtyle is ſimple. There is no fruit, but the ſeed is naked and ſingle, and has on each ſide a prominent, membranaceous margin. A number of the germina are arranged together, in an imbricated manner, and form a ſhort and roundiſh cone; they appear like ſo many reflex ſquammæ.

This genus comprehends the Rudbeckia of Houſton.

1. *Conocarpus foliis obverſe ovatis.* The Button Tree.
*The obverſely oval-leaved Conocarpus.*

The root is large and ſpreading: the tree grows thirty feet high: it's trunk is often a foot in diameter. The bark is tolerably ſmooth, and of a pale grey colour. The branches are numerous and ſpreading: the leaves ſtand in pairs; they have ſhort pedicles, and are of an oval figure, but with the broadeſt part at the extremity, and ſomewhat too narrow for their length: they are an inch and a half long, and about three quarters of an inch broad, ſmooth, and of a pale yellowiſh-green: the leaves toward the extremities of the branches differ from theſe, in that they are narrower, and pointed. The extremities of the branches divide into ſeveral twigs, on which ſtand oval cluſters of flowers, which are ſmall and red: when they are fallen, the head aſſumes a more conic figure.

The tree is frequent in Jamaica, and other of the American iſlands, principally about the coaſts. Sir Hans Sloane calls it, Alni fructu laurifolia arbor maritima; Breynius, Alno affinis Americana liguſtri folio, flore rubro.

2. *Conocarpus foliis lanceolatis.*
*Lanceolate-leaved Conocarpus.*

The root is large and ſpreading: the tree grows to forty feet high, and it's trunk to fifteen inches in diameter. The leaves ſtand alternately, and are three inches long, of a lanceolated figure, and placed on pedicles of half an inch; they are broadeſt at the

the baſe, and ſerrated round the edges. The flowers ſtand in cluſters, forming a kind of ſhort, conic heads; they are ſmall, and of a beautiful yellow colour.

This is a native of Virginia, and other parts of America. Sir Hans Sloane calls it, Alni fructu mori folio arbor, flore pentapetalo flavo.

## DIERVILLA.

THE calyx is a ſmall perianthium, placed on the germen, and divided into five ſubulated, permanent ſegments. The corolla conſiſts of a ſingle petal: the tube is clavated, and gibboſe at the baſe, with a gula impreſſed beneath: the limb is divided into five ſegments, and aſſumes a kind of bilabiate figure: the upper lip is divided into two parts, the lower into three, of which the middle one is the longeſt; all the ſegments are of a lanceolated figure, and bent backward. The ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are oblong and erect. The germen is of an ovato-ſubulated figure, and is placed under the receptacle: the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is peltato-capitated, convex, and hollow underneath. The fruit is a bivalve, bilocular capſule, of an ovato-ſubulated figure, and each cell contains ſeveral ſmall, roundiſh ſeeds.

There is but one known ſpecies of this genus, and that ſo nearly allied to the loniceræ, that the generical characters only diſtinguiſh it, ſo that it needs no farther deſcription.

## LONICERA.

THE calyx is a ſmall perianthium, placed on the germen, and divided into five ſegments: the corolla conſiſts of a ſingle petal: the tube is oblong, and gibboſe downwards: the limb is divided into five ſegments, one of which is more deeply ſerrated than the reſt, and all turn backward. The ſtamina are five ſubulated filaments, nearly of the length of the corolla: the antheræ are oblong: the germen is roundiſh, and placed under the receptacle: the ſtyle is filiform, and of the length of the corolla: the ſtigma is obtuſely capitated. The fruit is a roundiſh, umbilicated berry, containing two cells; the ſeeds are roundiſh, and compreſſed.

This genus comprehends the Caprifolium, Periclymenum, Chamæceraſus, Xyloſteum, Trioſteoſpermum, and Symphoricarpos of authors.

1. In the Caprifolium the lower ſegment of the corolla is twice as deeply ſeparated as the reſt, and the berry placed ſingle. 2. In the Periclymenum the ſegments of the corollæ are all nearly equally ſeparated. 3. In the Chamæceraſus the lower ſegment of the the corolla is twice as deeply ſeparated as the others, and the berries are placed two together. 4. In the Xyloſteum the ſegments of the corolla are nearly equally ſeparated, and all deeply; the berries ſtand two together. 5. In the Trioſteoſpermum the ſegments of the corolla are roundiſh, and the ſeeds three in a berry, which is coronated with a large cup: and, finally, in the Symphoricarpus, the corolla is almoſt campanulated, the fruit bilocular and ſemiquadrilocular, the ſeeds ſingle.

As the reſt of the generical characters are perfectly the ſame in all theſe, they are to be properly arranged together in the ſame genus, and theſe diſtinctions to be conſidered merely as ſpecifical.

1. *Lonicera floribus verticillatis, terminalibus, ſeſſilibus, foliis ſummis connato-perfoliatis.* Perfoliate Honeyſuckle.

*The verticillate, ſeſſile, terminatory-flowered Lonicera, with perfoliate leaves.*

The root is woody, long, and creeping: the ſtalks are round, woody, and ſlender, not able to ſupport themſelves erect; they are four, or more, feet, in length, and have, at every joint, two leaves; theſe are roundiſh, and of a bluiſh-green; the lower ones ſtand ſeparate, and on ſhort pedicles; the upper ones grow together at their baſe, and the ſtalk pierces it's way through in the middle; the top pair on every branch form a kind of hollow, from the center of which grows a cluſter of very beautiful red flowers, an inch and a half in length, without pedicles, and very ſweet to the ſmell.

It is a native of Italy and the ſouth of France, and is common with us in gardens. Tournefort calls it, Caprifolium Italicum; C. Bauhine, Caprifolium perfoliatum.

2. *Lonicera*

2. *Lonicera floribus verticillatis, foliis rotundioribus.* Ever-green
*The rounder-leaved, verticillate-flowered Lonicera.* Honeyſuckle.

The root is long, creeping, and woody: the ſtalks are very ſlender and weak; they ſeldom grow to more than four or five feet high: the leaves ſtand in pairs; they are ſmall, roundiſh, of a bluiſh-green colour, ſmooth and ſhining, on the upper ſurface, hoary underneath, often joined at the baſe. The flowers ſtand in tufts round the ſtalks; they are of a fine high crimſon colour, but of no great ſmell. The ſhrub is an ever-green, and flowers the greateſt part of the year.

It is a native of Virginia, but is not uncommon in our gardens. Tournefort calls it, Periclymenum perfoliatum Virginianum, ſemper virens et florens.

3. *Lonicera pedunculis biflоris, baccis diſtinctis, foliis integerrimis.* Dwarf
*The two-flowered Lonicera, with diſtinct berries and undivided leaves.* Cherry.

The root is long, fibrous, and creeping: the ſtem is round and firm, ſtanding erect, and growing to two or three feet high: the leaves ſtand in pairs; they are large, broad, and hairy, an inch and a half in length, and more than an inch in breadth. The flowers are ſmall and yellowiſh, oblong, and divided at the extremity; they always grow two on a pedicle, which riſes from the ala of a leaf. The berries grow like a pair of teſticles on the ſtalk, and are red, when ripe, and of a very nauſeous taſte.

It is frequent in the woods and hedges, in Germany. Tournefort calls it, Chamæceraſus dumetorum fructu gemino rubro; Dodonæus, Xyloſteum; and Linnæus, Lonicera foliis ovatis obtuſis integris.

4. *Lonicera corollæ laciniis æqualiter profunde ſectis.*
*The Lonicera, with the ſegments of the flower equally deep cut in.*

The root is long, woody, and creeping: the ſtalks are round, brittle, and covered with a greyiſh-brown bark, with a white pith within: they grow to three, four, or more feet high. The leaves ſtand in pairs; they are moderately large, obtuſe, hairy, eſpecially underneath, and not at all ſerrated at the edges. The flowers ſtand in cluſters, at the tops of the branches, and are large, long, and of a pale red colour, and ſweet ſmell. They ſtand two together, on long pedicles, ariſing from the alæ of the leaves: theſe are ſucceeded by two berries, large, red, when ripe, and of an unpleaſant taſte.

This is frequent about the Pyrenæan mountains, and in other places. Tournefort calls it, Xyloſteum; J. Bauhine, Chamæceraſus Geſneri, Chamæpericlymenum Alpinum quorundam.

The other ſpecies are; 1. The common Honeyſuckle of our hedges. 2. The late, German, red Lonicera. 3. The early, Italian Lonicera. 4. The ſinuated, hairy-leaved Lonicera. 5. The yellow-flowered, Italian Lonicera. 6. The black-fruited Lonicera. 7. The great-leaved, low Lonicera, called, Trioſteoſpermum: and, 8. The Symphoricarpos, or campanulated-flowered Lonicera.

## MUSSÆNDA.

THE calyx is a ſmall perianthium, ſituated on the germen, and divided into five ſegments at the edge: the corolla is compoſed of a ſingle petal, and is of a funnel-like ſhape: the ſtamina are five ſlender, long filaments: the antheræ are tumid: the germen is roundiſh; the ſtyle ſhort: the ſtigmata are two. The fruit is an oblong berry, and the ſeeds in it are diſpoſed in four ſeries.

The characters are ſo peculiar, that they render a farther deſcription unneceſſary.

*Claſs*

*Claſs the Fifth. Order the Firſt.*

*Diviſion the Fourth.*

*Pentandria Monogynia, with the ſtamina declinated.*

## MIRABILIS.

THE calyx is a permanent perianthium, formed of five leaves, of an ovato-lanceolate figure, ventricoſe, and erect. The corolla conſiſts of one petal, of an infundibuliform ſhape, and deciduous: the tube is ſlender, long, and thickeſt above: the nectarium is placed at it's baſe; the limb is erecto-patent, obtuſely quinquifide, and plicated; the nectarium is globoſe and permanent. The ſtamina are five filiform filaments, ariſing from the receptacle, and affixed, not to the nectarium, but to the petal; they are of the length of the corolla, declinated, and unequal: the antheræ are roundiſh, and aſſurgent: the germen is roundiſh, and placed within the nectarium: the ſtyle is filiform, of the length and ſituation of the ſtamina: the ſtigma is globoſe, punctated, and aſſurgent. The fruit is of an ovato-pentagonal figure, and the nectarium becomes indurated in a ſtrange manner: the ſeed is ſingle, globoſe, and covered.

This genus comprehends the Jalapa of Tournefort and others.

There is but one known ſpecies of it; but the vaſt variety of colour in the flower of this has led Tournefort and others to ſplit that into ten or a dozen, and to deſcribe the red-flowered, the white-flowered, the variegated-flowered, &c. as ſo many ſpecies.

### MIRABILIS. Marvel of Peru.

The root is very large, a foot, or more, in length, and often two inches in diameter, of a duſky colour on the ſurface, and paler within, and, when cut tranſverſely, ſhews a number of circles: it is of an acrid and very diſagreeable taſte. The ſtalk is round and ſmooth, half an inch, or more, in diameter, of a firm texture, and pale green colour. It grows to three feet in height, and ſends out a great number of branches. The leaves are placed two at every joint; they ſtand on ſhort pedicles, and are two inches, or more, in length, broadeſt at the baſe, and pointed at the extremity. The flowers riſe ſingly from the alæ of the leaves; they are large, and naturally of a beautiful red colour, but often white, yellowiſh, or of a duſky purple, or, finally, of two or more of theſe colours, mixed in various manners in the ſame flower. The plant is, from the month of July to the end of October, if the ſeaſon be favourable, covered with a profuſion of flowers, yet none of them remain longer than twenty-four hours on it, after they are open; the greater part not half ſo long, but the ſucceſſion of flowers ſeems endleſs. The root is naturally perennial, but decays with us in the winter, if left in the ground; if taken up, and planted again in the ſpring, it laſts many years.

This beautiful plant is a native of South America. Tournefort calls it, Jalapa flore rubro, flore flavo, &c. C. Bauhine, Solanum Mexicanum flore magno; others. Mirabilis Peruviana.

The root of this plant has long been known to be purgative; Tournefort and Linnæus declare that it is the jalap of the ſhops, but Houſton, a man of great credit, brought over to us an evident convolvulus, declaring it to be the plant whoſe root was dug for jalap.

## DATURA.

THE calyx is an oblong, tubulated, ventricoſe perianthium, of a pentangular figure, formed of a ſingle leaf, divided into five ſegments at the extremity; it's upper part falls off ſo near the baſe, but an orbicular ſegment of it remains on the plant. The corolla is of the infundibuliform kind; it conſiſts of a ſingle petal: the tube is cylindric, and ſomewhat longer than the cup: the limb is erecto-patulous, of a pentangular figure, folded in five places, and almoſt entire at the edges, but riſing into five points: the ſtamina are five ſubulated filaments, of the length of the cup: the

the antheræ are oblong, compreſſed, and obtuſe: the germen is oval: the ſtyle is filiform and ſtrait: the ſtigma is thick, obtuſe, and bilamellated. The fruit is a ſuboval capſule, formed of four valves, containing two cells, and affixed to the baſe of the cup: the receptacles are convex, large, punctated, and affixed to a partition: the ſeeds are numerous, and kidney-ſhaped.

This genus comprehends the Stramonium and the Stamonioides of authors.

1. *Datura pericarpiis ſpinoſis, erectis ovatis.* Thorn Apple.
*The Datura, with ſpinoſe, erect, oval fruits.*

The root is compoſed of a number of long and moderately thick fibres: the ſtalk is round, ſucculent, green, and near an inch in diameter; it ſends out a great number of branches, ſo that the plant, when full grown, is often two feet, or more, in diameter: it grows to three feet high. The leaves ſtand alternately on the ſtalks; they are very large, broad, ſerrated at the edges, and pointed at the extremity; they are of a dark green colour, ſmooth, and ſtand on pedicles of a moderate length. The flowers are very large, and always of a pure ſnow-white colour, an inch and a half over the mouth, when fully expanded; they ſtand ſingly, on ſtrait pedicles, at the divarications of the branches. The fruit is erect, of an oval figure, bigger than a walnut, covered over with long ſpines, and of a green colour.

It is a native of South America, but is very common in our gardens, and thrives ſo well in our climate, that we frequently meet with it wild, where the ſeeds have chanced to be ſcattered by any accident. Tournefort calls it, Stramonium fructu ſpinoſo, oblongo, flore albo; C. Bauhine, Solanum fœtidum pomo ſpinoſo oblongo, flore albo; Camerarius, Tatula.

2. *Datura pericarpiis globoſis ſpinoſis nutantibus.* Vetella Nut.
*The Datura, with round, prickly, bending fruits.*

The root is compoſed of a great number of long and thick, woody ramifications: the ſtalk is round and ſmooth, and grows to a foot and a half high: the leaves ſtand alternately on the ſtalks; they are very large, of a deep green colour, a little ſinuated at the edges, hoary, and affixed to very long pedicles, and they have a very offenſive ſmell. The flowers ſtand ſingly, at the ramifications of the branches; they are large, and ſometimes of a pure white, ſometimes reddiſh. The fruit is round, and of the ſize of a ſmall apple; it is covered with roundiſh protuberances on the ſurface, and armed with ſhort ſpines, and with ſomewhat of a hoarineſs about them: this fruit does not ſtand erect, as in the common Datura, but droops downward, and the remains of the calyx are not angulated in this, as in that ſpecies.

This is a native of Aſia and Africa; we have it in our gardens. C. Bauhine calls it, Solanum pomo ſpinoſo rotundo, longo flore; Tournefort makes two ſpecies of the varieties of it, which he calls, Stramonium fructu ſpinoſo rotundo, flore violaceo duplici triplicive, and Stramonium Ægyptiacum flore pleno intus albo, foris violaceo.

The ſeeds of this ſpecies are what are known under the name of Daturæ ſemina in ſhops.

The other ſpecies of Datura are, 1. The tall, large-fruited Datura, with ſinuated leaves, called Stramonium ferox. 2. The little, American, Alkekengi-leaved Datura. 3. The ſmooth-fruited Datura of Malabar. 4. The great Datura, with ſmall leaves.

## HYOSCYAMUS.

THE calyx is a perianthium, of a cylindric figure, ventricoſe at the bottom, formed of a ſingle leaf, divided into five acute ſegments at the extremity, and permanent. The corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric and ſhort; the limb is erecto-patent, lightly divided into five obtuſe ſegments, one of which is broader than the reſt. The ſtamina are five ſubulated and declinated filaments: the antheræ are roundiſh; the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina, and the ſtigma capitated. The fruit is a capſule of an ovato-obtuſe figure, with a line marked on each ſide; it contains two cells, and is covered with an operculum, which falls off horizontally: the ſeeds are numerous.

1. *Hyoſcyamus foliis amplexicaulibus.* Common Henbane.
*The Hyoſcyamus, with leaves ſurrounding the ſtalk.*

The root is a foot long, half an inch in diameter, whitiſh, hard, woody, and of very little ſmell. The radical leaves are a foot long, and five inches broad, deeply ſinuated at the edges, pointed at the extremity, ſeſſile, of a bluiſh-green colour, ſomewhat hoary, and of an intolerably fœtid ſmell. The ſtalk is round, hard, woody, half an inch in diameter, and grows to two feet high, or more; it divides toward the top into ſeveral branches: the leaves are large, and, like thoſe at the root, they ſtand alternately: the flowers are half an inch in diameter, and more in length, of a duſky browniſh colour, with a deep purple baſe, and a multitude of purple lines all over them. The cup is hairy, and the capſule large: the flowers are very numerous, and ſtand in long ſeries, on the upper ſides of the branches.

This is common with us in uncultivated Places. C. Bauhine calls it, Hyoſcyamus vulgaris niger; Fuchſius, Hyoſcyamus flavus.

2. *Hyoſcyamus foliis ovatis integerrimis, calycibus inflatis ſubgloboſis.*
*The oval-leaved Hyoſcyamus, with inflated, ſubglobous cups.*

The root is long, thick, and woody: the ſtalk is round, and riſes to two feet high: the leaves are ſmooth, of an oval figure, undivided at the edges, and affixed to pedicles. The top of the ſtalk is divided into many branches, on which ſtand the flowers; they are moderately large, and cut into five ſegments. When the fruit is ripe the calyx becomes very large and inflated, and perfectly repreſents that of the Alkekengi; but within it is a capſule, perfectly anſwering to the characters of the Henbane. It is a native of Siberia, and has not been deſcribed by any body except Linnæus, who obſerves, that it connects in a manner the two genera of Phyſalis and Hyoſcyamus, and is not without his doubts, but the plant itſelf may be a kind of mungril between both; but this bears no great face of probability.

The other ſpecies of Hyoſcyamus are, 1. The common, white Henbane. 2. The lanceolated Hyoſcyamus, with prickly cups. 3. The great, yellow, Cretic Hyoſcyamus. 4. The little, yellow Hyoſcyamus. 5. The red Syrian Hyoſcyamus. 6. The white, Egyptian Hyoſcyamus. 7. The little, narrow-leaved, golden-flowered Hyoſcyamus. 8. The Bete-leaved Hyoſcyamus.

## NICOTIANA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, divided into five ſegments, and of an oval figure. The corolla conſiſts of a ſingle petal, of an infundibuliform ſhape; the tube is longer than the cup; the limb is patulous, lightly divided into five ſegments, and folded in five places. The ſtamina are five ſubulated, inclinated filaments, nearly of the length of the corolla; the antheræ are oblong: the germen is oval, the ſtyle is filiform, and of the length of the corolla; the ſtigma is capitated and emarginated: the fruit is a capſule of a nearly oval figure; there is a line on each ſide of it, and it contains two cells, and opens at the top: the receptacles are of a half oval figure, punctated and affixed to the ſeparating body: the ſeeds are numerous, kidney-ſhaped, and rugoſe.

1. *Nicotiana foliis lanceolatis.* Tobacco.
*Lanceolated-leaved Nicotiana.*

The root conſiſts of a cluſter of long and thick white fibres, of a very acrid taſte; the radical leaves are a foot long, or more, and five or ſix inches broad: the ſtalk is round, thick, and ſucculent; it grows to five or ſix feet high, and is hairy, and full of a white pith: the leaves ſtand alternately on the ſtalks; they are very large, often ten inches, or more, in length, hairy, without pedicles, and are thick, and terminate in a point. Their breadth is four inches, or more; they are of a yellowiſh-green colour, and glutinous to the touch; the top of the ſtalk is uſually divided into three or four branches; the flowers are large, and very long, and of a beautiful pale red.

This

This is a native of many parts of America, and is cultivated in many others, for the advantage of the dried tobacco and ſnuff made from it. C. Bauhine calls it, Nicotiana major latifolia; others, Tabaco latifolia, and Hyoſcyamus Peruvianus; Renealm Blennochoes.

2. *Nicotiana foliis ovatis.* English
*The oval-leaved Nicotiana.* Tobacco.

The root is oblong, and uſually ſingle, of the thickneſs of a man's finger, and ſix or eight inches long: the radical leaves are numerous; they are ſix inches long, about three and a half broad, and obtuſe at the extremity: the ſtalk is round, thick, and hairy; it grows to two feet high, and toward the top divides into three or four branches: the leaves ſtand alternately, at conſiderable diſtances; they are four inches long, two and a half broad, of an oval figure, affixed to ſhort pedicles, undivided at the edges, and obtuſe at the ends; of a fattiſh appearance, and duſky green colour: the flowers ſtand ſeveral together; at the top of the branches they are affixed to ſhort pedicles, and are of a yellowiſh-green colour, and much ſmaller than the flowers of the other.

This is a native of America; we call it Engliſh Tobacco, from it's being the firſt ſpecies known in our gardens. C. Bauhine calls it, Nicotiana minor; J. Bauhine, Priapeia, quibuſdam Renealmi pachyphylla.

The other ſpecies of Nicotiana are, 1. The great, narrow-leaved Nicotiana. 2. The dwarf Nicotiana. 3. The great, roundiſh-leaved Nicotiana. 4. The prickly, arboreſcent, white-flowered Nicotiana.

## ATROPA.

THE calyx is a gibbous permanent perianthium, formed of a ſingle leaf, divided into five ſegments, of an ovato-acute figure: the corolla conſiſts of a ſingle, infundibuliform petal: the tube is very ſhort; the limb is ventricoſe, of an oval figure, and longer than the cup: the mouth is ſmall, and divided into five equal and expanded ſegments: the ſtamina are five ſubulated filaments, proceeding from the baſe of the petal; they are of the length of the corolla, connivent at the baſe, and bent outwardly upwards; the antheræ are thick and aſſurgent. The germen is ſemi-oval; the ſtyle is filiform, of the length of the ſtamina, and inclinated: the ſtigma is capitated, aſſurgent, and tranſverſely oblong. The fruit is a globoſe berry, placed on a large cup, and containing two cells: the receptacle is convex on each ſide, and kidney-ſhaped. The ſeeds are numerous, and kidney-ſhaped alſo.

This genus comprehends the Belladonna of Tournefort.

There is only one known ſpecies of it.

### ATROPA.

The root is compoſed of a number of oblong, tuberous bodies, of a brown colour, ſucculent, and of a very diſagreeable ſmell. The radical leaves are a foot long, and five inches broad: the ſtalk riſes to three or four feet high, and is very much divaricated and branched: the leaves ſtand alternately on it, and at ſmall diſtances; they are five or ſix inches long, and more than half as much in breadth, of a duſky green above, and a paler green underneath, hairy on both ſides, and not ſinuated at the edges: the flowers are very numerous; they ſtand in the alæ of the leaves, and are large, of a campanulated figure, and ſtriated. They are of a duſky purple colour within, with a yellow, variegated baſe; the outer ſurface is of a greeniſh red, and hairy: after the flower is fallen, a fine beautiful and large berry, black, when ripe, appears in the place.

It is a native of England, but happily is not frequent. Cluſius calls it, Solanum lethale; C. Bauhine, Solanum melanoceraſos; Tournefort, Belladonna majoribus foliis et floribus. It is a powerful poiſon.

MANDRA-

## MANDRAGORA.

THE calyx is a large, erect, campanulated perianthium, of a quinquangular figure, formed of one leaf, divided into five ſemi-lanceolated ſegments, venous and permanent. The corolla conſiſts of a ſingle petal, erect, and growing gradually wider from the baſe, hollow, a little larger than the cup, and divided, beyond the middle, into five lanceolated ſegments: the ſtamina are five ſubulated filaments, of the length of the cup, and hairy at the baſe: the germen is roundiſh; the ſtyle ſubulated, of the length of the ſtamina, and ſomewhat declinated: the ſtigma is capitated: the fruit is a great globoſe berry, containing two cells: the receptacle is fleſhy and convex on both ſides; the ſeeds are numerous, and kidney-ſhaped.

Of this genus there is only one known ſpecies, though uſually, from a ſlight variation in the ſhape of the fruit, this is divided into two, a male and female.

### MANDRAGORA. Mandrake.

The root is very large, two inches thick, and a foot, or more, in length; often ſingle, but ſometimes divided from about the middle into two parts, which the common people ſuppoſe like the thighs and legs of a man, and the upper part like the body; ſometimes there are, however, three or four of theſe branches inſtead of two: the colour of the outer ſurface is a pale brown, and it is white within: the leaves are a foot, or more, in length, five inches in breadth, broadeſt in the middle, and have no pedicles: they are of a duſky green colour, and diſagreeable ſmell: the flowers ſtand on ſhort pedicles four inches long, ſlender, and riſing immediately from the root; one flower ſtands on each. It is large, of a duſky greeniſh colour, with ſome admixture of red, and ſomewhat hairy: the fruit, which ſucceeds this, is round, and of the ſize of a ſmall apple, green at firſt, but yellow and ſoft, when ripe. Sometimes it is not perfectly round, but of a turbinated or pear-like form, in which caſe the plant is called the female Mandrake, as in the other, or more common ſtate, it is called the male. The whole plant has a very bad ſmell.

It is a native of Spain and Italy, and is frequent in gardens with us. C. Bauhine calls it, Mandragora mas fructu rotundo, and Mandragora flore purpuraſcente. It has been eſteemed a poiſon by many, and by others it is declared innocent. The bark of the root was once in uſe as a narcotic; at preſent the leaves are uſed in ointments.

## VERBASCUM.

THE calyx is a ſmall permanent perianthium, formed of one leaf, divided into five erect, acute ſegments at the rim: the corolla conſiſts of a ſingle petal, of a rotated figure; the tube is cylindric, and very ſhort; the limb is patent, and divided into five oval, obtuſe ſegments: the ſtamina are five ſubulated filaments, ſhorter than the flower: the antheræ are roundiſh, compreſſed, and erect: the germen is roundiſh; the ſtyle is filiform, of the length of the ſtamina, and inclinated; the ſtigma is thick and obtuſe: the fruit is a roundiſh capſule, divided into two cells: the receptacles are of a ſemi-oval figure, and affixed to the partition: the ſeeds are numerous and angular. In moſt ſpecies, the ſtamina are inclinated, unequal, and covered with coloured villi at the baſe.

This genus comprehends the Verbaſcum and Blattaria of authors.

1. *Verbaſcum foliis utrinque tomentoſis, caule floribus ſeſſilibus clavato.* White Mullein.

*The Verbaſcum, with leaves woolly on each ſide, and with ſeſſile flowers.*

The root is oblong, ſingle, woody, moderately thick, and covered with fibres; the radical leaves are fourteen inches long, and ſix in breadth; they are woolly, and pointed at the extremity: the ſtalk is thick, firm, and rigid, and grows to ſix or eight feet high: the leaves ſtand very cloſe, in an irregular manner on it; they have no pedicles, but have membranaceous appendages often running a great way from their baſes, and giving

giving the ſtalk an alated figure. They are four or five inches long, and two or three broad, very white and woolly, and pointed at the extremity: the ſtalk terminates in a kind of ſpike of a foot and half, or more, in length, compoſed of multitudes of flowers, very thick ſet together, and opening ſucceſſively and irregularly: they are moderately large, of a beautiful yellow, and the antheræ in them of a bright purple.

The plant is common with us in dry places. C. Bauhine calls it, Verbaſcum mas latifolium luteum; others, Tapſus barbatus.

2. *Verbaſcum foliis ovatis crenatis ſubtus tomentoſis, caule angulato.*
*The oval, crenated-leaved Verbaſcum, with angular ſtalks.*

**Black Mullein.**

The root is oblong, ſingle, and furniſhed with a number of ſmall and ſlender fibres. The radical leaves are ten inches long, and four, or more, broad, crenated round the edges, and pointed at the ends. The ſtalk is angular, and grows to five or ſix feet in height: the leaves ſtand irregularly on it, but at ſome diſtance from one another; they have pedicles of two inches long, and uſually of a reddiſh colour, and are of an oval form, four or five inches long, crenated round the edges, of a duſky green at top, and hoary or woolly underneath. The top of the ſtalk furniſhes a long ſpike of flowers, thick ſet together, and opening irregularly; they are large, of a beautiful bright yellow, with purple antheræ.

It is common by road-ſides, in many parts of England. C. Bauhine calls it, Verbaſcum nigrum flore ex luteo purpuraſcente; Dodonæus, Verbaſcum nigrum; Lobel, Verbaſcum ſalviæ folio.

3. *Verbaſcum foliis amplexicaulibus oblongis glabris, pedunculis ſolitariis.*
*The oblong, ſmooth-leaved Verbaſcum, with ſingle peduncles.*

**Yellow Moth Mullein.**

The root is oblong, thick, and furniſhed with a multitude of fibres. The radical leaves are three inches long, an inch broad, crenated at the edges, and of a dark green colour: the ſtalk is round; it riſes to two or three feet high; the leaves ſtand irregularly, and pretty cloſe on it: they ſurround the ſtalk at the baſe, and are two or three inches long, an inch broad, jagged at their edges, and of a duſky green colour, ſmooth and ſhining; the top of the ſtalk furniſhes a long ſpike of flowers, but they are not placed ſo cloſe as in the former ſpecies, but each ſtands out on it's own ſeparate pedicle. They are very large, and of an extreamly beautiful yellow colour: the ſtamina in the midſt are of a deep ſtrong purple, and add greatly to the beauty of the flower.

It is a native of England, but is not common with us. C. Bauhine calls it, Blattaria lutea folio oblongo laciniato; J. Bauhine, Blattaria lutea. The flowers are often white.

The other ſpecies of Verbaſcum are, 1. The great, ſweet-ſcented, white Verbaſcum. 2. The thick-leaved, branched, gold yellow-flowered Verbaſcum. 3. The undulated-leaved Verbaſcum. 4. The duſty Verbaſcum, with a ſmall, yellow flower. 5. The tall, white-flowered Verbaſcum. 6. The branched, ſmall-flowered, ſmooth-leaved Verbaſcum. 7. The borrage-leaved Verbaſcum. 8. The purple-flowered Verbaſcum. 9. The tall, jagged-leaved Verbaſcum, with great, yellow flowers. 10. The multifid-leaved, hoary Verbaſcum. 11. The conjugate-leaved, Cretic Verbaſcum. 12. The ſhrubby, ſpinoſe Verbaſcum. 13. The white, ſinuated-leaved Verbaſcum. 14. The Conyza-leaved Verbaſcum, with ferrugineous, yellow flowers. 15. The betony-leaved Verbaſcum. 16. The long, narrow-leaved Verbaſcum. 17. The roundiſh, white-leaved Verbaſcum.

## CORIS.

THE calyx is a permanent, campanulated perianthium, formed of one leaf, divided into ten ſegments at the edge, the alternate ones reflex. The corolla conſiſts of a ſingle petal, and is of the ringent kind: the tube is cylindric, and of the length of the cup; the limb is plane, and divided into five oblong, obtuſe, emarginated ſegments; the two upper ones ſhort, and more diſtant from one another: the ſtamina are five ſetaceous filaments, of the length of the corolla, and declinated: the antheræ are ſimple; the germen is roundiſh; the ſtyle is filiform, of the length of the ſtamina, and declinated: the ſtigma is thick; the fruit is a globoſe capſule, formed of five valves, and ſituated in the bottom of the cup: the ſeeds are ſmall, numerous, and oval.

Of this genus there is only one known ſpecies.

### CORIS.

The root is oblong, thick, and reddiſh on the outſide: the ſtalks are round, ſmooth, and firm, uſually of a purpliſh colour, and grow to three or four inches high; they are very much branched. The leaves are like thoſe of the larger erica, but ſomewhat ſmall, oblong, and ſet extreamly thick, and cloſe together: the flowers ſtand in cluſters, at the extremities of the branches, forming a kind of ſhort ſpikes or heads: they are ſmall, but of an extreamly beautiful purple, or bluiſh, colour.

It is a native of France and Italy; we have it in ſome of our gardens. C. Bauhine calls it, Coris cærulea maritima; Lobel, Coris Monſpeliaca.

## *Claſs the Fifth. Order the Firſt.*

## *Diviſion the Fifth.*

*Pentandria Monogynia, with monopetalous flowers and berries placed upon the receptacle.*

## RHAMNUS.

THERE is no calyx. The corolla has been, indeed, by ſome taken for a calyx; but the ſituation of the ſtamina proves, that it is not ſo: the corolla conſiſts of a ſingle, unperforated petal: the tube is of a turbinated, cylindric figure: the limb patent, divided, and acute; the whole petal is extreamly rude, but internally coloured, and of an infundibuliform ſhape, and at the baſe of every ſegment it has a little ſquammula, which is connivent inwardly. The ſtamina are ſubulated, and are in number equal to the ſegments of the corolla, and are inſerted into the corolla under theſe ſquammulæ; the antheræ are ſmall: the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is obtuſe, and divided into ſegments, fewer in number than the ſtamina: the fruit is a round, naked berry, divided within into fewer cells than there are ſegments of the corolla: the ſeeds are ſingle, roundiſh, gibbous, and compreſſed on one ſide.

This genus comprehends the Rhamnus, Frangula, Cerviſpina, Paliurus, Alaternus, and Zizyphus of authors. The ſtructure of the flower is evidently the ſame in all theſe. The other differences are to be looked on only as ſpecific. In the Frangula, the ſtigma is emarginated; the fruit contains two ſeeds, and the corolla has five ſegments. In the Cerviſpina, the ſtigma is quadrifid; the fruit contains four ſeeds, and the corolla has four ſegments; in this genus the male and female flowers are on different individuals of the ſame ſpecies. In the Paliurus there are three ſtyles; the nucleus has three cells, the corolla has five ſegments, and the berry is ſurrounded by a membranaceous rim. In the Alaternus, the ſtigma is trifid; the fruit has three ſeeds, the corolla five ſegments. In this the ſquammulæ of the corolla are wanting, and there are male and hermaphrodite flowers on ſeparate plants. In the Zizyphus, there are two ſtyles, and the nucleus contains two cells; the corolla has five ſegments.

1. *Rhamnus*

1. *Rhamnus ramis ſpina terminatis, floribus quadrifidis diœcis.*
*The Rhamnus, with terminatory ſpikes, and quadrifid, diœcious flowers.*

**Buckthorn.**

The root is woody, large, and ſpreading; the ſhrub grows to ten or fifteen feet high: the trunk is covered with a blackiſh, external bark, under which there are a yellow and a green one: the wood is hard and whitiſh. It is very ramoſe, and every branch is full of leſſer ſhoots, beſet with leaves, and terminated each by a very robuſt and ſharp thorn. The leaves are an inch and half long, and more than an inch broad, ſerrated at the edges, and terminating in a point: the flowers are very ſmall and green: the berries of the ſize of a pea, round, black, and containing four ſeeds; they ſtand on long pedicles, about the baſes of the ſpines. The ſeveral ſhrubs of this ſpecies are ſome of them only productive of male flowers, ſucceeded by no fruit; others produce hermaphrodite flowers, ſucceeded by berries.

It is common in our hedges. C. Bauhine calls it, Rhamnus catharticus; others, Spina cervina, and Cerviſpina. The juice of it's berries makes the Syrupus de ſpina cervina, or Syrup of Buckthorn of the ſhops, in ſuch common uſe as a purge.

2. *Rhamnus inermis floribus monogynis hermaphroditis*
*The Rhamnus without prickles, with hermaphrodite flowers, and with ſingle ſtyles.*

**Black Alder.**

The root is woody, creeping, and full of fibres. The ſhrub riſes to about ſix or eight feet high; the ſtem is ſeldom more than half an inch in diameter, and divides into a number of branches, ſo that the ſhrub is not of the robuſt kind: the bark of the trunk is ſmooth and brown, uſually ſpotted with bluiſh; the under bark yellow, and ſtains any thing it touches; the wood is very brittle and whitiſh, with a pith within: the leaves ſtand irregularly on the branches; they are large, roundiſh, and terminate in a point; they are near two inches long, and little leſs in breadth, of a dark green colour, and ſhining ſurface. The flowers are ſmall, and of a whitiſh green colour; they grow in cluſters from the alæ of the leaves, each on it's ſeparate pedicle: the berries are round, green at firſt, afterwards red, and finally black, and contain two ſeeds.

It is common in ſome of our woods. Tournefort calls it, Frangula; C. Bauhine, Alnus nigra baccifera.

3. *Rhamnus aculeis geminis, altero inferiore reflexo, floribus trigynis.*
*The Rhamnus, with two thorns at a place, the lower one crooked, and with three ſtyles.*

**Chriſt's Thorn.**

The root is woody and ſpreading; the ſhrub is uſually about ſix or eight feet high, but it ſometimes grows to the ſtature of a tree: the trunk is thick; the branches numerous, reddiſh, weak, and bent downwards: the ſpines are frequent, ſhort, and ſharp; the leaves are ſmall, of an oval figure, lightly crenated about the edges, and of a pale green: the flowers ſtand in the alæ of the leaves, and are ſmall and yellowiſh; the fruit is edged on each ſide with a membrane.

It is a native of France, and other parts of Europe. Dodonæus calls it, Paliurus; Camerarius, Rhamnus; C. Bauhine, Rhamnus folio ſubrotundo fructu compreſſo; others, Rhamnus tertius Dioſcoridis.

4. *Rhamnus inermis floribus diœcis, ſtigmate triplici.*
*The Rhamnus without prickles, with diœcious flowers, and a tryple ſtigma.*

**Alaternus.**

The root is woody and creeping; the ſhrub riſes to ſix or eight feet high, ſometimes much more: the trunk is covered with a greyiſh bark, under which is a yellow one: the branches are numerous; the leaves are of an oval figure, an inch long, and of

of a gloſſy ſurface, thick, firm, and placed near one another; they are lightly dentated at the edges. The flowers are ſmall, and of a greeniſh colour; they hang in cluſters from the alæ of the leaves, and each has it's ſeparate pedicle. The fruit is a round berry, red, when ripe. In this ſpecies ſome ſhrubs bear only male flowers, others hermaphrodite ones and berries.

It is a native of France, Italy, and Germany; we have it frequently in our gardens. Cluſius calls it Alaternus; C. Bauhine, Philyrea elatior et humilior.

5. *Rhamnus floribus digynis, foliis ovatis.* The Ju-
*The oval-leaved Rhamnus, with digynous flowers.* jube Tree.

The root is woody and large. The ſhrub grows often to twelve feet high, ſometimes it has the appearance of a regular and moderately large tree. It's trunk is covered with a browniſh bark; it's wood is white and firm; the branches are numerous, and beſet with thorns. The leaves ſtand alternately, and are of an oval figure, an inch and a half long, and an inch broad, obtuſe, ſerrated at the edges, and of a pale green. The flowers ſtand in cluſters, at the alæ of the leaves; they are ſmall and greeniſh. The fruit is of the bigneſs of a ſmall olive, and reddiſh, when ripe.

It is a native of Spain and Italy; we have it ſometimes in gardens. Authors call it, Zizyphus and Jujuba. The fruit was at one time uſed in medicine as a pectoral, and ſometimes in fevers; at preſent it is not regarded.

## CHRYSOPHYLLUM.

THE calyx is a ſmall, permanent perianthium, formed of five roundiſh leaves: the corolla is formed of a ſingle, campanulated petal: the limb is divided into ten ſegments, which are alternately roundiſh and patulous, and narrow and erect: the ſtamina are five ſubulated filaments: the antheræ are ſimple: the germen is roundiſh: the ſtyle is ſubulated: the ſtigma is ſimple. The fruit is a large berry, of an oval figure, and containing one cell: the ſeeds are oſſeous, and three in number.

This genus comprehends the Cainito of Plumier, and is of kin to the rhamnus and ſideroxylum; the characters expreſs the eſſential difference from them, and render a deſcription unneceſſary.

## SIDEROXYLUM.

THE calyx is a ſmall, erect perianthium, compoſed of a ſingle leaf, divided into five ſegments, and permanent. The corolla conſiſts of a ſingle petal, divided into five roundiſh, erect, concave ſegments, and, at the baſe of every one of theſe, there is placed a cuſpidated, ſerrated denticle, bending inwards. The ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are ſimple: the germen is roundiſh; the ſtyle is ſubulated, and of the length of the ſtamina: the ſtigma is ſimple. The fruit is a roundiſh berry, containing only one cell: the ſeeds are four in number.

## LYCIUM.

THE calyx is a ſmall, erect, obtuſe, permanent perianthium, divided into five ſegments: the corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric, patent, and crooked: the limb is ſmall, divided into five ſegments, obtuſe and patulous: the ſtamina are five ſubulated filaments, growing out of the tube of the corolla; they are ſhorter than it, and inclinated: the antheræ are erect: the germen is roundiſh: the ſtyle is ſimple, and longer than the ſtamina: the ſtigma is bifid and thick. The fruit is a roundiſh berry, containing two cells: the ſeeds are numerous, and kidney-ſhaped: the receptacles are convex, and affixed to the diſſipimentum.

This genus comprehends the Lycium and Jaſminoides.

1. *Lycium foliis ovatis dentatis.* **Avignon Thorn.**
*The Lycium, with oval, dentated leaves.*

The root is formed of a number of woody ramifications. The ſhrub riſes to ſix, or more, feet in height, and is very much branched, and armed with long and robuſt thorns. The leaves ſtand irregularly on the branches; they are about an inch long, near as much in breadth, and dentated at the edges. The flowers ſtand in cluſters, about the baſe of the ſpines; they are ſmall, and of a pale yellowiſh-green colour: the pedicles they ſtand on are ſhort: the berries are ſmall and roundiſh.

It is a native of France, Germany, and ſome other parts of Europe. C. Bauhine calls it, Lycium Gallicum; Lobel, Paliurus alia peregrina.

2. *Lycium foliis linearibus.* **Purple Jaſminoides.**
*The narrow-leaved Lycium.*

The root is large and ſpreading. The ſhrub grows to eight or ten feet high. The trunk is large; the branches numerous and tortuous; they ſend off many ſhort ſhoots, each of which, like the main branch, is terminated by a robuſt ſpine. The leaves are an inch long, very narrow, obtuſe at the end, and even at the edges. The flowers ſtand ſingly, on moderately long pedicles; they are long, large, and of a beautiful purple colour. The fruit is of the ſize of a large nut.

It is a native of Africa; we have it in ſome gardens. C. Bauhine calls it, Rhamnus alter foliis ſalſis, flore purpureo; Niſſole and Micheli, Jaſminoides Africanum jaſmini aculeati foliis et facie.

The other ſpecies of Lycium are, 1. The long-leaved Lycium. 2. The box-leaved Lycium. 3. The olive-leaved Lycium. 4. The capillaceous-leaved Lycium. 5. The broader-leaved, Jaſminoide Lycium. 6. The willow-leaved Lycium, called prickly Jaſmine.

## CESTRUM.

THE calyx is a ſmall, cylindric, obtuſe perianthium, formed of a ſingle leaf, divided into five ſegments at the rim, erect, and obſcure. The corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric, very long and ſlender; the opening is roundiſh: the limb plane, plicated, and formed into five equal, oval ſegments. The ſtamina are five filiform filaments, adhering longitudinally to the tube, though ſending out in the middle a little denticle, which ſtands inward. The antheræ are roundiſh, but ſomewhat tetragonal, and ſtand within the opening of the petal. The germen is of a cylindric, but ſomewhat oval, figure, of the length of the cup. The ſtyle is filiform, and of the length of the ſtamina: the ſtigma is thick, obtuſe, and ſlightly emarginated. The fruit is an oval, oblong berry, containing only one cell: the ſeeds are numerous and roundiſh.

This genus comprehends the Hidinna of Fevill. The characters diſtinguiſh it ſufficiently.

## PHILYEA.

THE calyx is double; there is a common receptacle of the flowers, which collects them all into a head, or diſk, and, beſide this, each has it's proper perianthium, which is formed of three narrow, oblong leaves, and is permanent. The corolla conſiſts of a ſingle, imperforated petal, externally rude and erect: the tube is conic, and of the length of the perianthium: the limb is divided into five ſmall, erect ſegments, and, at the baſe of each of theſe, there is a little, acuminated ſquammula, turning inwards. The ſtamina are five very ſmall filaments, inſerted into the corolla under theſe ſquammulæ. The antheræ are ſimple: the germen is ſituate in the bottom of the flower: the ſtyle is ſimple: the ſtigma is obtuſe: the fruit is a roundiſh, trilobous capſule, formed of three valves, and divided into three cells: the ſeeds are ſingle, roundiſh, gibbous on one ſide, and acuminated.

This genus comprehends the Alaternoides of authors. The characters diſtinguiſh it ſufficiently.

## CHIRONIA.

THE calyx is an erect, permanent perianthium, divided at the edge into five lanceolated ſegments. The corolla is formed of a ſingle petal, and is equal: the tube is roundiſh, and of the ſize of the cup: the limb is divided into five equal, oval, ſegments, and patent: the ſtamina are five broad and ſhort filaments, produced from the mouth of the tube: the antheræ are large, oblong, erect, and connivent: the germen is oval: the ſtyle is filiform, a little longer than the ſtamina, and declinated: the ſtigma is capitated and aſſurgent. The fruit is of an oval figure, and contains two cells: the ſeeds are numerous and ſmall. The characters diſtinguiſh it ſufficiently.

## BRUNFELSIA.

THE calyx is a very ſmall, campanulated, obtuſe perianthium, formed of one leaf, divided into five ſegments at the edge, and permanent. The corolla conſiſts of a ſingle, infundibuliform petal: the tube is very long; the limb plane, divided into five ſegments, and obtuſe: the ſtamina are five, of the length of the tube, and inſerted into it: the antheræ are oblong: the germen is roundiſh and ſmall: the ſtyle is capillary, and of the length of the tube: the ſtigma is thick. The fruit is a globoſe berry, containing only one cell: the ſeeds are numerous, roundiſh, and placed cloſe to the integument of the berry.

It is an American, deſcribed by Plumier.

## MYRSINE.

THE calyx is a ſmall, permanent perianthium, formed of one leaf, divided into five, ſometimes four, oval ſegments. The corolla is formed of a ſingle petal, divided into five ſemioval, obtuſe, connivent ſegments: the ſtamina are five filaments, ſcarce diſcernible, inſerted into the middle of the corolla: the antheræ are ſubulated, erect, and ſhorter than the corolla: the germen is of a globoſe figure, and almoſt fills up the corolla: the ſtyle is cylindric, longer than the corolla, and permanent: the ſtigma is large, woolly, and hangs out of the corolla. The fruit is a roundiſh, depreſſed berry, containing five cells, and in each a ſingle ſeed: ſometimes the ſegments of the cup are but four, then the ſtamina, &c. are four alſo.

## STRYCHNUS.

THE calyx is a ſmall, deciduous perianthium, formed of one leaf, divided into five ſegments. The corolla is formed of a ſingle petal: the tube is cylindric: the limb is patent, divided into five ſegments, and acute: the ſtamina are five filaments, of the length of the corolla: the antheræ are ſimple: the germen is roundiſh: the ſtyle is ſimple, and longer than the ſtamina: the ſtigma is thick. The fruit is a very large, ſmooth, fragile berry, of a globoſe figure, containing only one cell, and full of a pulpy matter: the ſeeds are orbiculate, depreſſed, hairy, the hairs radiated from the edges.

## CAPSICUM.

THE calyx is an erect, permanent perianthium, formed of one leaf, divided into five ſegments at the edge. The corolla is a rotated petal: the tube is very ſhort: the limb is large, patent, and plicated, lightly divided into five broad, acute ſegments: the ſtamina are five very ſmall, ſubulated filaments: the antheræ are oblong and connivent: the germen is oval: the ſtyle is filiform, and longer than the ſtamina: the ſtigma is obtuſe. The fruit is a berry, without any pulp, of a figure approaching to oval, hollow, coloured, formed into two cells: the receptacles are dry, and grow to the diſſipimentum: the ſeeds are numerous, kidney-ſhaped, and compreſſed.

Of this genus there is but one known ſpecies. Tournefort gives an account, indeed, of no leſs than twenty-ſix different ones; and moſt other authors name ten or a dozen; but, ſtrictly examined, they will be found to be all one and the ſame plant, varying, as it does almoſt infinitely, in the length and figure of it's fruit.

CAPSICUM. Guinea Pepper.

The root is oblong, ſlender, and furniſhed with a number of fibres. The ſtalk is angulated, hairy, firm, and ſolid, of a ſtrong green colour, except at the origin of the leaves, where is it uſually reddiſh; it is much branched, and with us grows to a foot and a half, or two feet, in height; in hotter countries to four feet. The leaves ſtand ſingly; they are oblong, broadeſt in the middle, and pointed at the extremity, three inches long, and an inch and a quarter broad, ſmooth, thick, and of a yellowiſh-green colour. The flowers ariſe from the alæ of the leaves, and from the divarications of the branches; they are moderately large and white, and ſtand on long pedicles; in their place comes the fruit, the character of which is, that it is a berry without juice; it's ſhape and ſize vary extreamly; it's colour is uſually a fine bright red, but this not always: in ſhape it is ſometimes long, and ſometimes ſhort and roundiſh, ſometimes oval, ſometimes cylindric, and ſometimes broad and flatted; ſometimes cordated, ſometimes ſharp-pointed, ſometimes obtuſe: it is ſometimes no larger than a cherry, ſometimes as big as a pear, ſometimes five inches long: it is upon theſe variations that Tournefort and others have formed their diſtinctions of imaginary ſpecies; the whole habit of the plant is otherwiſe the ſame in all, and, as to theſe differences, a ſkilful gardener can multiply them to infinity. Tournefort calls it Capſicum; C. Bauhine, Piper Indicum.

It is a native of Braſil, Mexico, and many other parts of America, and even of ſome of the northern parts of that quarter, as alſo of the Eaſt Indies. The whole plant is of a burning, acrid taſte. The people of the American plantations uſe the fruit in ſauces, under the name of Cayan Pepper, or, as ſome of them ſpeak it, Cayan Butter.

## SOLANUM.

THE calyx is a permanent perianthium, formed of one leaf, divided into five ſegments at the edge, erect and acute: the corolla conſiſts of a ſingle, rotated petal: the tube is very ſhort; the limb large, plicated, divided into five ſegments, and reflexo-plane: the ſtamina are five very ſmall, ſubulated filaments: the antheræ are oblong, connivent, and contingent: the germen is roundiſh: the ſtyle is filiform, and longer than the ſtamina: the ſtigma is obtuſe. The fruit is a round, ſmooth berry, punctated at the top, and formed into two cells: the receptacle is fleſhy, and convex on both ſides: the ſeeds are numerous and roundiſh.

This genus comprehends the Solanum, Melongena, and Lycoperſicon of authors.

1. *Solanum caule inermi herbaceo, foliis ovatis angulatis.* Common Nightſhade.

*The herbaceous Solanum, without prickles, with oval, angular leaves.*

The root is oblong, ſlender, and ſurrounded with a multitude of fibres. The ſtalk is roundiſh, thick, tortuous, and branched. It grows to a foot and a half high, and is of a dark green colour. The leaves ſtand ſingle, and on long pedicles; they are of a roundiſh, oval figure, largeſt at the baſe, ſinuated round the edges, and they terminate in a point. The flowers ſtand on long pedicles, affixed ſeveral together to one common peduncle, ariſing from the alæ of a leaf; they are ſmall and white; the berry that ſucceeds each is as big as a pea, black and gloſſy.

It is very common in our fields and gardens. C. Bauhine calls it, Solanum officinarum; Tournefort, Solanum acinis nigricantibus.

2. *Solanum caule inermi perenni flexuoſo, foliis ſuperioribus haſtatis.* Woody Nightſhade.

*The perennial, flexuous-ſtalked Solanum, with the upper leaves haſtated.*

The root is compoſed of a multitude of fibres; the ſtalks are round, woody, but very ſlender, weak, and flexuous; they ſupport themſelves uſually among buſhes, and will

will grow to ſix or eight feet in length. The bark of the main ſtalk is of a greyiſh-brown, that of the young ſhoots green. The leaves ſtand ſingly on large pedicles; they are of a kind of oval figure, but too much pointed at the end, and have two long auriculæ at the baſe. The flowers grow in cluſters; they are ſmall, and of an ill ſmell, but of a very beautiful purple colour; the berries, which ſucceed them, are oblong and red.

It is frequent with us in watery places, and among hedges. C. Bauhine calls it, Solanum ſcandens ſive Dulcamara.

3. *Solanum caule inermi herbaceo, foliis pinnatis inciſis.*
*The herbaceous Solanum, without prickles, with pinnated, ſerrated leaves.*

Love Apple.

The root is compoſed of a multitude of white fibres: the ſtalk is roundiſh, hollow, hairy, weak, and procumbent in great part: it grows to three or four feet long, and uſually keeps the upper half erect, the reſt on the ground; it is very ramoſe, and the branches long. The leaves are pinnated; each conſiſts of three or four pair of pinnæ, which are of an oval figure, ſerrated round the edges, and an inch long, affixed to a middle rib, terminated with an odd leaf at the end: they are ſomewhat hairy, and of a deep duſky green colour. The flowers do not grow from the alæ of the leaves, but from the intermediate ſpace; they ſtand ten or twelve together, each on a pedicle of an inch long; they are moderately large, and yellow. The fruit is very large and beautiful, of a yellowiſh-red colour.

It is a native of both the Eaſt Indies and America, and is very common in our gardens. The fruit is eaten by many people, but it ought to be thoroughly ripe. C. Bauhine calls it, Solanum pomiferum fructu rotundo ſtriato molli; Tournefort, Lycoperſicon Galeni.

4. *Solanum calycibus aculeatis, foliis ovatis integerrimis tomentoſis.*
*The prickly-cupped Solanum, with oval, woolly leaves.*

Mad Apple.

The root is compoſed of a multitude of fibres, and does not deſcend very deep into the ground: the ſtalk is uſually ſingle, round, reddiſh, and covered with a ſoft down, which is eaſily rubbed off; it is of the thickneſs of a finger, not more than eight or ten inches high, but branched from the very bottom to the top. The leaves are very large, often four inches and a half long, and more than three broad; they are deeply ſinuated about the edges, and they ſtand on very long and thick pedicles; the colour of the leaf is a dark green; but the whole ſtalk of the plant, the pedicles of the leaves, and even the middle rib, is uſually of a blood red; there is always a looſe down upon the leaves, and the middle rib is ſometimes armed with thorns. The flowers grow oppoſite to the leaves, uſually ſingle, ſometimes two or three together; the cup is armed with red ſpines: the flower itſelf is large, naturally of a purple colour, ſometimes whitiſh. The fruit is roundiſh, oval, or of an oblong figure, approaching to that of a cucumber, of a fine purple, or greeniſh, colour.

It is a native of Africa, and of ſome parts of America, but we have it in our gardens. Tournefort calls it, Melongena fructu rotundo; C. Bauhine, Solanum pomiferum fructu oblongo; Dodonæus and others, Mala inſana; but, notwithſtanding that terrible name, the Italians eat the fruit, as they do that of the former ſpecies, without any injury.

The other ſpecies of Solanum are very numerous in nature, but not nearly ſo many as they appear in the writings of the botanical authors, who have frequently made ſix or eight ſpecies out of one: an inſtance of this we have in the firſt ſpecies of Solanum deſcribed here, the moſt common of all the kinds, both here and in many other places, and almoſt univerſal throughout the world, but with ſome variation, as, 1. In the Eaſt Indies; it's leaves are even at the edges, and ſmooth, and the ſtalks round. 2. In Guinea the ſtalks are angular, and the leaves ſmooth. 3. In Virginia the ſtalks are angular and dentated, the leaves ſmooth, and bent back. 4. In our own country the ſtalks are round and hairy, and the leaves ſinuated, and very little hairy. 5. In Judæa the ſtalk is ſomewhat prickly, and the berries ſometimes yellow. Theſe are but very trifling variations, when we conſider the plant in ſo many different climates; yet every one of theſe varieties has been deſcribed, by one author or other, under the name of a

diſtinct

diſtinct ſpecies, and thus ſix ſpecies made out of what is truly but one. Dillenius has called the Indian kind, Solanum procerius patulum vulgaris fructu; Boerhaave calls the Guinea kind, Solanum fructu nigro umbellato; and ſo of the reſt. This may explain the reaſon why, in many genera, the ſpecies mentioned here are much fewer than ſtand uſually in authors.

The more ſingular and diſtinct kinds, beſide the above deſcribed, are, 1. The common Potato. 2. The borrage-leaved, prickly Solanum. 3. The cordated-leaved, prickly Solanum. 4. The ſhrubby, narrow-leaved Solanum. 5. The prickly, procumbent Solanum. 6. The yellow-ſpined, American Solanum. 7. The great, woolly, prickly Solanum. 8. The ſinuated-leaved Solanum, with purple ſpines. 9. The pomiferous, ſoft, woolly Solanum, with no ſpines. 10. The long-fruited, ſinuoſe-leaved Solanum. 11. The bay-leaved, prickly Solanum. 12. The mullein-leaved Solanum. 13. The almond-leaved Solanum. 14. The henbane-leaved, climbing, prickly Solanum. 15. The blite-leaved, ſhrubby Solanum. 16. The angulated-leaved, great-fruited, ſhrubby Solanum. 17. The prickly, long-fruited Solanum.

## PHYSALIS.

THE calyx is a ſmall, pentagonal, ventricoſe perianthium, formed of a ſingle leaf, divided into five ſhort acuminated ſegments at the edge, and permanent. The corolla conſiſts of a ſingle, rotated petal: the tube is very ſhort: the limb is large, plicated, divided into five ſhort, acute ſegments: the ſtamina are five very ſmall, ſubulated filaments: the antheræ are erect and connivent: the germen is roundiſh: the ſtyle is filiform, ſomewhat longer than the ſtamina: the ſtigma is obtuſe. The fruit is a ſmall berry, roundiſh, and containing two cells; it is ſituated in the bottom of a large, hollow, coloured, and inflated caſe, which is formed of the perianthium, extended to thoſe dimenſions, and cloſed at the extremity: the receptacle is kidney-ſhaped, and duplicate: the ſeeds are numerous, kidney-ſhaped, and compreſſed.

1. *Phyſalis caule ſimplici annuo, foliis integerrimis geminatis, floribus ſolitariis.* Winter Cherry.

*The ſingle, annual-ſtalked Phyſalis, with geminated leaves, and ſingle flowers.*

The root is long and ſlender; it creeps under the ſurface, and ſends out a number of fibres. The ſtalk is round, ſlender, ſomewhat hairy, often red, and always jointed at ſmall diſtances; at every joint there ſtand two leaves; each has it's own long pedicle; they are of an oval figure, obtuſe at the end, and of a yellowiſh-green colour, not ſerrated at the edges, a little hairy, ſcarce perceptibly ſo, and of a pale yellowiſh-green colour. The flowers ſtand on ſlender, hairy pedicles, of three quarters of an inch long, growing from the alæ of the leaves; they are large and white; when they are fallen, the cup ſwells to the bigneſs of a walnut, and becomes red, pentagonal, and hollow, like a bladder; the berry is placed at it's bottom, and is red, and of the bigneſs of a ſmall cherry.

It is a native of Germany, Italy, and France; we have it in gardens. Tournefort calls it, Alkekengi officinarum; C. Bauhine, Solanum veſicarium.

2. *Phyſalis annua ramoſiſſima, ramis teretibus pubeſcentibus, geniculis nodoſis.* Virginian Winter Cherry.

*The branched Phyſalis, with round, hoary ſtalks, and knotty joints.*

The root is fibrous: the ſtalk is round, hairy, jointed, and protuberant at the joints, a foot and a half long, but in great part procumbent. The leaves are oval, hoary, and oblong; the flowers are ſmaller than in the former, and the fruit is yellow.

It is a native of Virginia. Moriſon calls it, Solanum veſicarium procumbens Virginianum folio lanuginoſo.

The other ſpecies are, 1. The Indian, beet-leaved Phyſalis. 2. The ſmall-fruited Phyſalis. 3. The little, green-fruited Phyſalis. 4. The large, American Phyſalis, with deeply ſinuated leaves, brought over by Houſton.

*Claſs the Fifth Order the Firſt.*

*Diviſion the Sixth.*

*Pentandria Monogynia, with flowers compoſed of ſeveral petals.*

## GRONOVIA.

THE calyx is a perianthium, divided beyond the middle into five ſegments, which are erect, and of a ſemi-lanceolated figure; the whole is campanulated, coloured, and permanent. The corolla conſiſts of five extremely ſmall petals, of a roundiſh figure, and growing out of the inciſures of the cup: the ſtamina are five capillary filaments, of the length of the corolla; they are inſerted into the calyx, and ſtand alternately with the petals: the antheræ are erect and didymous: the germen is placed below the receptacle: the ſtyle is filiform, and longer than the ſtamina: the ſtigma is obtuſe. The fruit is a roundiſh capſule, coloured, and containing only one cell: the ſeed is ſingle, roundiſh, and large.

It is an American, but it ſtands in ſome of our gardens. The characters render a deſcription unneceſſary.

## HEDERA.

THE involucrum of the pedicles is very ſmall, and divided into many ſegments: the perianthium of the flower is ſmall, placed on the germen, and divided into five ſegments: the corolla conſiſts of five oblong, patent petals, with their points bent: the ſtamina are five erect, ſubulated filaments, of the length of the corolla: the antheræ are incumbent, and bifid at the baſe: the germen is turbinated, and ſurrounded with the receptacle: the ſtyle is ſimple, and very ſhort: the ſtigma is ſimple. The fruit is a globoſe berry, having only one cell: the ſeeds are five in number, large, gibbous, and angulated on one part.

### HEDERA. Tree Ivy.

The root is woody and ramified: the ſtem is woody, tough, and tortuous; it ſupports itſelf by twiſting round trees, or fixing it's radiculæ into their bark, or into walls, &c. and grows to ten, twenty, or more feet high. While young, it's leaves are oval and pointed; afterwards it produces angulated leaves, and, finally, often toward it's top oval or oblong ones again. In it's different ſtates it is called by authors, 1. Hedera humi repens. 2. Hedera helix. 3. Hedera arborea corymboſa: a fine way of multiplying ſpecies. It's flowers are ſmall and greeniſh; they ſtand in cluſters, and are ſucceeded by berries of the ſize of peas. Some of the ſeeds of the Ivy were lately produced, as falling from the clouds in a hail-ſtorm; and a diſtinguiſhed member of the Royal Society declared them to be the ſeeds of a wild garlic: they are eaſily diſlodged from trees and buildings by ſtorms, and the ſame miſtake of their being rained down has often happened; they have been ſometimes taken for wheat.

Another variety of this plant, with yellow berries, has been deſcribed by authors as a new ſpecies, under the names of Hedera poetica, and Hedera Dionyſias: Plumier has alſo deſcribed another variety of it, under the name of Hedera Americana folio haſtato.

The common Ivy is found in all parts of England. Authors call it, Hedera and Hedera arborea.

## VITIS.

THE calyx of the Vitis is a perianthium ſo ſmall, as ſcarce to be diſcernible; it is divided into five parts: the corolla conſiſts of five ſmall, deciduous, rude petals, growing together at their extremities: the ſtamina are five deciduous, erecto-patent filaments: the antheræ are ſimple; the fruit is a large, round berry, containing only one cell: the ſeeds are five; they are oſſeous, ſemi-orbicular, but turbinate, cordated, and narrow at the baſe.

1. *Vitis*

1. *Vitis foliis palmato-angulatis* The common Vine.
*The palmato-angulated-leaved Vitis.*

The root is woody and divaricated; the ſtem is angulated, and covered with a looſe, brown cruſt; the wood tough and fibrous: it grows, when properly ſupported, to twenty feet high: the leaves ſtand ſingly, on long pedicles; they are large, palmated, angulated, of a bright green, and ſoure taſte: the flowers are very ſmall and green, and the berries round.

This ſpecies varies extreamly in the ſize and colour of the fruit, and alſo of the leaf; and we owe to theſe varieties the names of a great number of imaginary ſpecies in the botanical writers.

This is a native of France, Italy, and Germany. C. Bauhine calls it, Vitis vinifera.

2. *Vitis foliis laciniatis.* Parſley Vine.
*The laciniated-leaved Vitis.*

The root is woody and divaricated; the ſtem angular; the bark brown and looſe, or peeling; the leaves ſtand ſingle, on ſhorter pedicles than in the former, and are divided, to the middle, into a multitude of irregular ſegments: the fruit is large, round, and green.

This is a native of Germany. J. Bauhine calls it, Vitis apii folio.

3. *Vitis folio angulato ſerrato.* Ivy Vine.
*The angulated, ſerrated-leaved Vitis.*

The root is fibrous, but woody; the ſtem ſlender, round, and tough; the bark is of a dark brown, and ſmooth; the leaves ſtand ſingly on long pedicles: they are of a kind of triangular figure, with two angular protuberances at the baſe; they are three inches long, and two broad: the fruit is ſmall.

This is a native of America. Plumier calls it, Vitis hederæ folio, ſerrato. Dr Hughes, in a late hiſtory of Barbadoes, has conſiderably increaſed the number of American vines, by adding all the Convolvuli, and indeed every other climbing plant to them, under the name of Vine.

## RIBES.

THE calyx is a ventricoſe, one-leaved perianthium, divided into five oblong, obtuſe, hollow ſegments; they are coloured and permanent: the corolla conſiſts of five ſmall, obtuſe, erect petals, inſerted into the margin of the cup: the ſtamina are five, erect, ſubulated filaments, inſerted alſo into the cup; the antheræ are incumbent, compreſſed, and they ſplit at the edge: the germen is roundiſh, and ſtands below the cup: the ſtyle is bifid; the ſtigmata are obtuſe; the fruit is a globoſe, umbilicated berry, containing only one cell, with two lateral, oppoſite, longitudinal receptacles: the ſeeds are numerous, roundiſh, and ſomewhat compreſſed.

This genus comprehends the Ribeſium of Dillenius, and the Ribes and Groſſularia of other authors.

1. *Ribes inerme floribus planiuſculis, racemis pendulis.* The Currant.
*The pendulous-cluſtered Ribes, with plain flowers, and without prickles.*

The root is woody, ramoſe, and fibrated; the ſtems ariſe many together, and grow to three, four, or five feet high; they are round, weak, covered with a pale bark, and full of pith: the leaves are broad, ſinuated, and ſerrated; the flowers are moderately large, and greeniſh; they hang in long cluſters, and are ſucceeded by round berries, of the ſize of peas.

The ſhrub is a native of Germany, and is cultivated every-where in gardens. The fruit varies in colour; and authors have hence made different ſpecies of it, under the names of Ribes fructu rubro, and Ribes fructu albo.

2. *Ribes*

2. *Ribes inerme floribus oblongis.* **The Black Currant.**
*The long-flowered Ribes, without prickles.*

The root is woody, ramoſe, and fibrated; the ſtems numerous, round, ſlender three feet high, and covered with a pale bark; the leaves are large, palmated, and ſinuated, hairy underneath, and of a bad ſmell: the flowers are oblong and hollow; the berries black, and as big as a large pea; they are of a diſagreeable taſte.

It is a native of England, but is not common with us, except in gardens. J. Bauhine calls it, Ribes nigrum vulgo dictum folio olente.

3. *Ribes ramis ſubaculeatis reclinatis.* **The Purple Gooſeberry.**
*The reclinated and ſomewhat prickly-branched Ribes.*

The root is woody, and divaricated; the ſtem an inch thick; the branches droop downwards, and have a ſmooth, pale bark; the leaves are ſhort, broad, laciniated, and of a dark green: the ſquammæ of the buds, when they burſt, have a number of capitated hairs round the edge: the fruit ſtands on ſingle ſhort pedicles, and is large, and of a blackiſh purple: the flowers are ſmall and green.

This is a native of Germany, and is common in our gardens. Cluſius calls it, Groſſularia fructu obſcure purpuraſcente.

The varieties of the Currant and Gooſeberry are endleſs. Of the number of the certainly diſtinct ſpecies are, 1. The more prickly, narrow-leaved Ribes. 2. The leſs-prickly, ſmaller-leaved Ribes. 3. The broader, undivided-leaved, American Ribes. 4. The narrower, undivided-leaved, American Ribes.

## CUPANIA.

THE calyx is a plane, permanent perianthium, formed of three oval acute leaves, exceeding the petals in ſize: the corolla conſiſts of five ſmall, roundiſh, patent petals: the ſtamina are five ſubulated filaments, of the length of the corolla; the antheræ are roundiſh; the germen is oval; the ſtyle is very ſmall and bifid: the ſtigmata are obtuſe; the fruit is a coriaceous capſule, of a turbinato-oval figure, formed of three valves, and containing only one cell: the ſeeds are ſix in number, and roundiſh; each has a proper receptacle of a campanulated figure, crenated, and ſurrounding it.

It is an American, deſcribed by Plumier.

## ITEA.

THE calyx is a very ſmall, erect, acuminated, permanent perianthium, formed of one leaf, and divided into five ſegments at top. The corolla is compoſed of five long, lanceolated, acute, patent petals: the ſtamina are five, ſubulated, erect, filaments, of the length of the corolla: the antheræ are roundiſh; the germen is oval; the ſtyle cylindric, and of the length of the ſtamina, and permanent: the ſtigma is obtuſe; the fruit is an oval capſule, of many times the length of the cup, mucronated with the ſtyle, and formed of two valves cohering at the points: the cell is ſingle; the ſeeds are numerous and ſmall.

It is a native of North America, and is deſcribed by Gronovius, in his Flora Virginica. The characters ſufficiently diſtinguiſh it.

## CELASTRUS.

THE calyx is a very ſmall, plane perianthium, formed of one leaf, divided into five unequal, obtuſe ſegments: the corolla conſiſts of five equal, oval, patent, ſeſſile petals, with their ends turned back: the ſtamina are five ſubulated filaments, of the length of the corolla; the antheræ very ſmall; the germen is alſo very ſmall, and is immerſed in a large plane receptacle, marked with ten ſtriæ: the ſtyle is ſubulated, and ſhorter than the ſtamina; the ſtigma is obtuſe and trifid; the fruit is a coloured oval capſule, obtuſely trigonal, gibbous, formed of three valves, and containing three cells,

cells, in each of which are ſome oval, coloured ſeeds, ſmooth, and half covered by a calyptra, which is alſo coloured, and has an unequal rim divided into four parts.

There is a ſpecies with a triple ſtigma, and no ſtyle.

## CEANOTHUS.

THE calyx is a perianthium, formed of a ſingle leaf, divided into five ſegments at the edge: the corolla is compoſed of a number of arched petals, of a hollowed figure; the ſtamina are five filiform filaments; the germen is oblong; the ſtyle ſhort and ſlender; the ſtigma large; the fruit is an oblong, dry berry, with three cells in it, and three ſeeds in each.

### *Ceanothus corymbis folio longioribus.*
### *The Ceanothus, with the corymbi longer than the leaves.*

The root is woody and divaricated; the ſtem is a third of an inch in diameter, rarely more; the bark is of a pale brown: the branches are not numerous; their bark is reddiſh. The leaves ſtand irregularly; they have reddiſh pedicles, half an inch long, and are themſelves three inches long, an inch and half broad, and terminate in a point. They are of a pale green colour, and crenated at the edge: the flowers ſtand in large umbels, on the extremities of the branches; they are ſmall, white, and without ſmell; the fruit is ſmall, and of a browniſh red.

The ſhrub is a native of Virginia and Carolina. Plukenet calls it, Euonymus jujubinis foliis Carolinienſis, fructu parvo fere umbellato. Iſnard, Euonymoides Zizyphi foliis.

## DIOSMA.

THE calyx is a perianthium, divided into five narrow, acute, permanent ſegments, and with a flat baſe: the corolla conſiſts of five oval, obtuſe, ſeſſile, erecto-patulous petals, of the length of the cup: the nectarium ſtands on the germen, in form of a corona, and is hollowed, obtuſe, and divided into five parts: the ſtamina are five ſubulated filaments: the antheræ are oval and erect: the germen is covered by the nectarium: the ſtyle is ſimple, of the length of the ſtamina; and the ſtigma is obſolete. The fruit conſiſts of five compreſſed, ovato-acuminated capſules, joined together by their inner edges with the points, diſtant from one another, and all opening at the upper part by a ſuture: the ſeeds are ſingle, oblong, of a depreſſed, oval figure, and pointed at the top; and each is wrapped up in a cartilaginous, elaſtic membrane. It is obſervable, the fruit of this Dioſma agrees with the fruit called Aniſum ſtellatum, not only in ſhape and ſtructure, but in ſmell.

Commelin and others have deſcribed the Dioſma under the name of Spiræa; but the difference is ſufficiently evident from the characters.

## LAGOECIA.

THE univerſal involucrum is formed of eight leaves, which are pennato-dentated, ciliated, and reflex; this ſurrounds a number of pedicles, each of which has a ſingle flower on it, and the whole are collected into a head by it. The proper involucrum conſiſts of four capillaceo-pennated leaves, and ſurrounds a ſingle pedunclc, which is very ſhort. The proper perianthium ſtands on the germen, and is formed of five capillaceo-multifid leaves: the corolla conſiſts of five petals, very ſhort and bicornate: the ſtamina are five capillary filaments, of the length of the corolla; the antheræ are roundiſh; the germen is roundiſh: the ſtyle is of the length of the ſtamina: the ſtigma is ſimple: there is no perianthium: the ſeeds are ſingle, of an ovato-oblong figure, and coronated with the perianthium.

Of this genus there is only one known ſpecies.

LAGOECIA. Round-headed Cummin.

The root is compoſed of a cluſter of fibres: the ſtalk is round, hollow, and weak; it riſes to about ſix or eight inches high, and is divided into a multitude of ramifications: the leaves are four inches long, pinnated, and of a duſky green: the pinnæ are oblong, broad, and ſerrated at the edges. At the tops of the branches ſtand roundiſh heads, or cluſters of flowers; the whole head appears whitiſh and hairy. It is very ill referred, by authors, to the Cummin. It has neither the appearance, ſmell, or taſte of that plant: it's ſmell is more like that of the carrot.

It is a native of Syria; we have it in ſome of our gardens. Tournefort calls it, Cuminum orientale; Camerarius, Cuminum ſylveſtre; and C. Bauhine, Cuminum ſylveſtre capitulis globoſis.

## BRUNIA.

THE common perianthium is roundiſh, imbricated, compoſed of a number of narrow, pointed leaves, and containing ſeveral flowers. The proper perianthium is compoſed of five oblong, hairy leaves, ſhorter than the corolla: the corolla conſiſts of five petals; their ungues are ſlender, and of the length of the cup; their bracteæ roundiſh and patent: the ſtamina are five capillary, flaccid filaments, longer than the corolla, and affixed to the ungues of the petals: the germen is very ſmall; the ſtyle is ſimple, and of the length of the corolla; the ſtigma is bifid; there is no pericarpium: the common receptacle of the fructifications ſeparates the perianthia by it's hairy ſquammæ: the ſeeds are ſingle, and ſomewhat hairy. Breynius calls this, Cypreſſo-pinulus, Cent. 1. 10.

## CLAYTONIA.

THE calyx is a bivalve perianthium; the leaves are oval, erect, equal, obtuſe and permanent. The corolla conſiſts of five large, erect petals, of an oval, oblong figure, and emarginated: the ſtamina are five crooked, ſetaceous filaments, a little ſhorter than the corolla: the antheræ are oblong and incumbent: the germen is roundiſh; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is bifid: the fruit is a capſule of a roundiſh figure, containing three cells, and in each three roundiſh ſeeds.

### *Claytonia foliis obverſe ovatis.*
### *The obverſely-oval-leaved Claytonia.*

The root is fibrous; the radical leaves are numerous, of an obverſely oval figure; the top being round and broad, the baſe narrow, and forming a furrowed pedicle below; they are ſmooth, nervous, and even at the edges: the ſtalk is round, and does not exceed the radical leaves in height; at it's top there ſtand two ſeſſile, obverſely oval, ſhort leaves, oppoſite to one another: the flowers are large, and of a beautiful red.

It is a native of Siberia; we have it in ſome of our gardens. It is deſcribed in the Stockholm Acts, under the name of Limnia.

## CELOSIA.

THE calyx is a perianthium, formed of three acute, lanceolated, dry, permanent leaves, and reſembling a corolla: the corolla conſiſts of five erect, lanceolated, acute, rigid, and permanent petals: the nectarium is a very ſmall margin, ſurrounding the germen; the ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are verſatile; the germen is globoſe; the ſtyle is ſtrait, ſubulated, and of the length of the ſtamina: the ſtigma is ſimple: the fruit is a globoſe capſule, ſurrounded with the corolla. It is formed into only one cell, and opens horizontally: the ſeeds are roundiſh and emarginated.

*Celoſia foliis lanceolato-ovatis.* Creſted
*The lanceolato-oval-leaved Celoſia.* Amaranth.

The root is oblong and thick; the ſtalk is round, thick, ſtriated, and of a mixed purple and green colour; toward the ground it is all over of a deep purple, and the bark full of a blood-coloured juice. It grows to four feet high; the leaves ſtand alternately, and at ſmall diſtances from one another; they are eight or ten inches long, narrow, of a deep green, and pointed at the extremity. On the top of the ſtalk, and of the ſeveral lateral branches, ſtand broad, and, as it were, reticulated ſpikes of flowers, of a beautiful purple. The whole ſpike is often a foot and half long, curled at the edges, and bending down with the weight of the top; they are often three or four inches broad.

It is a native of the Eaſt Indies. C. Bauhine calls it, Amaranthus panicula incurva; Camerarius, Amaranthus criſtatus. It is ſubject to great variations from culture. The colour of the ſpike, which is naturally of a fine ſtrong ſcarlet, will become of all the degrees of red, of a gold yellow, and of a thouſand admixtures of red, yellow, and green. To theſe accidental variations of the plant we owe the names of more than than thirty imaginary ſpecies in the botanical writers.

Of the number of theſe are the Amaranthus ſpicatus ſericeus flore luteo vireſcente; Amaranthus ſpicis carneis, &c. The error of confounding this with the Amaranthus is alſo a very groſs one: the characters are perfectly different.

## *Claſs the Fifth. Order the Firſt.*

## *Diviſion the Seventh.*

## *Pentandria Monogynia, with incompleat flowers.*

## ACHYRANTHUS.

THE calyx is a perianthium, compoſed of five lanceolated, acute, rigid, pungent, and permanent dry leaves; there is no corolla: the ſtamina are five ſhort filaments; the antheræ are ſmall; the germen is roundiſh; the ſtyle is ſimple, of the length of the ſtamina; the ſtigma is bifid. There is no pericarpium: the ſeed is ſingle, roundiſh, and compreſſed.

Dillenius has figured this plant in his Hortus Elthamenſis, but the characters alone are a ſufficient diſtinction.

## THESIUM.

THE calyx is a turbinated, permanent perianthium, formed of a ſingle leaf, divided into five ſhort, ſemi-lanceolated, erect, obtuſe ſegments. There is no corolla, but the calyx, being coloured on the inſide, has paſſed for a corolla with ſome: the ſtamina are five ſubulated filaments, ſhorter than the cup, and affixed to the baſe of the ſegments: the antheræ are roundiſh; the germen is placed below the receptacle; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is thick and obtuſe: there is no pericarpium: the calyx holds in it's bottom a ſingle, roundiſh ſeed.

There is but one known ſpecies of this genus, and the characters ſufficiently diſtinguiſh it.

## GLAUX.

THERE is no calyx. The corolla is a ſingle, campanulated, erect, permanent petal, divided into five obtuſe, revoluted ſegments: the ſtamina are five ſubulated, erect filaments, of the length of the corolla: the antheræ are roundiſh; the germen is oval; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is capitated: the fruit is a globoſe, but acuminated, capſule, formed of five valves, containing a ſingle cell, and in it five roundiſh ſeeds, with a great roundiſh receptacle, hollowed by the ſeeds.

### GLAUX.

The root is a cluſter of ſhort, white fibres. The ſtalks are numerous, and grow to four or five inches long; they are procumbent in part, and ſend out many fibres from their joints, where they touch the ground. The leaves are ſmall, oblong, and ſtand two at a joint without pedicles: the flowers are ſmall, of a purpliſh colour, and ſtand in the alæ of the leaves.

The plant is frequent about our ſea-coaſts. C. Bauhine calls it, Glaux maritima; others, Glaux exigua maritima. The flowers are ſometimes white, ſometimes ſtriated with red, the ground colour being a duſky white.

## ILLECEBERUM.

THE calyx is a permanent, pentangular perianthium, compoſed of five thick, erect, compreſſed leaves, each terminating in a hair, their tops diſtant, and the whole hollowed inward: there is no corolla. The ſtamina are five capillary filaments within the cup; the antheræ are ſimple; the germen is ovated and acute, and terminates in a ſhort ſtyle: the ſtigma is bifid: the fruit is a capſule, approaching to a roundiſh figure, but pointed at each end; formed of five valves, containing only one cell, and covered by the calyx. The ſeed is ſingle, large, roundiſh, and pointed at each end.

*Illecebrum caulibus procumbentibus.*
*The procumbent-ſtalked Illecebrum.*

The root is oblong, ſlender, white, and furniſhed with a number of fibres. The ſtalks are round, jointed, procumbent, of a reddiſh colour, and ſpread every way on the ground: the leaves are placed two at a joint; they are ſhort, of an oval figure, ſomewhat like the leaves of the ſerpyllum, and hollow. The joints are about an inch diſtant from each other; and, beſide theſe two leaves, there are a number of little white flowers, ſtanding in a kind of verticillate cluſters ſurrounding the ſtalks.

It is frequent in Cornwal and Devonſhire, in wet places. C. Bauhine calls it, Polygala repens nivea; J. Bauhine, Polygonum parvum flore albo verticillato.

*Claſs the Fifth. Order the Firſt.*

*Diviſion the Eighth.*

*Pentandria Monogynia, with the ſegments of the corolla bent obliquely to the right.*

## CERBERA.

THE calyx is a ſmall, erect, acuminated perianthium, formed of a ſingle leaf, divided into five ſegments at the edge: the corolla conſiſts of a ſingle, infundibuliform petal, and the tube is elevated: the limb is large, and divided into five ſegments; they are lanceolated in figure, and bent to the right: the nectarium is pentangular, divided into five parts, erecto-ſtellate, and placed at the mouth of the tube: the ſtamina are five ſubulated filaments, placed in the middle of the tube; the antheræ are erect and connivent; the germen is globoſe; the ſtyle is filiform, and ſhort; the ſtigma is capitated; the fruit is a large, roundiſh, fleſhy drupe, marked with a longitudinal furrow on the ſide, and containing two cells, in each of which is a ſingle ſeed of an oval figure.

This genus comprehends the Cerbera and the Thevetia of Linnæus, for the characters are the ſame; and the Ahovai of Tournefort.

1. *Cerbera foliis lanceolatis.*
*The lanceolated-leaved Cerbera.*

The root is large and brachiated; the tree grows to thirty feet high, or more: it's trunk is often two feet in diameter: the bark is of a pale, whitiſh colour, and ſmooth;

the wood moderately firm: when the young branches are cut, they emit a milky juice, and both this and the dry wood ſtink ſo intolerably, that the natives cannot uſe the wood ſo much as to burn; the ſmell is much like that of human excrement: the leaves remain green all the year; they are three inches long, two broad, and of a lanceolated ſhape. The flower is moderately large; the fruit poiſonous.

It is a native of the Eaſt and Weſt Indies. Tournefort calls it, Ahovai Theveti.

## RAUVOLFIA.

THE calyx is a very ſmall, permanent perianthium, divided into five ſegments: the corolla is a ſingle petal, of an infundibuliform ſhape: the tube is cylindrico-globoſe: the limb is plane, and is divided into five roundiſh, truncated ſegments: the ſtamina are five filaments, ſhorter than the tube; the antheræ are erect and ſimple: the germen is roundiſh; the ſtyle is very ſhort; the ſtigma capitated: the fruit is a large, globoſe berry, lacteſcent, containing only one cell, and in it two compreſſed, cordated ſeeds.

It is an American, deſcribed by Plumier, 40.

## VINCA.

THE calyx is an erect, acute, permanent perianthium, formed of one leaf, divided into five ſegments: the corolla conſiſts of a ſingle, hypocrateriform petal: the tube is longer than the cup, and is cylindric at the bottom; broader toward the top, marked with five lines, and has a pentagonal mouth. The limb is horizontal, and divided into five ſegments, growing to the top of the tube, broader upwards, and obliquely truncated at the top: the ſtamina are five very ſhort, inflex, and retroflex filaments: the antheræ are membranaceous, obtuſe, erect, crooked, and loaded with farina at each ſide: the germina are two, and roundiſh, and at their ſides lie two other roundiſh bodies: the ſtyle is ſingle, common to both; it is cylindric, and of the length of the ſtamina: the ſtigmata are two, and perpendicular; the lower one is orbicular and plane; the upper one is capitated and hollowed. The pericarpium conſiſts of two erect, cylindric, long folliculi, formed of one valve, and opening longitudinally: the ſeeds are numerous, oblong, cylindric, and ſulcated.

*Vinca foliis ovatis.*
*The oval-leaved Vinca.*

**Common Periwinkle.**

The root is fibrous; the ſtalks are procumbent, and take root, as they run along the ground, often growing thus to a great length: the leaves ſtand in pairs; they have ſhort pedicles, and are of an oval figure, about an inch long, of a dark green colour, ſhining, even at the edges, and thick and rigid. The flowers ſtand ſingly on pedicles of three inches long, ariſing from the alæ of the leaves; they are large, and of a beautiful blue.

It is common in England, but probably only as it has eſcaped from gardens; in Germany it is native. C. Bauhine calls it, Clematis daphnoides minor; Dodonæus, Clematis daphnoides. Tournefort has made eight or ten ſpecies out of this, differing in ſize, and in the colour of the flower, as the red, white, &c.

## NERIUM.

THE calyx is a very ſmall, acute, permanent perianthinm, divided into five ſegments at the top; the corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric, and ſhorter than the cup; the limb very large, and divided into five broad, obtuſe, oblique ſegments: the nectarium is ſhort, and torn, as it were, into a number of capillary ſegments; it forms a corona, terminating the tube: the ſtamina are five very ſhort filaments, in the tube of the corolla: the antheræ are ſagittated, connivent, and terminated by a long filament: the germen is roundiſh and bifid; the ſtyles are very ſhort; the ſtigmata ſimple: the fruit conſiſts of two cylindric, acuminated, long, erect follicles, formed each of one valve, and opening longitudinally: the ſeeds are

are numerous, oblong, coronated with a downy matter, and placed in an imbricated manner.

*Nerium foliis ternis lineari-lanceolatis.* Roſe-bay.
*The Nerium, with lineari-lanceolated leaves, three at a joint.*

The root is woody and branched: the trunk is woody, an inch and a half in diameter, often much more, and grows to eight, or more, feet high; it divides into many branches, which ſtand erect, and are furniſhed with leaves, uſually three at a joint; theſe are four inches long, an inch broad, nearly of the ſame diameter all the way, only riſing from a narrow baſe, and terminating in a point; they are rigid, and of a greyiſh colour. The flowers ſtand in cluſters, on the tops of the branches; they are very large, and of a beautiful red, ſometimes white.

It is a native of Syria and the Eaſt Indies, and of ſome of the ſouthern parts of Europe, and is frequent in our gardens. Dodonæus calls it, Rhododendrum; Lobel, Oleander and Laurus roſea; C. Bauhine, Nerium rubro flore.

The other ſpecies are, 1. The tuberous-rooted, ſcandent Nerium. 2. The narrower-leaved, Indian Nerium: and, 3. The broader-leaved, ſmaller-flowered, Indian Nerium.

## PLUMERIA.

THE calyx is an extremely ſmall, obtuſe perianthium, divided into five parts: the corolla conſiſts of a ſingle, infundibuliform petal: the tube is long, and grows broader towards it's top: the limb is erecto-patent, and divided into five oblong, oval ſegments, bent toward the right: the ſtamina are five ſubulated filaments, growing out of the middle of the tube: the antheræ are connivent: the germen is oblong and bifid: there are ſcarce any ſtyles: the ſtigma is double and acuminated. The fruit is compoſed of two long, pointed, ventricoſe follicles, formed of a ſingle valve each, and containing a ſingle cell, and naturally bending downwards, and nutant: the ſeeds are numerous, oblong, imbricated, and inſerted into a large, oval membrane, at the baſe.

## CAMERARIA.

THE calyx is a very ſmall, acute, connivent perianthium, formed of a ſingle leaf, divided into five parts: the corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric, long, and ventricoſe both at the baſe and at the top: the limb is plane, and is divided into five lanceolated ſegments: the ſtamina are five very ſmall filaments, placed in the middle of the tube: the antheræ are connivent: the germina are two, and have two appendages at their ſides: there are ſcarce any ſtyli, and the ſtigmata are obſolete. The fruit is compoſed of two oblong follicles, bent horizontally, obtuſe at both ends, and ſending out a lobe on each ſide near the baſe; they are formed each of one valve, and have only one cell. The ſeeds are numerous, oval, and imbricated, and inſerted into a large, oval membrane at the baſe.

It is an American, deſcribed by Plumier.

## TABERNOMONTANA.

THE perianthium is very ſmall, divided into five parts, acute and connivent: the corolla conſiſts of a ſingle, infundibuliform petal: the tube is cylindric and long; the baſe and apex of it are both ventricoſe: the limb is divided into five linear, obtuſe ſegments: the ſtamina are five very ſmall filaments, placed in the middle of the tube: the antheræ are connivent: the germina are two, and ſimple: the ſtyle is ſubulated; the ſtigmata are obſolete. The fruit is compoſed of two follicles, bent horizontally, ventricoſe and acuminated, formed of one valve, and containing one cell: the ſeeds are numerous, of an oblong, oval figure, obtuſe, imbricated, and wrapped up in pulp.

It is common to America and to the Eaſt Indies, and is deſcribed by Plumier, and in the Hortus Malabaricus, 1. 46.

CEROPEGIA.

## CEROPEGIA.

THE calyx is a ſmall, permanent perianthium, formed of a ſingle leaf, divided into five ſhort ſegments at the end: the corolla conſiſts of a ſingle petal: the baſe is large and globoſe; the tube which terminates this is cylindric and long: the limb is very ſmall, quinquedentated, acuminated with the tops of the ſegments, connivent, and open at their ſides: the ſtamina are five ſmall, crooked, connivent filaments, at the bottom of the corolla: the antheræ are ſmall; the germen is extreamly ſmall; there is ſcarce any ſtyle: the ſtigmata are two. The fruit is compoſed of two cylindric and very long follicles, ſtrait, acuminated, formed each of one valve, and containing one cell: the ſeeds are oblong, numerous, imbricated, and crowned with down.

It is a native of the Eaſt Indies, and is deſcribed in the Hortus Malabaricus, 9, 16.

### *Claſs the Fifth. Order the Second.*

## PENTANDRIA DIGYNIA.

### *Plants which have in each flower five ſtamina and two ſtyles.*

OF theſe there are ſeveral diſtinct ſeries, to be ſeparated into ſo many diviſions: 1. Some have the ſegments of the corolla bent obliquely to the right. 2. Some have only one ſeed after each flower. 3. Others have ſeveral ſeeds after each. 4. Some have two naked ſeeds and a ſimple umbel. 5. Some have two naked ſeeds, and a univerſal and partial involucrum. 6. Some have two naked ſeeds, with only a partial involucrum. 7. Some have two naked ſeeds, and no involucrum.

### *Claſs the Fifth. Order the Second.*

### *Diviſion the Firſt.*

### *Pentandria Digynia, with the ſegments of the corolla bent obliquely to the right.*

## STAPELIA.

THE calyx is a perianthium, formed of one leaf, divided into five ſegments, acute, ſmall, and permanent: the corolla conſiſts of a ſingle, large, plane petal, divided beyond the middle into five ſegments, which are broad, plane, and acuminated: the nectarium is a plane, little ſtar, of five points; the ſegments are linear, their apices lacerated, and they ſurround the parts of fructification; and there is alſo another plane, little ſtar, of five acute, undivided rays, covering the ſame parts: the ſtamina are five plane, erect, broad filaments: the antheræ are linear, and affixed each way to the ſide of the filament: the germina are two, of an oval figure, and plane within: there are no ſtyles: the ſtigmata are obſolete. The fruit conſiſts of two oblong, ſubulated follicles, formed of one valve, and containing one cell: the ſeeds are numerous, imbricated, compreſſed, and pappoſe: in ſome ſpecies there is a plane, orbicular body, placed under the ſtars.

### *Stapelia denticulis ramorum extrorſum prominulis.*
### *The Stapelia with the denticles of the branches prominent outwards.*

The root is compoſed of four white fibres. The ſtalk is ſucculent, of the thickneſs of a man's finger, and not more than eight or ten inches long, uſually procumbent, ſometimes riſing obliquely; while young, green, but afterwards purple: it is divided into a number of ramifications, and is of a kind of trigonal figure, denticulated, and the denticles riſing into a kind of tubercles, armed with prickles; it is full of an acrid juice,

juice, and has no leaf on it. In the alæ of the denticles there ſtand ſhort, ſucculent, greeniſh, or purpliſh, pedicles, divided into three fine, foliaceous points at the extremity, and each ſupporting a large yellow flower.

It is a native of the Cape of Good Hope. Herman calls it, Apocynum humile aizoides ſiliquis erectis Africanum.

## ASCLEPIAS.

THE calyx is a permanent perianthium, divided into five ſegments, acute and ſmall: the corolla conſiſts of a ſingle petal, plane or reflex, divided into five oval, acuminated ſegments: the nectaria are five in number, and ſurround the parts of fructification; each of them is of an oval figure, but obliquely auriculated outward, and, from the baſe of this auricle, ariſes an acute corniculum, bent towards the parts of fructification: the parts of fructification are covered by a truncated body, ſurrounded with five ſquammulæ, and opening at the ſides by a many fiſſures; there are ſcarce any filaments: the antheræ are five; they are affixed to the truncated body of the nectarium, within the ſquammulæ: the germina are two, of an oval figure, and acuminated: there are ſcarce any ſtyles; the ſtigmata are ſimple. The fruit conſiſts of two large, oblong follicles, ventricoſe, and pointed, formed each of one valve, and containing only one cell: the ſeeds are numerous, imbricated, and winged with down: the receptacle is membranaceous and free.

This genus comprehends the Aſclepias and the Apocynum of authors. In the Aſclepias the corolla is plane, in the Apocynum it is reflex; but, as the nectaria, and all the other parts of fructification, are alike in both, this is to be regarded no more than as a ſpecific, not a generical difference.

1. *Aſclepias caule erecto ſimpliciſſimo herbaceo, foliis cordato-lanceolatis, racemis conglomeratis alternis.*
*The erect, herbaceous, ſimple-ſtalked Aſclepias, with cordated-lanceolated leaves, and alternate, conglomerated cluſters.*

White Swallow-Wort.

The root is fibrous and white: the ſtalk is round, thick, hairy, jointed, erect, and without divarication. The leaves ſtand two at a joint; they are two inches long, an inch broad, cordated at the baſe, and lanceolated; they ſtand on very ſhort pedicles, which riſe upwards; the ribs are hairy. From the alæ of the leaves ariſe pedicles, on each of which ſtands a cluſter of white, ſmall flowers: the pods are an inch and a half long, and the ſeeds winged with a very fine down.

This is a native of Germany. C. Bauhine calls it, Aſclepias flore albo; Dodonæus, Vincetoxicum.

2. *Aſclepias caule ſubvolubili herbaceo, foliis ovatis lanceolatis, floribus confertis patentiſſimis.*
*The herbaceous-ſtalked Aſclepias, with oval, lanceolated leaves, and open, cluſtered flowers.*

Black Swallow-Wort.

The root is compoſed of a number of large fibres. The ſtalk is round, tender, weak, and ſupports itſelf by twining about any thing near it; by this means it will be carried to four or five feet high: toward the top it is uſually branched. The leaves are large, oblong, ſomewhat oval, but pointed at the extremity; they are ſmooth, ſoft, and ſucculent. The flowers ſtand in cluſters, and are ſmall, patent, and of a very deep purple, almoſt black. The pods are long, and the ſeed winged with a very fine down. The whole plant abounds with an acrid, milky, but yellowiſh, juice.

It is a native of France and Germany. C. Bauhine calls it, Aſclepias pullo flore; J. Bauhine, Aſclepias flore nigro quorundam.

3. *Aſclepias*

3. *Aſclepias caule erecto ſimplici herbaceo, foliis ovalibus ſubtus tomentoſis, umbellis nutantibus.*
*The ſimple, erect, herbaceous-ſtalked Aſclepias, with oval leaves and nutant umbels.*

**Syrian Dog's-bane.**

The root is compoſed of a multitude of large fibres. The ſtalk is round, erect, and hairy; it grows to four feet high. The leaves ſtand in pairs; they are large, and of an oblong, oval figure, of a duſky green on the upper ſide, but whitiſh and hairy underneath. The flowers are ſmall and purple; they ſtand a great number together, forming a kind of umbel.

It is a native of Syria. Cornutus calls it, Apocynum majus Syriacum rectum; Veſlingius, Beideloſſar.

4. *Aſclepias foliis rotundo-ovatis, caule fruticoſo.*
*The ſhrubby-ſtalked, roundiſh-oval leaved Aſclepias.*

**Round-leaved Dog's-bane.**

The root is fibrous; the ſtalk is round, hard, woody, not very thick, and divides into ſeveral branches. The leaves are almoſt round, or between that and oval; they are ſmooth, green, and of a ſhining ſurface. The flowers are ſmall, and of a pale red.

It is a native of Egypt. Veſlingius calls it, Apocynum folio rotundiore. We have it frequently in our gardens.

The other ſpecies of the Aſclepias are very numerous. The more ſingular are, of thoſe called by authors Aſclepiades, 1. The narrow-leaved, yellow Aſclepias. 2. The Cretic Aſclepias, with bifid pods. 3. The tall, erect, purple Aſclepias. 4. The broad-leaved, purple Aſclepias. Of thoſe called Apocyna, 1. The broad-leaved, hoary Apocynum of Malabar. 2. The broad-leaved, purple, American Apocynum. 3. The green-ſtalked, white-flowered, Syrian Apocynum. 4. The long-podded, long-leaved Apocynum. 5. The willow-leaved, purple Apocynum. 6. The tuberous-rooted, orange-flowered Apocynum. 7. The nerium-leaved Apocynum. 8. The undulated-leaved, hairy Apocynum. 9. The periwinkle-leaved Apocynum. 10. The digitated-leaved Apocynum. 11. The orange-leaved Apocynum. 12. The Apocynum of the Canaries. 13. The narrow toad, flax-leaved Apocynum. 14. The round-leaved, ſcandent Apocynum.

## PERIPLOCA.

THE calyx is a very ſmall perianthium, divided into five oval, permanent ſegments: the corolla conſiſts of a ſingle petal, plane, and divided into five oblong, linear, truncated, and emarginated ſegments: the nectarium is very ſmall, and ſurrounds the center of the petal, and emits five crooked filaments from it's ſides, ſhorter than the ſegments of the corolla, and placed alternately with them: the ſtamina are five very ſhort filaments: the antheræ are erect and connivent: the germen is ſmall and bifid: there are ſcarce any ſtyles: the ſtigmata are ſimple. The fruit conſiſts of two large, oblong, ventricoſe follicles, each formed of a ſingle valve, and containing one cell: the ſeeds are numerous, imbricated, and coronated with down: the receptacle is longitudinal and capillary.

1. *Periploca foliis lanceolatis, caulibus fruticoſis volubilibus.*
*The ſhrubby, twining-ſtalked Periploca, with lanceolated leaves.*

**Climbing Dog's-bane.**

The root is woody, and divaricated; the ſtalks are round, ſlender, woody, and covered with a brown bark; they riſe by the help of trees, which they twiſt themſelves about, to the height of thirty feet. The leaves ſtand in pairs; they are oblong, broadeſt in the middle, and pointed at the end. The flowers ſtand four or five together, forming a kind of umbel; they are ſmall, and of a duſky purple.

It is a native of many parts of America. C. Bauhine calls it, Apocynum oblongo folio; others, Periploca repens anguſtifolia, and Periploca folio longo flore purpurante.

The other ſpecies of Periploca are, 1. The narrow-leaved Periploca. 2. The roundiſh-leaved Periploca. 3. The acute-leaved Periploca. 4. The echinated-fruited Periploca. 5. The hard-podded Periploca. 6. The climbing, willow-leaved Periploca. 7. The procumbent, diffuſe, toad, flax-leaved Periploca. 8. The citron-leaved, purple, umbellated-flowered Periploca. 9. The ſhort and roundiſh-leaved Periploca. 10. The ſagittated-leaved Periploca. 11. The citron-leaved Periploca, with great fruit.

## CYNANCHUM.

THE calyx is a very ſmall, erect, permanent perianthium, divided into five ſegments: the corolla conſiſts of a ſingle petal: there is ſcarce any tube: the limb is plane, and is divided into five long, linear ſegments: the nectarium is placed in the center of the flower; it is long, erect, cylindric, and divided into five parts at the top: the ſtamina are five parallel filaments, of the length of the nectarium: the antheræ are contingent, and are placed within the mouth of the corolla: the germen is oblong and bifid: there is ſcarce any ſtyle: the ſtigmata are two, and obtuſe. The fruit is compoſed of two oblong, acuminated follicles, formed each of one valve, and containing one cell; they open longitudinally, and contain numerous, oblong ſeeds, placed imbricatedly, and winged with down.

*Cynanchum caule volubili, foliis cordato-lanceolatis glabris.*
*The climbing Cynanchum, with cordato-lanceolated, ſmooth leaves.*

The root is oblong, creeping, brittle, and white. The ſtalk is firm and climbing; it winds itſelf about any thing near, and is ſo carried up to a great height. The leaves are two inches long, and an inch and a half broad; they are cordated, and ſurround the ſtalk at the baſe, from whence they gradually become ſmaller to the point; they are ſo full of milky juice, that the leaſt bruiſe brings it out in abundance. The flowers are ſmall and white; they ſtand in umbels all along the ſtalks.

It is a native of Perſia, and ſome of the ſouthern parts of Europe; we have it in gardens. Dodonæus calls it, Periploca prior; J. Bauhine, Apocynum latifolium amplexicaule.

## APOCYNUM.

THE calyx is a perianthium, formed of one leaf, divided into five ſegments at the end, erect, ſmall, and permanent: the corolla conſiſts of a ſingle petal, of a campanulated, roundiſh form, lightly divided into five ſegments, which are revolute; there is no other nectarium. The ſtamina are five filaments, ſcarce viſible: the antheræ are oblong, erect, acute, bifid at the baſe, and connivent: the germina are two, and oval: the ſtyles are ſcarce viſible: the ſtigmata are globoſe, and as large as the germina. The fruit is compoſed of two oblong, acuminated follicles, each formed of one valve, and containing one cell: the ſeeds are numerous, very ſmall, and coronated with long down: the receptacle is ſubulated, very long, rough, and free.

1. *Apocynum foliis lanceolatis, corymbis terminatricibus.*
*The lanceolate-leaved Apocynum, with terminatory corymbi.*

The root is creeping, white, and moderately thick: the ſtalk is round, thick, rigid, and ſmooth. The leaves are three inches long, and an inch and a half broad; they are placed in pairs, and are broadeſt in the middle, and terminate in a point. The flowers ſtand only at the tops of the branches, in large tufts or umbels, as it were; they are moderately large, and of a beautiful pale red. The plant grows to four feet high.

It is a native of Syria and Greece, but we have it in our gardens. J. Bauhine calls it, Apocynum oblongo lato folio.

2. *Apocynum*

2. *Apocynum foliis ovatis.*
*The oval-leaved Apocynum.*

This is a low plant: the root is creeping, and of the thickneſs of a crow-quill. The ſtalks are woody, and a foot high; they are round, ſmooth, and divided into ſeveral ramifications. The leaves ſtand in pairs, on ſhort pedicles; they are an inch and a half long, and an inch broad, of a figure approaching to oval, and of a deep green colour. The flowers are of the ſize of thoſe of the lilly of the valley, and ſomewhat reſemble them in ſhape; they are of a beautiful pale red.

It is a native of America. Boccone calls it, Apocynum Canadenſe foliis androſæmi majoris; Ray, Apocynum flore lillii convallii. We have it in our gardens.

## *Claſs the Fifth. Order the Second.*

## *Diviſion the Second.*

## *Pentandria Digynia, with only one ſeed after each flower.*

## HERNIARIA.

THE calyx is a one-leaved perianthium, divided into five ſegments at the end, acute, patent, coloured on the inſide, and permanent: there is no corolla: the ſtamina are five very minute filaments: the antheræ are ſimple: the germen is oval: the ſtyle is very ſhort, ſcarce viſible: the ſtigmata are two, acuminated, and of the length of the ſtyle. The fruit is a ſmall capſule, placed in the bottom of the cup, covered, and hardly ſplitting: the ſeed is ſingle, ovato-acuminated, and ſmooth.

This genus comprehends the Herniaria and Parenychiodes of Tournefort.

1. *Herniaria floſculorum glomerulis ſubrotundis.* Rupture-
*The Herniaria, with roundiſh tufts of flowers.* wort.

The root is compoſed of a cluſter of white fibres: the ſtalks are round, procumbent, very much branched, and not more than two or three inches in length. The leaves are very ſmall; they ſtand two at a joint, and are pointed at the end, and of a pale yellowiſh-green; all along the ſides of the ſtalks ſtand ſhort and roundiſh cluſters of flowers. They are very minute, and of a yellowiſh colour.

The plant is a native of England, eſpecially of the weſtern counties. It's leaves are uſually ſmooth, but ſometimes it varies from this, and they are hairy. The botanical writers have, from this, divided it into two ſpecies, under the names of Herniaria glabra and Herniaria hirſuta. C. Bauhine calls it, Polygonum minus, ſive Millegrana major; Royen and Haller, Herniaria calycibus bractea nudis.

2. *Herniaria floſculorum glomerulis oblongis.*
*The Herniaria, with oblong cluſters of flowers.*

This is a very beautiful little plant. The root is fibrous; the ſtalks are procumbent, and ſpread every way upon the ground; they are round, ſlender, ſmooth, jointed, and four or five inches long; the leaves are very ſmall, and of a pale green, broadeſt in the middle, and pointed at the ends; they ſtand in pairs. From the alæ of theſe, all along the ſtalk, there grow cluſters of flowers; theſe are an inch long, and are compoſed of multitudes of fine white, ſilvery ſquammulæ, ſet very thick together: among theſe ſquammulæ are numbers of very minute, white flowers.

It is a native of Spain, Italy, and ſome other parts of Europe. J. Bauhine calls it, Paronychia Hiſpanica Cluſii, ſive Anthyllis nivea; C. Bauhine, Polygonum minus candicans.

3. *Herniaria*

3. *Herniaria floſculorum glomerulis ovatis.*
*The Herniaria, with oval cluſters of flowers.*

The root is fibrous; the ſtalks are procumbent, round, ſmooth, and eight inches long. The leaves ſtand in pairs, and are a third of an inch long, and a quarter of an inch broad, pointed at the ends, and of a pale green colour. The cluſters of flowers are ſhort and oval, and not very compact: the flowers are white.

It is a native of Spain and Italy. Tournefort calls it, Paronychia Hiſpanica ſupina alſine-folia capitulis minus compactis.

The other ſpecies of Herniaria are, 1. The narrow-leaved, erect Herniaria. 2. The broad-leaved, procumbent Herniaria. 3. The ſhrubby, myrtle-leaved Herniaria. 4. The echinated-leaved Herniaria.

## SALSOLA.

THE calyx is a perianthium, compoſed of five oval, peltato-obtuſe, permanent leaves: there is no corolla. The ſtamina are five very ſhort filaments, ariſing from the leaves of the calyx: the germen is globoſe: the ſtyle is ſhort, and divided into two parts: the ſtigmata are crooked. The fruit is a globoſe, unilocular capſule, covered with the cup: the ſeed is ſingle, large, and ſpiral, like a ſnail.

This genus comprehends the Kali of Tournefort and others.

1. *Salſola inermis foliis lanceolatis.* Smooth Glaſswort.
*The lanceolated-leaved Salſola, without prickles.*

The root is fibrous; the ſtalks are round, thick, and ſucculent, and uſually of a purpliſh colour; toward the tops they are divided into a multitude of branches. The leaves are large toward the bottom, but very ſmall toward the tops, broad at the baſe, and growing ſmaller to the point. The flowers are ſmall and greeniſh; the ſeeds beautifully contorted, or twiſted in a ſpiral manner.

It is common on the ſea-coaſts in many parts of Europe, and is cultivated alſo in many places for making a kind of pot-aſh. C. Bauhine calls it, Kali majus ſemine cochleato; J. Bauhine, Kali vulgare.

2. *Salſola foliis lineari-lanceolatis pungentibus.*
*The Salſola, with lineari-lanceolate, pungent leaves.*

The root conſiſts of a cluſter of fibres: the ſtalk is round, thick, ſucculent, and of a duſky green colour; it grows to eight or ten inches, ſometimes more, in length, and is uſually very much branched: the leaves ſtand at ſmall diſtances; they are an inch in length, narrow, and of a lineari-lanceolate figure, terminating with a ſharp ſpine. The whole leaf, as well as the ſtalk, is full of juice, and thick, only the ſpine is dry, and ſomewhat rigid. The flowers are ſmall and green; they ſtand in the alæ of the leaves: the ſeed is beautifully ſpiral, the cup prickly.

This is frequent on the coaſts of the Mediterranean, and is cultivated in ſome places for making an Alkali ſalt. C. Bauhine calls it, Kali ſpinoſum cochleatum; Matthiolus, Fragus ſpinoſus.

The other ſpecies are, 1. The procumbent, ſhort-leaved Salſola, from which the bariæa, or fineſt pot-aſh, is made. 2. The thick, ſhort-leaved Salſola. 3. The woody Salſola, with membranaceous flowers. 4. The ſhrubby, tamariſk-leaved Salſola. 5. The ſhrubby, Spaniſh, broom-leaved Salſola. 6. The capillaceous-leaved, ſhrubby Salſola. 7. The trifid-leaved, prickly Salſola. 8. The large-flowered, ſhrubby Salſola. 9. The woolly-ſhrub Salſola. 10. The toad-flax-leaved Salſola. 11. The prickly, capillaceous-leaved, ſhrubby Salſola.

## GOMPHRENA.

THE calyx is a perianthium, formed of three leaves, and of a compreſſed figure; two of the leaves are navicular, carinated on the outſide, and have their interior edges connivent; the third is ſmall and incumbent; ſidewiſe they are all coloured and

and permanent. The corolla is divided into five parts, and erect; the petals are ſubulated and permanent: the nectarium is a cylindric tube, of the length of the corolla, divided into five ſhort, patulous ſegments at the mouth: the ſtamina are five ſcarce, viſible filaments, placed in the mouth of the nectarium; the antheræ cover the mouth of it: the germen is oval with a point; the ſtyles are two and ſmall: the ſtigmata are ſimple, and of the length of the ſtamina: the fruit is a thin, roundiſh cruſt, with one cell, containing a ſingle, large, roundiſh ſeed, with an oblique end.

This genus comprehends the Amaranthoides of Tournefort and others.

1. *Gomphrena caule erecto, foliis ovato-lanceolatis, capitulis ſolitariis, pedunculis diphyllis.* **Purple everlaſting flower.**
*The erect, ovato-lanceolate-leaved Gomphrena, with ſingle heads on two-leaved peduncles.*

The root conſiſts of a cluſter of white fibres: the ſtalk is round, hairy, erect, rigid, and branched. It grows to two feet high; the joints are protuberant, and two inches diſtant: the leaves ſtand on ſhort pedicles; they are two inches long, an inch and a quarter broad, and pointed at the ends, of a pale greyiſh-green and hoary. On the tops of the branches ſtand the heads of flowers; they are roundiſh, of the bigneſs of a nutmeg, and of a beautiful purple colour, ſometimes white: the pedicles have two leaves on them uſually, ſometimes four: the heads are compoſed of a multitude of looſe ſquammulæ.

The plant is a native of both the Eaſt and Weſt Indies; we have it in our gardens. Herman calls it, Amaranthoides Indicum foliis ocymaſtri capitulis purpureis.

2. *Gomphrena caulibus procumbentibus, foliis lineari-lanceolatis.*
*The procumbent Gomphrena, with lineari-lanceolate leaves.*

The root is fibrous: the ſtalk grows to eight or ten inches long; it lies on the ground, and is much branched: the leaves are half an inch long, very narrow, and pointed at the ends. The heads are ſmall, and of a beautiful ſilvery white.

It is a native of America, and is found about the ſea-coaſts. Plumier calls it, Amaranthoides maritima repens.

## CHENOPODIUM.

THE calyx is a perianthium, formed of five oval, hollow leaves, with membranaceous edges; the whole hollow and permanent: there is no corolla. The ſtamina are five ſubulated filaments, placed oppoſite to the leaves of the cup, and of the ſame length with them: the antheræ are roundiſh and didymous; the germen is orbiculate; the ſtyle is ſhort, and divided into two parts; the ſtigmata are obtuſe: there is no pericarpium. The cup becomes ſhut, of a pentagonal figure, with five compreſſed angles, and is deciduous: the ſeed is ſingle, orbicular, and depreſſed: the ſtyle is, in ſome ſpecies, divided into three parts; but the ſhape of the cup, containing the ſeed, diſtinguiſhes it from all other genera.

1. *Chenopodium foliis triangulari-ſagittatis integerrimis.* **Engliſh Mercury.**
*The triangular, ſagittated-leaved Chenopodium.*

The root is large, oblong, yellowiſh, and furniſhed with a number of fibres. The ſtalks are thick, hollow, ſtriated, and of a pale green colour, purpliſh toward the baſe; they are, in part, procumbent; in part, obliquely erect: the leaves are three inches long, and two broad at the baſe; triangular, and ſagittated; of a pale green, and covered in part with a quantity of looſe, greyiſh globules, fattiſh to the touch: the top of the ſtalks terminate in long ſpikes, of little yellowiſh-green flowers, very thick ſet together.

The plant is common with us in uncultivated places. C. Bauhine calls it, Lapathum unctuoſum; J. Bauhine, Bonus Henricus. The tops of it are eaten, boiled; and a decoction of the leaves uſed in emollient clyſters.

2. *Chenopodium foliis cordato-triangularibus obtuſiuſculis, dentatis, racemis erectis compoſitis.* Goose-foot.
*The triangular, cordated-leaved Chenopodium, with erect, compound cluſters of flowers.*

The root is long, thick, and woody: the ſtalk is thick, ſtriated, and three feet high: the leaves are three inches long, triangular, but ſomewhat cordated at the baſe, and of a bright green colour: the cluſters of flowers are large, and compoſed of ſhorter cluſters; they are of a green colour, with a mixture of yellowneſs, and ſtand at the top, and along the ſides of the plant.

It is common with us on dunghils. C. Bauhine calls it, Atriplex ſylveſtris latifolia.

3. *Chenopodium foliis rhombeo-ovatis integerrimis.* Stinking Orach.
*The rhombeo-oval-leaved Chenopodium.*

The root is ſlender, oblong, and woody; the radical leaves are three quarters of an inch long, and more than half an inch broad; they ſtand on long pedicles. The ſtalks are partly procumbent, partly obliquely erect; they are round, ſtriated, and a foot long: the leaves ſtand alternately on them, and are like the radical ones, but ſhorter and ſmaller: the flowers ſtand in ſhort and thick tufts, all down the ſides of the main ſtalk, on ſhort branches. The whole plant is of a whitiſh colour, and covered with looſe, duſty globules; it's ſmell is very offenſive.

It is common with us about dunghils. Tournefort calls it, Chenopodium fœtidum; Ray, Blitum fœtidum vulvaria dictum.

The other ſpecies of Chenopodium are, 1. The triangular, dentated, thick-cluſtered Chenopodium. 2. The purpliſh-cluſtered, folioſe-cluſtered Chenopodium. 3. The naked-cluſtered, triangular-leaved Chenopodium. 4. The ſinuated, whitiſh-leaved Chenopodium. 5. The ſtramonium-leaved Chenopodium. 6. The narrow-leaved, laciniated Chenopodium. 7. The many-ſeeded Chenopodium. 8. The ſubulated-leaved Chenopodium, called white Gloſswort, and Kali minus album.

## BETA.

THE calyx is a hollow, permanent perianthium, formed of five ovato-oblong, obtuſe leaves: there is no corolla. The ſtamina are five ſubulated filaments, of the length of the leaves of the cup, and placed oppoſite to them; the antheræ are roundiſh: the germen is placed below the receptacle; the ſtyles are two, very ſhort and erect; the ſtigmata are acute: the fruit is a capſule, placed within the cup at the baſe; it contains only one cell, and is deciduous: the ſeed is ſingle, kidney-ſhaped, compreſſed, and ſurrounded every way by the cup.

Of this genus there is only one ſpecies; but this, from it's varying in the colour of the ſtalks, leaves, &c. from a pale whitiſh green to a blood-red, and in other particulars, has been deſcribed as different ſpecies, under the names of Beta alba and Beta rubra, &c.

BETA. Beet.

The root is long and thick; often an inch and half in diameter, and more than a foot in length: the radical leaves are eight inches long, and five broad; of a pale green, a whitiſh, or a blood-red colour: the ſtalk is very thick, roundiſh, ſtriated, whitiſh or reddiſh, and four feet high: the leaves ſtand alternately on long pedicles on it; they are like thoſe of the root, but ſmaller, and very thick and fleſhy: the flowers ſtand on the tops of the ſtalks, and on ſhort branches riſing from the alæ of the leaves. They are ſmall, and naturally of a greeniſh white. Culture makes a vaſt variety in this plant; ſo that Tournefort has deſcribed no leſs than ten varieties of it, under the name of ſo many ſpecies.

It is a native of the ſea-coaſts of many parts of Europe, and, in this it's wild ſtate, is deſcribed, as a diſtinct ſpecies, under the name of Beta ſylveſtris maritima, when cultivated C. Bauhine calls it, Beta rubra, and Beta alba. The variations culture makes in it are in ſize, and in the roundneſs or flatneſs of the ſtalk, and in the variation of the leaves, ſtalks, or ribs of the leaves, into red and yellow.

## ULMUS.

THE calyx is a turbinated, rugoſe perianthium, compoſed of a ſingle leaf, divided into five ſegments at the edge, erect, coloured on the inſide, and permanent: there is no corolla. The ſtamina are five ſubulated filaments, twice as long as the cup: the antheræ are erect, ſhort, and ſulcated four ways: the germen is orbicular and erect; the ſtyles are two, ſhorter than the ſtamina, and reflex; the ſtigmata are hoary. The fruit is a large, oval, compreſſed, drupe: the ſeed is ſingle, roundiſh, and lightly compreſſed.

1. *Ulmus fructu membranaceo.* The common Elm.
*The membranaceous-fruited Elm.*

This is a large, tall and ramoſe tree: the bark is rough, and full of cracks on the trunk, but on the young ſhoots ſmooth, and of a pale brown colour, and the under bark is mucilaginous and tough: the leaves are two inches long, nearly as much in breadth, ſerrated round the edges, and pointed at the ends: the flowers appear before the leaves; they are ſmall and purpliſh: the fruit is a large, oval-pointed, membranaceous drupe: the ſeed ſweet to the taſte.

It is common in our hedges. C. Bauhine calls it, Ulmus campeſtris et Theophraſti; Dodonæus, Ulmus. It's inner bark, boiled in water, makes an excellent mucilage, uſed in ſore throats, and in fevers.

The other ſpecies of Elm are, 1. The narrow-leaved Elm. 2. The broad, rough-leaved Elm; 3. and the broad and ſmooth-leaved Elm.

## BOSEA.

THE calyx is a perianthium, compoſed of five hollowed, lanceolated, erect leaves, thinner at the edges than elſewhere; there is no corolla: the ſtamina are five ſubulated filaments, a little longer than the cup; the antheræ are ſimple; the germen is ovato-oblong, and cuſpidated: the ſtyles are two, and patulous: the ſtigmata are ſimple: the fruit is a globoſe, unilocular berry; the ſeed is ſingle and acuminated. This genus comes very near the Celtis and the Ulmus.

Of this there is but one known ſpecies. It is deſcribed by Ludwig, under the name of Yerva Mora. Theſe characters diſtinguiſh it ſufficiently.

## CAESSA.

THE calyx is a perianthium, compoſed of five oblong, hollow leaves. The corolla conſiſts of a ſingle petal; the tube is ſhort, and the mouth expanded: the ſtamina are five ſubulated filaments, placed on the upper part of the tube of the corolla; the antheræ are ſimple: the germen is oval; the ſtyles are two, ſhort and expanded: the ſtigmata are thick; the fruit is a bivalve capſule; the ſeeds ſmall.

There is but one known ſpecies of this genus, which is ſufficiently diſtinguiſhed by theſe characters.

*Claſs the Fifth Order the Second.*

*Diviſion the Third.*

*Pentandria Digynia, with many ſeeds ſucceeding each flower.*

## NAMA.

THE calyx is a permanent perianthium, compoſed of five oblong leaves: the corolla conſiſts of five petals: the ſtamina are five ſhort and ſlender filaments, of a ſubulated form; the antheræ are tumid and large; the germen is of an oval figure: the ſtyles are two; they are ſhort and ſlender: the fruit is a capſule of an oval figure, formed of two valves, and containing only a ſingle cell; the ſeeds are numerous, ſmall, and roundiſh.

Of this genus there is but one known ſpecies, which needs no farther deſcription.

MITREOLA.

## MITREOLA.

THE calyx is a very ſmall, permanent perianthium, formed of one leaf, and divided into five ſegments: the corolla conſiſts of a ſingle, campanulated petal, divided at the extremity into five erect, acute ſegments: the ſtamina are five extreamly ſhort filaments, placed in the tube of the corolla; the antheræ are ſimple. The germen is divided into two parts, and oval: the ſtyles are two; they are erect, and of the length of the ſtamina; the ſtigmata are obtuſe: the fruit is an erect, ſimple capſule, divided into two parts, containing two cells, and of an ovated, acute figure, and ſplits between the lobes: the ſeeds are numerous, ſmall, and roundiſh.

It is an American, deſcribed by Houſton under the name of Mitra.

## HEUCHERA.

THE calyx is a narrow, rounded perianthium, compoſed of a ſingle leaf, divided at the edge into five obtuſe ſegments: the corolla conſiſts of five petals, inſerted into the edge of the cup; they are of the length of the cup, and of an ovato-linear figure: the ſtamina are five erect, ſubulated filaments, of twice the length of the cup; the antheræ are roundiſh: the germen is roundiſh and ſemi-bifid: the ſtyles are two, ſtrait, and of the length of the ſtamina; the ſtigmata are obtuſe. The fruit is an ovato-acuminated capſule, ſemi-bifid, terminating in two reflex points, and containing two cells: the ſeeds are numerous and ſmall.

### *Heuchera foliis palmatis ſinuatis.*
### *The Heuchera, with palmated and ſinuated leaves.*

The root is oblong, whitiſh within, brown on the ſurface, and furniſhed with many fibres; the radical leaves are affixed to long pedicles; they are very large, palmated, ſinuated, and indented round the edges; of a bright green on the upper ſide, but paler underneath. The ſtalk grows but to five or ſix inches high: it has ſometimes no leaves, ſometimes one or two, like the radical ones, but much ſmaller; from the middle to the top of the ſtalk ſtand the flowers; they are of a duſky blackiſh purple, with an admixture of greeniſh, and appear hairy. They ſtand on long pedicles, and form a kind of lax ſpike.

It is a native of America, and of ſome parts of Europe; it grows in damp places. Boerhaave calls it, Mitella Americana flore ſquallide purpureo villoſo; Plukenet, Cortuſa Americana flore purpureo.

## GENTIANA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into five oblong, acute, permanent ſegments: the corolla conſiſts of a ſingle petal, tubulated, and imperforated at the baſe, and at the edge divided into five ſegments, various in figure. The ſtamina are five ſubulated filaments, ſhorter than the corolla; the antheræ are ſimple: the germen is oblong, cylindric, and of the length of the ſtamina; there are no ſtyles, but the ſtigmata are two, and oval. The fruit is an oblong, cylindric, acuminated capſule, ſlightly bifid at the top, formed of two valves, and containing only one cell: the ſeeds are numerous and ſmall; the receptacles are two, and grow to the two valves of the capſule.

This genus comprehends the Gentiana and Centaurium minus of authors. The figure of the fruit is conſtant; the flower varies greatly in the ſeveral ſpecies, both in the number, and figure of it's parts. One ſpecies excludes a fifth, another adds three fifths to the parts; in ſome the neck of the corolla is open, in others it is cloſed up with filaments; in ſome the laciniæ are ciliated, in others the limb is only plicated, in others ſtellated; in ſome campanulated, and in others infundibuliform: when it is ſtellated, there are often little ſegments placed between the others.

1. *Gentiana*

1. *Gentiana floribus lateralibus confertis, pedunculatis, corollis rotatis.* Gentian.

*The Gentiana, with lateral, cluſtered, pedunculated, and rotated flowers.*

This is the ſpecies of Gentian, the root of which is uſed in medicine. The root is of a yellowiſh brown, long, thick, and divided into ſeveral parts toward the bottom: the radical leaves ſtand in cluſters; they are ſix or eight inches long, and more than half their length in breadth, of a pale green, very rigid and nervous, the nerves running longitudinally, broadeſt in the middle, and pointed at the end. The ſtalk is ſmooth and thick; it grows to two or three feet high: the leaves ſtand in pairs at the joints; they are like the radical ones, but ſmaller, ſmooth, gloſſy, and have each either three or five ribs running longitudinally. The flowers ſtand in cluſters, verticillately as it were, ſurrounding the ſtalks; they are moderately large, and of a pale yellow.

The plant is a native of Germany and Sweden. C. Bauhine calls it, Gentiana major lutea; J. Bauhine, Gentiana major hellebori albi folio. It's root is an excellent ſtomachic in tincture or infuſion.

2. *Gentiana foliis linearibus, floribus terminatricibus raris, corollis erectis plicatis.* Calathian Violet.

*The linear-leaved Gentian, with terminatory, plicated flowers.*

The root is oblong, ſlender, yellow, and bitter: the ſtalk is round, ſlender, and grows to fifteen inches, or more, in height: the leaves are often two inches long, very narrow, and placed in pairs on the ſtalks; they are of a pale green, and have each three longitudinal ribs. The flowers ſtand at the top of the ſtalk, and of the branches, when there are any; they are very large, often an inch, or more, in length, and of a beautiful blue colour.

The plant is a native of England, but not common. I found it, two years ſince, in a marſh near Rocheſter. C. Bauhine calls it, Gentiana paluſtris anguſtifolia; others, Pneumonanthe.

3. *Gentiana corollis hypocrateri-formibus, fauce barbatis.* Autumnal dwarf Gentian.

*The Gentiana, with hypocrateri-form flowers, barbated at the mouth.*

The root is oblong, ſlender, and yellowiſh; the radical leaves are an inch long, and more than half an inch broad; they ſtand thirty or forty together in a circular manner: the ſtalk is firm, ſmooth, and a foot high: the leaves ſtand two at a joint: they have no pedicles, and are like the radical ones, but ſhorter, and have each three longitudinal ribs; they terminate in a point. The flowers ſtand on the top of the ſtalk, and on ſhort branches growing from the alæ of all the leaves; they are moderately large, and of a beautiful blue colour.

It is common in dry, hilly places. C. Bauhine calls it, Gentiana autumnalis ramoſa; Rudbeck, Gentianella; Ray, Gentianella autumnalis elatior foliis centaurii minoris.

4. *Gentiana foliis lineari-lanceolatis, caule dichotomo, corollis infundibuliformibus quinquifidis.* Small Centaury.

*The lineari-lanceolate-leaved Gentian, with dichotomous ſtalks, and funnel-ſhaped flowers.*

The root is long, ſlender, oblique, and woody; the radical leaves are an inch long, and not half an inch broad; the ſtalk riſes ſingle, but uſually divaricates afterwards into two, and theſe often into two again. The height of the plant is about ten inches: the leaves ſtand in pairs, and are like thoſe of the root, but narrower: the flowers

ers ſtand at the tops of the ſtalk in cluſters, and are long, narrow, and of a pale red. The whole plant is very bitter to the taſte.

It is common in dry paſtures. C. Bauhine and others calls it, Centaurium minus. It is an excellent ſtomachic in infuſion, and is a common ingredient in bitters.

The other principal ſpecies of Gentian are, 1. The narrow-leaved Gentian, with a blue and yellow flower. 2. The great, purple Gentian. 3. The ſwallow-wort-leaved Gentian. 4. The great-flowered, Alpine Gentian. 5. The little ſpring Gentian. 6. The narrow-leaved, ſpring Gentian. 7. The cruciate-leaved Gentian. 8. The broad, ſhort-flowered Gentian. 9. The Gentian called ſmall Centaury, with very narrow, linear leaves. 10. The ſhort, acute-leaved Gentian. 11. The cluſter-flowered, toad-flax-leaved Gentian. 12. The red, ſpiked-flowered Gentian. 13. The great, red-flowered, ſweet Gentian, of the Cape of Good Hope. 14. The perfoliate, yellow-flowered Gentian. 15. The little, trifoliate, yellow Gentian. 16. The narrow and rigid-leaved, little, yellow Gentian.

## SWERTIA.

THE calyx is a plane, permanent perianthium, formed of one leaf, divided into five lanceolated ſegments. The corolla conſiſts of a ſingle petal: there is no tube; the limb is plane, and divided into five lanceolated ſegments, larger than the cup, and cohering only at their ungues. The nectaria are ten; they are two points at the bottom of every ſegment, depreſſed, and ciliated with fine hairs: the ſtamina are five, erecto-patent, ſubulated filaments, ſhorter than the corolla; the antheræ are incumbent: the germen is of an ovato-oblong figure; the ſtyle is not viſible: the ſtigma is ſimple: the fruit is a cylindric capſule, pointed at each end, formed of two valves, and containing only one cell: the ſeeds are numerous and ſmall. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

### *Claſs the Fifth. Order the Second.*

### *Diviſion the Fourth.*

*Pentandria Digynia, with two naked ſeeds after every flower, and with ſimple umbels.*

## PHYLLIS.

THE calyx is an extreamly minute perianthium, compoſed of two leaves, and fixed on the germen: the corolla conſiſts of five lanceolate, obtuſe petals, turned backwards, and juſt joining at their baſes: the ſtamina are five capillary, flaccid filaments, ſhorter than the corolla: the antheræ are ſimple and oblong: the germen is placed under the receptacle; there is no ſtyle: the ſtigmata are two, pubeſcent, reflex, and ſubulated: the fruit is of a turbinato-oblong, obtuſe, angular figure, compoſed of two parallel ſeeds, broadeſt at top, convex and angular on one ſide, and plain on the other.

This genus comprehends the Beupleuroides of Boerhaave; the Simpla Nobla of Plukenet. The characters are ſufficient, without a farther deſcription.

## PANAX.

THE umbel of the Panax is ſimple, equal, and thick; the involucrum is very ſmall, formed of a number of leaves, ſubulated and permanent. The perianthium of each flower is very ſmall, divided into five ſegments, and permanent: the general corolla is uniform; the peculiar corolla conſiſts of five oblong, crooked, equal petals: the ſtamina are five very ſhort filaments; the antheræ are ſimple; the germen is roundiſh, and placed below the perianthium: the ſtyles are two, and ſmall; the ſtigmata are ſimple: the fruit is a roundiſh berry, having one cell, and is coronated with the cup: the ſeeds are two, and of a kidney-like ſhape.

This genus comprehends the famous Ginſeng, the Araliaſtrum, and Aureliana of authors.

The

The ſimilarity of the names Ginſeng and Ninzin, or Ninſi, and the ſimilar virtues of the two roots, have led people to imagine they were the ſame, but that very erroneouſly; they are not even of the ſame genus. The Ginſeng is a Panax; the Ninzin a Suim, hereafter to be deſcribed in it's place.

*Panax foliis quinis.*
*The five-leaved Panax.* Ginſeng.

The root is two or three inches long, and of the thickneſs of a man's little finger, ſomewhat rugoſe on the ſurface, and uſually divided into two, ſometimes into more, parts at the baſe. It is of a browniſh colour on the ſurface, and yellowiſh within; it's ſmell is aromatic and agreeable; it's taſte acrid, aromatic, and bitteriſh: at the head of the root ſtand a ſeries of nodules, formed by the remains of the ſtalks of the years before, and by theſe the age of the root is diſcovered. The ſtalk is ſingle, ſmooth, of a reddiſh colour, and a foot high. From the top of this there grow three or four oblong pedicles, furrowed longitudinally, half way of their length, and ſtanding horizontally, ſo as to form a kind of umbel. At the extremity of each of theſe ſtand five leaves, unequal in ſize, and growing together, with petioles of an unequal length; they are thin, oblong, of an ovato-acuminated figure, and deeply ſerrated round the edges; they are of a pale yellowiſh-green colour, and full of fine veins: from the top of the main ſtalk, and in the center of the pedicles ſupporting the leaves, there riſes a peduncle naked, ſlender, and five or ſix inches long; at the top of this ſtands a corymboſe umbel, formed of flowers ſtanding on peduncles, very ſlender, and an inch in length; every flower has it's ſeparate peduncle, and they are ſmall, and their petals oblong. The berry, which ſucceeds each of theſe flowers, is ſtriated on the ſurface.

It is a native of China and Tartary; it grows in ſhady places, in foreſts, &c. between thirty-nine and forty-ſeven degrees North; it has lately been diſcovered alſo about the forty-ſeventh degree in North America. Sarraſin calls it, Araliaſtrum quinquefolii folio. The Tartars and Chineſe gather the roots in ſpring and autumn, with great care, and dry them in a particular manner with a great many cautions; when dried, it ſells with them for three times it's weight in ſilver, and is eſteemed an univerſal medicine, a remedy for all diſeaſes; it's moſt favourite quality, however, is that of a provocative to venery, which they imagine it poſſeſſes in an amazing degree. With us it has been ſold at a much greater price than there; and ſuch cheats have been the Chineſe, who ſold it, that, when cut, every root of it has often been found loaded with a long piece of lead, carefully let into it, which has given it three times it's real weight.

## ERYNGIUM.

THE common receptacle is conic, and there are paleæ which ſeparate the ſeſſile floſcules. The involucrum of the receptacle is formed of ſeveral leaves, plane, and exceeding the floſcules in height: the proper perianthium is formed of five leaves, erect, acute, placed upon the germen, and exceeding the corolla in length: the corolla is, in the whole, roundiſh and uniform; the ſingle flower is formed of five oblong petals, with their extremities turned back to their baſe. The ſtamina are five ſtrait, capillary filaments, taller than the corolla: the antheræ are oblong; the germen is hairy, and ſtands under the proper perianthium: the ſtyles are two, filiform, ſtrait, and of the length of the ſtamina; the ſtigmata are ſimple: the pericarpium is an oval fruit, diviſible into two parts; and the ſeeds oblong and cylindric: in ſome the ſeeds are in time freed from the cruſt of the pericarpium, in others not.

1. *Eryngium foliis radicalibus ſubrotundis plicatis ſpinoſis, floribus pedunculatis.*
*The Eryngium, with the radical leaves, roundiſh, plicated, and prickly, and the flowers on peduncles.* Sea Eryngo.

The root is very long, of the thickneſs of a ſmall quill, and diſperſed every way in the earth: the radical leaves ſtand on long pedicles; they are ſix or eight inches long, and

and three or four broad, ſinuated at the edges, but not very deeply, and folded, as it were, very prickly at the edges, and of a pale whitiſh blue green. The ſtalk is round, thick, tough, very much branched, and of a bluiſh-green: the leaves on it are like the radical ones, but ſmall: the flowers ſtand at the tops of the branches, in round cluſters, ſurrounded by prickly leaves; they are ſmall and whitiſh.

It is common on our ſea-coaſts. C. Bauhine calls it, Eryngium maritimum.

2. *Eryngium foliis ſpinoſis laciniatis, caulibus ramoſiſſimis.*
*The prickly, laciniated-leaved Eryngium, with very much branched ſtalks.* Common Eryngo.

The root is a foot long, and as thick as a man's finger; the radical leaves are ſix or eight inches long, and deeply laciniated, even down almoſt to the middle rib, in many places, and divided, as it were, into ſo many lobes; they are ſerrated at the edges, and the denticles all terminate in very ſharp prickles: the ſtalk is ſtriated round, and tough; it grows to two feet high, and ſpreads ſo much into branches every way, that the whole plant frequently aſſumes a globular figure. The leaves ſtand alternately; they reſemble the radical ones, and are of a bluiſh-green colour: the flowers ſtand in round cluſters at the tops of the ſtalks, and are ſmall and white.

It is frequent in corn-fields in moſt part of Europe; but in England we have it only in three or four places, as in Northamptonſhire and Devonſhire. C. Bauhine calls it, Eryngium vulgare; others, Eryngium campeſtre. It's root is a deobſtruent and pectoral; it is candied with ſugar, and dried for uſe in decoctions, &c.

3. *Eryngium foliis radicalibus ovalibus planis crenatis, capitulis pedunculatis.*
*The oval, plane-leaved Eryngium, with pedunculated heads.* Small Eryngo.

The root is very long; the radical leaves are two inches long, an inch broad, rounded at the end, and narrower to the baſe; the ſtalk grows to ſeven inches high, and is very ramoſe: the flowers are ſmall and white.

It is a native of Ruſſia. C. Bauhine calls it, Eryngium planum minus.

The other ſpecies to be mentioned are, 1. The teaſel-headed, Alpine Eryngium. 2. The blue, mountain Eryngium. 3. The dwarf, ſpinoſe, ſinuated Eryngium. 4. The pſyllium-leaved Eryngium. 5. The ſtinking, American Eryngium. 6. The corniculate, Portugal Eryngium. 7. The multifid-leaved, Cretic Eryngium. 8. The little-headed, Cretic Eryngium. 9. The ſtellate Eryngium, with deeply divided, pale green leaves. 10. The tall, broader-leaved, ſtellate-headed Eryngium.

## HYDROCOTYLE.

THE general umbel is compoſed of four ſeſſile flowers, and a ſingle umbel in the center; the partial umbel conſiſts of four ſeſſile floſcules. The general involucrum is compoſed of four leaves, and the partial involucrum of four leaves alſo; there is ſcarce any viſible perianthium: the univerſal corolla is uniform in figure, though not in ſituation; the ſingle corolla is formed of five ovato-acute, patent petals: the ſtamina are five ſubulated filaments, ſhorter than the corolla: the antheræ are very ſmall; the germen is erect, compreſſed, and orbiculated, and ſtands under the proper receptacle: the ſtyles are two, ſubulated and very ſhort; the ſtigmata are ſimple: the fruit is orbicular, erect, and is compoſed of two compreſſed and ſemi-orbicular ſeeds.

1. *Hydrocotyle foliis peltatis orbiculatis undique emarginatis.*
*The orbiculated, peltated, and every way emarginated-leaved Hydrocotyle.* Marſh Pennywort.

The root is oblong, ſlender, and creeping; the ſtalks are procumbent, and take root at every joint, ſending down cluſters of long fibres; they never riſe at all from the

the earth; they are round and jointed; at an inch, or more, diſtance from every joint, there riſe three or four pedicles, of three inches, or more, in height; at the top of each ſtands a ſingle leaf, round and ſinuated, or emarginated all round the edges; it is about an inch in diameter, of a pale green colour, and the pedicle is inſerted into the center of it. From the ſame ſtalks, near the baſe of the pedicles of the leaves, there riſe other pedicles, of half an inch long, which ſuſtain the flowers, theſe are of a pale reddiſh colour, and very ſmall.

The plant is common with us in damp places, and is ſuſpected of hurting ſheep that eat of it, whence it's Engliſh name *White Rot*. J. Bauhine calls it, Cotyledon aquatica.

2. *Hydrocotyle foliis orbiculatis integerrimis, floribus minimis.*
*The orbiculate, whole-leaved Hydrocotyle, with very ſmall flowers.*

The ſtalks creep on the ground, and take root at every joint; they are round, purple, and of two feet in length: the leaves are perfectly round, two inches and a half in diameter, even at the edges, of a deep green, and ſtand on pedicles of about two inches high, which are inſerted into their center. The flowers are ſmaller than in the former ſpecies, and of a ſnow white.

It is frequent in the Savannahs of North America. Plumier calls it, Hydrocotyle folio umbilicato maximo.

The other ſpecies are, 1. The Aſarum-leaved Hydrocotyle, called Aſarina minor. 2. The nymphæa-leaved Hydrocotyle.

## *Claſs the Fifth. Order the Firſt.*

### *Diviſion the Fifth.*

### *Pentandria Digynia, with two naked ſeeds, and with an univerſal and a partial umbel.*

## SANICULA.

THE general umbel is formed of a very few radii, uſually but four; the partial umbel of very numerous and thick-ſet ones. The general involucrum is dimidiated, and placed outwardly; the partial one ſurrounds the whole, and is ſhorter than the floſcules: the perianthium is ſcarce viſible; the general corolla is uniform; the ſingle corolla conſiſts of five compreſſed, inflex, bifid petals: the ſtamina are five ſimple, erect filaments, twice as long as the floſcules: the antheræ are roundiſh; the germen is rough, and placed under the proper receptacle: the ſtyles are two, ſubulated and reflex; the ſtigmata are acute: the fruit is oval and acute, rough and diviſible into two parts: the ſeeds are two, convex and rough on one ſide, and ſmooth and plane on the other.

1. *Sanicula foliis radicalibus ſimplicibus, floſculis omnibus ſeſſilibus.*
*The Sanicula, with the radical leaves ſimple, and all the flowers ſeſſile.* Sanicle.

The root is compoſed of a number of thick fibres, black on the outſide, and white within; the radical leaves ſtand on long pedicles, and are of a roundiſh figure, but ſinuated in five places, and indented all round the edges; they are of a dark green, of a gloſſy ſurface, and thick. The ſtalk is round, ſmooth, and a foot high; it has often but one leaf on it, ſometimes two, and at it's top has a ſmall umbel; the flowers are moderately large and white, or of a pale fleſh colour.

It is common in our woods. C. Bauhine calls it, Sanicula officinarum; J. Bauhine, Sanicula ſive diapenſia. It is eſteemed an excellent vulnerary.

2. *Sanicula foliis ſeptilobatis inequalibus, floſculis maſculis pedunculatis.*
*The Sanicle, with unequal ſeptilobate leaves, and with the male flowers placed on pedicles.*

The root is black, ſhort, and furniſhed with a multitude of fibres: the radical leaves are placed on long, ſhining pedicles; they are an inch, or more, in breadth, of a figure approaching, in general, to roundneſs, but divided into ſeven lobes, by ſo many deep ſinuations, and theſe lobes ſerrated at the edges. The ſtalk is round, of a purpliſh brown, and gloſſy; it divides toward the top into two parts, and theſe again into two others: the leaves ſtand two together; at the diviſions of the ſtalks they are like the radical ones, but divided only into three lobes: the umbels are ſmall, and conſiſt partly of hermaphrodite flowers, partly of ſuch as are only male; the former are ſeſſile, the others have pedicles.

It is a native of Virginia. Ray calls it, Sanicula caule et ramis dichotomis echinis minimis in eodem pediculo; Grovonius and Van Royen, Sanicula floſculis maſculis pedunculatis hermaphroditis ſeſſilibus.

## ASTRANTIA.

THE general umbel is compoſed of a very few rays, uſually only of three; the partial umbel of very numerous ones: the general involucrum is formed of leaves duplicate to the rays; the partial one of about twenty leaves, of a lanceolated figure, patent, equal, coloured, and longer than the umbels: the proper perianthium is divided into five ſegments, acute, erect, and permanent: the univerſal corolla is uniform; the ſingle flower is compoſed of five bifid petals: the ſtamina are five ſimple filaments, of the length of the floſcule; the antheræ are ſimple: the germen is oblong; the ſtyles are two, erect and uniform; the ſtigmata are ſimple and patent: the fruit is oval, obtuſe, coronated, and ſtriated; it is ſeparable into two parts: the ſeeds are two, oval and oblong, and covered with the cruſt of the pericarpium. The marginal flowers of the umbel are only males; the reſt are hermaphrodite.

Of this genus there is only one known ſpecies.

### ASTRANTIA. Black MaſterWort.

The root is ſhort and tuberous, and is furniſhed with a multitude of large fibres, black on the outſide, and white within. The radical leaves are divided uſually into five lobes, which are oblong, broad, pointed at the ends, and ſerrated round the edges, of a dark green on the upper ſide, paler underneath, and placed on long pedicles: the ſtalk is round, ſtriated, and two feet high; the leaves on it ſtand ſingly, and are like the radical ones; the flowers ſtand in roundiſh cluſters at the tops of the ſtalks, and are ſmall, and of a greeniſh white: the ſurrounding leaves of the involucrum are often variegated with whitiſh, greeniſh, and purpliſh.

It is a native of Italy and Germany; we have it in gardens. Lobel calls it, Aſtrantia nigra; C. Bauhine, Helleborus niger ſaniculæ folio major. Moriſon has deſcribed a ſmaller kind, under the name of Aſtrantia minor; and C. Bauhine, under that of Helleborus ſaniculæ folio minor; but, brought into a garden, it grows to the ſame ſize, and is wholly the ſame with the common one. Tournefort has alſo made another ſpecies, from a whiter colour of the flowers. The root is ſaid to be aperient, and good in diſorders of the viſcera; but it is not in uſe at this time.

## BUPLEURUM.

THE general umbel is compoſed of radii, under ten in number; the partial umbel is erecto-patent: there is no general involucrum. The partial involucrum is compoſed of five leaves, much longer than the umbel itſelf; they are of an oval figure, acute and patent: the proper perianthium is ſcarce viſible; the general corolla is uniform; the ſingle flower conſiſts of five inflexo-cordated, ſmall petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh: the germen is placed below the proper receptacle: the ſtyles are two, reflex and ſmall; the ſtigmata are very little: the

the fruit is roundiſh, compreſſed, ſtriated, and divided into two parts: the ſeeds are two, of an oval oblong figure, convex and ſtriated on one ſide, and plane on the other.

The leaves of the plant ſometimes ſtand at the baſe of the general umbel, in ſuch a manner, that it will be eaſy for an incurious obſerver to take them for a general involucrum.

1. *Bupleurum foliis ovatis amplexicaulibus, umbellis majuſculis.* Thorough-wax.

*The oval-leaved, perfoliate Bupleurum, with moderately large umbels.*

The root is oblong, ſlender, whitiſh, and woody: the ſtalk riſes ſingle, and is round, ſmooth, hollow, and two feet, or more, in height: the leaves ſtand ſingly, at conſiderable diſtances; they are of an oval figure, very ſmooth and gloſſy, of a bluiſh-green colour, and ſurround the ſtalk in ſuch a manner, that it ſeems to perforate or grow through the middle of their baſe: toward the top the ſtalk divides into ſeveral ramifications, and at the tops of theſe, and of the branches propagated from them, ſtand moderately large umbels, an inch and a half in diameter at the top. The flowers are yellowiſh and ſmall, the ſeeds large and blackiſh.

The plant is common in the weſt of England, in corn-fields. C. Bauhine calls it, Perfoliata arvenſis.

2. *Bupleurum foliis anguſtiſſimis, umbellis minimis.*

*The Bupleurum, with very narrow leaves, and very ſmall umbels.*

The root is oblong, ſlender, and woody; the radical leaves are ſix inches long, not more than a ſixth of an inch broad, and very much reſemble thoſe of the graſſes: the ſtalk is round, green, branched, ſmooth, jointed, and grows to a foot and a half high; the leaves ſtand two together, at the diviſions of the ſtalks, and are two or three inches long, very narrow, and graſſy, and of a ſtrong green: toward the top the ſtalk divides into ſeveral branches, and theſe, at their tops, have very ſmall umbels, ſcarce diſtinguiſhable as ſuch: the flowers are yellowiſh, and very minute.

It is a native of England; I have found it about Thorndon in Eſſex in abundance. Ray calls it, Bupleurum minimum; C. Bauhine, Bupleurum anguſtiſſimo folio; J. Bauhine, Auricula leporis minima.

The other ſpecies to be mentioned are, 1. The broad, rigid-leaved Bupleurum. 2. The narrow-leaved, ſmall, thick-ſtalked Bupleurum. 3. The long-leaved, perfoliate Bupleurum. 4. The ſmall-flowered, Alpine Bupleurum. 5. The graſſy-leaved, Pyrenæan Bupleurum. 6. The willow-leaved and ſhrubby Bupleurum. 7. The graſſy-leaved, ſhrubby Bupleurum. 8. The long-ſeeded, oriental Bupleurum, with narrow leaves.

## ECHINOPHORA.

THE general umbel is multiple and unequal; the partial one is alſo multiple and unequal: the general involucrum is of a turbinated figure; it is formed of a ſingle leaf, and ſerves as a vagina for the ſeeds.

This is the eſſential character of the genus, and is ſo ſtriking and obvious a one, that no farther deſcription is neceſſary: the characters in general, excepting for this peculiar circumſtance of the general involucrum, agree with thoſe of the tordylium.

## TORDYLIUM.

THE general umbel is unequal and multiple: the partial umbel is alſo unequal, multiple, very ſhort, and plane: the general involucrum is compoſed of narrow leaves, often of the length of the umbel: the partial involucrum is dimidiated, and is longer than the umbellule: the general corolla is difform and radiated: the ſingle flowers of the diſk are compoſed of five equal, inflexo-cordated petals: the ſingle flowers of the radius are like theſe, but that the outer petal is larger than the reſt, and is divided into

into two parts: the ſtamina are five capillary filaments in all: the antheræ are ſimple: the germen in all is roundiſh, and placed under the proper receptacle: the ſtyles are two, and ſmall: the ſtigmata are obtuſe. The fruit is roundiſh, compreſſed, and ſurrounded longitudinally with denticles; it is ſeparable into two parts: the ſeeds are two; they are roundiſh, almoſt plane, but with an elevated, denticulated edge.

1. *Tordylium umbella conferta, foliolis ovato-lanceolatis pinnatifidis.*
*The Tordylium, with cluſtered umbels, and with pinnatifid, ovato-lanceolate leaves.*

Hedge Parſley.

The root is oblong, ſlender, and white; the radical leaves ſtand on long pedicles, and are five or ſix inches long, and formed of a number of lobes, reſembling pinnæ, diſpoſed on the two ſides of a middle rib, which is terminated at the extremity by a lobe of the ſame kind, only longer; they are all ſerrated round the edges, rough to the touch, and of a duſky green colour. The ſtalk is round, ſtriated, hairy, and rough to the touch; the leaves on it are like the radical ones, but ſmaller; it grows to three feet high, and, toward the top, divides into a number of branches, on the tops of which ſtand moderately large umbels of flowers, of a reddiſh colour.

It is common by our way-ſides and in hedges. C. Bauhine calls it, Caucalis ſemine aſpero floſculis rubentibus; others, Caucalis minor flore rubente.

2. *Tordylium involucris umbella longioribus.*
*The Tordylium, with the involucra longer than the umbels.*

The root is oblong, thick, and woody. The radical leaves are large, and compoſed of numbers of oblong and broad pinnæ, ſet on the ſides of the middle ribs, with ſmall lobes at their extremities; they are of a yellowiſh-green colour, and ſmooth ſurface. The ſtalk is round, ſtriated, jointed, and has leaves like the radical ones, but ſmaller, and placed ſingly at every joint, The top of the ſtalk is divided into ſix or eight branches, and, on the tops of theſe, ſtand umbels of a moderate ſize, compoſed of flowers of a white, or pale reddiſh, colour. The ſeeds are large and long.

It is a native of Syria, but we have it in ſome of our gardens. C. Bauhine calls it, Gingidium foliis paſtinachæ latifoliæ; J. Bauhine, Caucalis Syriaca cum maximo ſemine.

3. *Tordylium involucris partialibus longitudine petalorum, foliis ovatis laciniatis.*
*The oval, laciniated-leaved Tordylium, with the partial involucra of the length of the petals.*

Candy Hartwort.

The root is long, ſlender, and white. The radical leaves ſtand on pedicles of four or five inches long; they are compoſed of ſeveral pairs of pinnæ, of an oval figure, deeply ſerrated at the edges, of a pale green colour, and ſomewhat hairy. The ſtalk is round, ſtriated, and hairy; it grows to about fifteen inches high, and, toward the top, divides into ſeveral branches. The leaves ſtand ſingly on the ſtalk, and are like the radical ones, but ſmaller, and ſomewhat more hairy, though not much ſo. The umbels are ſmall, the flowers white, the ſeed not very hairy.

It is a native of Italy, and other parts of Europe. Dodonæus calls it, Seſeli Creticum; C. Bauhine, Seſeli Creticum minus.

The ſeeds are eſteemed a carminative and alexipharmic, but are very little uſed at preſent.

## CAUCALIS.

THE general umbel is unequal, and formed of a few radii, uſually not more than three: the partial umbel is alſo unequal, but it has more radii, the five outer ones being larger than the reſt: the general involucrum is compoſed of as many leaves as there are radii; they are of a lanceolato-acute figure, and have ſhort, oval, lateral membranes: the partial involucrum is compoſed of leaves of the ſame ſhape, longer than

than the radii, and uſually five in number: the general corolla is difform and radiated: the ſingle flowers of the diſk are all males; they are ſmall, and compoſed of five equal, inflexo-cordate petals; thoſe of the radius are all hermaphrodites, and are compoſed of five inflexo-cordate, unequal petals, the exterior one being larger than the reſt, and bifid; they have all five capillary filaments, with ſmall antheræ: the flowers of the radius have the germen oblong, ſcabrous, and placed below the cup: the ſtyles are two, and ſubulated: the ſtigmata are two, patent and obtuſe. The fruit is of an ovato-oblong figure, ſtriated longitudinally, and the ridges are beſet with little ſpines: the ſeeds are two, oblong, convex, and prickly on one ſide, and plane and ſmooth on the other.

1. *Caucalis involucro univerſali pinnatifido, partialibus indiviſis, umbella multifida.*

*The Caucalis, with the univerſal involucrum pinnatifid, the partial ones undivided, and with a multifid umbel.*

The root is white, oblong, ſlender, and of an aromatic taſte, but eſculent. The radical leaves ſtand on long pedicles, and are very finely divided; they reſemble, in ſome meaſure, the leaves of the common carrot. The ſtalk is a foot, or more, high, ſtriated, jointed, and ramoſe, even from the bottom. The leaves ſtand ſingly at the joints, and are like the radical ones; they are ſmaller, however, and yet the ſegments are broader. The umbels ſtand on very long, naked pedicles, and are moderately large; the flowers are larger than in moſt other umbelliferous plants, and white.

It is common among the corn in moſt parts of Europe, C. Bauhine calls it, Caucalis arvenſis echinata magno flore.

2. *Caucalis umbella trifida, umbellulis triſpermis, involucris triphyllis.*

*The Caucalis, with a trifid umbel, triſpermous umbellulæ, and three-leaved involucra.*

The root is ſmall, oblong, and white: the radical leaves are finely divided, but the ſegments ſomewhat broad, ſmooth on the upper ſurface, a little hairy underneath, and placed on ſhort pedicles. The ſtalk is round, ſtriated, ramoſe, and ſmooth: the leaves ſtand ſingly on it, and are like the radical ones, only that the ſegments are broader. The umbels ſtand on naked, very long pedicles: the involucrum is compoſed of three large leaves, with a white edge. The ſeeds are oval, compreſſed, and of the bigneſs of a man's nail, and beſet with a multitude of rigid, purple ſpines.

It is a native of many parts of Europe, and grows principally in corn-fields. C. Bauhine calls it, Caucalis Monſpeliaca echinato magno fructu.

3. *Caucalis umbellulis ſeſſilibus ſimplicibus.*

*The Caucalis, with ſimple, ſeſſile umbels.*

The root is ſmall, oblong, and white: the ſtalks are round, very rough, procumbent, or oblique, and the leaves divided into a number of ſegments, rough, and of a duſky green: the umbels ſtand at the joints, without any pedicles. The flowers are ſingle and white; the ſeeds ſmall, but very rough and hairy.

It is common under hedges, and in corn-fields. C. Bauhine calls it, Caucalis nodoſa echinato ſemine; Rivinus, Caucalis ad alas florens.

The other ſpecies are, 1. The ſmall-flowered, fine-leaved Caucalis. 2. The broad-leaved, red-flowered Caucalis. 3. The dwarf, maritime Caucalis. 4. The great, downy-leaved Caucalis. 5. The ſpignel-leaved Caucalis. 6. The very finely-divided leaved Caucalis, with a large, echinated fruit.

## ARTEDIA.

THE general umbel is multiple, plane, and patent: the partial umbel is ſmall, but ſimilar: the general involucrum is compoſed of about ten leaves; they are of an oblong, oval figure, nearly of the length of the umbel, and have three ſpines, or ſetæ, at their extremities: the partial involucrum is compoſed of two or three leaves,

and turns outward: the leaves are linear, pinnated, and longer than the umbellula: the general corolla is difform and radiated: the ſingle flowers of the diſk are all males; they conſiſt each of five erect, inflexo-cordate petals: the ſingle flowers of the radius are all hermaphrodites; they conſiſt of the ſame number of petals, but in theſe the exterior one is larger than the reſt, and divided into two parts: the ſtamina in all are five capillary filaments: the antheræ are ſimple and roundiſh: the flowers of the radius have the germen ſmall, and placed under the cup: the ſtyles are two, and reflex: the ſtigmata are ſimple. The fruit is roundiſh, compreſſed, diviſible into two parts, and foliacco-ſquammoſe at the edge: the ſeeds are two, oblong, and elegantly ridged at the edges, with round ſquammæ.

Of this genus there is only one known ſpecies.

### ARTEDIA.

The root is ſmall, oblong, and white: the radical leaves are finely divided, and of a dark green colour; they ſtand on moderately long pedicles, and ſomewhat reſemble the lower leaves of dill; they are of a bitter and diſagreeable taſte. The ſtalks are round, ſtriated, and two feet high: the leaves ſtand ſingly on them, and are like the radical ones, only ſmaller. The umbels are ſmall; the flowers white, with a tinge of bluiſh. The ſeeds are large and beautiful, and ſtand very cloſe in the head.

It is a native of the eaſtern parts of the world; Rawwolf found it about Mount Lebanon, and elſewhere; he calls it Gingidium; C. Bauhine, Gingidium folio fœniculi; and Tournefort, Thapſia orientalis anethi folio ſemine eleganter crenato.

## DAUCUS.

THE general umbel is multiple, plane when in flower, but, when in ſeed, concave and connivent: the partial umbel is multiple, and like it: the general involucrum is of the length of the umbel, and is compoſed of ſeveral leaves; theſe are linear and pinnatifid: the partial involucrum is more ſimple, and of the length of the umbellula: the proper perianthium is ſcarce viſible: the general corolla is unequal: the ſingle flowers conſiſt each of five inflexo-cordate petals, the exterior ones larger than the reſt: the ſtamina are five capillary filaments: the antheræ are ſimple: the germen is placed under the proper receptacle, and is ſmall: the ſtyles are two, reflex: the ſtigmata are obtuſe. The fruit is of an oval figure, every way covered with rigid hairs, and is diviſible into two parts: the ſeeds are two, of a ſuboval figure, convex and hairy on one ſide, ſmooth and plane on the other.

Of this genus there is only one known ſpecies.

### DAUCUS. Carrots.

The root is oblong, thick, and of an agreeable taſte: the radical leaves ſtand on long pedicles; they are very finely divided, large, and of a duſky green colour, and hairy on the under ſide. The ſtalk is round, ſtriated, and jointed; it grows to three feet high, and is, toward the top, divided into many branches: the leaves ſtand ſingly at the joints, and are like the radical ones, only ſmaller. The umbels ſtand at the tops of all the branches; they are moderately large, very thick ſet with flowers, and have a purpliſh tinge before they open, but, when opened, they are white. The umbel of the ſeeds is large and hollow; the ſeeds themſelves beautifully armed with pale, whitiſh prickles.

It grows with us by way-ſides very common. Cluſius calls it, Daucus vulgaris; C. Bauhine, Paſtinacha tenuifolia ſeminibus hiſpidis; Van Royen, Linnæus, and Haller, Daucus ſeminibus hiſpidis; but the addition of the two laſt words is unneceſſary, as the having hiſpid ſeeds is a part of the generical character.

The difference culture is able to produce in plants we have a very eminent inſtance of in this: our carrots, the red, the yellow, and the whitiſh kinds, which Tournefort has deſcribed as ſo many ſpecies, all are the ſame plant, all the common wild Daucus, meliorated by culture. It's other accidental varieties have alſo been treated in the ſame way by authors, and the number of ſpecies is thus ſwelled to no leſs than ten, though truly and originally but one and the ſame plant.

## AMMI.

THE general umbel is multiple, conſiſting of fifty radii: the partial umbel is ſhort, and thick ſet with flowers: the general involucrum is compoſed of a number of linear, punctato-acute leaves, ſcarce ſo long as the umbel: the partial involucrum is formed of a number of linear, acute, ſimple leaves, ſhorter than the umbel: the proper perianthium is ſcarce viſible; the general corolla is difform: the ſingle flowers are formed each of five inflexo-cordate petals, unequal in ſize in the radius, but equal in the diſk: the ſtamina are five capillary filaments; the antheræ are roundiſh: the germen ſtands below the receptacle: the ſtyles are two, and reflex; the ſtigmata are obtuſe: there is no pericarpium: the fruit is round, ſmall, ſtriated, and diviſible into two parts; the ſeeds are two, convex and ſtriated on one ſide.

This genus comprehends the Ammi of authors, and the Ammoides of Boerhaave.

1. *Ammi foliis inferioribus pinnatis lanceolatis ſerratis, ſuperioribus multifidis linearibus.*
*The Ammi, with the lower leaves lanceolate and ſerrated, the upper ones multifid and linear.*

Common Biſhop's-Weed.

The root is oblong, ſlender, and whitiſh: the radical leaves are placed on long pedicles, and are divided into a multitude of oblong, broad, crenated, and multifid ſegments: the ſtalk is round, ſtriated, and two or three feet high; the leaves on it ſtand ſingly, and are divided into more numerous, and thoſe much narrower and finer, ſegments, multifid, and of a dark green. The umbels ſtand on the tops of the branches; they are very large, the flowers white.

It is common wild in the vineyards of Spain and Italy; we have it in gardens. C. Bauhine calls it, Ammi majus; Dodonæus, Ammi vulgare; Linnæus, &c. Ammi laciniis foliorum caulis laciniatis.

The ſeeds of this are uſed in the ſhops as ſemina ammeos, but improperly; the next ſpecies is the true officinal kind.

2. *Ammi foliis inferioribus pinnatis linearibus ſerratis, ſuperioribus in ſegmenta anguſtiſſima diviſis.*
*The Ammi, with the lower leaves pinnated, linear, and ſerrated, the upper ones very finely divided.*

True Biſhop's Weed.

The root is ſmall, oblong, and white; hard, but of an agreeable taſte, like that of a parſnep. The radical leaves ſtand on long pedicles; they are large, but the pinnæ are oblong, narrow, linear, and ſerrated all the way round. The ſtalk is round, ſtriated, jointed, and about a foot high; the leaves on it ſtand ſingly, and are finely divided, like thoſe of fennel. The umbels ſtand on the tops of the branches; they are ſmall, and the flowers white. The ſeed is very ſlender, and of a very aromatic ſmell, and acrid taſte.

It is a native of Italy; we have it in our gardens. C. Bauhine calls it, Ammi parvum foliis fœniculi; Boerhaave, Ammoides majus odore origani.

It's ſeeds are uſed in the ſhops as a carminative, and are ingredients in many compoſitions.

3. *Ammi foliis omnibus pinnatis linearibus anguſtioribus.*
*The Ammi, with all the leaves pinnated, linear, and very narrow.*

Narrow-leaved Biſhop's-Weed.

The root is ſmall, oblong ,white, and hard: the radical leaves are narrow, pinnated, and of a dark green; the pinnæ are very narrow, oblong, and deeply ſerrated. The ſtalk is round, ſmooth, branched at the top, and about ſix or eight inches high: the leaves on it ſtand ſingly; they are ſmall, finely divided, and of a duſky green. The umbels are very ſmall; the flowers little and white.

It

It is a native of Spain; it grows only on barren, hilly places. C. Bauhine calls it, Ammoides; Cæſalpinus, Ammi puſillum.

## BUNIUM.

THE general umbel is multiple, but has fewer than twenty radii: the partial umbel is very ſhort, but thick ſet: the general invoiucrum is formed of many leaves, linear and ſhort; the partial involucrum is ſimilar, but of the length of the umbel: the proper perianthium is ſcarce viſible: the general corolla is uniform. The ſingle flowers conſiſt of each five inflexo-cordate petals, equal in ſize: the ſtamina are five ſimple filaments, ſhorter than the flower: the antheræ are ſimple; the germen is oblong, and ſtands below the proper cup: the ſtyles are two, and reflex; the ſtigmata are obtuſe: there is no pericarpium: the fruit is oval, and diviſible into two parts: the ſeeds are two, and oval, convex on one ſide, and plane on the other.

This genus comprehends the Bulbocaſtacum of Tournefort.

1. *Bunium foliis inferioribus pinnatis, pinnis linearilanceolatis.* **Common Earth Nut.**

*The Bunium, with the lower leaves pinnated, the pinnæ of a lineari-lanceolate figure.*

The root is tuberous, of the ſize of a ſmall walnut, brown on the ſurface, and white within; it lies at a conſiderable depth. The radical leaves are pinnated, three inches long, and two and a half broad in the whole; the pinnæ are narrow, oblong, and pointed at the ends. The ſtalk is round, ſmooth, and divided, toward the top, into two or three branches; it's leaves ſtand ſingly, and are much finer than thoſe of the root: the umbels ſtand at the tops of the branches; they are ſmall, and the flowers are ſmall and white.

It is common with us in paſtures, and it's root is eſculent. Authors have divided it into two ſpecies, from it's being ſometimes larger, ſometimes ſmaller; but theſe are only varieties, the plant the ſame; they call it, in theſe two ſtates, Bulbocaſtacum majus, and Bulbacoſtacum minus.

2. *Bunium foliis omnibus pinnatis, pinnis linearibus oblongis, umbellis majuſculis.* **Bulbous Cummin.**

*The Bunium, with all the leaves pinnated, the pinnæ linear and oblong, the umbels large.*

The root is tuberous, of the ſize of a large nutmeg, black on the outſide, white within: the radical leaves ſtand on pedicles of two inches long, reddiſh and ſlender; they are divided into a multitude of oblong and narrow ſegments, of a deep green colour. The ſtalk is round, branched at the top, and about eight inches high; it's leaves ſtand ſingly, and are like the radical ones, but ſmaller. The umbels are moderately large, the flowers white.

It is a native of the mountains in Germany. Tournefort calls it, Bulbocaſtacum minus ſaxatile peucedani folio; Columna, Cyrinicum bulboſum.

The other ſpecies are, 1. The broad-leaved, Alpine Bunium. 2. The narrow and ſhort-ſegmented Bunium.

## CONIUM.

THE general umbel is compoſed of a number of patent radii; the partial umbel is ſimilar: the general involucrum is very ſhort, and compoſed of ſeveral leaves; the partial involucrum is ſimilar: the proper perianthium is ſcarce diſcernible: the general corolla is uniform: the ſingle flowers conſiſt each of five inflexo-cordated ſegments, unequal in ſize: the ſtamina are five ſimple filaments; the antheræ are roundiſh; the germen ſtands below the perianthium: the ſtyles are two, and reflex; the ſtigmata are obtuſe: there is no pericarpium: the fruit is roundiſh, ſtriated, and diviſible into two parts: the ſeeds are two, convex, and nearly hæmiſpherical on one ſide, where they are ſtriated; and plane on the other.

Of this genus there is only one known ſpecies, the Cicuta of authors.

## CONIUM. Hemlock.

The root is large, oblong, and white, often a foot in length, and of the thickneſs of a moderate parſnep, of a fungous ſubſtance, and ſtrong ſmell, but of an agreeable taſte; the radical leaves are very large, a foot and a half long, and as much in diameter at the baſe; they are compoſed of a multitude of ſhort, ſerrated, broad pinnæ, of a dark green colour, and bad ſmell. The ſtalk is round, ſmooth, jointed, and branched at the top; it grows to an inch in diameter at the baſe, and to five feet high; it is uſually variegated in a beautiful manner with purple ſpots, on a dark green ground: the leaves ſtand ſingly, and are like the radical ones, but ſmaller: the umbels ſtand on the tops of the branches; they are very large; the flowers are moderately large, and white.

It is common in our hedges. C. Bauhine calls it, Cicuta major; Lobel, Cicuta; Linnæus and Van Royen, Conium ſeminibus ſtriatis.

It is poiſonous taken internally, but it is uſed in plaiſters, and other external applications. The other plants, erroneouſly deſcribed under the ſame generical name with this by authors, will be found here under the genera of Ligusticum, Cicuta, &c.

## SELINUM.

THE general umbel is multiple, and plano-patent; the partial umbel is ſimilar: the general involucrum is compoſed of a number of lanceolated, linear, reflex leaves; the partial one is ſimilar, patent, and of the length of the corolla: the proper perianthia are ſcarce viſible: the general corolla is uniform: the ſingle flowers conſiſt each of five unequal, inflexo-cordate petals: the ſtamina are five capillary filaments; the antheræ are roundiſh; the germen is placed below the proper receptacle: the ſtyles are two, and reflex; the ſtigmata are ſimple: there is no pericarpium: the fruit is of an elliptico-oblong, compreſſo-plane figure, ſtriated each way in the middle, and ſeparable into two parts: the ſeeds are two, of an oblong, elliptic figure, plane on each ſide, ſtriated in the middle, and edged with membranaceous rims at the ſides.

This genus comprehends the Oreoſelinum and Thyſſelinum of Tournefort, and the Cervaria of Rivinus.

### 1. *Selinum paluſtre leviſſime lacteſcens radice unica.*
### *The marſh Selinum, lightly milky, and with a ſingle root.*

The root is ſingle, oblong, and moderately large, of a browniſh colour, and diſagreeable, acrid taſte: the radical leaves ſtand on long pedicles; they are large, divided into a multitude of oblong, narrow ſegments, and of a dark green colour: the ſtalk is round, jointed, branched at the top, and grows to five feet high; the leaves ſtand ſingly on it, and are like the radical ones, but ſmaller: the umbels are large and ſpreading, the flowers white. The whole plant is lightly lacteſcent, or, on being cut, yields a ſmall quantity of a ſomewhat milky juice.

It is frequent in marſhy places, in moſt parts of Europe. Tournefort calls it, Thyſſelinum paluſtre; C. Bauhine, Seſeli paluſtre lacteſcens.

### 2. *Selinum pinnis ad angulos obtuſos pinnatis, pinnulis inciſis, non ſerratis.*
### *The Selinum, with the pinnæ pinnated at obtuſe angles, the pinnules laciniated, not ſerrated.*

The root is very large, oblong, and furniſhed with fibres at the head; it is often a foot long, and of the thickneſs of a child's wriſt, white, of an acrid taſte, and, when cut, yields a viſcid, milky liquor in plenty: the radical leaves are very large, formed of a multitude of pinnæ, beautifully diſpoſed, and of an oval figure, but pointed at the ends, and laciniated at the edges. The ſtalk is round, jointed, branched at the top, and four feet high; the leaves ſtand alternately on it, and are like the radical ones, but ſmaller: the umbels are large, the flowers white.

It is frequent on the mountains in Germany. Cluſius calls it, Oreoſelinum; C. Bauhine, Apium montanum folio ampliore.

3. *Selinum foliis radicalibus ovatis inequaliter ſerratis, radice multiplici.*
*The oval, ſerrated-leaved Selinum, with a multiple root.*

The root is compoſed of a number of oblong bodies, each half an inch in diameter, and often two feet long, all capillated at their tops, black on the outſide, white within, and, when cut, affording a thick, mucilaginous juice, of a reſinous, but not diſagreeable taſte: the radical leaves are a foot and a half long, and ſtand on long pedicles; they are compoſed of a multitude of pinnæ, of a kind of oval figure, but pointed and jagged round the edges; they are of a bluiſh-green colour, thick, rigid, and gloſſy: the ſtalk grows to five or ſix feet high; it is round, ſtriated, and ramoſe; the leaves ſtand alternately on it, and are like the radical ones: the umbels are large, and the flowers white.

It is frequent about the banks of the Rhine, and in the German vineyards. J. Bauhine calls it, Libanotis dicta cervaria nigra; others, Libanotis nigra; C. Bauhine, Daucus montanus apii folio major.

The other ſpecies are, 1. The yellow-flowered, cicuta-leaved Selinum. 2. The aniſe-leaved, oriental Selinum, called African aniſe, and ſhrubby Ferula. 3. The broad-leaved Selinum, called the Thyſſelinum of Pliny; and, 4. The Siberian Selinum, with ſimply-pinnated, inciſo-angulated leaves.

## ATHAMANTA.

THE general umbel is multiple and patent; the partial umbel is compoſed of fewer radii: the general involucrum is compoſed of many leaves, linear, and ſomewhat ſhorter than the radii; the partial involucrum is linear, and equal to the rays in length: the proper perianthium is ſcarce diſtinguiſhable: the general corolla is uniform: the ſingle flowers conſiſt of five inflexo-cordate petals, ſomewhat unequal: the ſtamina are five capillary filaments, of the length of the corolla: the antheræ are roundiſh; the germen ſtands below the perianthium: the ſtyles are two, and reflex; the ſtigmata are obtuſe: there is no pericarpium: the fruit is compoſed of two oval ſeeds, convex, and ſtriated on one ſide, ſmooth and plane on the other, and is of an oval figure.

1. *Athamanta foliis capillaribus, ſeminibus glabris.*
*The capillary-leaved Athamanta, with ſmooth ſeeds.* Spignel.

The root is oblong, and moderately thick, ſometimes ſingle, ſometimes multiple, brown on the outſide, and white within, and uſually furniſhed at the head with a tuft of hairy matter, formed of the fibres of decayed leaves; the radical leaves are very large; they ſtand on long pedicles, and are divided into a multitude of extremely narrow and oblong ſegments; they ſomewhat reſemble the leaves of fennel, but the ſegments are finer, and not ſo long. The ſtalk is round, ſtriated, and branched toward the top; the leaves ſtand alternately on it, and are like the radical ones, but ſmaller: the umbels are moderately large, the flowers ſmall and whitiſh, the ſeeds large, oblong, ſtriated, and ſmooth.

We have it wild in the north of England in abundance. C. Bauhine calls it, Meum foliis anethi; others, Meum, and Meum officinarum.

The root has been in much eſteem as an alexipharmic, and is an ingredient in ſeveral of the old compoſitions.

2. *Athamanta foliis inferioribus nitidis, umbellis primordialibus ſubſeſſilibus, ſeminibus piloſis.*
*The ſmooth-leaved Athamanta, with the primordial umbels ſubſeſſile, and the ſeeds hairy.*

The root is oblong, thick, and furniſhed with many fibres: the radical leaves are large; they ſtand on long pedicles, and are divided into a multitude of fine, very narrow ſegments, and of a gloſſy ſurface. The ſtalk is round, jointed, ramoſe, and a little

little hairy: the leaves ſtand alternately on it, and are like the radical ones, but ſomewhat hairy: the umbels are large; the flowers ſmall and white; the ſeeds hairy: the primordial umbel is ſubſeſſile, the lateral ones riſe.

It is a native of Italy, Sicily, and ſome parts of Germany; authors have been much puzzled how to arrange it. Haller calls it, Libanotis foliis multifidis planis; Morriſon, Myrrhis Sicula elatior tenuioribus foliis; Tournefort, Chærophyllum Siculum foliis ſophiæ, ſemine villoſo.

3. *Athamanta foliis duplicato-pinnatis, planis, umbella hæmiſpherica, ſeminibus hirſutis.*

*The duplicato-pinnate, plane-leaved Athamanta, with hæmiſpheric umbels, and hairy ſeeds.*

The root is oblong, and very large, often of the thickneſs of a man's wriſt, blackiſh on the outſide, white within, and full of an acrid, gummous juice: the radical leaves are large, and compoſed of a multitude of pinnæ, ſomewhat broad, ſerrated at their edges, and of a pale green colour on the upper ſurface, and greyiſh below. The ſtalk is thick, round, ſtriated, and about three feet high: the leaves ſtand alternately on it, and are like thoſe below, but ſmaller; the umbels are large; the flowers white.

It is frequent on the mountains of Germany. C. Bauhine calls it, Daucus montanus apii folio albicans; J. Bauhine, Ccrvariæ nigræ ſpecies; Rivinus and Haller, Libanotis pinnulis circa coſtam dentatis. Many of the botanical writers have alſo deſcribed it a ſecond time, as a different plant, under the name of Apium petræum albicans.

## PEUCEDANUM.

THE general umbel is multiple, very long and thin; the partial umbel is patent: the general involucrum is ſmall, and formed of ſeveral linear, reflex leaves; the partial involucrum is ſmaller: the proper perianthium is ſmall, and quinquedentated; the general corolla is uniform: the ſingle flowers conſiſt each of five equal, oblong, crooked, and undivided petals: the ſtamina are five capillary filaments; the antheræ are ſimple: the germen is oblong, and is placed under the proper receptacle: the ſtyles are two, and ſmall; the ſtigmata are obtuſe: there is no pericarpium. The fruit is oval, ſurrounded with an ala, ſtriated on both ſides, and ſeparable into two parts: the ſeeds are two, of an oval, oblong, compreſſed figure on one ſide, convex, and marked with three elevated ridges; the edge, ſurrounded with a membranaceous ala, with the top emarginated. The central flowers are often abortive.

1. *Peucedanum foliis quinquies tripartitis lineari-ſubulatis integerrimis.* Hog's Fennel.

*The Peucedanum, with five lineari-ſubulated, not ſerrated ſegments.*

The root is oblong and large, of a blackiſh colour on the outſide, greeniſh within, and full of a ſtrong ſmelling juice; at the top there is generally a tuft of hairy matter, formed of the fibres of decayed leaves: the radical leaves ſtand on moderately long pedicles; they are large, and divided into a multitude of very narrow, ſubulated ſegments, even at the edges, ſmooth, and of a deep green: the ſtalk is round, ſtriated, jointed, and two or three feet high: the leaves ſtand ſingly on it, and are like the radical ones, but ſmaller: the umbels are very large; the flowers ſmall and yellowiſh.

We have it in our fen ditches; I met with it this year in the iſle of Ely plentifully. Lobel calls it, Peucedanum; C. Bauhine, Peucedanum Germanicum.

The other ſpecies are, 1. The ſhorter-leaved Peucedanum; and, 2. The broader-leaved, purple Peucedanum.

## CRITHMUM.

THE general umbel is multiple, and of an hæmiſpheric figure; the partial umbels are ſimilar. The general involucrum is formed of ſeveral reflex, obtuſe, lanceolate leaves; the partial involucrum is lanceolato-linear, and of the length of the umbel: the proper perianthium is inconſiderable; the general corolla is uniform: the ſingle flowers conſiſt each of five oval, inflex, and nearly equal petals: the ſtamina are five ſimple filaments, longer than the corolla; the antheræ are roundiſh; the germen ſtands under the perianthium: the ſtyles are two, and reflex; the ſtigmata are obtuſe: there is no pericarpium. The fruit is oval, compreſſed, and ſeparable into two parts; the ſeeds are two, elliptic, ſtriated on one ſide, and compreſſo-plane.

1. *Crithmum foliis lanceolatis carnoſis.*
*The lanceolate, thick-leaved Crithmum.* Samphire.

The root is oblong, and as thick as a child's arm, and of an agreeably aromatic taſte. The radical leaves are large, and beautifully divided into a number of oblong, narrow, pointed, and thick ſegments, fleſhy, and full of juice: the ſtalk is round, thick, ſtriated, ramoſe, and about fifteen inches high, of a fine ſtrong green, as are alſo the leaves: the umbels are large; the flowers yellow: the whole plant is ſucculent, and of a ſaltiſh taſte.

It is frequent on our ſea-coaſts, and it's leaves make an excellent pickle. C. Bauhine calls it, Crithmum ſive fœniculum maritimum minus; Lobel, Fœniculum marinum ſive empetrum.

2. *Crithmum foliis linearibus, umbellis minoribus.*
*The linear-leaved Crithmum, with ſmaller umbels.*

The root is thick and oblong; the leaves, which riſe from it, are large, of a pale green, and divided into a multitude of long and narrow ſegments: the ſtalk is procumbent in part, and ſtriated, but riſes ſometimes to two or three feet from the procumbent part: the leaves are placed alternately on it, and are like the radical ones, but ſmaller: the umbels are large; the flowers white. The whole plant is ſucculent, and, when wounded, it yields a yellow, reſinous juice.

It is frequent on the coaſts of Italy and Sicily. C. Bauhine calls it, Crithmum maritimum grandius cui ſuccus luteus; Boccone, Crithmum Siculum baticulæ alterum genus.

## CACHRYS.

THE general umbel is multiple; the partial umbels are ſimilar: the general involucrum is formed of ſeveral lineari-lanceolate leaves: the partial ones are ſimilar: the proper perianthium is ſcarce obſervable: the general corolla is uniform; the ſingle flowers conſiſt each of five equal, lanceolated, and ſomewhat erect petals: the ſtamina are five ſimple filaments, of the length of the corolla: the antheræ are ſimple; the germen is turbinated, and ſtands below the perianthium: the ſtyles are two, ſimple, and of the length of the corolla; the ſtigmata are capitated. The fruit is roundiſh, but ſomewhat oval, angulated, obtuſe, very large, and ſeparable into two parts: the ſeeds are two, very large, very convex on one ſide, plane on the other, fungous, and each containing a ſingle ovato-oblong nucleus.

1. *Cachrys foliis multifidis, ſegmentis lineari-lanceolatis.*
*The Cachrys, with multifid, lineari-lanceolate leaves.*

The root is a foot long, and an inch and half in diameter; at top white, and of an acrid taſte: the radical leaves are very large, and divided into multitudes of fine, oblong, narrow, and pointed ſegments: the ſtalk is thick, round, ſtriated, ramoſe, and jointed; it's leaves alternate, and like the radical ones, but ſmaller: the umbels are very

very large; the flowers yellow: the ſeeds are very large and beautiful. It is, in the whole, an extreamly beautiful plant.

It is frequent in Spain, Italy, and ſome other parts of Europe. C. Bauhine calls it, Libanotis Cachryophoros ſemine anguloſo; J. Bauhine, Libanotis Cachryoparos floribus luteis.

2. *Cachrys foliis ovato-oblongis aſperis.*
*The ovato-oblong-leaved, rough Cachrys.*

The root is very large, oblong, white, and well taſted; the radical leaves are irregularly pinnated or formed of a multitude of oblong, oval ones, of a pale green colour, and covered thick with a downy matter: the ſtalk is round, ſtriated, ramoſe, and three feet high: the leaves ſtand alternately, and are like the radical ones, but ſmaller; both they and the ſtalk are rough and hairy: the umbels are very large; the flowers yellowiſh, ſometimes quite white; the ſeeds are very large and beautiful.

It is a native of Ruſſia, Hungary, and Tartary; C. Bauhine calls it, Panaci Heracleo ſimilis Ungarica; others, Panacea Ungarica edulis. The Ruſſians and Tartars, in ſcarcity of corn, make bread of it's roots.

The other ſpecies are, 1. The fennel-leaved Cachrys. 2. The broader peucedanum-leaved Cachrys. 3. The ſmaller-ſeeded peucedanum-leaved Cachrys. 4. The angelica-leaved, aſphodel-rooted Cachrys.

## FERULA.

THE general umbel is multiple and globoſe; the partial umbel is ſimilar: the general involucrum is deciduous; the partial involucrum is ſmall, compoſed of ſeveral narrow leaves: the proper perianthium is very ſmall, and ſtands on the germen: the general corolla is uniform; the ſimple flowers conſiſt each of five oblong, erect, and nearly equal petals: the ſtamina are five filaments, of the length of the corolla; the antheræ are ſimple: the germen is turbinated, and placed under the cup: the ſtyles are two, and reflex; the ſtigmata are obtuſe. The fruit is elliptic, plano-compreſſed, marked on each ſide with five prominent ridges, and ſeparable into two parts: the ſeeds are two, very large, elliptic, plane on each ſide, and marked each with three diſtinct ſtriæ: the peduncle of the primary umbel has ſometimes lateral and oppoſite peduncles growing from it.

1. *Ferula foliis linearibus longiſſimis ſimplicibus.* Fennel Giant.
*The Ferula, with very long, linear, ſimple leaves.*

The root is thick, oblong, and full of a milky juice; the radical leaves are very large, and finely divided; they ſomewhat reſemble thoſe of fennel, but the ſegments are longer and broader; they are of a pale green: the ſtalk is round, thick, and eight or nine feet high: the leaves on it are alternate, and like the radical ones, but ſmaller: the umbels are very large, and almoſt globular; the flowers large and yellow: the ſmell of the whole plant is ſtrong, and the taſte acrid.

It is a native of Italy and France. Dodonæus calls it, Ferula; C. Bauhine, Ferula fœmina Plinii.

2. *Ferula foliis laciniatis, laciniis tridentatis inequalibus.*
*The laciniated-leaved Ferula, with tridentated, unequal ſegments.*

The root is a foot and half long, and two inches in diameter; full of a yellowiſh, milky juice, of an acrid taſte. The radical leaves are very large, gloſſy, and divided into a multitude of ſegments, which are oblong, ſomewhat broad, and three-pointed: the ſtalk is very thick, round, ſtriated, and grows to ſix or ſeven feet high; the leaves are alternate: the umbels very large, globoſe, and of a yellowiſh hue: the ſeeds large, and deeply ſtriated.

It is a native of Italy and Spain. Herman calls it, Ferula Tingitana folio latiſſimo, lucido.

3. *Ferula foliorum alis utrinque acutis, foliolis linearibus integerrimis, umbellibus terminalibus subsessilibus.*
*The linear and undivided-leaved Ferula, with terminatory, subsessile umbels.*

The root is nine inches long, an inch thick, of a brown colour, and full of a milky acrid juice, somewhat yellowish. The radical leaves are large, and divided into a multitude of segments, oblong, narrow, rigid, and glossy: the stalk is round, striated, and ramose: the leaves on it are alternate, finely divided, and glossy: the umbels large and globose, the flowers small and yellow.

It is a native of Istria. Lobel calls it, Panax Asclepium Ferulæ folio. C. Bauhine, Libanotis Ferulæ folio et semine.

The other species are, 1. The broader-leaved Ferula. 2. The very fine-leaved Ferula. 3. The rigid and short-leaved Ferula. 4. The glossy-leaved, Canada Ferula.

## LASERPITIUM.

THE general umbel is very large, and has from twenty to forty radii; the partial umbel is plane, and consists also of numerous radii: the general involucrum is small, and composed of many leaves; the partial involucrum is also small, and formed of many leaves: the proper perianthium is inconsiderable, but quinquedentated: the general corolla is uniform: the single flowers each consist of five nearly equal petals, inflexo-cordated at the ends: the stamina are five setaceous filaments, of the length of the corolla; the antheræ are simple: the germen is roundish, and stands under the proper perianthium: the styles are two, thick and acuminated; the stigmata are obtuse and patent: there is no pericarpium. The fruit is oblong, and separable into two parts, and is ridged, with eight longitudinal membranes: the seeds are two, very large, oblong, and semi-cylindric, plane on one side, but on the other ornamented on the back and edges, with four membranes.

1. *Laserpitium foliolis cordatis incisis.* Small Laserwort.
*The laciniated, cordated-leaved Laserpitium.*

The root is very long, thick, and white, and has usually a tuft of hairy or fibrose matter at it's top, formed of the fibres of decayed leaves. The radical leaves are large; the foliola or pinnæ, which compose them, are of an oval figure, cordated, and cut in round the edges; they are of a bright green above, and a bluish green underneath: the stalk is round, not very thick, striated, rigid, and ramose; the leaves on it stand alternately: the umbels are very broad; the flowers small and white, the seed beautifully edged with membranes.

It is frequent on the mountains of Germany. Rivinius calls it simply, Laserpitium; Morison and Tournefort, Laserpitium foliis latioribus lobatis; C. Bauhine, Libanotis latifolia vulgatior. It's root has been kept in the shops, under the name of white Gentian, and also it's seeds, but both are now disused.

2. *Laserpitium foliolis sessilibus tricuspidatis.* Great Laserwort.
*The Laserpitium, with sessile, tricuspidate foliola.*

The root is very large and long, greyish on the outside, white within, of a fungous substance, and agreeable smell: the radical leaves stand on long pedicles, and are very large, divided and subdivided; the pinnæ or foliola are short, broad, rigid, and terminated by three segments: the stalk is round, striated, and six or seven feet high; it's leaves large, and like the radical ones, placed alternate at the joints, and a little hairy underneath: the umbels are large; the flowers moderately large; the seeds beautifully edged with membranes, and of a yellowish colour.

It is a native of the southern parts of France. C. Bauhine calls it, Laserpitium Gallicum; J. Bauhine, Laserpitium regione Massiliæ alatum.

The

The other ſpecies are, 1. The very long and narrow-leaved Laſerpitium. 2. The ſtinking Laſerpitium, with angulated, brittle leaves. 3. The ſelinum-leaved Laſerpitium. 4. The Laſerpitium, with undivided and even foliola. 5. The daucus-leaved Laſerpitium, with viſcous ſeeds. 6. The broad, lobated-leaved Laſerpitium. 7. The great, roundiſh-leaved, Alpine Laſerpitium. 8. The purple, ſmallage-leaved Laſerpitium. 9. The very long-leaved Laſerpitium.

## HERACLEUM.

THE general umbel is very large, and multiple; the partial umbel plane: the general involucrum is deciduous, and formed of ſeveral leaves; the partial involucra are dimidiated outwardly, and conſiſt of lineari-lanceolate leaves, from three to ſeven in number; the exterior ones longer than the others; the proper perianthium is ſcarce viſible: the general corolla is difform and radiated: the ſingle flowers of the diſk conſiſt each of five equal petals; the ſingle flowers of the radius conſiſt of five petals, unequal in ſize; the exterior ones being larger and more bifid, oblong and uncinated. All the flowers have five ſtamina, longer than the petals; the antheræ are ſmall: the germen is of a ſubovate figure, and ſtands under the cup; the ſtyles are two, erect and ſhort; the ſtigmata ſimple: the fruit is elliptic, compreſſed and emarginated, and ſtriated on each ſide in the middle; the ſeeds are two, oval, compreſſed, and foliaceous.

In ſome of the Heraclea, the flowers of the radius only are females and fertile, thoſe of the diſk males, ſteril or abortient: ſome are throughout hermaphrodites, and the involucra are ſometimes wanting. This genus comprehends the Sphondylium of authors.

1. *Heracleum foliis pinnatis, foliolis quinis, intermediis ſeſſilibus, floribus radiatis.*

*The pinnated-leaved Heracleum, with quinate leaves, and radiated flowers.*

The root is two feet long, and three inches in diameter; the radical leaves are large, and formed of a multitude of ſmall, cordated, and acuminated leaves, placed in a regular and very ſingular quinate order; they are rigid, of a ſtrong green, and a little hairy: the ſtalk is as thick as a child's arm, round, ſtriated, reddiſh toward the bottom; the leaves on it like the radical ones, but ſmaller: the umbels are large and white, the ſeed broad.

It is a native of the Alps, and of Siberia. Dalechamp calls it, Panax Heracleum; C. Bauhine, Panax ſphondylii folio.

2. *Heracleum foliis pinnatifidis.* Cow Parſnep.

*The pinnatifid-leaved Heracleum.*

The root is large and white; the radical leaves very large, divided into a multitude of larger or ſmaller ſegments, of a greyiſh green, and hairy: the ſtalk is ſtriated, thick, and five feet high; the umbels very broad: the flowers white; the ſeeds large and broad.

It is common in our meadows. C. Bauhine calls it, Sphondylium vulgare hirſutum; others ſimply, Sphondylium.

The other ſpecies are, 1. The green-flowered, quinate-leaved, Siberian Heracleum. 2. The ſmooth, broad-leaved, Alpine Heracleum.

## LIGUSTICUM.

THE general umbel is multiple; the partial ones alſo multiple: the general involucrum is unequal, and compoſed of ſeven leaves; the partial involucra have only three or four leaves: the perianthium is ſmall, quinquedentate, and is placed on the germen: the general corolla is uniform: the ſingle flowers conſiſt each of five equal petals, bent at the points, and carinated inwards: the ſtamina are five capillary filaments, ſhorter than the corolla; the antheræ are ſimple: the germen is placed under the

the receptacle: the ſtyles are two, and ſimple; the antheræ are ſimple: the fruit is naked, oblong, angular, ſulcated, and ſeparable into two parts; the ſeeds oblong, ſmooth, ſtriated on one ſide, and plane on the other.

This genus comprehends the Ligusticum ſiler, and Cicutaria of authors.

1. *Liguſticum foliis multiplicibus, foliolis ſuperne inciſis.* Lovage.
*The Liguſticum, with multiple leaves cut in on the upper part.*

The root is thick, long, and woody; the leaves are very large, and formed of a multitude of ſmaller leaves, which are broad, large, and cut in toward the top: the ſtalk is round, ſtriated, ramoſe, and ſix feet high: the umbels are large, the flowers yellow.

It is a native of Germany. C. Bauhine calls it, Liguſticum vulgare. It's ſeed is an aromatic and carminative.

2. *Liguſticum foliis multiplicato-pinnatis, foliolis pinnatim inciſis.* Stinking Hemlock.
*The multiplicato-pinnate-leaved Liguſticum, with the leaves divided pinnately.*

The root is large, long, and white; the leaves very large and compound; the pinnæ divided themſelves in a pinnated manner, jagged at the edges, and of a dark green: the ſtalk is round, ſtriated, ramoſe, and four feet high; the umbels are very broad; the flowers ſmall and white, the ſeeds ſhort.

It is a native of the Alps. C. Bauhine calls it, Cicutaria latifolia fœtidiſſima; Parkinſon, Seſeli Peleponneſiacum.

The other ſpecies are, 1. The great, narrow-leaved, ſtinking Liguſticum. 2. The narrow-leaved Liguſticum, called Siler montanum. 3. The great, fine-divided-leaved Liguſticum. 4. The great, ſmooth, hemlock-leaved Liguſticum. 5. The long and multifid-leaved Liguſticum. 6. The ſmallage-leaved Liguſticum. 7. The ferule-leaved Liguſticum.

## ANGELICA.

THE general umbel is roundiſh and multiple; the partial umbel, while in flower, is perfectly globoſe: the general involucrum is compoſed of either three or five leaves; the partial involucrum is ſmall, and compoſed of eight leaves: the proper perianthium is ſmall, and quinquedentate; the general corolla is uniform: the ſingle flowers conſiſt each of five deciduous, lanceolated, and ſlightly crooked petals: the ſtamina are five ſimple filaments, longer than the corolla; the antheræ are ſimple: the germen ſtands under the perianthium: the ſtyles are two, and reflex; the ſtigmata obtuſe. The fruit is naked, roundiſh, angular, and ſeparable into two parts: the ſeeds are two, of an oval figure, plane on one ſide, and ſurrounded with a rim; convex on the other, with three longitudinal ridges.

1. *Angelica foliorum impari lobato.* Angelica.
*The Angelica, with the odd leaf lobated.*

The root is brown, oblong, an inch or two thick, fragrant and acrid. The leaves are very large, compoſed of pinnated foliola, of an oblong, oval figure, dentated at the edge, and the odd leaf at the end of the pinna lobated: the ſtalk is round, ſtriated, as thick as a child's arm: the umbels are very large, and of a globoſe figure: the flowers very ſmall and greeniſh.

It is wild with us in ſome places, but is alſo very common in our gardens. C. Bauhine calls it, Angelica ſativa. It's root is a cardiac, alexipharmic, ſudorific, and carminative, and is much uſed in the ſhops.

The other ſpecies are, 1. The lucid-leaved, American Angelica, called, by Tournefort, American Maſterwort. 2. The great, narrow, ſerrated-leaved Angelica. 3. The great, narrow-leaved, water Angelica. 4. The yellow-flowered, Canada Angelica. 5. The

5. The little, umbelled Angelica. 6. The ſmallage-leaved Angelica. 7. The Columbine-leaved Angelica.

## SIUM.

THE general umbel is of an uncertain figure; the partial umbels are patent and plane: the general involucrum is compoſed of many leaves, reflex and ſhorter than the umbels: the leaves are lanceolate: the partial involucrum is ſmall, and formed of ſeveral linear leaves; the proper perianthium is very ſmall: the general corolla is uniform; the ſingle flowers are compoſed each of five equal, inflex petals: the ſtamina are five ſimple filaments; the antheræ are ſimple: the germen is ſmall, and ſtands under the perianthium: the ſtyles are two, and reflex; the ſtigmata are obtuſe. The fruit is naked, of an oval or roundiſh figure, ſmall, ſtriated, and ſeparable into two parts: the ſeeds are two, roundiſh, ſtriated, and convex on one ſide, plane on the other.

1. *Sium foliis pinnatis, umbella terminatrice.* Water Parſnep.
*The Sium, with pinnated leaves, and terminatory umbels.*

The roots are fibrous; the leaves are ſimply pinnated, or compoſed of only two ſeries of foliola, arranged along a middle rib, with an odd one at the end; they are oblong, oval, and ſerrated at the edges: the ſtalk is thick, jointed, and ſtriated; the umbels are large; the flowers ſmall and white; the ſeeds ſhort.

The plant is common in ditches with us. C. Bauhine calls it, Sium majus latifolium; others, Paſtinaca aquatica.

2. *Sium foliis pinnatis, floralibus ternatis.* Skirret.
*The pinnated-leaved Sium, with the floral ones ternate.*

The root is compoſed of a number of oblong, thick, tender, brittle tuberoſities, of a whitiſh colour, and agreeable taſte. The leaves are pinnated; the pinnæ oval or oblong, pointed at the ends, and ſerrated deeply round the edges: the ſtalk is round, ſtriated, ramoſe, and two feet high; the leaves on it like the radical ones, but ſmaller, of a dark green, and more pointed at the ends: the umbels are ſmall; the flowers white, and of a very ſweet ſmell.

It is a native of the Eaſt Indies, but common in our gardens; the roots are eaten. C. Bauhine calls it, Siſarum Germanicum; Dalechamp, Siſarum majus.

3. *Sium foliis integris pinnatis, et trilobatis, ſoboliferum.* Nin-
*The ſoboliferous Sium, with entire, pinnated, and trilobated leaves.* zin.

The root is oblong, and of the thickneſs of a man's little finger; whitiſh, ſoft, and ſurrounded on the ſurface by many ſlight, circular furrows, of an agreeable ſmell, and ſweet taſte, with ſomething aromatic and bitter. It's length is uſually about three inches, and toward the bottom it is often divided into two parts, which the Chineſe ſuppoſe to reſemble the legs of a man, as the upper part, which is ſingle, the body; 'tis hence that they call the plant Nindſin, which ſignifies like a man. As the plant grows up, there are often two or three more of theſe roots, produced by the ſides of the firſt, and they all become ſomewhat larger. The upper parts of them all are furniſhed alſo with numbers of tubercles, ſome of which are to become mere roots, ſome are to give riſe to leaves and ſtalks.

The ſtalk grows to two feet high; it is round, thick, ſtriated deeply, and has round prominent joints, at about an inch and half diſtance; from theſe joints ariſe ſo many branches, and the ſtalk itſelf is alſo ramoſe at the top: the leaves ſtand alternately, one at every joint: their pedicles are an inch and half long; they embrace the ſtalk at their bottom, and are hollowed half the way, and ſtriated all the reſt: the leaves are of very different ſize and figure, according to the ſtate of the plant. The firſt leaves that appear are ſimple, roundiſh, cordated at the baſe, and ſerrated round the edges, and about an inch long. As the plant grows up, they become pinnated, and are compoſed of three or four pair of pinnæ, moderately large, of an ovato-acuminated figure, and ſerrated round the edges. Finally, as the plant grows taller, thoſe on the upper part of the ſtalk are trilobate, and the pinnæ ſmaller, ſcarce exceeding the ſize of one's

nail. They are all of a bright green, and ſmooth: the umbels are about two inches broad, the flowers ſmall and white; the ſeeds are like thoſe of aniſe in ſhape and ſize, but reddiſh, and bifid; and beſide the ſeeds there are produced, in the divarications of the upper branches, a kind of ſoft tubercles, of a turbinated figure, and of the bigneſs of a pea, which planted in the earth, or naturally falling on it, produce new plants. The roots are gathered in the beginning of winter, and prepared by macerating ſome days in a decoction of rice, and then imbibing the ſteam of the ſame decoction before drying; they are by this means rendered almoſt tranſparent.

The plant is a native of China and Tartary, probably alſo of ſome parts of North America, as the Ginſeng alſo is. The Chineſe call it, Niſji, Nindſin, and Dſin; the Tartars, Soſai; Kœmpfer calls it, Siſarum montanum coræenſe radice non tuberoſa. It is eſteemed, all over the Eaſt, a powerful cordial, and a provocative to venery, and is given in almoſt all diſeaſes; they uſe it in the ſame caſes with the Ginſeng, but the other is preferred greatly to it.

The other ſpecies of Sium are, 1. The ſerrated-leaved, water Sium. 2. The greateſt, broad-leaved Sium. 3. The creeping Sium. 4. The Sium flowering at the joints, with ſeſſile umbels. 5. The aromatic Sium, or Amomum of the ſhops.

## BUBON.

THE general umbel is compoſed of about ten radii, the middle ones ſhorter than the reſt; the partial umbel has from fifteen to twenty radii: the general involucrum is compoſed of five equal, lanceolated, acuminated leaves, much longer than the umbel, and permanent: the partial involucrum is compoſed of a larger number of the like leaves, of the length of the umbel: the proper perianthium is permanent, very ſmall, and quinquedentate; the general corolla is uniform: the ſingle flowers conſiſt each of five oblong petals, of a lanceolated figure, and inflex: the ſtamina are five ſimple filaments, of the length of the corolla; the antheræ are ſimple: the germen is oval, and ſtands under the receptacle; the ſtyles are two, ſetaceous, permanent, nearly of the length of the corollula, and reflexo-patent: the ſtigmata are obtuſe; the fruit is naked, oval, ſtriated, hairy, coronated, and ſeparable into two parts: the ſeeds are two, oval, plane on one ſide, and on the other convex, ſtriated, and hairy.

*Bubon foliolis rhomboideo-ovatis inciſis, umbellis numeroſiſſimis.*

*The Bubon, with rhomboideo-oval, ſerrated foliola, and very numerous umbels.*

Macedonian Parſley.

The root is oblong, white, and as thick as a man's finger; the leaves are compoſed of a number of pinnæ, which are large, ſomewhat like thoſe of ſmallage, ſerrated round the edges, ſmooth, and of a dark green. The ſtalk is round, ſtriated, ramoſe, and two feet high, hairy, and but moderately thick; the umbels are ſmall, very numerous, and white.

It is a native of Macedonia; we have it in gardens. C. Bauhine calls it, Apium Macedonicum; others, Petroſelinum Macedonicum. It's ſeeds are carminative, and are ingredients in many compoſitions.

## CUMINUM.

THE general umbel, and the partial ones alſo, are frequently quadripartite. The general involucrum is compoſed of four leaves, longer than the umbel; they are ſometimes intire, ſometimes trifid; the partial involucrum is ſimilar: the proper perianthium is very ſmall; the general corolla is uniform: the ſingle flowers conſiſt each of five inflexo-emarginated, and ſomewhat unequal petals: the ſtamina are five ſimple filaments; the antheræ are ſimple: the germen is oval, larger than the flower, and ſtands under it's cup: the ſtyles are two, and very ſmall; the ſtigmata are ſimple: the fruit is naked, of an oval figure, and ſtriated: the ſeeds are two, of an oval figure, convex and ſtriated on one ſide, ſmooth and plane on the other.

Of this genus there is only one known ſpecies.

### CUMINUM. Cummin.

The root is oblong, ſlender, white, and of a ſweetiſh taſte; the leavesa re ſmall, and divided into a multitude of fine oblong, narrow ſegments, of a duſky green colour, and ſmooth: the ſtalk is round, ſtriated, ramoſe, and about a foot high; the umbels are moderately large; the flowers ſmall and white; the ſeeds oblong and ſtriated.

It is cultivated in the iſland of Malta. C. Bauhine calls it, Cyminum ſemine longiore. The ſeeds of it are ſometimes hairy, whence ſome have attempted to make another ſpecies, under the name of Cyminum hirſuto ſemine, though they agree, that all other parts are perfectly alike in both. Some alſo have deſcribed another ſpecies, under the name of Cuminum dulce, not knowing that Cuminum dulce is the name by which the Malteſe call aniſe. The ſeeds of Cummin are carminative, but very nauſeous.

## SISON.

THE general umbel conſiſts of fewer than ſix radii, and theſe unequal; the partial umbel has leſs than ten radii, and thoſe alſo unequal. The general involucrum is compoſed of four leaves, and unequal; the partial involucrum is ſimilar: the perianthium is very ſmall; the general corolla is uniform; the partial corolla is formed of five equal, lanceolated, inflex petals. The ſtamina are five capillary filaments, of the length of the corolla; the antheræ are ſimple: the germen is oval, and ſtands under the cup: the ſtyles are two, and reflex; the ſtigmata are obtuſe: the fruit is naked, oval, ſtriated, and ſeparable into two parts: the ſeeds are two, oval, convex, and ſtriated on one ſide, plane and ſmooth on the other.

1. *Siſon foliis pinnatis, umbellis pendulis.* Corn Parſley.
*The Siſon, with pinnated leaves, and pendulous umbels.*

The root is ſmall oblong, white, and fibrated: the leaves are beautifully pinnated; they conſiſt of ſix or eight pair of oval, acuminated pinnæ, finely ſerrated round the edges, and terminated by an odd one: the ſtalks are ſlender, numerous, round, ſtriated, very ramoſe, often procumbent, or oblique. The umbels are ſmall, and in general pendulous; the flowers very ſmall and white.

It is frequent in our corn-fields. Ray calls it, Selinum ſii foliis; Tournefort, Sium arvenſe.

2. *Siſon foliolis ſubcapillaribus.* True Biſhop's Weed.
*The Siſon, with ſubcapillary leaves.*

The root is ſmall, oblong, whitiſh, and ſweet to the taſte: the leaves are moderately large, and divided into many ſegments, which are long, narrow, and almoſt capillary; they reſemble the leaves of fennel: the ſtalk is round, ſtriated, ramoſe, a foot and half high, and the umbels are ſmall; the flowers are moderately large and white.

It is a native of Italy; but we have it in our gardens. C. Bauhine calls it, Ammi parvum foliis fœniculi.

The ſeeds of this plant are the true Semina Ammeos of the ſhops, uſed as a carminative and aperient.

## OENANTHE.

THE general umbel is compoſed of a few radii, the partial umbel of a great number: the general involucrum has many leaves; the partial involucrum is ſmall, and compoſed alſo of ſeveral leaves: the perianthium is moderately large, permanent, and quinquedentated: the general corolla is difform, and radiated: the ſingle flowers of the diſk are hermaphrodites; they conſiſt of five inflexo-cordated, and nearly equal, petals: the ſingle flowers of the radius are hermaphrodites, and conſiſt of

of five very large, unequal, inflexo-bifid petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh; the germen is placed under the cup: the ſtyles are two; they are ſubulated, and permanent: the ſtigmata are obtuſe: the fruit is naked, ſuboval, coronated, and ſeparable into two parts: the ſeeds are two, ſuboval, convex, and ſtriated on one ſide, plane on the other, and dentated at the top.

1. *OEnanthe foliis caulinis inflato-fiſtuloſis teretibus.* Common Dropwort.
*The OEnanthe, with the leaves on the ſtalk rounded and hollow.*

The root is compoſed of a number of oval tuberoſities, affixed to the ends of white and thick fibres: the radical leaves are large, and divided into a number of fine ſegments; thoſe on the ſtalk are cylindric, hollow, and terminate in a few narrow diviſions: the ſtalk is round, hollow, ſtriated, and ramoſe; it grows to two feet high: the umbels are ſmall, the flowers large and white.

The plant is common with us in wet places. C. Bauhine calls it, OEnanthe aquatica.

2. *OEnanthe foliis omnibus multifidis obtuſis ſubæqualibus.* Hemlock Dropwort.
*The OEnanthe, with all the leaves multifid, obtuſe, and nearly equal.*

The root is compoſed of a number of tuberous bodies, oblong, thick, and full of a yellowiſh, acrid juice: the leaves are large, of a pale green colour, and formed of a multitude of large, broad, and indented pinnæ. The ſtalk grows to four or five feet high, and is thick, ſtriated, and ramoſe: the umbels are very large; the flowers are white.

It is common about waters, with us. Ray calls it, OEnanthe cicutæ facie; C. Bauhine, OEnanthe cherophylli foliis. It is a terrible poiſon; many have periſhed by inadvertently eating it.

The other ſpecies are, 1. The thick, apium-leaved OEnanthe. 2. The narrow-ſegmented OEnanthe. 3. The rue-leaved OEnanthe. 4. The little, water OEnanthe. 5. The Portugal OEnanthe, with large, roundiſh ſeeds.

*Claſs the Fifth. Order the Second.*

*Diviſion the Sixth.*

*Pentandria Digynia, with two naked ſeeds, and only partial involucra.*

## PHELLANDRIUM.

THE general umbel is multiple; the partial one is ſimilar: there is no general involucrum; the partial one conſiſts of ſeven acute leaves, of the length of the umbellule: the perianthium is ſmall, permanent, and quinquedentated: the general corolla is nearly uniform; the ſingle flowers are unequal; they are compoſed each of five acuminated, cordato-inflex petals: the ſtamina are five capillary filaments, longer than the corolla: the antheræ are roundiſh: the germen ſtands under the perianthium: the ſtyles are two, ſubulated, erect, and permanent: the ſtigmata are obtuſe: the fruit is naked, ſmooth, and coronated with the perianthium and piſtils; it is ſeparable into two parts: the ſeeds are two, oval and ſmooth.

Of this genus there is only one known ſpecies.

PHELLANDRIUM. Water Hemlock.

The root is oblong, thick, white, and fibrated. The ſtalk is very thick, an inch and a half, or more, in diameter, ſtriated, hollow, jointed, and ramoſe: the leaves are ſix inches long, and near as much broad, ſometimes larger, and are finely divided into narrow ſegments: the umbels are ſmall, the flowers white, but the antheræ reddiſh.

It is common in waters. Lobel calls it, Cicutaria paluſtris; C. Bauhine, Cicutaria paluſtris tenuifolia.

## CICUTA.

THE general umbel is roundiſh, and compoſed of numerous radii, equal in length: the partial umbels are roundiſh, and compoſed alſo of numerous, equal, ſetaceous radii: the partial involucrum is formed of a number of ſhort, ſetaceous leaves: the perianthium is very ſmall: the general corolla is uniform: the ſingle flowers conſiſt each of five nearly equal, oval, inflex, and ſmall petals: the ſtamina are five capillary filaments, longer than the corolla: the antheræ are ſimple; the germen ſtands under the cup; the ſtyles are two, filiform, longer than the corolla, and permanent: the ſtigmata are capitated: the fruit is naked, roundiſh, ſtriated, and ſeparable into two parts: the ſeeds are two, oval, convex, ſtriated on one ſide, and plane on the other.

Of this genus there is but one known ſpecies.

### CICUTA. Long-leaved Water Hemlock.

The root is oblong, as thick as a man's thumb, and fibrated: the leaves ſtand on long pedicles, and are divided into a number of oblong, narrow, and ſerrated ſegments: the ſtalk is round, ſtriated, ramoſe, red at the bottom, and two or three feet high: the umbels are large, the flowers white.

It grows by waters with us, but happily is not common. Geſner calls it, Cicuta aquatica; Dodonæus, Sium alterum; Rivinus, Cicutaria. It is a terrible poiſon: Rivinus ſays cattle eat it unhurt, but Linnæus gives an inſtance of oxen killed by it.

## ETHUSA.

THE general umbel is patent; the interior radii are gradually ſhorter, the middle ones ſhorteſt of all: the partial umbels are ſmall and patent: the partial involucra are dimidiated, placed exteriorly, and compoſed of either three or five leaves, which are very long, linear, and pendulous: the perianthium is very ſmall; the general corolla is uniform: the ſingle flowers conſiſt each of five unequal, inflexo-cordate petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh: the germen ſtands under the cup: the ſtyles are two, and reflex: the ſtigmata are obtuſe: the fruit is naked, of a roundiſh, oval figure, and ſeparable into two parts: the ſeeds are two, roundiſh, ſtriated, and thence a third part plane.

Of this genus alſo there is only one known ſpecies. It is called, Cynapium and Cicuta fatua, by authors.

### ETHUSA. Fools Parſley.

The root is oblong, white, and ſlender: the leaves are large, and formed of a multitude of pinnæ; the foliola are ſmall, oval, pointed, and ſerrated; the whole leaf much reſembles that of hemlock, but that the ſegments are narrower. The ſtalk is ſlender, round, ſtriated, ramoſe, and three feet high: the umbels are moderately large; the flowers white, and the ſeeds very large: the ſtalk is not ſpotted, like that of hemlock, but is often duſty.

It is common in gardens, and other cultivated places. C. Bauhine calls it, Cicutaria minor petroſelino ſimilis.

## CORIANDRUM.

THE univerſal umbel has but few radii, the partial has ſeveral: the partial involucrum is compoſed of three linear leaves, placed outwardly, and the perianthium is quinquedentated: the general corolla is difform and radiated: the ſingle flowers of the diſk are hermaphrodites, and compoſed of five equal, inflexo-cordated petals: the ſingle flowers of the radius are hermaphrodite, and compoſed of five unequal, inflexo-cordate petals; the exterior one being very large, divided into two parts, and the lateral ones neareſt it having each one large, lateral ſegment: the ſtamina are five ſimple filaments; the antheræ are roundiſh; the germen ſtands under the cup: the ſtyles are two, and ſmall: the ſtigmata of the females are capitated: the fruit is naked, exactly

globoſe, and ſeparable into two parts: the ſeeds are two, hæmiſpheric and concave: the flowers of the diſk are often abortive.

*Coriandrum fructibus globoſis.* Coriander.

The root is oblong, ſlender, and white: the leaves are of two kinds; the radical ones are compoſed of broad, crenated pinnæ; thoſe on the ſtalk are divided into fine oblong and narrow ſegments. The ſtalk is round, ſtriated, ſlender, and two feet high, and ramoſe: the umbels are moderately large; the flowers reddiſh, ſometimes quite white.

It is a native of Germany, where it grows in corn-fields and by road-ſides; it is ſown in many places for the ſeeds. C. Bauhine calls it, Coriandrum majus. It's ſeeds are the Coriander ſeed of the ſhops, and are a pleaſant carminative.

Authors mention two other ſpecies of Coriander, a larger and a ſmaller, with teſticulated ſeeds, but they appear to be no more than accidental varieties of this common kind.

## SCANDIX.

THE general umbel is long, but compoſed of only a few radii; the partial ones have more rays: the partial involucrum is formed of five leaves, of the length of the umbellule: the perianthium is ſcarce viſible; the general corolla is ſlightly difform: the flowers in the diſk are hermaphrodites; thoſe in the radius females; each conſiſts of five petals, of a cordato-inflex figure; the inner ones ſmaller, the outer one larger: the ſtamina are five capillary filaments; the antheræ are roundiſh: the germen is oblong; the ſtyles are two; they are ſubulated, erect, of the length of the ſmalleſt petals, and permanent: the ſtigmata are obtuſe: the fruit is naked, long, ſubulated, and ſeparable into two parts: the ſeeds are two, ſubulated, convex, and ſulcated on one ſide, and plane on the other: the flowers of the diſk are generally abortive.

This genus comprehends the Scandix, Cerefolium, Odorata, and ſome of the ſpecies of Myrrhis, of authors.

In the Scandix the ſeeds are filiform, and have a kernel included in their baſe. In the Cerefolium the ſeeds are ovato-ſubulated and ſtriated, the involucrum green and permanent, and the flowers all hermaphrodites. In the Odorata the ſeeds are angulated, the involucrum deciduous, the flowers of the diſk male, and thoſe of the radius hermaphrodite.

1. *Scandix ſeminibus roſtro longiſſimo.* Shepherds Needle.
*The Scandix, with very long, roſtrated ſeeds.*

The root is oblong, ſlender, fibrated, and ſweet to the taſte. The leaves are ſmall, and divided into a multitude of narrow, oblong ſegments; they ſtand on long pedicles. The ſtalks are round, firm, ſtriated, ramoſe, and about eight inches high. The flowers are ſmall and white; the fruit very long, and reſembling the beak of the cranes bills.

It is common in our corn-fields. C. Bauhine calls it, Scandix ſemine roſtrato; others, Pecten Veneris.

2. *Scandix ſeminibus hiſpidis.* Rough-ſeeded, Wild Chervil.
*The rough-ſeeded Scandix.*

The root is ſmall, oblong, and white. The leaves are pinnated and compoſite; the pinnæ are ſhort, broad, crenated, and hairy. The ſtalk is round, ſlender, ramoſe, and two feet high; it has a few thin, weak ſpines, or hairs, on it. The umbels are ſmall, the flowers white.

It is common with us under hedges. Rays calls it, Myrrhis ſylveſtris ſeminibus aſperis; Rivinus, Caucalis foliis cerefolii.

3. *Scandix*

3. *Scandix seminibus nitidis ovato-subulatis* Chervil.
*The Scandix, with smooth, ovato-subulated seeds.*

The root is white, oblong, slender, and fibrated. The leaves resemble those of parsley, but that the pinnæ are smaller, and more divided. The stalk rises to four feet high; it is round, striated, hollow, and jointed at considerable distances. The umbels are large, the flowers small and white.

It is wild in many parts of Europe; with us it is cultivated for sallads. C. Bauhine calls it, Chærefolium sativum; Rivinus, simply, Cærefolium.

The other species are, 1. The great Cretic Scandix. 2. The very fine-leaved Scandix. 3. The long and smooth-seeded, wild Scandix. 4. The yellow-flowered, fine-leaved Scandix. 5. The fennel-leaved, rough-seeded Scandix. 6. The broad-leaved, reddish-flowered, rough Scandix. 7. The trifoliate, Canada Scandix.

## CHÆROPHYLLUM.

THE general umbel is patent; the partial ones have nearly the same number of radii: their involucra are formed of hollow, lanceolated, reflex leaves, of the length of the umbellules, and from five to ten in number: the perianthium is scarce observable: the general corolla is nearly uniform: the single flowers consist of each five inflexo-cordate petals, of which the exterior are somewhat the larger: the stamina five simple filaments, of the length of the umbellule: the antheræ are roundish; the germen stands below the cup; the styles are two, and reflex; the stigmata are obtuse: the fruit is naked, ovato-oblong, acuminated, and separable into two parts: the seeds are two, oblong, attenuated at top, convex on one side, and plane on the other.

1. *Chærophyllum seminibus lævibus nitidis, petiolis ramiferis simplicibus.* Wild
*The Chærophyllum, with smooth, nitid seeds, and the ramiferous petioli simple.* Cicely.

The root is long, thick, and white: the leaves are large, and composed of a multitude of oblong, pointed, serrated pinnæ, of a pale green colour, a little hairy, and soft to the touch. The stalk grows to four feet high; it is thick, hollow, striated, and ramose. The umbels are large; the flowers small and white, the seeds are long, smooth, and black, when ripe.

It is common under hedges, Ray calls it, Myrrhis sylvestris seminibus lævibus; others, Myrrhis sylvestris.

2. *Chærophyllum caule maculato, geniculis tumidis.* Wild
*The spotted-stalked Chærophyllum, with tumid joints.* Chervil.

The root is long, white, and woody. The leaves are large, and stand on long pedicles; they are composed of a number of large, broad, and serrated pinnules, of a pale green colour, and hairy. The stalk rises to three feet high; it is hairy, and spotted with red, and tumid at the joints. The umbels are large, the flowers little and white.

It is frequent in most parts of Europe. C. Bauhine calls it, Chærophyllum sylvestre; Rivinus, Myrrhis.

## SESELI.

THE general umbel is uncertain in figure; the partial umbels are very short, multiple, and almost round; their involucrum is composed of several leaves, of the length of the umbellule, narrow, and pointed: the perianthium is scarce observable: the general corolla is nearly uniform: the single flowers are composed each of five inflexo-cordate, and slightly unequal, petals: the stamina are five subulated filaments: the antheræ are simple: the germen stands under the receptacle: the styles are two, and reflex: the stigmata are obtuse: the fruit is naked, oval, small, striated, and separable into

into two parts: the ſeeds are two, oval, convex, and ſtriated on one ſide, and plane on the other.

1. *Seſeli foliis brevibus, ſegmentis brevibus linearibus.* Dutch Saxifrage.
*The ſhort-leaved Seſeli, with ſhort, linear ſegments.*

The root is oblong, ſlender, and yellowiſh, or white. The leaves are compoſed of a multitude of ſhort, narrow, linear ſegments; the top of the root is coronated with a tuft of hairy matter, from the fibres of decayed leaves. The ſtalk is ſlender, and ſcarce erect, ſtriated, a foot high, and furniſhed with a few leaves, finely divided, but ſmall. The umbels are moderately large, the flowers ſmall, ſometimes yellowiſh, often white.

It is common in Germany and Holland. Moriſon calls it, Saxifraga montana minor multifido folio; C. Bauhine, Daucus montanus multifido folio.

2. *Seſeli foliis longioribus, ſegmentis longiuſculis anguſtiſſimis.*
*The longer-leaved Seſeli, with very narrow, long ſegments.*

The root is long, ſlender, capillated at the top, black on the ſurface, and white within. The leaves are long, and divided into a multitude of long, and very narrow, ſegments, and are of a pale green colour. The ſtalk is round, ſlender, ſtriated, a foot and a half high, and ramoſe. The umbels are ſmall, the flowers white.

It is frequent in moſt parts of Europe. C. Bauhine calls it, Thapſia fœniculi folio.

The other ſpecies are, 1. The ſhort-leaved Seſeli, called broad-leaved Meum. 2. The long, glaucous-leaved Seſeli, called Mountain Saxifrage. 3. The large-leaved, yellow-flowered Seſeli.

## IMPERATORIA.

THE general umbel is plane and multiple; the partial umbels are unequal: the partial involucra are of the length of the umbellule, and formed of ſeveral long, narrow leaves: the perianthium is ſcarce obſervable: the general corolla is uniform: the ſingle flowers are compoſed each of five inflexo-cordate, and nearly equal, petals: the ſtamina are five capillary filaments: the antheræ are roundiſh: the germen is placed under the perianthium: the ſtyles are two, and reflex: the ſtigmata are obtuſe: the fruit is naked, round, compreſſed, and ſeparable into two parts: the ſeeds are two, oval, furrowed with two lines on one ſide, and ſurrounded with a broad margin.

Of this genus there is only one known ſpecies.

IMPERATORIA. Masterwort.

The root is thick, oblong, oblique, and rough on the ſurface, furniſhed with large fibres, and of an acrid, aromatic taſte, brown on the outſide, white within. The leaves are ternate, or three joined together, as ſo many lobes, on each pedicle, and each of them is again divided into three ſegments; they are large, of a deep green colour, and ſerrated at the edges. The ſtalk is round, ſtriated, jointed, ramoſe, and two or three feet high. The umbels are moderately large; the flowers white.

It is a native of the Apennines, and of ſeveral parts of Germany; we have it in gardens. Camerarius calls it, Magiſtrantia; C. Bauhine, Imperatoria major; Dodonæus, Aſtruthion.

It's root is a cordial and ſudorific, and is an ingredient in many compoſitions.

*Claſs the Fifth Order the Second.*

*Diviſion the Seventh.*

*Pentandria Digynia, with two naked ſeeds, and with no involucra.*

## THAPSIA.

THE general umbel is large, formed of about twenty radii, all nearly of equal length; the partial umbels conſiſt of as many nearly equal rays; neither have any involucra: the perianthium is ſcarce obſervable: the general corolla is uniform; the ſingle flowers conſiſt each of five crooked, lanceolated petals: the ſtamina are five capillary filaments, of the length of the corolla: the antheræ are ſimple; the germen is oblong, and placed under the cup: the ſtyles are two, and ſhort: the ſtigmata are obtuſe: the fruit is naked, oblong, ſurrounded longitudinally with a membrane, and ſeparable into two parts: the ſeeds are two, large, oblong, convex, pointed at each end, and have on each ſide a plane margin, large, and undivided, which is emarginated at top and bottom.

1. *Thapſia foliis lanuginoſis in ſegmenta linearia diviſis, umbellis latis.*
*The Thapſia, with lanuginous leaves, divided into linear ſegments, with broad umbels.*

The root is long and thick, coronated with a tuft of fibrous matter at top, blackiſh on the outſide, white within, and full of an acrid, milky juice. The leaves are large, divided into long, and ſomewhat broad, linear ſegments, pointed at the extremities, and of a pale green colour, covered with a light, downy matter. The ſtalk is round, ſtriated, jointed, and hollow: the umbels are very large, and the flowers yellow.

It is a native of Spain and Portugal. C. Bauhine calls it, Thapſia latifolia villoſa; others, Thapſia flore luteo, folio lato.

2. *Thapſia foliis glutinoſis, umbellis ſubgloboſis.*
*The glutinous-leaved Thapſia, with ſubgloboſe umbels.*

The root is oblong, very thick, brittle, blackiſh on the ſurface, white within, and full of a white, acrid juice. The leaves are large, and divided into ſomewhat broad ſegments, and are continually covered with a glutinous, liquid matter. The ſtalk riſes to two feet high; it is round, ſtriated, ſlender, and ramoſe: the umbels are moderately large, and arched, ſo that they approach to a globoſe figure: the flowers are yellow.

It is a native of Spain. C. Bauhine calls it, Thapſia foliis Libanotidis fœtidiſſima.

The other ſpecies are, 1. The ſmallage-leaved, ſtinking Thapſia. 2. The narrow-leaved Thapſia, called Panax aſclepium. 3. The Thapſia with very broad ſeeds. 4. The white-flowered, lucid-leaved Thapſia.

The roots of all the ſpecies are violently purgative, and unſafe medicines.

## PASTINACA.

THE general umbel is multiple and plane; the partial umbel is multiple; neither has any involucrum: the general corolla is uniform: each flower conſiſts of five lanceolated, crooked petals: the perianthium is ſcarce obſervable: the ſtamina are five capillary filaments: the antheræ are roundiſh: the germen ſtands under the cup: the ſtyles are two, and reflex: the ſtigmata are obtuſe: the fruit is naked, compreſſo-plane, elliptic, and ſeparable into two parts: the ſeeds are two, elliptic, plane on each ſide, and ſurrounded with a margin.

1. *Paſtinaca foliis ſimpliciter pinnatis.*
*The Paſtinaca, with ſimply pinnated leaves.* **Parſnep.**

The root is oblong, white, and fibrated, of a ſweet taſte, and eſculent. The leaves are large, and pinnated; they conſiſt of a double ſeries of large, oval, acuminated pinnæ, ſerrated round the edges, ſet on a rib, terminated by an odd pinna at the end. The ſtalk is round, ſtriated, ramoſe, and jointed; it grows to three feet high. The umbels are large, the flowers yellow.

It is common about our road-ſides. C. Bauhine calls it, Paſtinaca ſylveſtris latifolia. Authors deſcribe the garden Parſnep as a different ſpecies, but it is evidently the ſame plant, altered only by culture.

2. *Paſtinaca foliis duplicato-pinnatis.*
*The duplicato-pinnate leaved Paſtinaca.* **Illyrian Coſtus.**

The root is long and thick, covered with a browniſh rind, and white within. The leaves are compoſed of a multitude of large, broad pinnæ; they reſemble the leaves of common Parſnep in ſhape, but they are larger, ſerrated at the edges, and hairy; the whole leaf is ſometimes two feet long, and a foot and a half broad. The ſtalk is very thick, round, ſtriated, hairy, and ramoſe; it grows to ſix feet high. The umbels are very large; the flowers yellow; the ſeeds large and flat.

It is a native of Italy and Germany. C. Bauhine calls it, Panax paſtinachæ folio; Tabernomontanus, Coſtum Illyricum.

It's root is greatly recommended in diſorders of the viſcera, but it is not uſed with us at preſent.

## SMYRNIUM.

THE general umbel is unequal, growing larger as it ſtands; the partial umbels are erect; neither of them has any involucra: the general corolla is uniform: the perianthium is ſcarce viſible: the ſingle flowers conſiſt each of five lanceolated, lightly inflex petals: the ſtamina are five ſimple filaments, of the length of the corolla: the antheræ are ſimple: the germen ſtands below the cup: the ſtyles are two, and ſimple: the ſtigmata are two, and capitated: the fruit is naked, ſubgloboſe, ſtriated, and ſeparable into two parts: the ſeeds are two, bicaudated, convex on one ſide, with three ſtriæ, and plane on the other.

1. *Smyrnium foliis omnibus compoſitis.*
*The Smyrnium. with all the leaves compoſite.* **Alexanders.**

The root is very large, oblong, white, fibrated, and acrid. The leaves are compoſed of a number of pinnæ: the foliola are ſhort, roundiſh, large, and crenated at the edges; they ſomewhat reſemble the leaves of ſmallage, but that they are greatly larger. The ſtalk is round, ſtriated, ramoſe, and jointed very thick, and ſix or ſeven feet high. The flowers are of a greeniſh-white colour, the umbels very large.

It is a native of England, but is not common with us. C. Bauhine calls it, Hipposelinum, ſive Smyrnium.

2. *Smyrnium foliis caulinis ſimplicibus amplexicaulibus.*
*The Smyrnium, with the leaves on the ſtalk ſimple, and ſurrounding it.* **Candy Alexanders.**

The root is large, oblong, and white; the leaves are very large, and beautiful; they ſtand on long pedicles, and are themſelves a foot long, and three fourths of that in diameter, of a beautiful green colour, and compoſed of a number of ſhort, broad pinnules. The ſtalk is round, ſtriated, jointed, ramoſe, and grows to four feet, or more, in height. The leaves on the ſtalk are ſimple, roundiſh, ſmall, not more than an inch in diameter, of a yellowiſh green colour, and the ſtalk grows through them. The umbels are large, the flowers ſmall, and of a whitiſh-yellow.

It is a native of Crete, and of ſome of the ſouthern parts of Italy. C. Bauhine calls it, Smyrnium peregrinum rotundo folio.

## ANETHUM.

THE general umbel is multiple; the partial one is alſo multiple, and neither has any involucrum: the perianthium is ſcarce viſible; the general corolla is uniform: the ſingle flowers conſiſt each of five lanceolated, crooked petals; the ſtamina are five capillary filaments; the antheræ are roundiſh: the germen ſtands under the cup; the ſtyles are two and ſmall; the ſtigmata obtuſe: the fruit is naked, ſuboval, compreſſed, and ſeparable into two parts: the ſeeds are two, ſuboval, convex, ſtriated on one ſide, and plane on the other.

This genus comprehends the Anethum and Fœniculum of authors. In the Anethum of authors, the ſeeds are ſurrounded with a membranaceous edge; in the Fœniculum, they have not this ſingular character. This is too little, however, to form a generical diſtinction, when all elſe agree.

1. *Anethum fructu compreſſo.* **Dill.**
*The compreſſed-fruited Anethum.*

The root is long, ſlender, annual, and white; the leaves are divided into a multitude of fine, long, narrow ſegments, like thoſe of fennel, but of a bluiſh-green colour, and leſs ſtrong ſmell. The ſtalk is round, ſtriated, ramoſe, and firm; it grows to four feet high: the umbels are moderately large; the flowers yellow.

It is a native of Spain; we cultivate it in gardens. C. Bauhine calls it, Anethum hortenſe; Dodonæus, Anethum.

2. *Anethum fructu ovato.* **Sweet Fennel.**
*Oval-fruited Anethum.*

The root is long, large, white, and fibrated; the leaves are divided into a multitude of long, narrow ſegments, and are of a dark green colour, and ſtrong ſmell: the ſtalk is round, thick, green, and four feet high: the umbels are large; the flowers yellow; the ſeeds broad, oval, of a pale colour, and ſweet taſte.

It is a native of the South of France. C. Bauhine and others call it, Fœniculum dulce. It's ſeeds are uſed as carminatives in the ſhops.

The other ſpecies of Anethum are, 1. The common, long-ſeeded Anethum, called Fennel. 2. The white-flowered, roundiſh-ſeeded Anethum. 3. The tortuous-ſtalked Anethum. 4. The tall, long-leaved Anethum. 5. The little, long-umbelled Anethum. 6. The roundiſh, umbelled, tall Anethum. 7. The little procumbent Anethum.

## CARUM.

THE general umbel is long, and has ten radii often unequal; the partial umbels are cluſtered; neither has any involucra: the general corolla is uniform; the perianthia are ſcarce perceptible: the ſingle flowers conſiſt each of five, obtuſe, inflexo-cordate, and nearly equal petals: the ſtamina are five capillary filaments, of the length of the corolla; the antheræ are roundiſh, and very ſmall; the germen ſtands under the cup: the ſtyles are two, and very ſmall; the ſtigmata are ſimple: the fruit is naked, ovato-oblong, ſtriated, and ſeparable into two parts: the ſeeds are two, ovato-oblong, convex on one ſide, and ſtriated, ſmooth, and plane on the other.

Of this genus there is but one known ſpecies.

CARUM. **Caraway.**

The root is a foot long, as thick as a man's thumb, white, acrid, and fibrated. The leaves are placed on long pedicles, hollowed at the baſe; they are large, and compoſed of a multitude of pinnules placed at diſtances, ſmooth and ſerrated at the edges: the ſtalk is ſlender, but rigid, round, ſtriated, and ſomewhat ramoſe; it grows to a foot,

or

or more, in height: the umbels are moderately large; the flowers are white, with a caſt of reddiſh.

It is a native of many of the northern parts of Europe, and is cultivated in many other places, for the ſeed. C. Bauhine calls it, Cuminum pratenſe carvi officinarum; others ſimply, Carvi. The ſeeds are warm, carminative, and excellent in flatus's, and other complaints riſing from wind.

## PIMPINELLA.

THE general umbel is compoſed of ſeveral radii, and the partial ones of yet more numerous; neither has any involucra. The general corolla is uniform; the perianthium is ſcarce viſible: the flowers conſiſt each of five inflexo-cordate and nearly equal petals: the ſtamina are five ſimple filaments, longer than the corolla: the antheræ are roundiſh; the germen ſtands under the cup: the ſtyles are two, and very ſhort; the ſtigmata are obtuſe; the fruit is naked, of an oblong, oval figure, and ſeparable into two parts: the ſeeds are two, oblong, narrower toward the point, convex, ſtriated on one ſide, and plane on the other.

1. *Pimpinella foliis ſubrotundis.* Burnet Saxifrage.
*The roundiſh-leaved Pimpinella.*

The root is white, very long, but ſlender, and acrid. The radical leaves are ſimply pinnated; they conſiſt of two ſeries of pinnæ, of a roundiſh figure, and duſky green colour, crenated round the edges, and arranged on the two ſides of a pedicle, terminated by a ſingle pinna. The ſtalk is ſlender, round, ſtriated, very ramoſe, and two feet high: the leaves on it are few, and thoſe divided into five long ſegments: the flowers are white; the umbels moderately large.

It is common in dry paſtures. C. Bauhine calls it, Pimpinella Saxifraga major altera; Tournefort, Tragoſelinum alterum majus. What the ſame authors and others deſcribe alſo, as another ſpecies, under the name of Pimpinella Saxifraga minor, and Tragoſelinum minus, is only a variety of this. The root is uſed as a diuretic and aperient, and is an ingredient in ſome compoſitions.

2. *Pimpinella foliis petiolatis ovatis.* Great Burnet Saxifrage.
*The Pimpinella, with oval leaves on pedicles.*

The root is oblong, white, thick, and acrid. The leaves are ſimply pinnated; each conſiſts of a double row of oblong, oval, leſſer leaves, ſerrated round the edges, and affixed, by moderately long pedicles, to a middle rib terminated by a ſingle one. The ſtalk is round, hollow, ſtriated, and three feet high: the umbels are large; the flowers white.

It is wild in England in many places. C. Bauhine calls it, Saxifraga major umbella candida.

## ANISUM.

THE general umbel is thin and plano-patent; the partial ones are ſimilar; neither has any involucra: the perianthia are ſcarce obſervable: the general corolla is uniform; the ſingle flowers conſiſt each of five oval, inflex petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh; the germen ſtands under the cup: the ſtyles are two, and reflex; the ſtigmata are obtuſe: the fruit is naked, of a roundiſh figure, ſtriated, and ſeparable into two parts: the ſeeds are two, roundiſh, convex, ſtriated on one ſide, and plane on the other.

1. *Aniſum foliis radicalibus ſimplicibus.* Aniſe.
*Aniſum, with the radical leaves ſimple.*

The root is oblong, ſlender, and white; the radical leaves ſtand on long pedicles, and are ſimple, ſmall, roundiſh, foliola, crenated at the extremities, ſmooth, of a pale green, and of a ſtrong ſmell: the ſtalk is round, hairy, ſtriated, ramoſe, and ſo weak,

weak, that it ſcarce is able to ſuppport itſelf erect; the leaves on it are narrower, and more deeply cut in all the edges: the umbels are very large; the flowers white.

It is a native of Egypt and Syria, and is ſown in Malta for the ſeed. C. Bauhine calls it, Aniſum herbariis; the Malteſe call it, Sweet Cummin. The ſeeds are an excellent carminative.

2. *Aniſum foliis radicalibus pinnatis.* Foreign Parſley.
*The Aniſe, with the radical leaves pinnated.*

The root is oblong, ſingle, white, and acrid; the leaves are moderately large and pinnated; they ſtand on long pedicles, and the pinnæ are ſmooth, rounded, or oval, and themſelves alſo ſupported on long pedicles: the ſtalk is round, firm, ſlender, ramoſe, and ſtriated, two feet high, and reddiſh at the bottom; the leaves on it are compoſed of longer, narrower, and more ſerrated pinnæ than the radical ones; the umbels hang down, before the flowers are ready to open, but then they become erect; the flowers are ſmall and white.

It is a native of Germany. C. Bauhine calls it, Apium peregrinum foliis ſubrotundis; Cluſius, Selinum peregrinum.

## APIUM.

THE general umbel is compoſed of a great many rays; the partial umbel of fewer; they have neither of them any involucra. The perianthium is ſcarce viſible: the general corolla is uniform: the ſingle flowers conſiſt each of five roundiſh, inflex, equal petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh: the germen ſtands under the cup; the ſtyles are two, and reflex; the ſtigmata are obtuſe. The fruit is naked, oval, ſtriated, and diviſible into two parts: the ſeeds are two, oval, ſtriated on one ſide, and plane on the other.

1. *Apium foliis caulinis linearibus.* Parſley.
*The Apium, with the leaves on the ſtalk linear.*

The root is oblong, large, and white. The radical leaves are placed on long pedicles; they are formed of moderately large, broad, and indented pinnæ, of a bright green, and ſmooth: the ſtalk is ſtriated, round, ramoſe, and jointed; it's leaves are greatly different from thoſe of the root, they are narrow and linear; the umbels are ſmall; the flowers white, and very ſmall.

It is a native of Italy and Spain; it is in all our gardens. C. Bauhine calls it, Apium hortenſe petroſelinum vulgo.

2. *Apium foliis caulinis cuneiformibus.* Small-age.
*The Apium, with the leaves of the ſtalk cuneiform.*

The root is long, thick, white, and fibrated: the radical leaves ſtand on pedicles of four or five inches long, hollowed, ſtriated, and reddiſh; they are compoſed of a number of pinnæ, broad, large, divided each into three principal ſegments, and ſerrated round the edges: the ſtalk is round, thick, deeply ſtriated, and hollow; the leaves on it ſtand on ſhort pedicles, and are cuneiform; at the top of the branches ſtand ſmall umbels; the flowers are ſmall and white.

It is common in our ditches. C. Bauhine calls it, Apium paluſtre; others, Eleoſelinum and Paludopium. This plant, by culture, becomes what we call Celeri, the bleached ſtalks of which are eaten at our tables.

## ÆGOPODIUM.

THE general umbel is multiple and convex; the partial umbels are multiple and plane; neither has any involucra: the proper perianthium is ſcarce obſervable: the general corolla is uniform; the ſingle flowers conſiſt each of five oval, concave, and nearly equal petals: the ſtamina are five ſimple filaments; the antheræ are roundiſh: the germen ſtands under the cup; the ſtyles are two, ſimple, erect,

and of the length of the corollula; the ſtigmata are capitated: the fruit is naked, ovato-oblong, ſtriated, and ſeparable into two parts: the ſeeds are two, ovato-oblong, ſtriated, convex on one ſide, and plane on the other.

*Ægopodium foliis caulinis, ſummis ternatis.* Gout-
*The Ægopodium, with the upper leaves ternated.* Weed.

The root is ſmall and creeping; the radical leaves reſemble thoſe of angelica; they are compoſed of a number of oblong and broad pinnæ, of a pale green colour, ſerrated about the edges, and ſtanding at diſtances from one another. The ſtalk is round, ſtriated, hollow, and ramoſe: the upper leaves on it conſiſt only of three lobes, or oblong leaves, like thoſe forming the radical ones: the umbels are moderately large, and convex; the flowers ſmall and white.

It is very common under hedges, and about gardens. C. Bauhine calls it, Angelica ſylveſtris minor, ſive Erratica.

*Claſs the Fifth. Order the Third.*

## PENTANDRIA TRIGYNIA.

*Plants which have in every flower five ſtamina and three ſtyles.*

### RHUS.

THE calyx is a perianthium, divided into five ſegments, acute, erect, and permanent: the corolla conſiſts of five petals, ovato-acuminate, erecto-patent, and twice as large as the cup; the ſtamina are five ſcarce viſible filaments; the antheræ are ſmall, and ſhorter than the corolla; the germen is roundiſh, and of the ſize of the corolla; the ſtyles are ſcarce viſible; the ſtigmata are three, cordated, and ſmall; the fruit is a berry, coriaceous, roundiſh, and having only one cell; the ſeed is ſingle, roundiſh, and oſſeous.

This genus comprehends the Rhus and Toxicodendron of Tournefort, and the Vernix of Kœmpfer. The Rhus has a hairy berry, and the kernel is globoſe. The Toxicodendron has the berry ſmooth, but ſtriated, and the nucleus compreſſed and ſulcated. The Vernix has the fructifications on different plants of the ſame ſpecies.

1. *Rhus foliis pinnatis ſerratis.* Sumach.
*The pinnated, ſerrated-leaved Rhus.*

This is a ſhrub growing to eight feet high. The root is large and brachiated; the trunk thick, and covered with a brown bark; the young ſhoots are covered with a paler bark, and are hairy. The leaves are compoſed of two ſeries, or rows, of pinnæ, placed along a middle rib, terminated at the extremity by an odd one; they are oblong, narrow, lightly ſerrated round the edges, and of a dark green colour. The ſpikes ſtand at the tops of the branches, long, thick, hoary, or tomentoſe, and the flowers are ſmall and purple.

It is a native of Braſil; we have it in our gardens. C. Bauhine calls it, Rhus anguſtifolium, and Sumach anguſtifolium. It's flowers and ſeeds are aſtringent.

2. *Rhus foliis ternatis, foliolis obverſe-cordatis ſeſſilibus.* Trifoliate
*The ternate-leaved Rhus, with obverſely-cordated, ſeſſile leaves.* Sumach.

The root is woody and fibrated. The ſhrub riſes to three, four, or five feet high: the trunk is covered with a brown bark; the young ſhoots are brittle, and covered with a paler bark. The leaves ſtand three on a ſtalk; they are placed each on a pedicle of an inch long, and are of a roundiſh, but ſomewhat cordated, figure, at the top, narrower at the bottom, of a deep ſhining green colour, and ſmooth. The flowers are very ſmall, and of a yellowiſh colour.

It is a native of Æthiopia. Commelin calls it, Vitex trifolia minor Indica rotundifolia; Plukenet, Rhus Africanum trifoliatum minus glabrum.

3. *Rhus*

3. *Rhus foliis ternatis, foliolis petiolatis, ovatis, acutis, pubeſcentibus, integris ſinuatiſque.* Poiſon-Wood.
*The ternate-leaved Rhus, with oval, acute, hoary, petiolated leaves, entire and ſinuated.*

This is a ſhrub of ſcarce more than three feet high. The root is woody and brachiated. The leaves ſtand three together, ſupported on long, ſmooth pedicles, and each has alſo it's own pedicle; they are of an oblong figure, broad, approaching to oval; but pointed at the end, uſually ſinuated, more or leſs deeply, but ſometimes entire, and always more or leſs hoary. The flowers are ſmall and whitiſh.

It is a native of Virginia. Tournefort calls it, Toxicodendron triphyllum folio ſinuato pubeſcente.

4. *Rhus foliis pinnatis integerrimis.* The Verniſh Tree.
*The Rhus, with pinnated, undivided leaves.*

The root is woody, brachiated and fibrated: the bark is a deep brown and ſmooth, on the younger branches often reddiſh. The leaves are compoſed of a double ſeries of oblong, pointed pinnæ, of a duſky green colour, ſmooth, and even at the edges. The flower is ſmall, the fruit rhomboidal: the whole abounds with a milky, poiſonous juice.

It is a native of China, and alſo of Virginia; we have it in our gardens. Plukenet calls it, Arbor Americana alatis foliis ſucco lacteo venenato; Kœmpfer calls it, Sitz vel Sitzdſin; verniſh is the produce of it.

The other ſpecies are, 1. The elm-leaved Rhus. 2. The broader-leaved Rhus. 3. The narrower-leaved Rhus, ſmooth on both ſides. 4. The ſmooth, trifoliate Rhus, or Toxicodendron.

## COTINUS.

THE calyx is a ſhort perianthium, divided into five oval, obtuſe ſegments: the corolla conſiſts of five oval petals, ſcarce any larger than the cup: the ſtamina are five very minute filaments: the antheræ are ſmall; the germen is triquetrous; the ſtyles are three, and ſmall; the ſtigmata are obtuſe: the fruit is an oval berry, with only one cell; the ſeed is ſingle, and triangular.

Of this genus there is only one known ſpecies. Linnæus, in his late works, refers it to the Rhus, but it is ſufficiently diſtinct.

### COTINUS.

This riſes to a ſmall tree. It's root is woody, brachiated, and fibrated: the trunk is covered with a brown bark. The leaves are roundiſh, or oval, and ſtand ſingly on long pedicles; they are an inch and a half long, and of a pale green colour; their pedicles are red, and, toward the end of ſummer, the leaves become red too. The tops of the branches ſuſtain a kind of tufts, formed of an infinite number of hairy, or cirrated, long, complex filaments, together forming a tuft of three or four inches in diameter, and of a purpliſh colour; the flowers ſtand in this, and are ſmall, and of a yellowiſh-green colour, the ſeeds reddiſh.

It is a native of Italy. J. Bauhine calls it, Cotinus, ſive Coccygria; C. Bauhine, Cocconilea, ſive Coccigrya.

## CASSINE.

THE flowers form a decompound umbel: the perianthium is very ſmall, thick at the baſe, divided into five parts, obtuſe and permanent: the corolla is formed of a ſingle petal, divided into five ſuboval, obtuſe, patent ſegments, larger than the cup: the ſtamina are five ſubulated, patent filaments, ſhorter than the corolla: the antheræ are ſimple; the germen is conic; there is no ſtyle; the ſtigmata are three, reflex and obtuſe: the fruit is a roundiſh berry, with three cells; the ſeeds are ſingle and oval. Linnæus has, of late, joined the maurocenia to this genus; they are nearly allied, but have diſtinction enough to keep them properly ſeparate. Dillenius makes this ſhrub a ſpecies of phyllerea.

MAUROCENIA.

## MAUROCENIA.

THE perianthium is ſmall, formed of one leaf, divided into five ſegments, and permanent: the corolla is formed of a ſingle petal, divided into five oval, patent ſegments: the ſtamina are five erect, ſubulated filaments, longer than the corolla: the antheræ are ſimple; the germen is conic; the ſtyles are not diſcernible: the ſtigmata are three, and gibbous: the fruit is an oval berry, umbilicated with the ſtigmata: the ſeeds are three, oblong, and ſcarce ſeparated by the pulp.

Dillenius makes this ſhrub a ſpecies of frangula.

## VIBURNUM.

THE flowers are arranged into an umbel: the perianthium is ſmall, divided into five ſegments, and permanent: the corolla conſiſts of a ſingle petal, of a campanulated form, erecto-patent, divided into five ſegments at the edge, which are ſhort, obtuſe, and reflex, ſometimes cordated: the ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are roundiſh; the germen is roundiſh, and placed under the receptacle: there is no ſtyle, but, in it's place, a turbinated glandule: the ſtigmata are three, and obtuſe: the fruit is a roundiſh berry, with one cell: the ſeed is ſingle, oſſeous, compreſſed, and ſtriated.

This genus comprehends the Viburnum, Tinus, and Opulus of Linnæus's Genera Plantarum.

1. *Viburnum foliis cordatis, acute-crenatis, venoſis, ſubtus tomentoſis.*
*The Viburnum, with cordated, venous, acutely-crenated leaves, woolly underneath.* The Wayfaring Tree.

The root is creeping; the ſhrub is fifteen or twenty feet high, and very ramoſe; it's trunk is large, it's branches long and ſpreading. The leaves ſtand oppoſite, in pairs; they are two inches long, nearly as much broad, marked with large veins, deeply crenated round the edges, of a dark green colour on the upper ſide, and white and cottony underneath. The flowers ſtand in umbels, of three inches in diameter; they are moderately large, white, and of the ſmell of elder-flowers: the berries are black, compreſſed, of a ſweetiſh taſte, and viſcous.

It is common in our hedges. C. Bauhine calls it, Viburnum; others, Lantana.

2. *Viburnum foliis ovatis integerrimis.*
*The Viburnum, with oval, undivided leaves.* Laurustine.

This ſhrub grows to five or ſix feet high, and ſends out a multitude of branches. The root is woody and cirrated; the ſtem is covered with a ſmooth deep brown bark; the young ſhoots are ſomewhat quadrangular. The leaves are placed in pairs; they are two inches long, more than an inch broad, of a dark, but ſhining, green colour, and ſomewhat oval figure, thick and rigid, and even at the edges; they are green all the year. The flowers ſtand in umbels, of two inches in diameter; they are moderately large, white, with a tinge of red, and of a ſweet ſmell: the berries are compreſſed, and of a fine blue colour, when ripe.

It is a native of Italy; we have it very common in gardens. C. Bauhine and others call it Laurus ſylveſtris, and Tinus, but they make three ſpecies very improperly of it, from the variations in the ſize of the leaves; Cluſius ſet this on foot, and called them Tinus primus, Tinus ſecundus, and Tinus tertius; others, Tinus folio minore, &c.

3. *Viburnum foliis trilobis dentatis.*
*The Viburnum, with trilobate, dentated leaves.* Water Elder.

This is a weak ſhrub, of ſix or ſeven feet high. The ſtem is an inch or two in diameter; it's bark of a pale grey colour: the branches are long and weak, and uſually grow in pairs. The leaves are large, two inches and a half long, as much in breadth,

and

and divided into three large, broad lobes; they are ſmooth, of a pale green colour, and ſoft to the touch. The flowers ſtand in large umbels; they are conſiderably large, and white.

It is common with us about waters. C. Bauhine calls it, Sambucus aquatica flore ſimplici; others, Opulus, and Opulus Ruellii.

This ſhrub, by culture, will produce double and globoſe flowers, and is then called the Gelder Roſe.

## SAMBUCUS.

THE calyx is a perianthium, formed of one leaf, divided into five ſegments, ſmall and permanent: the corolla conſiſts of a ſingle petal, of a rotato-concave form, lightly divided into five reflex ſegments: the ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are roundiſh; the germen is oval, obtuſe, and placed under the receptacle: there is no ſtyle, but, in the place of it, a ventricoſe glandule: the ſtigmata are three, and obtuſe: the fruit is a roundiſh, unilocular berry; the ſeeds are three, convex on one ſide, and angular on the other.

1. *Sambucus caule arboreo ramoſo, floribus umbellatis.*
*The branched, woody Sambucus, with umbellated flowers.* Elder.

This grows to a ſhrub of eight or ten feet high, ſometimes more. The trunk is covered with a pale, whitiſh bark, cracked and uneven: the wood is white and firm: the young ſhoots are green, full of pith, and tender. The leaves are compoſed of four, ſix, or more, pinnæ, which are large, oblong, and ſerrated round the edges, of a deep green colour, and diſagreeable ſmell. The flowers are ſmall and white; they ſtand in very large umbels: the berries are black.

It is common in our hedges. C. Bauhine calls it, Sambucus fructu in umbella nigro; J. Bauhine, Sambucus vulgaris.

It varies ſometimes with laciniated leaves, ſometimes with white berries: authors have deſcribed theſe varieties as diſtinct ſpecies.

2. *Sambucus caule herbaceo ſimpliciſſimo.* Dwarf
*The herbaceous, ſimple-ſtalked Sambucus.* Elder.

This is merely an herbaceous plant, dying down to the ground every winter. It's root is long, creeping, and of the thickneſs of a man's finger. The ſtalk is ſimple and tender; it grows to three or four feet high, and is green, ſtriated, and thick, full of pith, and much like the green ſhoots of the common elder: the leaves alſo greatly reſemble thoſe of the elder, but they are compoſed of longer, and more deeply indented, pinnæ; there are three or four ſeries of theſe, fixed to the two ſides of a middle rib, with an odd one at the end: at the top ſtands an umbel of white flowers, very large and ſpreading. The berries are angular at firſt, but they grow round as they ripen. The leaves are of a very diſagreeable ſmell. The flowers have ſomewhat of the ſcent of apricot kernels.

It is common in watery places. C. Bauhine calls it, Sambucus humilis, ſive Ebulus; J. Bauhine, Ebulus, ſive Sambucus herbacea.

It is eſteemed a diuretic and aperient, and is ſometimes given in dropſies, jaundices, and obſtructions of the viſcera.

## TAMARIX.

THE calyx is a perianthium, formed of one leaf, divided into five ſegments, obtuſe, erect, permanent, and of about half the length of the corolla: the corolla conſiſts of five oval, hollow, obtuſe, and patent petals: the ſtamina are five filaments: the antheræ are roundiſh: the germen is acuminated: there is no ſtyle; the ſtigmata are three, oblong, revolute, and plumoſe: the fruit is an oblong, acuminated, triquetrous capſule, formed of three valves, containing only one cell, and longer than the cup: the ſeeds are numerous, very ſmall, and pappoſe. There is one ſpecies of this genus whoſe flower has ſten ſtamina, all growing together at the baſe, and the alternate ones ſhorter.

*Tamarix pedunculis nudis, floribus pentandribus.*
*The naked pedunculed Tamarix, with five ſtamina in the flower.* Tamariſk.

This uſually grows to but ten or twelve feet high, with the appearance of a ſhrub; ſometimes it is met with much taller, and with all the appearance of a tree. The bark of the trunk is pale brown, and rough; that of the young branches ſmooth and red. The leaves are very narrow, and ſomewhat reſemble thoſe of the cypreſs, but are of a paler green colour. The flowers ſtand in cluſters, at the extremities of the branches; they have long, ſlender, naked pedicles, and are ſmall, of a purpliſh colour on the outſide, before opened, but white within.

It is a native of France and Italy, and grows moſtly near the ſea. J. Bauhine calls it, Tamarix major, ſive Arborea Narbonenſis.

## STAPHYLÆA.

THE calyx is a perianthium, divided into five roundiſh, hollow ſegments; it is nearly of the ſize of the flower, and is coloured: the corolla conſiſts of five oblong, erect petals, and much reſembles the cup: the ſtamina are five oblong, erect, filaments, of the length of the cup: the antheræ are ſimple: the germen is thick and tripartite: the ſtyles are three; they are ſimple, and a little longer than the ſtamina: the ſtigmata are obtuſe, and contiguous: the fruit is compoſed of three inflated, flaccid capſules, affixed together longitudinally, by a ſuture pointed at the tops, and opening on the inſides: the ſeeds are two, oſſeous, ſubgloboſe, with oblique points, and an orbicular hole at the ſide of the apex: in ſome ſpecies the ſtyles are only two, and then the fruit alſo conſiſts of only two capſules.

1. *Staphylæa foliis pinnatis.* Bladder-nut.
*The pinnated-leaved Staphylæa.*

This grows ſometimes to the height and bulk of a tree, more uſually it is a ſhrub, ten or fifteen feet high; it's bark is dark brown on the trunk; the young ſhoots are green, and have a large pith. The leaves are pinnated and large; two or three pair of oblong, large, pointed, and crenated pinnæ ſtand on a ſtalk, terminated by a ſingle one. The flowers grow, in a verticillate manner, round certain long, pendulous pedicles, the cluſters are at a diſtance from one another; they are ſmall, white with a caſt of reddiſh, before they open, and ſmell like thoſe of elder; the veſicles are long, large, inflated, and green.

It is a native of England, but not common with us; I have met with it in woods in Kent. J. Bauhine calls it, Staphylodendron; others, Nux veſicaria.

2. *Staphylæa foliis ternatis, ovato-acuminatis.* Trifoliate Bladder-nut.
*The Staphylæa, with ternate, ovato-acuminated leaves.*

The trunk is large, and covered with a brown bark; the branches are brittle, and greeniſh. The leaves ſtand on pedicles, three together; they are two or three inches long, broadeſt near the baſe, but running to a long point at the end, and of a pale green colour. The flowers are of a greeniſh-white colour, ſmall, and in cluſters; the fruit is very large, inflated, and of a browniſh colour.

It is a native of North America, and has been often ſent over from Penſylvania.

## TURNERA.

THE calyx is a perianthium, formed of one leaf, of an infundibuliform ſhape, and deciduous: it's tube is cylindraceo-angulated, oblong, and erect: the limb is erect, and divided into five lanceolated ſegments, of the length of the tube: the corolla conſiſts of five petals, of an obverſely-cordated figure, with a point; they are plane, erecto-patent, and have narrow ungues inſerted into the tube: the ſtamina are five ſubulated filaments, of half the length of the corolla, and inſerted into the cup: the antheræ are acuminated and erect: the germen is conic; the ſtyles are three, filiform,

form, and of the length of the ſtamina: the ſtigma is capillaceo-multifide: the fruit is an oval capſule, with one cell, formed of three valves: the receptacles are linear, and are annexed longitudinally to the valves: the ſeeds are numerous, oblong, and obtuſe.

It is an American, deſcribed by Plumier.

## TELEPHIUM.

THE perianthium conſiſts of five oblong, obtuſe, permanent leaves, of the length of the corolla: the corolla conſiſts of five erect, oblong, obtuſe petals, narroweſt at the baſe: the ſtamina are five ſubulated filaments, ſhorter than the corolla; the antheræ are incumbent; the germen is triquetrous and acute: there are no ſtyles, but the ſtigmata are three, acute and patent: the fruit is a ſhort, triquetrous capſule, formed of three valves, and having only one cell; the receptacle is free, and of about half the length of the capſule: the ſeeds are numerous and roundiſh.

Of this genus there is only one ſpecies; it is called by many authors a ſpecies of Ciſtus.

### TELEPHIUM.

The root is three or four inches long, and as thick as one's finger, yellowiſh on the outſide, white within, hard, perennial, and furniſhed with a few long and thick fibres. The radical leaves are oblong and narrow; the ſtalks are numerous and procumbent, or, at beſt, but oblique; they are ſix or eight inches long, round, ſlender, and green: the leaves ſtand alternately on them; they are ſmall, of an oblong figure, approaching to an oval, about half an inch in length, and of a yellowiſh green. The flowers ſtand in long cluſters, at the extremities of the branches, and the ends of the cluſter turn back; they are white and ſmall.

It is a native of France. Imperatus calls it, Telephium legitimum; C. Bauhine, Telephium repens folio non deciduo. Moriſon makes it a ſpecies of polygonum. Authors have made other ſpecies out of the varieties of this plant, and have deſcribed ſome others as of this genus, which belong to others.

## CORRIGIOLA.

THE perianthium conſiſts of five oval, concave, patent, permanent leaves, of the ſize of the corolla: the corolla conſiſts of five oval, patent petals: the ſtamina are five ſmall, ſimple filaments: the antheræ are ſimple; the germen is ovated and trigonal; there are no ſtyles; the ſtigmata are three, and obtuſe: there is no fruit but the calyx, which, cloſing, ſerves in the place of one: the ſeed is ſingle, and ovato-triquetrous.

Of this genus there is only one known ſpecies.

### CORRIGIOLA.

The root is oblong and ſlender; the radical leaves are oblong, narrow, and pointed. The ſtalks are numerous and procumbent; they are four or five inches long, round, ſlender, and ramoſe; the leaves on theſe are ſhorter than the radical ones, and reſemble thoſe of the ſmaller knot-graſs; they ſtand cloſely and irregularly, and are of a bluiſh-green colour; at the tops of the ſtalks ſtand ſpiked, thick cluſters of flowers; they are ſmall, reddiſh, before they open, afterwards white; before the ſpikes have flowered all over, their ends are turned back.

It is a native of France and Germany. Ray calls it, Polygoni-folia per terram ſparſa flore ſcorpioidis; Parkinſon, Polygonum minus Monſpelienſe.

## HOLOSTEUM.

THE perianthium is permanent, and compoſed of five leaves: the corolla is compoſed of five petals, broadeſt toward the ends, plane, patent, and tridentated: the ſtamina are five ſimple filaments: the antheræ are roundiſh; the germen is oval; the ſtyles are three, and repandous; the ſtigmata are ſimple: the fruit is a cylindraceo-conic capſule, with one cell; the receptacle is free, obſoletely trigonal, and has very ſhort hairs, which ſerve to fix the ſeeds: the ſeeds are numerous, and triquetrous: there is a ſpecies of this genus in which the ſtamina, and other parts, are only four, inſtead of five.

## PHARNACEUM.

THE calyx is a perianthium, formed of five ſuboval, concave, patent, equal, and permanent leaves: there is no corolla, but the calyx reſembles one, being coloured on the inſide, and it's edges very thin: the ſtamina are five ſubulated filaments, of the length of the cup: the antheræ are bifid at the baſe; the germen is oval and trigonal; the ſtyles are three, and of the length of the ſtamina: the ſtigmata are obtuſe: the fruit is an oval capſule, obſcurely trigonal, in part covered by the cup; it is formed of three valves, and contains three cells: the ſeeds are numerous, nitid, orbiculated, depreſſed, and ſurrounded with a margin.

## BASELLA.

THE Baſella has no calyx; the corolla is compoſed of a ſingle leaf, deeply divided into ſix ſegments, the two oppoſite ones being broader than the others, and, finally, it becomes baccated: the ſtamina are five ſlender filaments: the antheræ are ſmall; the germen is roundiſh; the ſtyles are three, and ſhort; the ſtigmata are ſimple; the ſeed is ſingle.

Theſe characters ſufficiently diſtinguiſh the Baſella from all the plants of this claſs, without a farther deſcription.

*Claſs the Fifth. Order the Fourth.*

## PENTANDRIA TETRAGYNIA.

*Plants which have in each flower five ſtamina and four ſtyles.*

*Of this Order there is only one Genus, and of that Genus only one known ſpecies.*

## PARNASSIA.

THE calyx is a perianthium, divided into five oblong, acute, patent, and permanent ſegments; the corolla conſiſts of five roundiſh, emarginated, ſtriated, hollowed, and patent petals; the nectaria are five; each is compoſed of a cordated ſquamma, hollowed, and furniſhed round it's edge with thirteen filaments, gradually taller, and each having a globular body at it's head: the ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are depreſſed and incumbent; the germen is oval and large; there are no ſtyles; the ſtigmata are four, obtuſe and permanent; the fruit is a capſule of a tetragono-oval figure, formed of four valves, containing one cell, and having a quadruple receptacle affixed to the valves; the ſeeds are numerous and oblong.

### PARNASSIA.

The root is fibrous, of a reddiſh-white colour, and aſtringent, and of a ſomewhat acrid taſte: the radical leaves ſtand ſingly on long pedicles; they are roundiſh, cordated at the baſe, and terminate in a point, of a pale green colour, ſmooth, and about half an inch in diameter. The ſtalks are numerous; they are ſlender, angulated, and grow to ſix or ſeven inches high; each has one leaf, near it's bottom, ſurrounding it at the baſe, and like the radical ones; at it's top ſtands a ſingle, large, beautiful, white flower.

We have it in many boggy places in England. Tournefort calls it, Parnaſſia vulgaris et paluſtris; others, Gramen Parnaſſi.

*Claſs*

*Claſs the Fifth. Order the Fifth.*

## PENTANDRIA PENTAGYNIA.

*Plants which have in every flower five ſtamina, and five ſtyles, or ſtigmata.*

### ARALIA.

THE flowers of the Aralia are collected into an umbel of a globoſe figure, with a very ſmall involucrum: the perianthium is very ſmall, divided into five parts, and placed on the germen: the corolla conſiſts of five ovato-acute, ſeſſile, reflex petals: the ſtamina are five ſubulated filaments, of the length of the corolla: the antheræ are roundiſh; the germen is roundiſh; the ſtyles are five, very ſhort, and permanent; the ſtigmata are ſimple; the fruit is a roundiſh, coronated, ſtriated berry, having five cells; the ſeeds are ſingle, hard, and oblong.

*Aralia caule folioſo inermi.* Berry-bearing
*The Aralia, with a weak, folioſe ſtalk.* Angelica.

The root is whitiſh, a foot long, and an inch in diameter. The ſtalk is round, thick, jointed, ramoſe, of a purpliſh colour, oftener than green, filled with a white pith, and five or ſix feet high. The leaves are very large, and compoſed of a number of large, oval, and acuminated pinnæ, placed at diſtances, and are of a duſky green, and ſerrated at the edges. The umbels are ſmall, and riſe from the alæ of the leaves; the flowers are ſmall, greeniſh at firſt, and afterwards white. The berries are large, red, and extremely ſweet to the taſte.

It is a native of North America. Tournefort calls it, Aralia Canadenſis; Ray and others, Angelica baccifera.

### BARRERIA.

THE calyx is a perianthium, formed of one leaf, of a turbinated figure, erect, divided into five ſlight ſegments at the edge, and permanent: the corolla is compoſed of five oval petals, with very long, filiform ungues: the ſtamina are five ſubulated filaments, longer than the cup: the antheræ are ſimple: the germen is rude, immerſed in the cup, and quinquifid: the ſtyles are five; they are filiform, and of the length of the ſtamina: the ſtigmata are obtuſe.

### STATICE.

THE common perianthium is of a very different figure in the different ſpecies: the proper perianthium is formed of one leaf, of an infundibuliform ſhape: the tube is narrow, the limb entire, not plicated: the corolla is infundibuliform; it is formed of five petals, narrow at the bottom, broad and obtuſe at the top, and patent: the ſtamina are five ſubulated filaments, ſhorter than the corolla: the antheræ are incumbent: the germen is extremely ſmall: the ſtyles are five, filiform and diſtant: the ſtigmata are acute: there is no pericarpium: the cup becomes conſtringed about the neck, and it's limb is expanded; and in this ſtate it retains the ſeed, which is ſingle, very ſmall, and roundiſh.

This genus comprehends the Statice and the Limonium of authors. The Statice of authors has a common triple cup, and the flowers are arranged into a roundiſh head. The Limonium of authors has a common, imbricated cup, and the flowers are arranged into oblong ſeries. There is a ſpecies in which the corolla is monopetalous, but this is not a generical diſtinction; in the others the ſtamina adhere to the ungues of the petals.

1. *Statice caule nudo ſimpliciſſimo capitato.*
*The ſimple and naked ſtalked Statice, with a capitated head.* Thrift.

The root is thick, oblong, and fibrated. The radical leaves are three or four inches long, narrow, graſſy in appearance, and pointed at the ends; they are of a duſky green colour, and grow in great tufts. The ſtalks are numerous; they are round, five or ſix inches high, naked, and, at the top, have a roundiſh head, or cluſter of flowers, of the bigneſs of a nutmeg. The flowers are of a pale red colour, and moderately large.

It is common on our ſea-coaſts, and in ſome places ſufficiently diſtant from ſea; we have it alſo frequent in gardens. Tournefort and others call it, Statice; C. Bauhine, Caryophyllus maritimus, or Montanus flore globoſo; Moriſon, Limonium flore globoſo. It grows ſometimes larger, ſometimes ſmaller, and authors have very injudiciouſly made two ſpecies of it.

2. *Statice caule nudo ramoſo.* Common Sea Lavender.
*The Statice, with a naked, ramoſe ſtalk.*

The root is oblong, divaricated, and of a reddiſh colour. The radical leaves are two or three inches long, and an inch and a half broad, broadeſt in the middle, pointed at the end, and affixed to long pedicles. The ſtalk is round, robuſt, naked, ramoſe, and a foot, or more, in height; the ramifications of the top of it bend backward, and ſtand very ſeparate from one another; they are all along ornamented with a ſeries of flowers, of a beautiful pale blue colour, and ſmall.

It is very frequent on our ſea-coaſts. C. Bauhine calls it, Limonium maritimum majus; others, Limonium vulgatius.

3. *Statice foliis lanceolatis mucronatis radicalibus, caule ancipiti dichotomo, ſtipulis ſimplicibus.*
*The lanceolated, mucronated, radical-leaved Statice, with ſtalks alated, and ſimple ſtipulæ.*

The root is oblong, thick, and reddiſh; the leaves are numerous, oblong, of a bright green colour, large and broad, and terminate in a point that is rigid and prickly; they are in part erect, and in part lie on the ground. The ſtalk is round, ramoſe a foot high, and alated on each ſide by a ſtiff membrane. The flowers are very numerous, large, and form a kind of umbels; they are of a fine ſilvery white colour, with ſometimes a little tinge of blue among it; the whole cluſter of them, as there are uſually a great number together, makes an extremely beautiful appearance.

It is a native of Greece, and of ſome parts of Europe. Ray calls it, Limonium floſculis elegantiſſimis; Tournefort, Limonium orientale plantaginis folio floribus umbellatis. The common Limonium varies extremely in it's manner of growth, as well as ſize, and from theſe varieties many imaginary ſpecies have been made by too many authors, ſuch as Limonium minus, Limonium minimum, and the like.

The more certainly diſtinct ſpecies, beſide theſe, are, 1. The decurrent-leaved Statice, or Rawwolf's elegant Limonium. 2. The daiſy-leaved Statice. 3. The cordated-leaved Statice. 4. The aſplenium-leaved Statice. 5. The reticulated-leaved Statice. 6. The auricula-leaved Statice. 7. The hairy-leaved Statice. 8. The plantain-leaved Statice. 9. The multifid-leaved Statice. 10. The ſcorzonera-leaved Statice. 11. The ſhrubby, great-flowered, graſſy Statice. 12. The capillaceous-leaved Statice. 13. The baſil-leaved Statice. 14. The juniper-leaved Statice. 15. The purple, ſhort-ſtalked Statice. 16. The ſpiked, narrow-leaved Statice. 17. The ſhrubby Statice, with narrow, prickly leaves.

## LINUM.

THE calyx is a permanent perianthium, formed of five ſmall, erect, acute, lanceolated leaves: the corolla is of an infundibuliform ſhape; it is compoſed of five oblong petals, broad and obtuſe at the top, large and patent: the ſtamina are five erect,

erect, ſubulated filaments, of the length of the cup: the antheræ are ſimple, and ſagittated; the germen is oval; the ſtyles are five, filiform, erect, and of the length of the ſtamina: the ſtigmata are ſimple and reflex: the fruit is a globoſe, ſomewhat pentagonal and, pointed capſule; it is formed of five valves, and contains ten cells: the ſeeds are ſingle, ovated, flattiſh, ſmooth, and pointed.

This genus comprehends the Linum, Radiola, Chamælinum, and Linocarpon of authors. In one of the ſpecies, the ſtamina and petals are only four. Authors have made a new genus of this; but, as every thing elſe agrees, this is not allowable.

1. *Linum foliis alternis lanceolatis integerrimis, calycibus acuminatis angulatis, capſulis mucronatis.* Flax.
*The lanceolated, alternate-leaved Linum, with angular cups, and pointed capſules.*

The root is oblong and ſlender; the ſtalk erect, round, hollow, ſimple, and three feet high, ſmooth, and divided at the top into three or four branches. The leaves ſtand cloſely and irregularly on it; they are two inches long, of the breadth of a ſtraw, and of a pale green, ſmooth even at the edges, and pointed at the ends: the flowers are large and blue.

It is cultivated in almoſt all parts of Europe. We meet with it alſo wild, or from ſeeds caſually dropped; and authors have made this another ſpecies, under the name of Linum ſylveſtre. Boerhaave alſo deſcribes what he calls a Linum ſativum humilius flore magno; and Tournefort, a Linum ſativum latifolium Africanum fructu majori, both which are varieties only of this ſpecies.

2. *Linum caule dichotomo, foliis ovato-lanceolatis, corollis acutis.* Purging Flax.
*The dichotomous-ſtalked Linum, with ovato-lanceolate leaves, and acute corollæ.*

The root is very ſmall, oblong, and woody; the ſtalks are procumbent at bottom, for two or three inches; thence they riſe erect, to ſix or ſeven inches high; they are very ſlender, round, and toward the top divided into many branches. The leaves are very ſmall, of an oval figure, but pointed at the ends; they have no pedicles, and are of a duſky green; the flowers ſtand ſingly on ſlender pedicles; they are moderately large and white.

The plant is common with us in dry paſtures. C. Bauhine calls it, Linum pratenſe floſculis exiguis; others, Linum catharticum. A decoction of the whole plant is a very rough purge, much uſed among the country people.

3. *Linum caule dichotomo, floribus tetrandris tetragynis.* The leaſt Rupture-wort, or All-ſeed.
*The dichotomous-ſtalked Linum, with four ſtamina, and four piſtils in each flower.*

The root is very ſmall and oblong; the ſtalk is round, ſlender, and very ramoſe: the plant grows to about an inch and a half high; the branches are uſually reddiſh; the leaves ſtand in pairs; they are extreamly ſmall, of a ſomewhat oval figure, and have no pedicles: the flowers are very minute, and white; the ſeed-veſſels large: the plant often expands into a kind of round tuft, and it's whole ſuperficies ſeems covered with flowers and ſeed-veſſels.

We have it in dry places not unfrequently. Ray calls it, Radiola vulgaris ſerpyllifolia; C. Bauhine, Polygonum minimum, ſive Millegrana minima; Vaillant; Chamælinum vulgare; Micheli, Linocarpum ſerpyllifolio multicaule.

The other ſpecies are, 1. The perennial, large-flowered Linum. 2. The ſmall-headed Linum. 3. The broad-leaved, hairy Linum. 4. The ſhrubby, white-flowered Linum. 5. The narrow-leaved, yellow-flowered Linum. 6. The roundiſh-leaved, yellow Linum. 7. The broad-leaved, yellow Linum, flowering at the joints. 8. The ſhrubby, yellow Linum. 9. The narrow-leaved, procumbent Linum.

num. 10. The rough-leaved, yellow Linum. 11. The rigid, aculeated-leaved, yellow, ſhrubby Linum. 12. The larix-leaved Linum. 13. The red-flowered, hairy Linum.

## DROSERA.

THE calyx is a one-leaved perianthium, divided into five ſegments, erect, acute, and permanent: the corolla is infundibuliform; it is compoſed of five ſuboval, obtuſe petals, and is ſomewhat larger than the cup: the ſtamina are five ſubulated filaments, of the length of the cup: the antheræ are ſmall; the germen is roundiſh; the the ſtyles are five, ſimple, and of the length of the ſtamina; the ſtigmata are ſimple; the fruit is a ſuboval capſule, containing only one cell, and opening into five parts at the top; the ſeeds are numerous, very ſmall, and oval.

This genus comprehends the Ros ſolis, or Rorella of authors.

1. *Droſera ſcapis radicatis, foliis orbiculatis.* Sun-dew.
*The radicated-ſtalked Droſera, with roundiſh leaves.*

The root is ſmall and fibroſe; the leaves are roundiſh, a ſixth of an inch in diameter, ſometimes larger; uſually hollow, of a reddiſh colour, and affixed to long pedicles: the upper ſurface of the leaf is ſurrounded with long reddiſh filaments, and has ſome ſhorter in it's middle: the upper ſurface of the pedicle is alſo furniſhed with ſuch; the under ſide of both is ſmooth; there are drops of a clear fluid conſtantly ſtanding on the ſurfaces of theſe leaves in the hotteſt weather: the ſtalk is round, ſlender, naked, and three or four inches high: the flowers are moderately large and white; they ſtand in a long ſeries at the top of the ſtalk, all one way, and each on it's own ſeparate pedicle.

It is common in boggy places. C. Bauhine calls it, Ros ſolis folio rotundo.

2. *Droſera ſcapis radicatis, foliis oblongis.*
*The Droſera, with radicated ſtalks, and oblong leaves.*

The root is ſmall and fibrous; the ſtalk naked, ſix or eight inches high, and the flowers larger than in the former ſpecies, and of a beautiful white; they ſtand in a ſeries on the top of the ſtalk, and have ſhorter pedicles than thoſe of the former ſpecies. The leaves are an inch and a half long, including the pedicle, which by degrees dilates into the form of the leaf, and is covered, as in the former, with reddiſh hairs, and with drops of a clear fluid.

It is common on our bogs. C. Bauhine calls it, Ros ſolis folio oblongo. Authors have deſcribed other ſpecies, as they call them, alſo differing in ſize, under the names of larger and ſmaller Rorellæ. I have given the ſecond a place, as a diſtinct ſpecies, in complaiſance to Linnæus, who makes it ſuch, and who is not apt to ſwell the number of ſpecies unneceſſarily: but I am apt to ſuſpect, as he alſo ſeems to do, that it is only a variety of the common, round-leaved kind.

## CRASSULA.

THE calyx is a perianthium, formed of five lanceolated, hollowed, acute, erect, and permanent leaves, which meet in ſuch a manner, as to form a kind of tube. The corolla is of the infundibuliform ſhape; it is compoſed of five petals, the ungues of which are very long, linear, ſtrait, connivent, and joined at their baſes, and the bracteæ, which form the limb, oval and reflexo-patent. The nectaria are five very ſmall, emarginated ſquammæ, annexed outwardly to the baſe of the germen: the ſtamina are five ſubulated filaments, of the length of the tube, and inſerted into the ungues of the corolla: the antheræ are ſimple; the germina are five, oblong, acuminated, and terminated by ſubulated ſtyles, of the length of the ſtamina; the ſtigmata are obtuſe: the fruit is compoſed of five oblong, acuminated, ſtrait, compreſſed capſules, opening longitudinally inwards: the ſeeds are numerous and ſmall. The corolla has ſometimes only four ſegments.

*Craſſula*

*Craſſula caule dichotomo, foliis linearibus, floribus quadrifidis.*
*The dichotomous-ſtalked, linear-leaved Craſſula, with quadrifid flowers.*

The root is compoſed of a multitude of white, moderately thick fibres; the ſtalks are round, thick, ſucculent, and often purpliſh; they are divided toward the tops into two, and theſe into two more each, and ſo on to the extremities, the diviſion always being thus: the leaves are very ſmall, narrow, and obtuſe; the flowers moderately large, and of a beautiful red.

It is frequent in France and Germany. Vaillant calls it, Sedum minimum annuum flore tetrapetalo.

## SURIANA.

THE calyx is a permanent perianthium, compoſed of five lanceolated, acuminated leaves: the corolla conſiſts of five petals, obverſely ovate, patent, and of the length of the cup: the ſtamina are five filiform filaments, ſhorter than the corolla; the antheræ are ſimple: the germina are five, and roundiſh; the ſtyles are ſolitary, filiform, erect, of the length of the ſtamina, and inſerted into the middle of the interior ſide of the germen; the ſtigmata are obtuſe; there is no pericarpium, except the cruſts of the ſeeds: the ſeeds are five in number, and roundiſh.

It is a native of South America, and is deſcribed by Plumier.

## SIBALDIA.

THE calyx is a permanent perianthium, compoſed of a ſingle leaf, ſlightly divided into ten ſegments, which are equal, patent, ſemi-lanceolate, and alternately narrower and broader: the corolla is ſmaller than the cup; it conſiſts of five oval petals, inſerted into the cup under it's ſegments: the ſtamina are five capillary filaments, inſerted into the cup, and ſhorter than the corolla; the antheræ are ſmall and obtuſe; the germina are five, oval and very ſhort; the ſtyles are of the length of the ſtamina, and ariſe from the ſides of the germen; the ſtigmata are capitated: there is no pericarpium. The cup cloſes at top, and in it's bottom holds the ſeeds, which are oblong, and five in number: the piſtils are ſometimes duplicate in the ſame plants, in which, in other flowers, they are quinate.

*Sibaldia foliis tridentatis.* Trifid Penta-
*The tridentated-leaved Sibbaldia.* phylloides.

The root is woody, oblong, and perennial; the ſtalks are round, rigid, procumbent, and often get within the ſurface: the leaves ſtand in cluſters, about the tops of the ſtalks; they have each a brown, oblong, membranaceous baſe ſurrounding the ſtalk, ſemi-bifid and acute; from this diviſure grows a pedicle half an inch long, erect, ſlender, a little hairy, and at it's ſummit ſtand three leaves; theſe are vertically ovate, but with the apex cut off, hairy on both ſurfaces, a third of an inch in length, and terminated at the extremity by three acute denticulations: the flowers ſtand uſually four together, on a pedicle of half an inch long; they are yellow.

It is frequent in the North of England, and in Denmark, Sweden, and Lapland. Sibbald, from whom Linnæus has named it, calls it, Fragariæ ſylveſtri affinis planta flore luteo; Ray calls it, Pentaphylloides pumila foliis ternis trifidis.

*Class the Fifth. Order the Sixth.*

## PENTANDRIA POLYGYNIA.

*Plants which have in each flower five stamina, and very numerous styles.*

*Of this order there is only one genus, and of that but one known species.*

### MYOSUROS.

THE calyx is a deciduous perianthium, composed of five semi-lanceolate, obtuse, reflex, coloured leaves, joined on above the base: the corolla is considerably smaller than the calyx; it consists of five extreamly minute petals, and is tubulated at the base, and opens obliquely inwards: the stamina are five filaments, of the length of the cup; the antheræ are erect and oblong; the germina are very numerous, and are placed on the receptacle in form of a conic, oblong cluster; there are no styles: the stigmata are simple; there is no pericarpium: the receptacle is extreamly long, styliform, and covered with seeds, laid in an imbricated manner: the seeds are numerous, oblong, and acuminated.

This genus has a great affinity with the Ranunculus, but cannot be joined with it. The number of the stamina is not certain, but varies considerably in the different plants.

MYOSUROS. **Mouse-tail.**

The root is composed of a number of white, slender fibres; the leaves are very numerous, three inches long, very narrow, of a deep green, and somewhat broader toward the ends than at the base: the stalks are simple, two inches high, round, green, and slender: the flower is of a greenish colour; the antheræ are yellow: the receptacle is a green, cylindric body, two inches long, thicker than the stalk, and beautifully imbricated in it's structure.

It is common with us among corn, and in dry pastures. C. Bauhine calls it, Myosuros; Dodonæus, Cauda murina.

*Class the Sixth.*

## HEXANDRIA.

*Plants which have in every flower six stamina.*

*Of these some have only one style, some have two, some three, some four, some six, and some a great number in each flower; according to these distinguishing characters, they are to be arranged into six orders.*

*Order the First.*

## HEXANDRIA MONOGYNIA.

*Plants which have in each flower six stamina, and only one style.*

THE genera of this order are very numerous, and may be arranged, according to certain obvious and invariable distinctions, into five several divisions. Some of them having, 1. Calyculated flowers, divided into three segments. 2. Others having a monophyllous spatha. 3. Others having flowers composed of six petals, and naked. 4. Others having flowers consisting only of one petal, and naked; and, 5. Others having flowers not divided into three segments, yet having cups to them.

*Class*

# Class 6 & 7 Hexandria & Heptandria.

Yucca foliis Margine integerrimis

Esculus floribus Heptandris

Tradescantia

Anthericum

Scilla

Aloe

Leucoium

Leontopetalon

Allium

Erythronium

Pontederia

Hemerocallis

Aphyllanthes.

B. Cole sculp.

*Claſs the Sixth. Order the Firſt.*

*Diviſion the Firſt.*

*Hexandria Monogynia, having corollæ divided into three ſegments, and cups to them.*

## BROMELIA. Pine-apple.

THE calyx is a ſmall trigonal perianthium, divided into three oval ſegments, placed on the germen, and permanent. The corolla conſiſts of three narrow, lanceolate, erect petals, much longer than the cup: the nectarium is connivent, and affixed to every petal above it's baſe: the ſtamina are ſix ſubulated filaments, ſhorter than the corolla, and inſerted into the cup: the antheræ are erect, and ſagittated; the germen ſtands below the cup; the ſtyle is ſimple and filiform, of the length of the ſtamina; the ſtigma is obtuſe and trifid: the fruit is a large, roundiſh, umbilicated berry: the ſeeds are numerous, incumbent, oblong, and obtuſe.

This genus comprehends the Pinguin of Dillenius, the Ananas of Tournefort, and the Karotas of Plumier, the pine-apples of our ſtoves.

## TILLANDSIA.

THE calyx is an oblong, tripartite, erect, permanent perianthium, formed of one leaf; the ſegments are oblong, lanceolated, and acuminated: the corolla is compoſed of a ſingle petal, and is tubulated: the tube is long and ventricoſe; the limb is ſmall, erect, trifid, and obtuſe: the ſtamina are ſix filaments, of the length of the tube of the corolla, and adhere longitudinally to the petal: the antheræ are erect and acute, and are placed in the neck of the corolla: the germen is oblong, and pointed at each end; the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is trifid and obtuſe: the fruit is a long, obtuſely, trigonal, acuminated capſule, formed of three valves, but containing only one cell: the ſeeds are numerous, and are affixed to a long capillary plume.

This genus comprehends the Caraguata of Plumier.

## RENEALMIA.

THE calyx is a deciduous perianthium, compoſed of three coloured, oval, erect, hollow leaves: the corolla is long, erect, and of the infundibuliform kind; the tube is of the length of the calyx; the limb is ſhort, plane, and divided into three ſegments: the ſtamina are ſix ſhort membranaceous filaments, inſerted into the corolla: the antheræ are ſagittated; the germen is ovato-oblong, rounded, pointed at the end, marked with three furrows formed of three valves, and contains three cells. The ſeeds are numerous, oblong, and have each a capillary plume. It is a native of South America, deſcribed by Plumier.

## BURMANNIA.

THE calyx is a perianthium, formed of a ſingle leaf, long, cylindric, coloured, and edged longitudinally with a triple, membranaceous ala. The mouth is ſmall, and divided into three ſegments: the corolla is very ſmall; it conſiſts of three extreamly minute, oval, oblong petals, placed in the mouth of the cup: the ſtamina are ſix ſcarce viſible filaments: the antheræ are very ſhort; they ſtand in the mouth of the cup, two together, and are crooked at the extremity: the germen is cylindric, and of about half the length of the cup; the ſtyle is filiform, and of the length of the corolla; the ſtigmata are three, obtuſe and hollow: the pericarpium is an involuted capſule, of a cylindraceo-trigonal figure, formed of three valves, containing three cells, and opening at the angles: the ſeeds are numerous and ſmall.

It is a native of Ceylon, and is figured in Burman's Theſaurus 20. 1.

TRADES-

## TRADESCANTIA.

THE flowers are arranged into an irregular umbel, and have an irregular ſpathaceous involucrum. The perianthium is formed of three oval, concave, patent, permanent leaves: the corolla conſiſts of three petals; they are very large, orbiculated, plane, and patent; the ſtamina are ſix, filiform, hairy filaments, erect, and of the length of the cup; the antheræ are reniform: the germen is oval, and obtuſely trigonal; the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is trigonal and obtuſe. The fruit is an oval capſule, covered by the cup, formed of three valves, and containing three cells: the ſeeds are few in number, and angular.

Of this genus there is only one known ſpecies.

### TRADESCANTIA. Virginian Spider-Wort.

The root is fibrous, and ſpreads every way under the ſurface. The radical leaves are very numerous; they grow in cluſters of three or four together, ſurrounding one another at the baſe; they are two feet long, and ſcarce half an inch broad, graſſy in appearance, and gradually growing ſmaller from the baſe to the point. The ſtalk is round, thick, green, jointed, and uſually ſimple, ſometimes ramoſe: the leaves ſtand ſingly at the joints, except at the top, where there grow two; from the center of theſe grows a cluſter of flowers, ten or fifteen in number. They are large, beautiful, and fading; their colour is a deep blue, ſometimes red, ſometimes white; the flowers that open in the morning cloſe and fade at night, but there is a long ſucceſſion of new ones.

It is a native of Virginia. C. Bauhine calls it, Allium ſive Moly Virginianum; others, Phalangium Virginianum, and Ephemerum Virginianum.

*Claſs the Sixth. Order the Firſt.*

*Diviſion the Second.*

*Hexandria Monogynia, with a ſpatha compoſed of a ſingle leaf.*

## GALANTHUS.

THE calyx is an oblong, obtuſe, compreſſed ſpatha, opening on the flat ſide, and fading: the corolla conſiſts of three oblong, obtuſe, lax, hollow, patulous petals, equal in ſize: the nectarium is cylindric, and is formed of three parallel, obtuſe, emarginated leaves, of half the length of the petals: the ſtamina are ſix very ſhort, capillary filaments; the antheræ are oblong, acuminated, connivent, and terminate in ſetæ or hairs: the germen is globoſe, and placed under the cup; the ſtyle is filiform, and longer than the ſtamina; the ſtigma is ſimple: the fruit is a capſule of a globoſo-oval figure, obtuſely trigonal, formed of three valves, and containing three cells: the ſeeds are numerous and globoſe.

Of this genus there is only one known ſpecies, and this is uſually called Narciſſo-leucoium.

### GALANTHUS. The Snow-Drop.

The root is a ſmall bulb, compoſed of a multitude of coats; the colour black on the outſide, but white within, and furniſhed with a multitude of fibres from the baſe: the ſtalk and leaves riſe from the root in a cluſter, ſurrounded to a conſiderable height, with a membrane; the ſtalk is ſlender, angular, hollow, green, and three or four inches high; two leaves accompany the ſtalk uſually, almoſt to it's top; they are narrow, long, graſſy, and of a bluiſh or greyiſh green; the top of the ſtalk furniſhes a drooping pedicle, on which hangs a large ſnow-white flower.

It is a native of the Alps and Apennines; we have it in our gardens almoſt every where, flowering early in ſpring. C. Bauhine calls it, Leucoium bulboſum trifolium minus; Lobel, Leuconarciſſo-lirion minimum; and Renealm, Erangelia.

## LEUCOIUM.

THE calyx is an oblong, obtuſe ſpatha, compreſſed, burſting ſideways, and deciduous. The corolla is of a rounded ſhape, and patent, divided into ſix plain, oval petals, almoſt from the very baſe, and with their tops ſomewhat thicker and narrower than the middles. The ſtamina are ſix very ſhort, ſetaceous filaments: the antheræ are oblong, obtuſe, quadrangular, erect, and diſtant; the germen is roundiſh, and ſtands under the receptacle; the ſtyle is thickeſt upward and obtuſe; the ſtigma is ſetaceous, erect, acute, and longer than the ſtamina: the fruit is a turbinated capſule, formed of three valves, and containing three cells: the ſeeds are numerous and roundiſh.

Of this genus there is alſo only one ſpecies, and this is uſually diſtinguiſhed only from the former genus as another ſpecies, larger than that. Some have indeed obſerved the difference in the flower, but they have ſtill called it by the ſame name.

LEUCOIUM. The great Snow-Drop.

The root is a tunicated bulb, brown on the outſide, white within, and fibrated at the baſe. The leaves are ſix inches long, and a third of an inch broad, of a bright green, and of a gloſſy ſurface; there are uſually, from three to ſix of them, together: the ſtalk is ſix inches high, green, hollow, angular, and ſtriated; it is incloſed with the leaves in a membrane, to two inches high; it has no leaf on it, and has at it's top a long drooping pedicle ſometimes, but rarely two or three: the flower is large, and of a beautiful white, marked with a green ſpot externally: the antheræ are yellow.

It is a native of Italy and Germany; we have it in our gardens. C. Bauhine calls it, Leucoium bulboſum vulgare; Dodonæus, Leucoium bulboſum hexaphyllum.

## NARCISSUS.

THE calyx is an oblong, obtuſe, compreſſed ſpatha, opening on one ſide, and deciduous. The corolla conſiſts of a nectarium, formed of one leaf, of a cylindric or infundibuliform ſhape, coloured at the top, and wide, curled and plicated at the mouth; and of ſix oval, acuminated, plane petals, affixed externally to the tube of the nectarium above it's baſe. The ſtamina are ſix ſubulated filaments, ſhorter than the nectarium; the antheræ are oblong: the germen is roundiſh, but obſcurely triquetrous, and ſtands under the cup: the ſtyle is filiform, and longer than the ſtamina; the ſtigma is trifid, hollow, and obtuſe. The fruit is a roundiſh, obtuſely, trigonal capſule, formed of three valves, and containing three cells, in which are a number of round, appendiculated ſeeds, with a columnar receptacle.

1. *Narciſſus ſcapo unifloro, nectarii limbo rotato reviſſimo.*

*The ſingle-flowered Narciſſus, with the limb of the nectarium very ſhort and rotated.* Purple-rimmed Daffodil.

The root is a tunicated bulb, fibrated at the baſe; the leaves are twelve or fifteen inches long, half an inch broad, and of a pale bluiſh-green; the ſtalk is ſingle, naked, and fifteen inches high, green, flatted, angulated, ſtriated, and hollow; at it's top ſtands a ſingle flower, very fragant and beautiful; it is white, but the tubular part has a crimſon edge, below which is a white circle, and under that a yellow one.

It is a native of Italy, and ſome parts of France. C. Bauhine calls it, Narciſſus albus circulo purpureo; Dodonæus, Narciſſus medio-purpureus.

2. *Narciſſus ſcapo unifloro, nectarii limbo campanulato, erecto, petala equante.*
*The ſingle-flowered Narciſſus, with the limb of the nectarium campanulated, erect, and equal with the petals.*

**Wild Daffodil.**

The root is a moderately large, tunicated bulb; the leaves are a foot long, a third of an inch broad, of a bluiſh-green colour, ſtriated, and ribbed on each ſide; four or five of theſe riſe with the ſtalk, and accompany it to the top, without ſeparating from it. The ſtalk is a foot high, green, hollow, ſtriated, and has at it's top a ſingle and very large flower, two inches long; the petals of a pale yellow colour; and the nectarium or tube very large, and of a gold colour.

It is a native of England. Dodonæus calls it, Narciſſus luteus ſylveſtris; others, Pſeudo-Narciſſus Anglicus.

3. *Narciſſus ſcapo multifloro, nectario campanulato, foliis planis enſiformibus.*
*The many-flowered Narciſſus, with a campanulated nectarium, and plane enſiform leaves.*

**Many-flowered Daffodil.**

The root is a large, tunicated, and fibrated bulb, blackiſh on the outſide, and white within: the leaves are ten inches long, half an inch broad, flat, ſmooth, and edged like a ſword: the ſtalk is naked, hollow, green, ſtriated, and a foot high; at it's top ſtand ten or twelve flowers, moderately large, and of a diſagreeable ſmell: the petals are uſually white, ſometimes a little yellowiſh; the nectarium of a ſtrong yellow.

It is a native of the coaſts of Spain and Italy. C. Bauhine calls it, Narciſſus medio-luteus copioſiore flore odore gravi.

4. *Narciſſus ſcapo multifloro, nectario campanulato, brevi, foliis ſubulatis.*
*The many-flowered Narciſſus, with a ſhort, campanulated nectarium, and ſubulated leaves.*

**The Jonquille.**

The root is a tunicated bulb, brown on the outſide, white within, and fibrated: the leaves are a foot long; there uſually ariſe only two of them from the root: they are of the thickneſs of a ſmall packthread at the baſe, and gradually ſmaller to the point; they look round, but are, when examined, furrowed along the middle: the ſtalk is round, ſlender, a foot high, and green: the flower ſtands ſometimes ſingle; ſometimes there are two on the ſtalk, ſometimes more: the tube is long; the petals ſmall; the opening of the nectarium ſinuated; the whole flower is of a beautiful yellow, and a very ſweet ſmell.

It is a native of Spain and Italy. C. Bauhine calls it, Narciſſus juncifolius luteus minor.

The varieties of theſe four ſpecies of Narciſſus are almoſt innumerable; they are principally owing to culture, and conſiſt in the mutiplicity of petals, and ſize and colour of the corolla. Tournefort fills four or five pages, with the names of them, recounting them as ſpecies.

## PANCRATIUM.

THE calyx is an oblong, obtuſe, compreſſed ſpatha, opening in the plane ſide, and deciduous: the nectarium of the corolla is formed of a ſingle leaf, of a cylindraceo-infundibuliform ſhape, coloured at top, and with an open mouth divided into ten ſegments: the petals are ſix, lanceolated and plane, and are inſerted externally into the tube of the nectarium above the baſe: the ſtamina are ſix ſubulated filaments, affixed to the apex of the nectarium; the antheræ are oblong and incumbent; the germen is obtuſely trigonal, and placed under the receptacle: the ſtyle is filiform, and ſomewhat longer than the ſtamina; the ſtigma is obtuſe; the fruit is a roundiſh, triquetrous

quetrous capſule, formed of three valves, and containing three cells: the ſeeds are numerous and globoſe; the receptacle is columnar. It is figured by Dillenius, Hort. Elth. 221.

## AMARYLLIS.

THE calyx is an oblong, obtuſe, compreſſed, emarginated ſpatha, opening in the plane ſide, and deciduous: the corolla conſiſts of ſix lanceolated petals; the ſtamina are ſix ſubulated filaments: the antheræ are oblong, incumbent, and aſſurgent: the germen is roundiſh, ſulcated, and placed below the cup: the ſtyle is filiform, of the length and ſituation of the ſtamina; the ſtigma is trifid and ſlender: the fruit is an oval, or nearly oval, capſule, formed of three valves, containing three cells: the ſeeds are numerous: the inflexion of the petals, ſtamina, and piſtil, in this genus, is very different in the various ſpecies.

This genus comprehends the Lilionarciſſus of Tournefort and Dillenius.

1. *Amaryllis ſpatha multiflora, corollis revolutis, genitalibus ſtrictis.*
*The many-flowered Amaryllis, with revolute flowers, and cloſe ſtamina.*

The Guernſey Lilly.

This is by far the moſt beautiful plant of it's genus, perhaps the moſt beautiful in the world. It's root is a large bulb; it's leaves are eight inches long, an inch broad, of a ſtrong bluiſh-green, and ſmooth; eight or ten of them grow in a cluſter, and they uſually droop their extremities toward the ground; the ſtalk riſes not in the midſt of theſe, but long before them, when the plant is of an age to flower: they only appear, after the ſtalk is faded; this is tender, green, and ſucculent, and is beautifully ſpotted with purple at the bottom: at it's top ſtands a cluſter of ten or twelve flowers; they are very large, and of a fine bright red, ſpangled, as it were, with gold-coloured ſpots, which, in the ſun, ſhine like burniſhed gold.

It is a native of Japan, but it thrives excellently wild in our iſland of Guernſey, where the roots were long ſince ſcattered by ſome accident, and whence we have been plentifully ſupplied ever ſince. Cornutus and others call it, Narciſſus Japonicus rutilo flore.

2. *Amaryllis ſpatha uniflora, corolla inequali, genitalibus declinatis.*
*The ſingle-flowered Amaryllis, with an unequal corolla, and declinated ſtamina.*

The root is a bulb of the ſize and figure of a ſmall onion, but blackiſh on the outſide; the leaves are thick, oblong, and narrow; the ſtalk is a foot high, uſually ſingle; ſometimes there are two from the ſame root; it grows to a foot high, and is roundiſh, ſucculent, and of a reddiſh colour: the ſpatha, while cloſed, is of a beautiful red; when it burſts, a ſingle flower appears. It is large, pendent, and of a bright red colour; the petals are diſpoſed three and three, and the middle one of the upper ſeries ſtands more erect than the reſt.

It is a native of Mexico. C. Bauhine calls it, Narciſſus Indicus totus ruber; others, Narciſſus Jacobæus flore ſanguineo.

The other ſpecies of the Amaryllis are, 1. The ſmall-flowered, red Amaryllis. 2. The great, round-headed Amaryllis, with numerous red flowers. 3. The dwarf, many-flowered, Indian Amaryllis. 4. The Jamaica Amaryllis, with red and yellow flowers. 5. The American, convallaria-leaved Amaryllis. 6. The little, ſingle-flowered, white Amaryllis. 7. The yellow, vernal Amaryllis. 8. The little, yellow, autumnal Amaryllis. Culture makes many varieties of one or other of theſe ſpecies, which are themſelves deſcribed as ſpecies by too many.

## PONTEDERIA.

THE calyx is an oblong ſpatha, opening ſideways: the corolla is formed of a ſingle petal, divided into two parts, and ringent: the upper lip is ſtrait, plane, and it's top divided into three equal ſegments: the lower lip is reflex, divided into three parts, and theſe alſo equal: the ſtamina are ſix filaments, inſerted into the corolla; one of them is very ſhort, and two are longer than the other: the antheræ are incumbent; the germen is oblong, and placed above the receptacle; the ſtyle is ſimple, very ſhort, and declinate; the ſtigma is ſimple: the fruit is a fleſhy capſule, of an oval figure, ſomewhat triangular, marked with three furrows, and containing three cells: the ſeeds are numerous, and of a roundiſh figure.

It is a native both of the Eaſt and Weſt Indies, and is deſcribed by Houſton under the name of Michelia.

### *Claſs the Sixth. Order the Firſt.*

### *Diviſion the Third.*

### *Hexandria Monogynia, with naked flowers, conſiſting of ſix petals.*

## CRINUM.

THE calyx is a ſpathiform, general involucrum, compoſed of two oblong leaves, which bend downward, after it opens, and expoſe to ſight a kind of little umbel: the corolla is infundibuliform, and conſiſts of a ſingle petal; the tube is oblong, cylindric, and bent; the limb is divided into ſix lanceolato-linear, obtuſe, concave, reflex ſegments, three of which alternately are diſtinguiſhed by an uncinated appendage. The ſtamina are ſix ſubulated filaments, ariſing from the baſe of the limb; they are of the length of the limb, and connivent: the antheræ are oblong, linear, incumbent, and aſſurgent: the germen is placed in the bottom of the corolla; the ſtyle is ſubulated, and ſhorter than the ſtamina; the ſtigma is trifid, and very ſmall: the fruit is a capſule of a ſuboval figure, with three cells; the ſeeds are numerous.

Of this genus there is only one known ſpecies, and this has been uſually called a Lilioaſphodelus by authors.

### CRINUM.

The root is a large tunicated bulb; the leaves are ſix or eight inches long, half an inch broad, and of a bluiſh-green, and remain green all the winter. The ſtalk is round, green, ſucculent, thick, naked, and near a foot high: the flowers are large and white, and ſtand ten or fifteen together in a cluſter, at the top of the ſtalk.

It is a native of America. Commelin calls it, Lilioaſphodelus Americanus ſempervirens minor albus. We have it in ſome of our gardens.

## BULBOCODIUM.

THERE is no calyx; the corolla is of a funnel-like ſhape, and is formed of ſix petals. The ungues are very long and linear; the bracteæ are connected at the mouth, and the limb is erect and formed of the bracteæ, become of a lanceolated figure, and concave. The ſtamina are ſix ſubulated filaments, of but half the length of the limb; they are inſerted into the neck of the corolla: the antheræ are incumbent: the germen is in figure ovato-ſubulated, and obtuſely trigonal: the ſtyle is filiform, of the length of the ſtamina: the ſtigmata are three, oblong, erect, and furrowed: the fruit is a triangular, acuminated capſule, containing three cells: the ſeeds are numerous.

## ALLIUM.

THE calyx is a common ſpatha, of a roundiſh figure, terminating in a long point, and deciduous: the corolla conſiſts of ſix oblong, narrow, comato-erect petals: the ſtamina are ſix ſubulated filaments, of the length of the corolla: the antheræ are oblong and erect; the germen is ſhort and trigonal, with a line on every angle: the ſtyle is ſimple; the ſtigma is acute: the fruit is a very ſhort, broad capſule, of a trilobated figure, conſiſting of three valves, and containing three cells: the ſeeds are numerous, and of a roundiſh figure.

This genus comprehends the Allium and the Moly of authors, and the Cepa and Porrum of Linnæus, in his Genera Plantarum.

1. *Allium caule planifolio bulbifero, radice compoſita, ſtaminibus tricuſpidatis.* **Common Garlick.**

*The planifolious, bulbiferous-ſtalked Allium, with a compound root, and three-pointed ſtamina.*

The root is a compoſite bulb, of the bigneſs of a hen's egg, formed of a number of ſmaller bulbs, ſurrounded by a common membrane, acrid to the taſte, and of a very ſtrong ſmell. The leaves are numerous, a foot and a half long, narrow and thin. The ſtalk is round, ſmooth, naked, hollow, and two or three feet high. The flowers are ſmall and whitiſh, but they ſtand in a very large cluſter, at the top of the ſtalk.

It is a native of Sicily; we have it in all our gardens. C. Bauhine and others call it, Allium ſativum. It's root is uſed in the ſhops as an aperient and diuretic; a ſyrup of it is excellent in aſthma's, and other diſorders of the breaſt, ariſing from a tough, viſcid phlegm.

2. *Allium ſcapo nudo, foliis lanceolato-ſeſſilibus, umbella faſtigiata.* **Yellow Moly.**

*The naked-ſtalked, lanceolato-ſeſſile-leaved Allium, with a faſtigiated umbel.*

The root is a bulb, ſometimes ſingle, ſometimes double, and reſembling that of an orchis. The leaves ſtand two together, ſurrounding one another at the baſe; they are ten inches long, an inch and a half broad, erect, firm, ſomewhat hollowed toward the baſe, of a bluiſh-green colour, and of the ſmell of garlick. The ſtalk is round, ſmooth, ſlender, but firm, and a foot, or more, in height. The flowers are ſmall, of a pale whitiſh-yellow on the outſide, and of a deep yellow within: each has it's ſeparate pedicle, an inch long, or more; and a cluſter of thirty, or more, of them, ſtand together, at the ſummit of the ſtalk, in a kind of globular form.

It is a native of Hungary, and of ſome parts of France. C. Bauhine calls it, Moly latifolium luteum odore allii.

3. *Allium ſcapo nudo, inferne ventricoſo, longiore, foliis teretibus.* **The Onion.**

*The naked and ventricoſe-ſtalked Allium, with cylindric leaves.*

The root is a large, tunicated bulb, acrid, and irregular in ſhape, ſometimes perfectly round, ſometimes oblong, ſometimes depreſſed. The leaves are a foot long, hollow, rounded, and of a ſtrong green colour. The ſtalk is naked, thick, ſtrait, and hollow; toward the middle it ſwells into a kind of belly, and is four or five feet high: at the top ſtands a large, round cluſter, of little, greeniſh, white flowers. Culture makes a vaſt number of varieties in this ſpecies, in the colour, ſhape, and taſte of the roots, &c. and theſe varieties have been deſcribed under the names of different ſpecies, but the plant is the ſame in all.

4. *Allium caule planifolio, umbellifero, radice tunicata, ſtaminibus tricuſpidatis.* The Leek.

*The planifolious-ſtalked Allium, with a tunicated root, and tricuſpidate ſtamina.*

The root is a large bulb, compact, but tunicated, and fibrated at the bottom. The leaves are large, half an inch broad, and a foot long; they ſtand alternately on the young ſtalks, and ſurround them at the baſe; when the ſtalk grows higher, the leaves are narrower, and carinated. The ſtalk is thick, ſucculent, and three or four feet high; at the top ſtands a cluſter of flowers, of the bigneſs of a man's fiſt; they are ſmall, and of a purpliſh colour.

The Leek and Onion are both natives of Italy; we have them in all our kitchen gardens.

5. *Allium ſcapo nudo folia adæquante, foliis teretibus ventricoſis.* The Long Onion.

*The low, ventricoſe-leaved, naked-ſtalked Allium.*

The length or roundneſs of the root we have already obſerved makes no ſpecific diſtinction in the Onion; the root of this is, indeed, always oblong, but it has other more eſſential differences from the common kind. It's ſtalk is not above a foot and a half high, and the ſtamina, in it's flowers, are ſimple, not tricuſpidate, as in the common Onion; it's leaves are hollow, and rounded; it's flowers whitiſh, with a tinge of purple; the root is ſometimes white, ſometimes reddiſh.

It is a native of Spain. C. Bauhine calls it, Cepa radice longa.

The other more ſingular ſpecies of this genus are, 1. The convoluted-ſtalked Allium, or Ophioſcordon. 2. The ſmaller, rounded-headed Allium. 3. The leek-leaved Allium, with purple flowers. 4. The broad-leaved, wild Allium, called Ramſons. 5. The narrower, thin-leaved Allium. 6. The bicornate, wild Allium. 7. The ſtriated-flowered Allium. 8. The ruſhy-leaved, yellow Allium. 9. The purple, Pyrenean Allium. 10. The narciſſus-leaved Allium. 11. The long-rooted, mountain Allium. 12. The liliaceous Allium. 13. The purple, African Allium. 14. The narrow-leaved Allium, with yellow flowers. 15. The graſſy Allium. 16. The crenated-leaved Allium. 17. The ruſh-leaved Allium, with a ſweet ſmell. Of thoſe called Onions and Leeks are, 1. The Aſcalonic Allium, or Scallions. 2. The fiſſile Allium, or Chiboule. 3. The perennial ſectile Allium, with ruſhy leaves. 4. The five-leaved, purple Allium. 5. The double-headed Allium. 6. The narrow-leaved, foliaceous-ſtalked Allium, called narrow Leek. 7. The purple, ſweet-ſcented, oriental Allium.

## LILIUM.

THERE is no calyx: the corolla has a narrow, campanulated baſe; from this proceed ſix erecto-incumbent petals, obtuſely carinated at the baſe, growing gradually wider, and more patent, and with their extremities thick, obtuſe, and reclinate: the nectarium is a longitudinal line in each petal, near the baſe: the ſtamina are ſix ſubulated, erect filaments, ſhorter than the corolla: the antheræ are oblong and incumbent: the germen is oblong, cylindric, and marked with ſix ſtriæ: the ſtyle is cylindric, and of the length of the corolla: the ſtigma is thick and triangular: the fruit is an oblong capſule, furrowed with ſix deep lines; it's top is hollow, trigonal, and obtuſe; it is compoſed of three valves; it contains three cells, and the ſeeds are very numerous, and ſtand in double rows; they are flat, and ſemiorbiculated externally: the nectarium in ſome ſpecies is plain, in others barbated; and the petals in ſome are intirely revolute, in others not.

1. *Lilium*

1. *Lilium floribus ſparſis oblongis, corollis campanulatis, intus glabris.*
*The ſparſed-flowered Lilium, with oblong, campanulated corollæ, ſmooth within.*

The White Lily.

The root is bulbous, compoſite, and white. The ſtalk is very thick, four feet high, and full of leaves; theſe are oblong, moderately broad, ſmooth, and of a pale green colour: the flowers ſtand ſingly, on ſhort pedicles, forming a large cluſter at the top of the ſtalk; they are very large, of a ſnow-white colour, and very fragrant.

It is a native of Syria, where it is found plentifully wild in damp places; we have it in our gardens. C. Bauhine calls it, Lilium album flore erecto vulgare; others, only Lilium album. It's root and it's flowers have been eſteemed emollients externally uſed, but they are at preſent much neglected.

2. *Lilium foliis ſparſis, corollis campanulatis erectis, intus ſcabris.*
*The ſparſed-leaved Lily, with erect, campanulated flowers, rough within.*

Red Lily.

The root is a ſquammoſe bulb; the ſtalk is thick and round; it riſes to four or five feet high; the leaves ſtand leſs frequent on it than in the white Lily, and are narrower, oblong, rigid, and of a ſhining blackiſh-green colour. The flowers reſemble thoſe of the common white Lily, but are of a fine reddiſh-yellow colour, and ſcabrous within.

It is a native of Italy and Spain, and of Ruſſia; it is common in our gardens. C. Bauhine calls it, Lilium purpureo-croceum majus, and Lilium bulbiferum afterwards, as if of another ſpecies.

3. *Lilium foliis ſparſis, floribus reflexis, corollis revolutis.*
*The ſparſed-leaved Lilium, with reflex flowers and revolute corollæ.*

The root is a ſquammoſe bulb: the ſtalk riſes to two feet high. The leaves are oblong, and very narrow, of a pale green colour, rigid and nervous. The flowers are large; they ſtand in conſiderable cluſters, and are of a deep bloody purple; they hang downwards, and the petals turn back.

It is a native of Aſia; we have it in gardens. C. Bauhine calls it, Lilium floribus reflexis anguſtifolium; Cluſius, Lilium rubrum præcox.

The other ſpecies of the Lily are very numerous, and culture has made ſo many varieties from each, that the apparent number is much greater. The principal and more certainly diſtinct are, 1. The great, pendent-flowered, broad-leaved Lilium. 2. The plantain-leaved, bloody Lilium. 3. The hoary-leaved, bloody Lilium. 4. The great, nutant-flowered Lilium, called the great Martagon. 5. The hoary Martagon. 6. The bright, red, many-flowered Lilium. 7. The early, narrow-leaved Lilium. 8. The graſſy-leaved Lilium. 9. The yellow, nutant Lilium. 10. The broad-ſtalked, Syrian Lilium. 11. The long-ſpiked and reflex flowered Lilium. 12. The bright red, Byzantine Lilium. 13. The pyramidal, muſk Lilium. 14. The ſhort and very narrow-leaved Lilium.

## FRITILLARIA.

THERE is no cup: the corolla is compoſed of ſix petals, and is of a campanulated form, with a broad baſe: the petals are oblong, and parallel: the nectarium is a cavity, hollowed near the baſe of every petal: the ſtamina are ſix ſubulated filaments, preſſing upon the ſtyle: the antheræ are quadrangular, oblong, and erect: the germen is oblong, trigonal, and obtuſe: the ſtyle is ſimple, and longer than the ſtamina: the ſtigma is triple, patent, and obtuſe: the fruit is an oblong, obtuſe, trilobate capſule, formed of three valves, and containing three cells: the ſeeds are numerous, plane, ſemiorbiculated externally, and placed in a double row.

This genus comprehends the Fritillary, Petilium, and Corona Imperialis of Tournefort, and the Liliofritillaria of Boerhaave. In the Fritillaria of authors the nectarium

is

is oblong, and the fruit ſmooth; in the Corona Imperialis the nectarium is hemiſpheric, and the fruit acutely emarginated.

1. *Fritillaria foliis omnibus alternis.* **Common Fritillary.**
*The Fritillary, with all the leaves alternate.*

The root is a ſolid bulb, white and ſucculent. The ſtalk is ſlender, round, purpliſh, and not very robuſt; the height about eight inches. The leaves are very narrow, long, carinated, and of a duſky green colour; they all ſtand alternately on the ſtalk, and there are uſually about ſix or ſeven of them on it. The flower is large, often ſingle, ſometimes two or three grow together: the pedicle is an inch long, ſlender and nutant: the flower is uſually beautifully checquered with ſquares of a dark purple, and of a pale red colour, but ſometimes it is white, or has a great deal of white in it.

It is a native of Germany and Sweden, and is frequent in our gardens. C. Bauhine calls it, Fritillaria præcox purpurea variegata; Dodonæus and Renealm, Meleagris.

2. *Fritillaria foliis imis oppoſitis.* **The little-flowered Fritillary.**
*The Fritillaria, with the lower leaves in pairs.*

The root is a large, ſolid bulb; the ſtalk is round, ſlender, erect, and a foot, or more, high: the leaves are narrow, long, and of a duſky green colour; there are fifteen or twenty of them on the ſtalk, and the lower ones ſtand in pairs, oppoſite to one another; the others alternate. The flowers are ſmall, and of a blackiſh purple colour, and the ends of them turn up: the three interior petals are narrower than the others, and the whole flower reſembles a bell.

It is a native of the Apennines. C. Bauhine and others call it, Fritillaria flore minore.

3. *Fritillaria racemo nudiuſculo, foliis obliquis.* **The Perſian Lily.**
*The naked-cluſtered Fritillary, with oblique leaves.*

The root is a large, round ſquammoſe bulb: the ſtalk riſes to three feet high, and is round, ſlender, and ſet full of leaves; theſe are oblong, very narrow, and of a duſky greyiſh-green; at the top of the ſtalk ſtands a long ſpike of flowers, each on it's ſeparate pedicle, an inch and a half, or more, in length; they are large, of a deep purple colour, and hang downward.

It is a native of the Eaſt, but is frequent in our gardens. C. Bauhine and others call it, Lilium Perſicum.

4. *Fritillaria racemo comoſo, inferne nudo.* **The Crown Imperial.**
*The Fritillary, with a comoſe cluſter, naked at the bottom.*

The root is a large, compreſſed, ſquammated bulb, of a whitiſh or reddiſh colour, and poiſonous ſmell. The ſtalk is round, ſtriated, thick, and three feet high. The leaves ſtand in cluſters on the lower part of the ſtalk; they are long, narrow, and ſeſſile, adhering by a broad baſe, and rendering the ſtalk angular, by running down it: from the top of this leafy part the ſtalk runs up naked, a foot, or more, high; it is ſlenderer, and not ſtriated, but ſpotted with purple. The flowers ſtand in a cluſter at the top, three, four, or more, together, on ſeparate pedicles, each with two narrow, little leaves at it's baſe; they are large, of a reddiſh yellow colour, and dependent.

It is a native of Perſia, but is frequent in our gardens. C. Bauhine and others call it, Corona imperialis; Linnæus, in his Hort. Cliffort. Petilium foliis lanceolatis; he then ſuppoſed it of a diſtinct genus from the Fritillary, but afterwards found it of the ſame.

The other ſpecies of Fritillary are numerous; their varieties owing to culture much more ſo. The more ſingular and certainly diſtinct are, 1. The large-flowered, autumnal Fritillary. 2. The little, yellow Fritillary. 3. The large, yellow Fritillary. 4. The greeniſh-yellow Fritillary. 5. The Fritillary, with umbellated flowers. 6. The branched, purple Fritillaries. Theſe are all called Fritillaries by authors. The Corona Imperialis is a ſingle ſpecies, though it's varieties deſcribed by authors under the name of

of ſpecies, amount to more than twenty. Tournefort enumerates them; they conſiſt in the ſize and colour of the flower, and in the variegations of the leaves.

## TULIPA.

THERE is no calyx: the corolla is of a campanulated form; it conſiſts of ſix petals, of an ovato-oblong form, concave and erect: the ſtamina are ſix ſhort, ſubulated filaments: the antheræ are quadrangular, oblong, erect, and diſtant: the germen is large, oblong, and trigonal, but approaching to a cylindric form: there is no ſtyle: the ſtigma is trilobate and triangular: the angles are protuberant, bifid, and permanent: the fruit is a triquetrous capſule, formed of three valves, and contains three cells; the valves are oval, and have a ciliated edge: the ſeeds are numerous, plane, and placed in a double ſeries; they are ſemicircular, and ſeparated by coniform flocci.

Of this genus there is but one known ſpecies, though infinitely varied by culture.

### TULIPA. The Tulip.

The root is a moderately large bulb: the radical leaves are oblong, broad, thick, even at the edges, and of a greyiſh-green colour. The ſtalk riſes to a foot and a half high, and has uſually three leaves on it, like the radical ones, but ſmaller. The flower is ſingle, and ſtands erect on the ſummit of the ſtalk; it is large, and of a pale red colour.

This is the natural, original Tulip. It is a native of Greece, and has been introduced into our gardens about a hundred and ninety years, in which time five times as many varieties of it have been raiſed by culture, and a very conſiderable part of theſe deſcribed as diſtinct ſpecies by authors: Tournefort alone enumerates conſiderably more than a hundred of them as diſtinct plants. The judicious reader will not wonder that we have greatly reduced the ſuppoſed number of ſpecies in general in this work, when he ſees that more than a hundred are here neceſſarily ſtruck off at once: the varieties are very beautiful, but they ſhould be the deliciæ of gardeners, not of botaniſts.

## ERYTHRONIUM.

THERE is no calyx: the corolla conſiſts of ſix oblong, lanceolated, acuminated petals, alternately incumbent on one another at the baſe, and, after gradually becoming wider, turning back from about the middle: the nectaria are two obtuſe, callous tubercles, adhering to the alternate, interior petals, at the baſe: the ſtamina are ſix ſubulated, very ſhort filaments: the antheræ are oblong: the germen is turbinated: the ſtyle is ſimple and ſtrait, ſhorter than the corolla, but longer than the ſtamina: the ſtigma is triple, patent, and obtuſe: the fruit is a capſule of a ſubgloboſe figure, narroweſt at the baſe, formed of three valves, and containing three cells: the ſeeds are numerous, and of an ovato-acuminated figure.

Of this genus there is only one known ſpecies.

### ERYTHRONIUM. Dog's Tooth.

The root is two inches long, thickeſt at the bottom part, and ſmaller toward the top: the radical leaves are uſually only two, ſometimes three; they are oblong, broad, narrow at the baſe, and terminate in a point, ſometimes narrower, ſometimes, eſpecially when there is only a ſingle leaf, broader, and roundiſh; they are often four inches long, and an inch broad, of a deep green colour, and uſually ſpotted with purple. The ſtalk is ſingle, round, tender, reddiſh, naked, and three or four inches high. The flower is ſingle; it ſtands on the top of the ſtalk, and is moderately large, and either white or purpliſh.

It is a native of Spain, Italy, and Germany, and is frequent in our gardens. C. Bauhine calls it, Dens canis latiore folio, and deſcribes, as indeed moſt other authors have alſo done, a variety of it as a diſtinct ſpecies, under the name of Dens canis anguſtiore folio.

## UVULARIA.

THERE is no calyx: the corolla conſiſts of ſix oblongo-lanceolate, acute, erect, and very long petals: the nectarium is an oblong cavity, formed toward the baſe of every petal: the ſtamina are ſix very ſhort, and broad, filaments: the antheræ are long, erect, and of half the length of the corolla: the germen is roundiſh: the ſtyle is ſingle, but ſemitrifid, filiform, and ſhorter than the ſtamina: the ſtigmata are ſimple and reflex: the fruit is an ovato-oblong, and ſomewhat triangular, capſule, containing three cells: the ſeeds are numerous, roundiſh, and compreſſed.

## GLORIOSA.

THERE is no calyx: the corolla conſiſts of ſix oblongo-lanceolated, undulated, and very long petals, reflex to near the baſe: the ſtamina are ſix ſubulated filaments, patulous, and ſhorter than the corolla: the antheræ are incumbent; the germen is globoſe; the ſtyle is filiform, and longer than the ſtamina, and inclinated: the ſtigma is triple and obtuſe: the fruit is an oval, pellucid capſule, formed of three valves, and containing three cells: the ſeeds are numerous, globoſe, and diſpoſed in a double ſeries.

Tournefort has given this genus the name of Methonica, in the Memoirs of the Paris Academy, 1706.

## ASPHODELUS.

THERE is no calyx; the corolla conſiſts of a ſingle petal, divided into ſix parts: the ſegments are lanceolated, plane, and patent: the nectarium conſiſts of ſix valvulæ very ſmall, inſerted into the baſe of the petal, and connivent, ſo as to form a globe: the ſtamina are ſix ſubulated, arcuated filaments; the three alternate ones ſhorter, and all inſerted into the valves of the nectarium: the antheræ are oblong, incumbent, and aſſurgent; the germen is roundiſh, and ſtands within the nectarium: the ſtyle is ſubulated, and ſtands on the ſtamina; the ſtigma is truncated: the fruit is a fleſhy capſule, of a globoſe figure, divided into three lobes, and containing three cells: the ſeeds are numerous, triangular, and gibbous on one ſide: the ſtamina are in ſome ſpecies declinated, in others bent outwards.

1. *Aſphodelus caule ſimplici folioſo, foliis trigonis fiſtuloſis.*
*The ſingle, leafy-ſtalked Aſphodelus, with trigonal, fiſtulous leaves.*

**Yellow Aſphodel.**

The root conſiſts of a number of tuberoſities, oblong, thick, and yellow, furniſhed with many thick and ſtrong fibres. The radical leaves are long and narrow; the ſtalk grows to three feet high; the leaves ſtand very thick upon it, and are of a trigonal ſhape, and hollow; the flowers are moderately large and yellow, they ſtand in a long ſpike, reaching from the top almoſt to the bottom of the plant.

It is a native of Sicily; we have it in our gardens. C. Bauhine calls it, Aſphodelus luteus flore et radice.

2. *Aſphodelus caule nudo ramoſo, foliis ſtriatis, ſubulatis fiſtuloſis.*
*The naked, ramoſe-ſtalked Aſphodelus, with ſtriated, ſubulated, fiſtulous leaves.*

**Hollow-leaved Aſphodel.**

The root is compoſed of a number of oblong tuberoſities; the radical leaves are very narrow, ſometimes round, ſometimes flatted on one ſide; they are pointed at the end, narrow, and ſomewhat rough to the touch: the ſtalk is ſmooth, branched, and has no leaves on it: the flowers are large, and the nectarium very obvious.

It is a native of Spain, France, and Italy. C. Bauhine calls it, Aſphodelus foliis fiſtuloſis.

The

The other more ſingular ſpecies are, 1. The great, white, ramoſe Aſphodel. 2. The little graſſy-leaved Aſphodel. 3. The patulous-ſtalked, compreſſed-leaved Aſphodelus. 4. The great-flowered, ſpiral, yellow Aſphodel. 5. The rough-leaved, patulous, yellow Aſphodel.

## ANTHERICUM.

THERE is no calyx; the corolla conſiſts of ſix petals of an oblong, obtuſe figure, and very patent: the ſtamina are ſix ſubulated, erect, and very hairy filaments: the antheræ are ſmall, incumbent, and quadriſulcous; the germen is obſcurely trigonal; the ſtyle is ſimple, of the length of the ſtamina; the ſtigma is obtuſe and trigonal: the fruit is a ſmooth, oval, trigonal capſule, marked with three furrows, compoſed of three valves, and holding three cells; the ſeeds are numerous and angular. The hairineſs of the ſtamina is the great character.

1. *Anthericum foliis planis, caule ſimpliciſſimo.*
*The plane-leaved and ſimple-ſtalked Anthericum.*
**Single-ſtalked Spider-Wort.**

The root conſiſts of a multitude of long, thick, white fibres: the radical leaves ſtand in cluſters, ſurrounding one another at the baſe; they are narrow, long, pointed at the end, of a bright green, and ſtand erect. The ſtalk is round, ſmooth, ſucculent, and grows to a foot high, ſingle and ſtrait; at it's top ſtands a kind of ſpike of flowers, which are large and ſnow-white.

It is a native of the Pyrenæans; we have it in our gardens, where it grows larger, and varies ſo much, that it has been made into two or three other ſpecies. C. Bauhine calls it, Phalangium parvo flore, non ramoſum; Ray, Phalangium pulchrius, non ramoſum.

2. *Anthericum foliis planis, corollis planis deciduis.*
*The plane-leaved Anthericum, with plane, deciduous flowers.*
**Branched Spider-Wort.**

The root is compoſed of a multitude of thick fibres, white, and ſweetiſh to the taſte: the radical leaves are narrow, and a foot, or more, in length; they lie flat on the ground: the ſtalk is two feet, or more, in height, very ſlender, round, ſmooth, and ſucculent; the flowers ſtand on the ſeveral branches it divides itſelf into; at the top, they are large, and of a fine ſnow-white.

It is a native of Germany. C. Bauhine calls it, Phalangium parvo flore ramoſum.

The other more ſingular ſpecies are, 1. The great, lily-flowered Anthericum, called great Spider-wort. 2. The fiſtulous-leaved Anthericum. 3. The ſeſſile, pulpy-leaved Anthericum. 4. The ſtriated, fleſhy, ſubulated-leaved Anthericum. 5. The fleſhy, cylindric-leaved, ſtriated Anthericum. 6. The marſh, iris-leaved Anthericum. 7. The little Scottiſh, iris-leaved Anthericum. 8. The larger, acute-leaved Anthericum.

## SCILLA.

THERE is no calyx; the corolla conſiſts of ſix oval, deciduous, and very patent petals: the ſtamina are ſix ſubulated filaments, of half the length of the corolla: the antheræ are oblong and incumbent: the germen is roundiſh; the ſtyle is ſimple, of the length of the ſtamina, and deciduous; the ſtigma is ſimple: the fruit is a ſmooth capſule, of a ſuboval figure, marked with three furrows, formed of three valves, and containing three cells: the ſeeds are numerous and roundiſh.

This genus comprehends the Liliohyacynthus of Tournefort, and the Hyacynthus Stellaris of Ray and others.

1. *Scilla radice tunicata.*
*The tunicated-rooted Scilla.*
**The Squill.**

The root is a roundiſh, very large, tunicated bulb; the coats are very thick, and full of a ſlimy, acrid juice: the leaves are a foot and half long, and three or four inches broad,

broad, thick, juicy, and of a fine bright green. The ſtalk riſes to three feet high; it is green, ſucculent, ſlender, and round; the flowers ſtand in a long ſeries toward the top; they are ſmall and white.

It is a native of the ſea-coaſts of Spain and Italy. C. Bauhine calls it, Scilla vulgaris radice rubra; Cluſius, Scilla Hiſpanica. It's root is ſometimes reddiſh, ſometimes white, and hence ſome have made two ſpecies of it, a red and a white rooted ſquill. The root is uſed in medicine as an emetic and detergent; an oxymel is made of it in the ſhops.

2. *Scilla radice ſquammata corollis majoribus.* **The blue, ſtarry hyacynth.**
*The ſquammated-rooted Scilla, with large corollæ.*

The root is a large, roundiſh bulb, formed of a number of thick ſquammæ, and reſembling that of the lily; the leaves are ten inches long, narrow, and of a bright green: the ſtalk is round, ſucculent, and green; the flowers large, and of a beautiful blue, ſometimes of a pale red, ſometime white, whence Tournefort has divided it into as many ſpecies.

It is a native of the Eaſt; we have it frequently in gardens. C. Bauhine calls it, Hyacynthus ſtellaris foliis et radice lilii; Tournefort, Liliohyacynthus flore 1. Cæruleo. 2 Albo. 3 Rubello.

## ORNITHOGALUM.

THERE is no calyx, except a few vague fulcra are underſtood to be ſuch. The corolla conſiſts of ſix petals, of a lanceolated figure, from the baſe to the middle erect, from thence to the points plano-patent; they are permanent, but they loſe their colour: the ſtamina are ſix erect filaments, of an uncertain figure, of about half the length of the corolla; the antheræ are ſimple: the germen is angular; the ſtyle is ſubulated and permanent: the ſtigma is obtuſe: the fruit is a roundiſh, angulated capſule, formed of three valves, and containing three cells: the ſeeds are numerous and roundiſh; the receptacle columnar: the ſtamina are in ſome ſpecies plane, erect, trifid at the top, with the anthera on the middle ſegment.

1. *Ornithogalum ſcapo anguloſo diphyllo, pedunculis umbellatis ſimplicibus.* **Yellow Star of Bethlehem.**
*The angular ſtalked, two-leaved Ornithogalum, with ſimple, umbellated peduncles.*

The root is a ſmall fleſhy bulb, full of a viſcous juice. The radical leaves are uſually two; they are ſix inches long, half an inch broad, of a deep green, and ribbed longitudinally: the ſtalk riſes ſingle, angular, greeniſh, or reddiſh, and about four or five inches high, and toward it's top has uſually two leaves, ſmall and narrow near the top. The flowers ſtand on long pedicles, and form a kind of umbel; they are green on the outſide, with a rim of yellow, and are perfectly yellow within.

It is a native of Germany and Sweden. C. Bauhine calls it, Ornithogalum luteum; Dodonæus, Bulbus ſylveſtris.

2. *Ornithogalum ſcapo angulato diphyllo, pedunculis umbellatis ramoſis.*
*The angular-ſtalked Ornithogalum, with two leaves, and ramoſe, umbellated peduncles.*

The root is a round, ſolid bulb, not much larger than a pea; there uſually riſes from this a ſingle leaf, three or four inches in length, very narrow, and of a whitiſh green: the ſtalk is angular, very ſlender, about three inches high, and has uſually two leaves on it; at it's top it ſends off a number of peduncles, which ſubdivide into others, and theſe ſupport the flowers; they are ſmall, and of a purpliſh yellow without, of a pure yellow within.

It is a native of Spain and Italy. C. Bauhine calls it, Ornithogalum luteum minus.

The

The other ſpecies are, 1. The common, greeniſh, white Ornithogalum. 2. The great, white-ſpiked Ornithogalum. 3. The ſmaller-flowered, ſpiked Ornithogalum. 4. The great, broad-leaved Ornithogalum, with ſnow-white flowers. 5. The great, umbellated, Arabian Ornithogalum. 6. The common, umbellated Ornithogalum. 7. The bluiſh-white, umbellated-flowered Ornithogalum. 8. The very narrow-leaved, yellow Ornitholagum. 9. The ſingle, ruſhy-leaved Ornithogalum. 10. The comoſe Ornithogalum, with ſnow-white flowers. 11. The bifoliate, large, blue-flowered Ornithogalum. 12. The purple, ſtarry, autumnal Ornithogalum. 13. The blue, vernal, ſtarry Ornithogalum. 14. The great-ſpiked, bluiſh, ſtarry Ornithogalum. 15. The flower upon flower, Indian, purple, ſtarry Ornithogalum. 16. The Eriopherous, ſtarry, Indian Ornithogalum. Many of theſe ſpecies are called, by the generality of writers, ſtarry Hyacynths; they are moſt of them received into our gardens, and have afforded a multitude of varieties by culture, which Tournefort and two many others have given as ſo many diſtinct ſpecies, as the red-flowered, the white-flowered, the double-flowered, &c.

## ASPARAGUS.

THERE is no calyx; the corolla is of an oblong, campanulated figure; it is compoſed of ſix petals, cohering at their tips; they are oblong, formed into a tube, and though three inner ones are alternately placed, and reflex at the extremities, they are all permanent: the ſtamina are ſix filiform capillaments, inſerted into the petals: they are erect, and of about half the length of the corolla; the antheræ are roundiſh: the germen is trigonal, of a turbinated form: the ſtyle is very ſhort; the ſtigma is a prominent point: the fruit is a globoſe berry, with an umbilicus, and contains three cells: the ſeeds are two in each, ſmooth, roundiſh, but internally angular: the figure of the corolla varies; it is ſometimes erect, ſometimes plane, ſometimes revolute. It may not improperly be called a monopetalous flower.

*Aſparagus foliis ſetaceis, caule herbaceo.* Aſparagus.
*The ſetaceous-leaved Aſparagus, with an herbaceous ſtalk.*

The root is compoſed of a multitude of long and thick fibres, ariſing from a ſmall tuberous head, and diſperſing themſelves every way: the ſtalk is at firſt thick, ſucculent, and tender; it afterwards grows ſlender and robuſt, hard, green, ſmooth, round, and very ramoſe: the leaves are very numerous, an inch in length, of a fine green, and ſcarce thicker than a thread: the flowers are ſmall and greeniſh; the berries large, and of a bright red. The plant grows to two feet and a half high, when wild; in gardens to much more.

It is a native of moſt parts of Europe in damp places, but it is greatly improved in the thickneſs and tenderneſs of it's eſculent ſhoots in gardens. C. Bauhine calls it, Aſparagus hortenſis et pratenſis. It's roots are an excellent diuretic, as indeed are alſo the ſhoots eaten at our tables.

The other ſpecies are, 1. The thick-leaved, herbaceous Aſparagus. 2. The herbaceous, prickly Aſparagus. 3. The prickly, woody Aſparagus. 4. The acute-leaved, ſpinoſe Aſparagus. 5. The great, prickly, Indian Aſparagus.

## LEONTICE.

THE calyx is very ſmall and deciduous; it is compoſed of ſix little leaves: the corolla conſiſts of ſix petals, of an oval figure, narroweſt at the baſe; the three interior ones are alternately ſmaller: the ſtamina are ſix very ſhort filaments; the antheræ are erect, formed of two valves, divided into two cells, and open lengthwiſe from the baſe to the apex, where the two valves are united firmly: the germen is of an oblong, oval figure; there is no ſtyle: the ſtigma is obtuſe, and of the height of the ſtamina: the fruit is a large, globoſe, acuminated capſule, inflated, ſomewhat ſucculent, and containing only one cell: the ſeeds are numerous and globoſe.

1. *Leontice foliis tripartitis.*
*The tripartite-leaved Leontice.*

The root is tuberous, of the bigneſs of an orange, greyiſh on the outſide, green within, and covered with a multitude of protuberances. The radical leaves riſe to a foot, or more, in height: the pedicles are long, and are divided into three parts, on each of which there ſtand two or three leaves, of a roundiſh figure, ſome more, ſome leſs, indented and jagged round the edges; they are full of ribs, and of a bluiſh-green colour. The ſtalk is round, ſlender, green, and ſtriated with purple ſtreaks; it is divided into ſeveral branches toward the top: the leaves ſtand ſingly at their joints, and are ſmaller and leſs indented than the radical ones: the flowers ſtand in a kind of ſpikes at the tops of the branches; they are large and yellow, and each has it's ſeparate pedicle an inch long, uſually with a little leaf at it's baſe: the ſeeds are black.

It is a native of Italy. C. Bauhine and others call it, Leontopetalon.

There is only one ſpecies beſide of this genus, which will eaſily be diſtinguiſhed by it's name; it is the ſimple-leaved Leontice.

*Claſs the Sixth. Order the Firſt.*

*Diviſion the Fourth.*

*Hexandria Monogynia, with flowers conſiſting of a ſingle petal, without any cup.*

## CONVALLARIA.

THERE is no calyx; the corolla is ſmooth, of a campanulated form, and compoſed of a ſingle petal, divided at the extremity into ſix ſhort, obtuſe, patenti-reflex ſegments. The ſtamina are ſix ſubulated filaments, inſerted into the petal, and ſhorter than it: the antheræ are oblong and erect; the germen is globoſe; the ſtyle is filiform, and longer than the ſtamina: the ſtigma is obtuſe and trigonal: the fruit is a globoſe berry, containing three cells, and is ſpotted, before it is ripe: the ſeeds are ſingle and roundiſh.

This genus comprehends the Lilium Convallium, the Polygonatum, and the Unifolium of authors. In all theſe the berry, before it is ripe, is ſpotted. In the Lilium Convallium, the corolla is globoſe, campanulated, and patent; in the Polygonatum, the corolla is tubulato-campanulated; in the Unifolium, a third part of all the fructifications is wanting: and, finally, ſome of the ſpecies of ſmilax of Tournefort are included in this genus, in which the corolla is divided into ſix very acute and patent ſegments.

1. *Convallaria ſcapo nudo.* **Lily of the Valley.**
*The naked-ſtalked Convallaria.*

The root is oblong, ſlender, and white, and creeps under the ſurface; from this riſe uſually two, ſometimes three, leaves; they are ſix inches long, two broad, and of a deep green; they are ſmall at the baſe, largeſt in the middle, and pointed at the end. The ſtalk is naked, ſlender, angulated, and ſix inches high; from it's middle to the top ſtand the flowers in a ſingle ſeries, placed one way, and dependent; they are ſmall, white, and of an extreamly fragrant ſmell.

It is a native of our woods, and is frequent alſo in gardens. C. Bauhine. &c. call it, Lilium Convallium.

2. *Convallaria foliis alternis floribus, ex alis.* **Solomon's Seal.**
*The alternate-leaved Convallaria, with flowers from the alæ.*

The root is oblong, white, creeping, jointed and fibrated. The ſtalk is round, green, ſlender, but firm, and two feet high; it is naked toward the bottom, but toward the top it bends downward, and is all along that part thick-ſet with alternate leaves,

leaves, two inches long, an inch broad, and nervous. The flowers are numerous, ſmall, oblong, tubular, and white; they have ſhort pedicles, ſometimes ſimple, ſometimes ramoſe.

It is a native of our woods. C. Bauhine calls it, Polygonatum latifolium vulgare. It varies extreamly in the ſize of the leaves and flowers, and theſe varieties have been deſcribed as diſtinct ſpecies, by authors, under the names of Polygonatum latifolium maximum, and Polygonatum latifolium flore majore odoro.

The root is a famous vulnerary, and is applied in form of a cataplaſm to contuſions.

3. *Convallaria foliis verticillatis.* Narrow-leaved
*The verticillate-leaved Convallaria.* Solomon's Seal.

The root is oblong, ſlender, white, and jointed; the ſtalk is angulated, ſlender, and a foot and half high: the leaves are ſmall and narrow; they ſtand four or five at a joint, ſurrounding the ſtalk in a verticillate manner, and are of a bluiſh-green, and ſmooth; the flowers ſtand round the ſtalks in the ſame manner, and are ſmall, and of a greeniſh-white.

It is a native of Sweden and Germany. C. Bauhine calls it, Polygonatum anguſtifolium; Dodonæus, Polygonatum alterum.

4. *Convallaria foliis cordatis* One Blade.
*The cordated-leaved Convallaria.*

The root is ſlender and creeping; the radical leaf is uſually ſingle, of a cordated form, three quarters of an inch long, half an inch broad, and placed on a ſlender pedicle of three or four inches in length: the ſtalk is ſlender, green, and four inches high, and has ſometimes only one, but more uſually two, ſometimes three leaves on it, like the radical one in figure, and hairy underneath; at the top ſtands a cluſter of little, white, ſweet-ſcented flowers.

It is a native of Germany, and many other parts of Europe. Gerard and Parkinſon pretend to have found it in England, but falſely. C. Bauhine calls it, Monophyllon ſive Lilium Convallium minus; others, Unifolium.

The other ſpecies are, 1. The ſingle-flowered, ſeſſile Convallaria. 2. The multiflorous Convallaria. 3. The hellebore-leaved Convallaria. 4. The dwarf, Engliſh Convallaria. 5. The bryony-leaved, American Convallaria. 6. The racemous Convallaria.

## HYACINTHUS.

THERE is no calyx; the corolla is of a campanulated ſhape, and is formed of a ſingle petal: the limb is divided into ſix reflex ſegments; the nectarium conſiſts of three pores or cavities, filled with a honey juice, and ſituated at the top of the germen: the ſtamina are ſix ſhort, ſubulated filaments; the antheræ are connivent: the germen is roundiſh, but trigonal, and marked with three furrows: the ſtyle is ſimple, and ſhorter than the corolla; the ſtigma is obtuſe: the fruit is a roundiſh capſule, triquetrous, formed of three valves, and containing three cells: the ſeeds are roundiſh, uſually two in each cell; the receptacle is columnar.

This genus comprehends the Hyacinthus and Muſcari of authors: in the Hyacinth of authors, the corolla is oblong and tubulated; in the Muſcari, it is inflated and globoſe.

1. *Hyacinthus corollis infundibuliformibus ſemiſexifidis baſi ventricoſis.* Oriental
*The funnel-flowered Hyacinth, with the corolla ventricoſe, and divided into ſix ſegments.* Hyacinth.

The root is a large bulb, full of a viſcid juice: the radical leaves are ſix or eight in number; they are long, narrow, hollowed, and of a pale green at the baſe, and deeper toward the point. The ſtalk is round, thick, green, ſucculent, and eight inches, or more,

more, high. From the middle of this to the top ſtand the flowers in a kind of ſpike; they are large, and of a beautiful blue, and have each it's ſeparate pedicle, about half an inch long, and dependent.

It is a native of the Eaſt, but is common in our gardens, where culture has produced a multitude of varieties of it, all which Tournefort has named as ſpecies; too many of them, almoſt all the other writers.

2. *Hyacinthus corollis campanulatis ſexifidis.* Graſſy Hyacinth.
*The campanulated-flowered Hyacinth.*

The root is a large bulb; the radical leaves are ſeven inches long, graſſy, and of a deep green: the ſtalk is green, round, ſucculent, and naked; at it's top ſtands a ſpike of large blue flowers, not ventricoſe at the baſe, divided into ſix ſegments to the middle, and theſe not curled back.

It is a native of the Eaſt; we have it in gardens. C. Bauhine calls it, Hyacinthus cæruleo oblongo flore minor.

3. *Hyacinthus corollis globoſis.* Racemoſe Grape-flower.
*The globoſe-flowered Hyacinth.*

The root is a moderately large bulb, of an oblong figure; the radical leaves are ſix or eight in number, very narrow, eight inches long, ſtriated, ruſhy, carinated, and purpliſh toward the baſe, green in other parts: the ſtalk is ſix or eight inches high, round, thick, naked, and ſucculent: the bottom is uſually purpliſh; the middle green, and the top, where the flowers are, bluiſh: the flowers ſtand in a long cloſe ſpike, two inches, or more, in length; they are ſmall, globoſe, of a fine blue colour, and uſually whitiſh at the edges; the top of the ſpike has a kind of ramoſe figure, and every flower has it's own ſhort pedicle, and hangs pendent.

It is a native of Italy, but is frequent in our gardens. C. Bauhine calls it, Hyacinthus racemoſus cæruleus; Tournefort, Muſcari cæruleum majus.

4. *Hyacinthus corollis ovatis.* Muſk Hyacinth.
*The oval-flowered Hyacinth.*

The root is a large, white, tunicated bulb; the radical leaves are ſix or eight in number, long, very narrow, furrowed, thick, and ſucculent: the ſtalk is thick, round, tender, and ſucculent, eight or ten inches high, and loaded with flowers from the middle to the top; theſe are oblong, or oval, of a fine blue colour, and a perfumed ſmell.

It is a native of Auſtria, but is common in our gardens. C. Bauhine calls it, Hyacinthus racemoſus Moſchatus.

Theſe are the only four abſolutely diſtinct ſpecies of Hyacinth; but the varieties of them from culture are almoſt innumerable. Tournefort, taking theſe for ſpecies, has extended them to near a hundred. Linnæus, in his Fundamenta Botanica, allows but two diſtinct ſpecies of this genus; but ſince the publiſhing that work, he allows theſe four to be ſo.

## POLYANTHES.

THERE is no calyx. The corolla is formed of one leaf, and is of an infundibuliform ſhape: the tube is oblong and crooked; the limb is patulous, and divided into ſix oval ſegments: the ſtamina are ſix thick, obtuſe filaments, ſituate in the opening of the corolla; the antheræ are linear, and longer than the filaments: the germen is roundiſh, and ſtands in the bottom of the corolla; the ſtyle is filiform, and ſhorter than the corolla; the ſtigma is trifid, thick, and covered with a honey-like juice: the fruit is a capſule of a roundiſh, but obtuſely trigonal, form, compoſed of three valves, containing three cells, and wrapped up in the baſe of the corolla: the ſeeds are numerous, ſemiorbicular, plane, and laid in a double ſeries. Heiſter has given this genus the name of Tuberoſa.

## ALOE.

THERE is no calyx; the corolla is oblong, and formed of a ſingle petal, divided into ſix ſegments at the extremities: the tube is gibboſe; the limb ſtrait; the ſtamina are ſix ſubulated filaments, fully of the length of the corolla, and inſerted in the receptacle: the antheræ are oblong and incumbent; the germen is irregular in it's figure; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is obtuſe and trifid: the fruit is an oblong, triſulcous capſule, formed of three valves, and containing three cells: the ſeeds are numerous and angular. The figure of the corolla in this genus is ſomewhat uncertain, but there are characters enough, beſide thoſe of that part, to diſtinguiſh it by.

1. *Aloe foliis anguſtis integris inermi-ſpinoſis.*
*The Aloe, with narrow, entire, weakly ſpinoſe leaves.*

**The Succotrine Aloe Plant.**

The root is tuberous, and large, covered with a greyiſh bark, and full of a bitter juice: the leaves are numerous, and ſtand wide; they are a foot and half long, not more than two inches broad, and are thick, ſucculent, and of a deep green; they terminate in a long ſpine at the end, and are beſet round the edges with a multitude of weak, white ſpines. The ſtalk grows to near two feet high; it is round, ſmooth, ſucculent, and browniſh; there are ſome little leaves on it toward the top: the flowers are large, bending, and of a beautiful purple; they ſtand in a kind of thick ſpike, at the ſummit of the ſtalk.

It is a native of the iſland Socotora, and many other places. Breynius calls it, Aloe ſuccotrina anguſtifolia ſpinoſa flore purpureo; and Plukenet, Aloe ananæ folio floribus ſuave-rubentibus. The juice of the leaves of this plant depurated by ſtanding, and then dried in the ſun, is what is called Succotrine Aloes in the ſhops. An excellent cathartic in uſe on a multitude of occaſions.

2. *Aloe foliis ſpinoſis confertis dentatis vaginantibus planis maculatis.*
*The cluſtered, thick, dentated, and prickly-leaved Aloe.*

**The Hepatic Aloe Plant.**

The root is a foot long, and two or three inches in diameter; the leaves are numerous, and ſtand in a circular manner; they are a foot and half long, three or four inches broad, and an inch, or more, thick; they terminate each in a ſpine, and are dentated at the edges, and all the denticulations terminate alſo in ſmaller ſpines; they are of a bluiſh-green colour, and ſeem as if duſty; the fleſhy ſubſtance is green, ſoft, ſucculent, and of a ſweetiſh taſte, but there run through it in all directions a number of veſſels, containing a yellow juice, of an intolerable bitterneſs. The ſtalk is round, ſmooth, three feet high, and uſually divided into two or three ramifications: the flowers ſtand in long ſeries; along the tops of theſe they are yellow, ſtreaked with green, an inch long, and pendulous.

It is a native of moſt parts of America, and of the Eaſt Indies. C. Bauhine calls it, Aloe vera vulgaris; others, Aloe vulgaris. The depurated juice of this plant, dried in the ſun, is what is called in the ſhops Hepatic Aloes; and the fæces of the ſame juice, dried, make the Caballine Aloes.

The other ſpecies of the Aloe are extreamly numerous; the more ſingular are, 1. The ſpinoſe, ribbed, African Aloe. 2. The American Aloe, with a very long ſpine at the end of the leaf. 3. The broad, glaucous-leaved Aloe. 4. The variegated-leaved Aloe, with a few ſhort ſpines. 5. The very robuſt, ſpined Aloe. 6. The very broad, ſhining-leaved Aloe. 7. The broad, lucid, ſerrated-leaved, ſpinoſe Aloe. 8. The dwarf, variegated Aloe of Ceylon. 9. The ſhort-leaved, ſpinoſe, African Aloe: Commelin has deſcribed this three times as three ſpecies. 10. The patulous, diſtichous, linguiform-leaved Aloe. 11. The very prickly, deep green-leaved Aloe. 12. The green-flowered, rhomboidal-leaved Aloe. 13. The oval, acuminated-leaved Aloe. 14. The triangular, viſcous-leaved Aloe. 15. The triangular-leaved, green and white Aloe.

## YUCCA.

THERE is no calyx; the corolla is of a campanulated ſhape, and formed of ſix large, oval petals, cohering at their baſe; or of a ſingle petal, divided almoſt to the baſe into ſo many ſegments. The ſtamina are ſix very ſhort filaments, thickeſt at top, and reflex; the antheræ are ſmall; the germen is oblong, obtuſely triquetrous, and longer than the ſtamina; there is no ſtyle: the ſtigma is trifid, obtuſe, pervious, and each of the three ſegments is bifid: the fruit is an oblong, obtuſely triangular capſule, with three furrows; it is formed of three valves, and contains three cells: the ſeeds are numerous and incumbent, in a double order. The Yucca approaches very near to the aloe, but is abſolutely a diſtinct genus.

1. *Yucca foliis margine integerrimis.*
*The Yucca, with even edges to the leaves.*

The Indian Bread Plant.

The root is tuberous and very large, divided into many portions, and covered with a reddiſh cruſt, or bark, but white within: the leaves ſtand in an orbicular manner; they are a foot and half long, three inches broad, and of a bluiſh-green colour: they are hard, tough, carinated, even at the edges, and terminate in a convoluted ſpine at the extremity. The ſtalk is round, thick, ſmooth, and grows to three or four feet high; toward the top it divides into a number of branches, and on theſe ſtand numerous, large, and beautiful flowers; they are white ſtreaked with purple.

It is a native of many parts of America. Ray calls it, Yucca Peruviana; C. Bauhine, Yucca foliis aloes. A kind of bread is made from the dried root of this plant by the Indians, which much reſembles that made from the root of the Caſſada.

2. *Yucca foliorum margine crenulato.*
*The Yucca, with crenulated leaves.*

The root is large, tuberous, and white; the leaves are two feet long, and three inches broad, ſucculent, thick, and ever-green: they are of a bluiſh-green, and very lightly crenated at the edges; they riſe in an oblique direction from the root, and often bend backwards at their ends: the ſtalk is round, ſmooth, ramoſe, and browniſh; the flowers are large, and of a pale fleſh colour.

It is a native of America; we have it in ſome of our ſtoves. C. Bauhine calls it, Draconi arbori affinis Americana.

## AGAVE.

THERE is no calyx. The corolla is of a regular figure and erect, compoſed of a ſingle petal; the tube is long and gibbous; the limb is divided into ſix ſegments: the ſtamina are ſix ſubulated filaments, longer than the corolla: the antheræ are oblong and incumbent; the germen ſtands under the corolla: the ſtyle is ſimple, nearly of the length of the ſtamina: the ſtigma trifid and obtuſe: the fruit is an oblong capſule, marked with three furrows, formed of three valves, and containing three cells: the ſeeds are numerous, and of an angular figure.

*Agave foliis ſpinoſo-dentatis mucronatiſque.*
*The Agave, with ſpinoſe, dentate, and mucronated leaves.*

Great American Aloe.

The root is very large, oblong, crooked, and, as it were, jointed. The leaves are five feet long, ſix inches broad, near the baſe, and two or three inches thick; they are hollowed, and of a bluiſh-green colour: the extremity terminates in a robuſt, brown ſpine, of two inches long; and the edges are beſet with ſpines of the ſame kind, only ſmaller, and bent downwards. The ſtalk is round, as thick as a man's arm, and fifteen feet high. The upper part of this ſtalk forms a ſpike of flowers ſix feet, or more, in length; the flowers are yellow, and ſtand in cluſters on peduncles, growing gradually ſhorter, in a regular and beautiful manner toward the top, ſo as to make the whole ſpike pyramidal.

It is a native of many of the warmer parts of America; we have it very common in our gardens, but it rarely flowers. It has been pretended only once in a hundred years; but this is as fabulous as the idle circumſtances recorded, as attending the opening of the flowers. C. Bauhine calls it, Aloe folio in oblongum mucronem abeunte; Cluſius, Aloe ex America.

## HEMEROCALLIS.

THERE is no calyx; the corolla is of an infundibuliform figure; the tube is ſhort: the limb is patent, and divided into ſix ſomewhat reflex ſegments: the ſtamina are ſix ſubulated, declinated filaments, of the length of the corolla; the upper ones ſomewhat ſhorter than the others: the antheræ are oblong, incumbent, and aſſurgent; the germen is roundiſh and ſulcated: the ſtyle is filiform, of the length and ſituation of the ſtamina: the ſtigma is obtuſely trigonal and aſſurgent: the fruit is an ovato-trilobous, trigonal capſule, formed of three valves, and containing three cells: the ſeeds are numerous and roundiſh.

This genus comprehends the Lilioaſphodelus and the Liliaſtrum of Tournefort. In the Lilioaſphodelus, the germen ſtands within the receptacle of a monopetalous corolla; in the Liliaſtrum, the germen has the ſame ſituation in a corolla, more properly hexapetalous.

1. *Hemerocallis ſcapo ramoſo, corollis monopetalis majoribus.* The day Lily.
*The large, monopetalous-flowered, ramoſe-ſtalked Hemerocallis.*

The root is compoſed of a number of oblong, tuberous bodies, of a yelloviſh colour on the outſide, and white within: the leaves which ariſe immediately from it are eight inches long, three quarters of an inch broad, and of a bright green: the ſtalk is round, naked, thick, ſmooth, and grows to three feet high, and is divided into ſeveral ramifications toward the top: the flowers ſtand along theſe ramifications, and are of a duſky yelloviſh red; they are very large, and much reſemble thoſe of the red lily; the ſides of the petals are undulated and venous; the ſtyle is ſtriate.

It is a native of Hungary; we have it in our gardens. C. Bauhine calls it, Lilium rubrum aſphodeli radice.

2. *Hemerocallis ſcapo ramoſo, corollis monopetalis minoribus.* The yellow, day Lily.
*The ſmaller, monopetalous-flowered Hemerocallis.*

The root is tuberous and compoſite; the leaves are four or five inches long, and half an inch broad: the ſtalk is round, ſlender, ramoſe, and near two feet high: the flowers ſtand on the ramifications at the top, and are ſcarce half ſo large as thoſe of the former: the petals are neither undulated nor venous at the edges; and the colour is a fine bright yellow.

It is a native of Siberia, and many other places. C. Bauhine calls it, Lilium luteum aſphodeli radice; Tournefort, Lilioaſphodelus luteus.

3. *Hemerocallis ſcapo ſimplici, corollis hexapetalis.* Great, White Spiderwort.
*The ſimple-ſtalked Hemerocallis, with hexapetalous flowers.*

The root is compoſed of a great number of large, long, and thick filaments; the radical leaves ſtand in cluſters, and are long, narrow, of a deep green colour, and incloſe one another at the baſe: the ſtalk is round, thick, firm, green, and a foot, or more, in height: the flowers are numerous, large, and of a ſnow-white; their antheræ only yellow. They ſtand in a kind of ſpiked cluſter at the top of the ſtalk, and very much reſemble the flowers of the common white lily, except that they are ſmaller.

It is a native of the Alps, and of ſome parts of Germany. Tournefort calls it, Liliaſtrum flore majore albo; J. Bauhine, Phalangium flore lilii; and C. Bauhine, Phalangium magno flore.

*Claſs the Sixth. Order the Firſt.*

*Diviſion the Fifth.*

*Hexandria Monogynia, with flowers not divided into three ſegments, and with cups to them.*

## ACORUS.

THE common receptacle of the fructifications is of the length and ſhape of a finger, and is covered with floſcules. The corolla conſiſts of ſix obtuſe, hollow, lax petals, broadeſt at top, and, as it were, truncated: the ſtamina are ſix filaments, conſiderably thick, and a little longer than the corolla: the antheræ are thick, didymous, terminatory, and adnate: the germen is gibbous, oblong, and of the length of the ſtamina; there is no ſtyle: the ſtigma is a prominent point: the fruit is a ſhort, triangular capſule, obtuſely acuminated at each end, and contains three cells: the ſeeds are of an oblong, oval figure.

Of this genus there is only one known ſpecies.

### ACORUS. Sweet Flag.

The root is oblong, thick, and jointed; the leaves are two feet long, narrow, compreſſed, ſmooth, of a bright green, and terminate in a point: at the baſe they are ſcarce ſo much as half an inch broad, and they grow gradually ſmaller. Among theſe there riſes a ſingle leaf, thicker and more robuſt than the reſt, furrowed on the ſurface, and of a paler green; on this grows the ſpike of flowers: this is brown, and of a kind of checquered ſurface.

It grows in watery places in many parts of England. It's root is the Calamus aromaticus of the ſhops, though very falſely and improperly ſo called, there being another Calamus aromaticus deſcribed by medical writers, which is the ſtalk of a plant, and to which the name was originally given. The root of this plant is a ſtomachic and carminative, and is in frequent uſe.

## HÆMANTHUS.

THE flowers are diſpoſed in form of a kind of umbel; the involucrum is very large, and compoſed of ſix oblong, erect, permanent leaves: the corolla conſiſts of a ſingle, erect petal, divided into ſix erect, linear ſegments; the tube is very ſhort and angular: the ſtamina are ſix ſubulated filaments, inſerted into the tube of the corolla, and longer than the corolla; the antheræ are incumbent and oblong: the germen ſtands below the receptacle: the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is ſimple: the fruit is a roundiſh berry, containing three cells; the ſeeds are ſingle and triquetrous: the involucrum has ſometimes more than ſix leaves.

*Hæmanthus foliis lanceolatis.* The Guinea Orchis.
*The lanceolated-leaved Hæmanthus.*

The root is a ſingle, moderately large, ſolid bulb, of a depreſſed figure, and furniſhed with fibres growing not from it's baſe, but from the top. The radical leaves are oblong, narrow, and pointed at the end: the ſtalk riſes to a foot high; it is green, thick, ſucculent, and ſpotted: the leaves ſtand alternately on it, ſurrounding it at their baſes; they are five inches long, not half an inch broad, and of a fine ſtrong green: the flowers ſtand at the top in a kind of little umbel; they are large, very beautiful, and of a ſtellated appearance.

It is a native of Guinea, but we have it in our ſtoves. C. Bauhine, &c. call it, Orchis e Guinea.

APHYL-

## APHYLLANTHES.

THE calyx is compoſed of a number of imbricated, lanceolated ſpathæ; the corolla conſiſts of ſix petals, of an obverſely oval figure, terminating at the baſe in very narrow ungues, and patent at the limb, forming a kind of tube below it. The ſtamina are ſix ſetaceous filaments, ſhorter than the corolla; the antheræ are oblong: the germen is trigonal, and turbinated; the ſtyle is filiform, and of the length of the ſtamina: the ſtigmata are three, and are oblong: the fruit is a turbinated capſule, of a triangular figure, and contains three cells; the ſeeds are oval.

Of this genus there is only one known ſpecies.

### APHYLLANTHES.

The root conſiſts of a number of ſlender, hard, woody, long, and contorted fibres; the radical leaves are very numerous, two inches long, extremely narrow, and very quickly withering. The ſtalk is round, ſmooth, without a joint, or knot, naked, and tolerably firm; at it's top ſtands a ſingle and very beautiful blue flower, ariſing from a kind of compound, imbricated cup.

It is a native of France. C. Bauhine calls it, Caryophyllus cæruleus Monſpelienſium.

## FLAGELLARIA.

THE calyx is a perianthium, divided into ſix ſegments: there is no corolla: the ſtamina are ſix capillary filaments: the antheræ are tumid; the germen is round; the ſtyle is moderately thick, and the ſtigma divided: the fruit is a roundiſh berry, containing a ſingle ſeed.

The perianthium and the fruit, with the want of a corolla, characteriſes this genus ſo ſufficiently, as to leave no neceſſity for a further deſcription.

## JUNCUS.

THE calyx is a bivalve glume, ſometimes ſerving in common to many flowers, ſometimes peculiar to one only: the perianthium is compoſed of ſix oblong, acuminated, permanent leaves: there is no corolla, but the perianthium, when freſh and coloured, greatly imitates one: the ſtamina are ſix very ſhort, capillary filaments: the antheræ are oblong, erect, and of the length of the perianthium: the germen is triquetrous and acuminated: the ſtyle is ſhort and filiform: the ſtigmata are three, long, filiform, villoſe, and crooked: the fruit is a covered capſule, of a triquetrous figure, formed of three valves, containing only one cell, in which are a few round ſeeds.

1. *Juncus culmo nudo ſtricto capite laterali.* **Round-headed Rush.**
*The naked, ſlender-ſtalked Juncus, with a lateral head.*

The root is compoſed of a number of long and thick, brown fibres. The ſtalk riſes to two or three feet high; it is round, ſlender, and ſomewhat ſtriated, of a deep green colour, and filled with a very lax and ſpungy pith: three or four inches below the top burſts out the head, or cluſter of flowers; it is compact and cloſe, formed of a multitude of flowers, regularly arranged, and, when ripe, is of a pale brown colour.

It is common with us in wet places. C. Bauhine calls it, Juncus lævis panicula non ſparſa.

2. *Juncus culmo nudo ſtricto panicula laterali.* **Soft Rush.**
*The naked, ſlender-ſtalked Juncus, with a lateral panicle.*

The root is compoſed of a number of thick, brown fibres. The ſtalks grow to two or three feet high; they are ſmooth, naked, ſhining, ſoft to the touch, and are filled with a firm and compact pith: ſix or eight inches from their top burſt forth the flowers; they are formed into a lax panicle, not cluſtered into a head, as in the former, and are of a deep brown colour.

It is common about waters. C. Bauhine calls it, Juncus lævis panicula ſparſa major.

3. *Juncus foliis nodoſo-articulatis.*
*The Juncus, with nodoſo-articulated leaves.*

The root is a cluſter of long, tough fibres, which ſpread every way under the ſurface. The ſtalk is nodoſe, ſomewhat compreſſed, fungous, ramoſe, and ſtriated; it grows ſometimes a foot and a half high, oftener only to four or five inches. The leaves ſtand ſingly at the joints; they are long, narrow, pointed at the extremities, and all the way beautifully articulated. The flowers grow five or ſix together, on ſhort pedicles.

It is a native of England, and is common in boggy places. C. Bauhine calls it, Gramen junceum folio articulato aquaticum; J. Bauhine, Juncus foliaceus capſulis triquetris.

The other ſpecies of this genus are very numerous. The more ſingular are, 1. The pungent, or ſharp-pointed Juncus. 2. The foliaceous Juncus, with a ſparſed panicle. 3. The great, reflex-headed Juncus. 4. The ſmall, trifid Juncus. 5. The pſyllium-headed Juncus. 6. The broad-leaved Juncus. 7. The dwarf, erect Juncus. 8. The ſmall, round-fruited Juncus. 9. The narrow, hairy, white-flowered Juncus. 10. The leaſt foliaceous Juncus. Authors have divided theſe into what they call Ruſhes, and Ruſh-graſſes, from their having, or wanting, leaves, but the fructifications are the ſame; whence this is a diſtinction of no foundation in nature.

## RICHARDIA.

THE calyx is a perianthium, formed of one leaf, divided into ſix parts, erect, acuminated, and of about half the length of the corolla: the corolla is of a cylindraceo-infundibuliform ſhape; it is compoſed of a ſingle petal: the limb is divided into ſix parts, erect and acute: the ſtamina are ſix ſcarce viſible filaments: the antheræ are roundiſh, ſmall, and placed in the diviſions of the corolla: the germen ſtands below the receptacle: the ſtyle is filiform, of the length of the ſtamina, and divided into three parts at the top: the ſtigmata are obtuſe: there is no pericarpium: the ſeeds are three, roundiſh, angular on one ſide, broadeſt upward, and gibbous.

It is an American, deſcribed by Houſton.

## BERBERIS.

THE calyx is a perianthium, formed of ſix oval, hollow leaves, narrow at the baſe, alternately ſmaller, coloured, and deciduous: the corolla conſiſts of ſix roundiſh, hollow, erecto-patent petals, and is ſcarce any larger than the cup: the nectarium conſiſts of two roundiſh, coloured corpuſcules, adhering to the baſe of every petal: the ſtamina are ſix erect, compreſſed filaments: the antheræ are bifid and adnate: the germen is cylindric, aud of the length of the ſtamina: the ſtyle is not viſible: the ſtigma is orbiculated, and broader than the germen: the fruit is a cylindric, obtuſe, umbilicated berry, containing only one cell: the ſeeds are two, oblong, cylindric, and obtuſe.

*Berberis ſpinis triplicibus.* The Berberry Buſh.
*The Berberis, with triple ſpines.*

The root is multifid, woody, and yellow. The ſhrub is uſually ten or twelve feet high, ſometimes it is conſiderably more, and emulates the form of a tree: the ſpines are very ſharp; they grow uſually three or four from the ſame ſpot, and, with them, the leaves; they are of a pale green colour, an inch and a half long, more than an inch broad, narrow at the baſe, and grow gradually wider; they are ſerrated round the edges, and armed with weak ſpines. The flowers are ſmall and yellow; they ſtand in long cluſters, on pedicles: the berries are red.

It is wild with us in many places. C. Bauhine and others call it, Berberis dumetorum. It's root is an aperient; it's fruit a grateful, cooling acid.

CORDIA.

## CORDIA.

THE calyx is a perianthium, formed of a ſingle leaf, tubulated, tridentated, and permanent: the corolla is formed of a ſingle petal, of an infundibuliform ſhape: the tube is of the length of the cup: the limb is erecto-patent, and divided irregularly into four, five, or ſix ſegments: the ſtamina are a number of ſubulated filaments, equal to that of the ſegments of the corolla: the antheræ are ſimple, and of the length of the tube: the germen is roundiſh and acuminated: the ſtyle is ſimple, of the length of the ſtamina, and bifid; the two ſegments of it are alſo bifid: the ſtigmata are obtuſe: the fruit is a dry, globoſe, acuminated drupe, covered with the cup: the ſeed is a ſulcated nut, containing two cells.

It is an American, deſcribed by Plumier.

## PRINOS.

THE calyx is a perianthium, formed of one leaf, lightly divided into ſix lobes, plane, ſmall, and permanent: the corolla conſiſts of a ſingle petal, and is of a rotated form: there is no tube: the limb is plane, and is divided into ſix oval ſegments: the ſtamina are ſix erect, ſubulated filaments, ſhorter than the corolla: the antheræ are oblong and obtuſe: the germen is oval, and terminates in a ſtyle ſhorter than the ſtamina: the ſtigma is obtuſe: the fruit is a roundiſh berry, much larger than the cup, and containing ſix cells: the ſeeds are ſingle, oſſeous, obtuſe, convex on one ſide, and angulated on the other.

It is an American, figured by Plukenet, 452. 1.

## LORANTHUS.

THE perianthium of the fruit is a hollow and undivided rim: the perianthium of the flower is an undivided, hollow margin, crowning the germen: the corolla is formed of a ſingle leaf, and is of a ſexangular figure, and divided into ſix nearly equal, linear, revolute ſegments: the ſtamina are ſix ſubulated filaments, alternately ſhorter, but about the length of the corolla: the germen is roundiſh, and ſtands between the two cups: the ſtyle is ſimple, of the length of the ſtamina: the ſtigma is obtuſe: the fruit is a roundiſh, unilocular berry: the ſeeds are ſix, convex on one ſide, and angular on the other.

It is an American, deſcribed by Plumier, 37.

## PEPLIS.

THE calyx is a campanulated, permanent perianthium, very large, and divided into twelve ſegments at the rim, which are alternately reflex: the corolla conſiſts of ſix oval and very minute petals, inſerted into the calyx near the verge: the ſtamina are ſix ſhort, ſubulated filaments: the antheræ are roundiſh: the germen is oval, the ſtyle very ſhort, the ſtigma orbicular: the fruit is a cordated capſule, containing two cells: the ſeeds are numerous, very ſmall, and triquetrous: the corolla is ſometimes entirely wanting.

Of this genus there is only one known ſpecies.

### PEPLIS. Water Purſlane.

The root is fibrous; the ſtalks are very ſlender, three or four inches long, and in great part procumbent, and take root at the joints; they are uſually reddiſh: the leaves ſtand two at every joint; they are narrow at the baſe, and terminate in an obtuſe extremity; they are ſmooth, even at the edges, and of a pale yellowiſh-green colour. The flowers are very ſmall, and of a purpliſh colour; they ſtand ſingly in the alæ of the leaves, and have no pedicles.

It is common with us about watery places. Dillenius calls it, Portula; Ruppius, Portulaca aquatica ſpuria; C. Bauhine, Alſine paluſtris minor ſerpyllifolia.

*Claſs*

*Claſs the Sixth. Order the Second.*

## HEXANDRIA DIGYNIA.

*Plants which have in every flower ſix ſtamina and two ſtyles.*

### ORYZA.

THE calyx is a glume, compoſed of two valves, containing a ſingle flower; it is very ſmall, and the valves are acuminated, and nearly equal in ſize: the corolla is formed of two valves, obtuſe, large, nearly equal, and permanent: the nectarium is compoſed of two leaves, plane, very ſmall, and ſituated on the ſides of the germen; the leaves of it are narrow at the baſe, truncated, and deciduous: the ſtamina are ſix capillary filaments, of the length of the corolla: the antheræ are bifid at the baſe: the germen is of a turbinated figure: the ſtyles are two, capillary and reflex: the ſtigmata are plumoſe, and are extended lengthway on the ſtyles: there is no pericarpium: the corolla grows to the ſeed, and becomes of an oblong, oval figure, compreſſed, thin at the edges, and marked each way with two lines on the ſides: the ſeed is ſingle, large, oblong, obtuſe, and compreſſed.

Of this genus there is only one known ſpecies.

ORYZA. **Rice.**

The root is compoſed of a number of fibres; the radical leaves are a foot and a half long, and an inch broad, of a bright green colour, and ſmooth. The ſtalk riſes to four feet high; it is round, hollow, ſtriated, and jointed; at every joint ſtands a ſingle leaf, long, thick, green, and narrow: at the ſummit of the ſtalk ſtands a large panicle, formed of many ramoſe pedicles, ſupporting the fructifications, which are large, and of a yellowiſh colour, except the antheræ, which are purpliſh.

Rice is cultivated in vaſt abundance in the Eaſt for food; it loves a wet ſoil.

### ATRAPHAXIS.

THE calyx is a perianthium, compoſed of two coloured, permanent leaves, of a lanceolated figure, and placed oppoſite: the corolla conſiſts of two roundiſh, ſinuated petals, permanent, and larger than the cup: the ſtamina are ſix capillary filaments, of the length of the cup: the antheræ are roundiſh; the germen is compreſſed: there is no ſtyle: the ſtigmata are two, and capitated: the cup ſerves the office of a perianthium, ſhutting up and including the ſeed, which is ſingle, roundiſh, and compreſſed. Theſe characters ſufficiently diſtinguiſh the Atraphaxis, without a farther deſcription.

*Claſs the Sixth. Order the Third.*

## HEXANDRIA TRIGYNIA.

*Plants which have in each flower ſix ſtamina and three ſtyles.*

### RUMEX.

THE calyx is a perianthium, compoſed of three obtuſe, reflex, permanent leaves: the corolla conſiſts of three oval petals; they are larger than the leaves of the cup, otherwiſe, like them, connivent and coloured: the ſtamina are ſix very ſhort, capillary filaments: the antheræ are erect and didymous: the germen is of a turbinated form, but three-cornered: the ſtyles are three, capillary, reflex, and ſhew themſelves from between the connivent petals: the ſtigmata are large and laciniated: the corolla ſerves the office of a perianthium; it becomes connivent, and of a triquetrous figure, and incloſes a ſingle, triquetrous ſeed.

This genus comprehends the Lapathum and Acetoſa of authors.

1. *Rumex*

1. *Rumex floribus hermaphroditis, valvulis integerrimis granulo notatis.* Bloody Dock.
*The hermaphrodite-flowered Rumex, with undivided, granulated valves.*

The root is large, oblong, divaricated, and tough. The leaves are large, ten inches long, and five broad, terminating in a point; they ſtand on long pedicles, and are full of veins, of a deep blood colour; the pedicles of the leaves are alſo blood red, and contain a juice which ſtains the hands, or any thing that it touches, purple. The ſtalk is four feet high, round, ſtriated, and hollow. The flowers are white, with a caſt of red and green, ſmall, and cluſtered at the top of the branches.

It is a native of Virginia, and many other places. C. Bauhine calls it, Lapathum folio acuto rutecute; others, Lapathum ſanguineum.

2. *Rumex floribus hermaphroditis, foliis haſtatis.* Common Sorrel.
*The hermaphrodite-flowered, haſtated-leaved Rumex.*

The root is ſlender, divaricated, and tough: the radical leaves ſtand on long pedicles; they are three inches long, an inch and a half broad, and of a haſtated figure. The ſtalk is ſtriated, ſlender, and a foot and a half high: the leaves ſtand ſingly at the joints. The flowers are large, and of a whitiſh green colour, with a caſt of red; they ſtand in lax cluſters, at the tops of the branches.

It is common in our meadows. C. Bauhine calls it, Acetoſa vulgaris.

3. *Rumex foliis cordato-ſagittatis undulatis.* Rhubarb.
*The cordato-ſagittated and undulated-leaved Rumex.*

The root is a foot and a half long, and three inches in diameter, of a duſky browniſh colour on the ſurface, and of a bright yellow, variegated with purple, within. The leaves are a foot long, and ſeven inches broad at the baſe, where they are cordated, and, as it were, auriculated; they gradually diminiſh in breadth to the point, where they are terminated obtuſely, and often ſlightly emarginated; they are undulated round the edges, of a bright green colour, and ſtand on long and very thick pedicles. The ſtalk is very thick, ſomewhat compreſſed, deeply ſtriated, and about three feet high; it has at every joint a leaf, like the radical ones, but ſmaller, and, from the middle to the top, ſends out ſhort branches, on which the flowers ſtand in little cluſters, or tufts, on ſhort pedicles; the flowers are white, and moderately large.

It is a native of China, Tartary, and Siberia; we have it in ſome gardens. Juſſieu calls it, Rhabarbarum folio oblongo criſpo undulato, flabellis ſparſis; others, Lapathum bardanæ folio.

The root is gathered for uſe in autumn, ſometimes in ſpring, and is the Rhubarb of the ſhops.

The other ſpecies of Rumex are very numerous, but they will be eaſily diſtinguiſhed by their names, the general face and manner of growing being almoſt the ſame in all. The more ſingular are, 1. The ſharp-leaved Rumex. 2. The obtuſe-leaved Rumex. 3. The golden-flowered Rumex. 4. The little, broad-leaved Rumex. 5. The narrow-leaved Rumex. 6. The broad-leaved, garden Rumex. 7. The great water Rumex. 8. The ſinuated-leaved Rumex, called Fiddle Dock. 9. The ſtinking, maritime Rumex. 10. The pellitory-leaved, Ægyptian Rumex. 11. The Rumex, called prickly-ſeeded, Cretic Beet. 12. The tall, broad-leaved Rumex. Theſe are called Lapatha, or Docks, by authors. Of thoſe called Acetoſæ are, 1. The great mountain Rumex. 2. The very long and narrow-leaved Rumex. 3. The arum-leaved Rumex. 4. The limonium-leaved Rumex. 5. The tuberous-rooted Rumex. 6. The roundiſh-leaved Rumex. 7. The roundiſh, emarginated-leaved Rumex. 8. The Cretic, prickly Rumex, with narrow leaves. 9. The round-leaved, ſhrubby Rumex. 10. The ſcutated-leaved Rumex. 11. The multifid-lobed Rumex. 12. The round-leaved, Alpine Rumex.

## SCHEUCHZERIA.

THE calyx is a perianthium, divided into ſix rude, permanent, oblong, acute, reflexo-patent leaves: there is no corolla: the ſtamina are ſix very ſhort, flaccid, capillary filaments: the antheræ are erect, obtuſe, very long, and compreſſed: the germina are three, oval and compreſſed, and of the ſize of the calyx: there are no ſtyles; the ſtigmata are oblong, obtuſe at the top, and adhere outwardly to the germen: the fruit conſiſts of three roundiſh, compreſſed, inflated, bivalve, reflexo-diſtant capſules: the ſeeds are ſingle and oblong: there are ſometimes ſix germina, and as many capſules, but three is the more natural and uſual number.

Of this genus there is only one known ſpecies.

### SCHEUCHZERIA.

The root is creeping, ſlender, jointed, and fibrated; the radical leaves are five or ſix in number, three inches long, not much more than an eighth of an inch broad, of a pale green colour, and pointed at the ends. The ſtalk is round and ſingle; it grows to four or five inches high; near it's bottom there ſtand two leaves, almoſt oppoſite to one another, and, toward the top, others alternately, one at every joint, with a pedicle for the flower, riſing from the alæ of each; theſe are all like the radical ones, broadeſt at the baſe, where they ſurround the ſtalk, and terminate in a point. The flowers ſtand ſingly on pedicles, each of an inch long; they are moderately large, and of a greeniſh colour, with an admixture of yellow.

It is frequent in the mountainous parts of the northern kingdoms; it loves boggy places. Scheuchzer calls it, Juncoidi affinis paluſtris; C. Bauhine, Juncus floridus minor.

## TRIGLOCHIN.

THE calyx is a perianthium, compoſed of three leaves, which are roundiſh, hollowed, obtuſe, and deciduous; the corolla conſiſts alſo of three oval, hollow, obtuſe petals, and is very like the cup; the ſtamina are ſix ſcarce viſible filaments; the antheræ are the ſame in number, and are ſhorter than the corolla: the germen is large; there is no ſtyle; the ſtigmata are three, ſometimes ſix, reflex and plumoſe; the fruit is a capſule of an ovato-oblong figure, and obtuſe; the cells it contains are of the ſame number with the ſtigmata; the ſeeds are ſingle and oblong.

This genus comprehends the Juncago of Tournefort.

1. *Triglochin capſulis trilocularibus linearibus.* Arrow-headed Graſs.
*The Triglochin, with trilocular, linear capſules.*

The root conſiſts of a little tuberoſity, furniſhed with a multitude of fibres. The leaves are very narrow, four or five inches long, erect, and of a pale green colour. The ſtalk is round, ſimple, and unjointed; two or three of the radical leaves uſually ſurround it a great way: from the middle of the ſtalk to the top ſtand the flowers, in a looſe ſpike; they are of a greeniſh colour, and pendulous.

It is common with us in ſea-marſhes, where it grows to ten or twelve inches high. C. Bauhine calls it, Gramen junceum ſpicatum, ſive Triglochin.

2. *Triglochin capſulis ſexlocularibus ovatis.* Sea ſpiked Graſs.
*The Triglochin, with ſexlocular, oval capſules.*

The root is compoſed of a cluſter of yellowiſh fibres. The leaves are numerous, four or five inches long, extremely narrow, flat on the upper ſide, but rounded underneath, and of a duſky green colour. The ſtalk is round, green, and ſhort. The flowers form a ſpike of four inches long, reaching from it's top almoſt to the bottom; they are very ſmall, and purpliſh. The fruit is a ſtriated, oval capſule.

It is common in our ſalt-marſhes. Cluſius calls it, Gramen marinum ſpicatum; C. Bauhine, Gramen ſpicatum alterum.

## COLCHICUM.

THERE is no calyx, unleſs a few vague ſpathæ are to be underſtood as ſuch; the corolla is divided into ſix ſegments; the tube is angular, and radicated; the ſegments of the limb are of a lanceolato-oval figure, concave and erect: the ſtamina are ſix ſubulated filaments, ſhorter than the corolla; the antheræ are oblong, incumbent, and formed of four valves; the germen is buried within the root: the ſtyles are three, filiform, and of the length of the ſtamina: the ſtigmata are reflex, and furrowed; the fruit is a capſule, formed of three lobes, connected intirely by a ſuture; the ſhape obtuſe; the cells in it three in number; the ſeeds numerous, of a roundiſh figure, and rugoſe; the piſtil is ſometimes only trifid at top, ſometimes ſimple.

1. *Colchicum foliis lanceolatis planis erectis.* Meadow Saffron.
*The Colchicum, with plane, erect, lanceolated leaves.*

The root is about an inch and a half long, more than an inch in breadth, ſomewhat compreſſed, turbinated toward the top, but, in the lower part, terminating in a broad end, like a nail, and ſending thence a number of fibres; it is covered with ſeveral coats, or huſks, of a blackiſh colour, and has uſually a number of ſmall, lateral bulbs adhering to it; internally it is white, and full of a milky juice. The flower appears in autumn: it is extremely beautiful, an inch and a half long, excluſive of the tube, which is ſmooth and delicate. The flower is of a purpliſh white, and the ſegments are each more than an inch broad, narrower at the baſe than in the middle, and terminate in a point. The leaves appear in the ſpring, and periſh before the next flowering ſeaſon; they are five or ſix inches long, an inch and a half broad, of a deep green colour, and pointed at the ends.

It is a native of our meadows, but not common; I found it ſome years ſince abundantly near Calne in Wiltſhire. C. Bauhine calls it, Colchicum commune; others, Colchicum Anglicum purpureum et album.

The other ſpecies of Colchicum are numerous, and the varieties of them from culture almoſt innumerable; theſe have been deſcribed as ſpecies alſo by ſome writers, and have greatly ſwelled the liſt. The principal really diſtinct ones are, 1. The ſpring Colchicum, with a ſimple piſtil, trifid at the end. 2. The many-flowered, ſmaller, white Colchicum. 3. The broad, white hellebore-leaved Colchicum. 4. The broad-leaved Colchicum, with teſſelated flowers. 5. The narrower-leaved, variegated, Chineſe Colchicum. 6. The little-flowered, narrow-leaved, mountain Colchicum. 7. The very narrow-leaved, ſaffron-flowered, meadow Colchicum.

## MELANTHIUM.

THE female flower has no calyx; it is compoſed of five petals, of an ovato-lanceolate figure, with thin, linear ungues, longer than the whole petals beſide: the nectarium is a ſpot of a cordated form, ſituated near the inner baſe of the limb of the petals, and from this riſes a ſetaceous filament, of the length of the petal, or nearly ſo: the germen is trigonal; the ſtyles are three, and crooked; the ſtigmata are obtuſe; the fruit is a capſule, of an ovato-triangular figure; the angles are compreſſed; it contains three cells, and in each ſeveral oblong, compreſſed, membranaceous ſeeds.

Theſe characters ſufficiently diſtinguiſh the Melanthium, without a farther deſcription.

## MEDEOLA.

THERE is no calyx, but the corolla is ſo like one that it has been miſtaken for it: the corolla conſiſts of ſix petals, of an ovato-oblong figure, equal, patent, and revolute: the ſtamina are ſix ſubulated filaments, of the length of the corolla: the antheræ are incumbent; the germina are three in number, and corniculated, and they terminate in ſtyles: the ſtigmata are thick, and bent backward: the fruit is a berry of a roundiſh figure, divided into three parts, containing three cells, and, in each, a ſingle cordated ſeed.

Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

MENISPERMUM.

## MENISPERMUM.

THE calyx is a deciduous perianthium, compoſed of ſix ovato-oblong leaves, erecto-patent, and of the length of the corolla: the corolla conſiſts of ſix ovato-oblong, obtuſe, hollow petals, erecto-patent, as the leaves of the cup: the ſtamina are ſix very ſhort filaments; the antheræ are ſimple, and ſhorter than the corolla: the germina are three, ſuboval, and terminate in as many patenti-reflex ſtyles, of the length of the corolla; the ſtigmata are obtuſe and emarginated: the fruit is compoſed of three oval berries, each containing a ſingle cell, and in it a large, ſingle, lunulated, compreſſed ſeed.

This is the general number of the parts of fructification, but they vary extreamly in this genus.

*Meniſpermum foliis peltatis anguloſis.* Virginian Ivy.
*The peltated and angular-leaved Meniſpermum.*

The root is large, woody, and divaricated; the ſtem is woody, round, and ſlender, and ſupports itſelf by means of trees and buſhes; in this manner it grows to a great height: the leaves ſtand ſingly on long pedicles, inſerted not at the edge, but near the center; they are oblong, angulated, and ſomewhat reſemble thoſe of the common great convolvulus: the flower is ſmall; the fruit compoſed of three moderately large berries. It is frequent in North America. Plukenet calls it, Hedera monophyllos convolvuli foliis Virginiana.

## SAURURUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, oblong, coloured, and lateral; there is no corolla: the ſtamina are ſix long, capillary filaments, three on each ſide, and placed oppoſite: the antheræ are oblong and erect; the germen is of an oval figure, and formed of three lobes; there is no ſtyle: the ſtigmata are three, obtuſe and permanent: the fruit is an oval berry, with a ſingle cell; the ſeed is ſingle and oval.

*Saururus foliis cordatis petiolatis, ſpicis ſolitariis recurvis.* Heart-leaved Lizard's Tail.
*The cordated, petiolated-leaved Saururus, with ſingle crooked ſpikes.*

The root is ſpreading and whitiſh; the ſtem is ridged, ſolid, and conſiderably thick, but not robuſt enough to ſupport itſelf erect: the leaves ſtand ſingly at the joints on pedicles of three quarters of an inch long; they are three inches, or more, in length, near two and a half in diameter, and ſomewhat reſemble thoſe of our black bryony, being cordated at the baſe, and terminating in a point: The ſpikes are ſlender, five or ſix inches long, and compoſed of very ſmall flowers of a yellowiſh colour; they grow ſingly, oppoſite to the leaves.

It is a native of Virginia and Maryland. Ray calls it, Saururus Marilandicus folio cordato; Plukenet, Serpentaria repens folio bryoniæ nigræ.

2. *Saururus foliis ternatis ſpicis terminatricibus.* Trifoliate Lizard's Tail.
*The ternate-leaved, terminatory-ſpiked Saururus.*

The root is compoſed of a number of fibres, long, complicated, and ramoſe; the ſtalk is ſtriated, hairy, firm, and hard, but does not ſupport itſelf erect, but climbs on trees in the manner of our ivy. The leaves ſtand three at a joint; they are of an oval figure, half an inch long, and nearly as much in diameter, a little hairy, eſpecially about the edges, and marked with three large, longitudinal ribs. The extremities of the branches are terminated by long ſpikes of flowers, three inches in length, and ſcarce a ſixth of an inch in diameter, much reſembling the tail of a rat.

It is a native of Jamaica. Plumier calls it, Saururus hederaceus triphyllus.

The

The other ſpecies to be mentioned are, 1. The round-leaved, creeping Saururus. 2. The ivy-leaved Saururus, with ſpotted ſtalks. 3. The ſhort-fruited, plantain-leaved Saururus. 4. The little, procumbent Saururus, with thick, heart-faſhioned leaves. 5. The great, cordated-leaved, tree Saururus, called St Maria leaves. 6. The low Saururus, with a fleſhy, pointed leaf. 7. The great, arboreſcent Saururus, with round, umbilicated leaves. 8. The pendulous-ſpiked Saururus. 9. The ſhort-ſpiked, Surinam Saururus.

*Claſs the Sixth. Order the Fourth.*

## HEXANDRIA TETRAGYNIA.

*Plants which have ſix ſtamina and only four ſtyles in the flower.*

*Of this order there is only one known genus.*

## PETIVERIA.

THE calyx is a permanent perianthium, compoſed of four erect, linear, obtuſe, equal leaves: there is no corolla; but the calyx, being coloured, has much the appearance of one. The ſtamina are ſix erect, equal, ſubulated filaments, of the length of the cup; the antheræ are ſimple: the germen is compreſſed and oblong; the ſtyles are four in number, ſubulated, and placed in a right line: the ſtigmata are obtuſe and permanent: there is no pericarpium but the cruſt of the ſeed: the ſeed is oblong, ſingle, narroweſt at the bottom, broader at the top, and flatted, emarginated, and armed with the four ſtyles, become rigid and acute, and turned back; the intermediate two are longeſt.

It is an American deſcribed by Plumier.

*Claſs the Sixth. Order the Fifth.*

## HEXANDRIA POLYGYNIA.

*Plants which have in every flower ſix ſtamina and a great number of ſtyles.*

*Of this order alſo there is only one known genus.*

## ALISMA.

THERE are various, trifoliate, acute involucra: the perianthium is compoſed of three oval, hollow, permanent leaves: the corolla conſiſts of three large, roundiſh, plane, and very patent petals: the ſtamina are ſix ſubulated filaments, ſhorter than the corolla; the antheræ are roundiſh: the germina are numerous; the ſtyles are ſimple; the ſtigmata are obtuſe: the fruit conſiſts of capſules arranged together, in a roundiſh or trigonal form; the ſeeds are ſingle and ſmall.

This genus comprehends the Damaſonium of Tournefort, and the Aliſma of Dillenius. In the Damaſonium, Tournefort mentions ſix large, diſtinct, acuminated capſules; in the Aliſma, Dillenius mentions numerous ſmall and obtuſe ones.

1. *Aliſma fructu obtuſo, trigono* — **Great Water Plantain.**
*The obtuſe, trigonal-fruited Aliſma.*

The root is compoſed of a great number of thick, whitiſh fibres. The radical leaves ſtand on pedicles, three or four inches long; they are of a ſuboval, acuminated figure, three inches long, and two broad, ſmooth, of a pale green, and even at the edges: the ſtalk grows to two or three feet high; it is round, thick, ſingle, and ſends off on every ſide a multitude of branches; they are ſmall, and are divided at their extremities into numerous others, and on theſe ſtand the flowers, which are moderately large, and of a reddiſh white.

The plant is common about waters. C. Bauhine calls it, Plantago aquatica latifolia; and, as it ſometimes has it's leaves narrower than ordinarily, he calls that variety, Plantago aquatica anguſtifolia; others call it, Plantago aquatica major, including both varieties under that name.

2. *Aliſma fructu globoſo undique echinato.* Little Water Plantain.
*The globoſe and echinated-fruited Aliſma.*

The root is compoſed of a number of white, thick, complicated fibres: the leaves ſtand on ſlender pedicles, two or three inches long; they are oblong, narrow, ſmooth, of a pale green, and undivided at the edges: the ſtalk is ſlender, hollow, naked, and a foot, or more, in height; it ſends out a great number of ſhort branches, near the top, and on theſe ſtand numerous, ſmall, whitiſh flowers, with yellow ungues; the heads which ſucceed theſe are roundiſh and echinated; thoſe of the former ſpecies are diſpoſed into a trigonal form.

This is common alſo in wet places. Ray calls it, Plantago aquatica minor.

The other ſpecies are, 1. The great, trigonal-headed, narrow, and long-leaved Aliſma; and, 2. The low, ſtarry-headed Aliſma.

## *Claſs the Seventh.*

## HEPTANDRIA.

*Plants which have ſeven ſtamina in every flower.*

*Of this claſs there are only two genera, and theſe have both only a ſingle ſtyle in the flower.*

## HEPTANDRIA MONOGYNIA.

### TRIENTALIS.

THE calyx is a permanent perianthium, formed of ſeven narrow, lanceolated, pointed, patent leaves: the corolla is plane and ſtellated; it conſiſts of a ſingle petal, divided into ſeven ſegments, and that ſo deeply, that they cohere only by their ungues; they are of an ovato-lanceolate figure, and ſomewhat longer than the calyx: the ſtamina are ſeven capillary filaments, of the length of the cup, and inſerted into the ungues of the corolla: the antheræ are ſimple: the germen is globoſe; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is capitated: the fruit is a dry, globoſe berry, having only one cell, and covered with only a very thin cruſt, which burſts irregularly: the ſeeds are few in number and angulated; the receptacle is very large, and is hollowed for the reception of the ſeeds. The parts of fructification, though uſually ſeven in this plant, yet vary ſometimes from that number.

There is only one known ſpecies of it.

#### TRIENTALIS.

The root conſiſts of a number of long, white fibres; the radical leaves are oval, pointed, and an inch and a half long: the ſtalk is round, ſmooth, ſlender, and about four or five inches high. It is naked to the top, where there ſtand ſix or ſeven leaves in a kind of circle; they have ſhort pedicles, and are of the figure of the radical ones, but ſmaller, and more pointed, and of a pale green colour. At the baſe of theſe there are ſometimes two or three ſmall and roundiſh leaves, of a browniſh colour, and and from the center of them riſe uſually two pedicles, ſlender, of a reddiſh colour, and near two inches long, and on the ſummit of each of theſe ſtands a ſingle and very beautiful ſtellate white flower.

It is a native of England, but is ſcarce with us: in Germany, Sweden, and Denmark, it is more common, Ray calls it, Alſinanthemos; C. Bauhine, Pyrola alſines flore; J. Bauhine, Herba trientalis.

## ESCULUS.

THE calyx is a ſmall, ventricoſe perianthium, formed of a ſingle leaf, divided into five parts at the extremity. The corolla conſiſts of five roundiſh petals, plane and patent; their edges plicated or undulated; their ungues very narrow, inſerted into the calyx, and equally coloured: the ſtamina are ſeven or eight ſubulated, declinated filaments, of the length of the corolla; the antheræ are aſſurgent: the germen is roundiſh; the ſtyle ſmall; the ſtigma acuminated: the fruit is a roundiſh, echinated, coriaceous capſule, formed of three valves, and containing only one cell: the ſeeds are two, and globoſe; often indeed there is formed only one, but it is from accident; two are always the intent of nature.

This genus comprehends the Hypocaſtanum of Tournefort, and the Eſculus and Pavia of Linnæus.

1. *Eſculus floribus heptandris.*
*The Eſculus, with ſeven ſtamina in the flower.* **The horſe-cheſnut.**

The root is brachiated and ſpreading; the tree very large and ramoſe: the leaves are palmated; each is compoſed of ſeven, others annexed to the ſame pedicle; theſe are of an oblong figure, broad, rough, and indented at the edges: the flowers are very beautiful; they ſtand in conſiderable numbers, on ſeparate peduncles annexed to common pedicles, ariſing from the alæ of the leaves; they are large and white, with a tinge of fleſh colour: the fruit is echinated and very large; the cheſnut contained in it is like the common kind, but larger, rounder, and of a diſagreeable taſte.

It is a native of the Eaſt; we had it brought into Europe in the year 1550, ſince which time it is common in our gardens, &c. Tournefort calls it, Hypocaſtanum vulgare; C. Bauhine, Caſtanea multifido folio.

2. *Eſculus floribus octandris.*
*The Eſculus, with eight ſtamina in the flower.* **The ſcarlet horſe-cheſnut.**

The root is brachiated; the leaves are compound, like thoſe of the common horſe-cheſnut, but the ſingle leaves ſmaller and narrower: the flower is very beautiful, and of a bright red; it ſomewhat reſembles a monopetalous, bilabiated flower, though in reality formed of five petals, as that of the former.

It is a native of the Eaſt; but we have it in our gardens. Boerhaave calls it, Pavia; Plumier, Ricinoides Americana caſtaneæ folio; Plukenet took it to be the ſea monna of Piſo, but erroneouſly.

### *Claſs the Eighth.*

## OCTANDRIA.

*Plants which have in every flower eight ſtamina.*

*Of theſe ſome have only one ſtyle, ſome have two, ſome three, ſome four, and ſome more numerous ones.*

THE ſeveral genera will hence therefore be arranged into five orders: The firſt containing ſuch as have only one ſtyle; the ſecond, ſuch as have two; the third, ſuch as have three, and ſo on.

*Order*

## *Order the Firſt.*

## OCTANDRIA MONOGYNIA.

*Plants which have in every flower eight ſtamina and only one ſtyle.*

### TROPÆOLUM.

THE calyx is a deciduous perianthium, compoſed of a ſingle leaf, divided into five ſegments, erecto-patulous, acute, coloured, and the two lower ones narrower than the reſt. The corolla conſiſts of five roundiſh petals, inſerted into the diviſions of the cup; the two upper petals are ſeſſile; the three others have very long and barbated ungues: the ſtamina are eight ſhort, ſubulated, declinated, unequal filaments; the antheræ are erect, oblong, quadrilocular, and aſſurgent: the germen is roundiſh, ſtriated, and formed of three lobes: the ſtyle is ſimple, erect, and of the length of the ſtamina: the ſtigma is trifid and acute: the fruit conſiſts of three capſulues convex, ſulcated, and ſtriated on one ſide, and angular on the other: the ſeeds are three, gibbous on one ſide, and angulated on the other, but upon the whole ſomewhat roundiſh, and ſtriated deeply.

This genus comprehends the Cardamindum of authors.

1. *Tropæolum foliis ſubquinquelobis, petalis obtuſis.* Indian Creſs.
*The obtuſe-petaled Tropæolum, with ſubquinquelobate leaves.*

The root is ſmall, oblong, and divaricated: the ſtalks are ſlender and weak; they are to be ſupported by ſticks or buſhes, otherwiſe they trail upon the ground. The leaves ſtand ſingly at the joints; they are an inch and half, or more, in diameter, and have each a pedicle of five inches long, reddiſh, ſlender, and tortile; this is inſerted into the middle of the leaf, not at the ſide, and the figure of the leaf is peltated; approaching to round, but, when moſt perfect, lightly ſinuated into five lobes. From the alæ of the leaves ariſe the pedicles of the flowers; they are long, ſlender, and contorted; the flower is large, and of an extreamly beautiful yellow, with an admixture of ſcarlet.

It is a native of Peru; it was brought into Europe in 1684, and is now common in our gardens. Tournefort calls it, Cardamindum ampliore folio et majori flore; Ray and others, Naſturtium Indicum.

2. *Tropæolum foliis integris, petalis acuminato-ſetaceis.* Little Indian Creſs.
*The Tropæolum, with undivided leaves, and acuminato-ſetaceous petals.*

The root is fibrous; the ſtalks are very ſlender, weak, and tortuous: the pedicles of the leaves are long and ſlender; the leaves themſelves ſmall, round, and not at all ſinuated at the edges: the flowers are of about half the ſize of thoſe of the former, and the petals acuminated: their colour is a pale yellow.

It is a native of Peru; but we have it, with the other, in ſome gardens. C. Bauhine calls it, Naſturtium Indicum minus; Tournefort, Cardamindum minus.

### ACER.

THE calyx is a permanent perianthium, compoſed of a ſingle leaf, plane and entire at the baſe, but divided toward the top into five acute, coloured ſegments: the corolla is ſcarce larger than the cup; it conſiſts of five oval, obtuſe, patent petals, broadeſt outwardly. The ſtamina are eight ſhort, ſubulated filaments: the antheræ are ſimple; the farina cruciform: the germen is compreſſed, and is immerſed in a large convex, perforated receptacle: the ſtyle is filiform, and grows taller, as the flower remains open: the ſtigmata are two, acuminated, ſlender, and reflex. The fruit conſiſts of a number of capſules, equal to that of the ſtigmata; they grow together

ther at the baſe, and are compreſſed, roundiſh, and each is terminated by a very large, membranaceous ala: the ſeeds are ſingle, and roundiſh: at the firſt opening of the flower in this genus the ſtigmata only appear, the ſtyle grows in length afterwards. In ſome ſpecies the corolla is ſcarce diſtinct from the calyx, and the ſtamina are long. The flowers are often of two kinds in the ſame cluſter; all, indeed, are hermaphrodites, but, in the lower ones, the antheræ never burſt, but the piſtil becomes a fruit; in the upper ones the antheræ burſt, and the farina is ſhed, but the piſtils decay.

1. *Acer foliis quinquelobis acutis, obtuſe ſerratis, petiolis canaliculatis.*

*The Acer, with quinquelobate and obtuſely dentated leaves.*

The Sycamore Tree.

The root is large and brachiated; the tree very large and beautiful; the bark of the young ſhoots reddiſh; the leaves are very large and broad, divided into five lobes, ſerrated at their edges, and of a dark green colour on the upper ſide, but paler underneath, and uſually ſomewhat whitiſh and hoary. The flowers are very ſmall, and of a greeniſh-white colour. The fruit is large and beautifully variegated with green and purple, in various degrees.

It is a native of Germany; it is common with us in plantations. We commonly, but very improperly, call it the Sycamore; it's proper name is the larger Maple. C. Bauhine calls it, Acer majus.

The other ſpecies of the Acer are, 1. The common, ſmall Acer, or Maple, of our hedges. 2. The Acer with finely-divided leaves. 3. The great-leaved, Virginian Acer. 4. The broad, platanus-leaved Acer. 5. The ſmall, ſugar Acer. 6. The rounder-leaved Acer, the Opalus of the Italians. 7. The narrower-leaved Acer.

## DODONÆA.

THE calyx is a perianthium, divided into three erect, equal, oval ſegments: there is no corolla: the ſtamina are eight extremely ſhort filaments: the antheræ are oblong, but ſcarce of the length of the calyx: the germen is triquetrous, and longer than the cup: the ſtyle is ſubulated, and very long; the ſtigma is ſimple: the fruit is a roundiſh capſule, with three cells, and with prominent, inflated angles, in the ſame number; the ſeeds are ſingle.

Burman refers this to the Carpinus, Plumier to the Staphylodendron, but erroneouſly. The flower often varies in the addition of a third part to the number of the ſegments, &c.

Theſe characters ſufficiently diſtinguiſh the Dodonæa, without a farther deſcription.

## GRESLEA.

THE calyx is a perianthium, formed of a ſingle leaf, of a turbinated form, erect, campanulated, and divided into four ſegments: the corolla conſiſts of four extremely minute petals, of an oval figure, ariſing from the denticulations of the cup, and ſcarce larger than they: the ſtamina are eight extremely long, ſubulated, erect filaments: the antheræ are ſimple and erect; the germen is oval; the ſtyle is filiform, and of the length of the ſtamina; and the ſtigma is ſimple.

Of this genus there is only one ſpecies, which is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

## ALLOPHYLLUS.

THE calyx is a perianthium compoſed of four leaves, of an orbicular figure, and two oppoſite ones, ſmaller than the others: the corolla conſiſts of four petals; the ſtamina are eight ſlender filaments; the antheræ are oblong; the germen is didymous.

Theſe characters ſufficiently diſtinguiſh the Allophyllus, without a farther deſcription.

## JAMBOLIFERA.

THE calyx is a perianthium, compoſed of a ſingle leaf, divided into four ſhort ſegments at the end: the corolla conſiſts of four petals, and is of an infundibuliform ſhape: the ſtamina are eight flatted filaments.

Theſe characters ſufficiently diſtinguiſh the Jambolifera, without a farther deſcription.

## MIMUSOPS.

THE calyx is a perianthium, compoſed of eight leaves: the corolla conſiſts of eight petals: the ſtamina are eight ſlender filaments: the fruit is a drupe.

Theſe characters ſufficiently diſtinguiſh the Mimuſops, without a farther deſcription.

## LAWSONIA.

THE calyx is a ſmall, permanent perianthium, divided into four ſegments: the corolla conſiſts of four petals, plane, patent, and of an ovato-lanceolated figure: the ſtamina are eight filiform filaments, of the length of the corolla; they ſtand by pairs, within the petals: the antheræ are roundiſh; the germen is roundiſh; the ſtyle is ſimple, permanent, and of the length of the ſtamina; the ſtigma is capitated: the fruit is a globoſe capſule, terminating in a point, and containing four cells; the ſeeds are numerous, angular, and acuminated.

There is but one known ſpecies of this genus, which is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

## RHEXIA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, oblong, tubulated, ventricoſe toward the bottom, and divided into four ſegments at the mouth: the corolla conſiſts of four petals, roundiſh, patent, and inſerted into the calyx: the ſtamina are eight filiform filaments, longer than the calyx, and inſerted into it: the antheræ are oblong and declinate: the germen is roundiſh; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is thick and oblong: the fruit is a roundiſh capſule, formed of four valves, containing four cells, and contained in the belly of the cup; the ſeeds are numerous and roundiſh; the cup, in ſome, is ſmooth, in others it is elegantly ſtellated with a kind of ſhort hairs.

## OENOTHERA.

THE calyx is a deciduous perianthium, formed of a ſingle leaf; it's tube is cylindric, long, and erect; it's limb is divided into four oblong, acute, deflex ſegments: the corolla conſiſts of four plane petals, of an obverſely cordated figure, of the ſize of the ſegments of the cup, and inſerted into the diviſures of them: the ſtamina are eight crooked, ſubulated filaments, ſhorter than the corolla, and inſerted into the tube of the calyx: the antheræ are oblong and incumbent: the germen is cylindric, and placed under the tube of the cup; the ſtyle is filiform, of the length of the ſtamina; the ſtigma is divided into four parts, thick, obtuſe, and reflex: the fruit is a cylindric capſule, with four low angles; it is formed of four valves, and contains four cells: the ſeeds are numerous, and angulated; the receptacle is columnar, free, and of a quadragonal form.

This genus comprehends the Onagra of Tournefort.

*OEnothera foliis ovato-lanceolatis planis.* The
*The OEnothera, with plane, lanceolated leaves.* Primroſe.

The root is oblong, white, and of the thickneſs of a finger. The ſtalk is robuſt, browniſh, ſpotted toward the top, and downy; it is round toward the bottom, but grows angulated, as it ſends out branches higher up; it grows to four feet high, erect, firm,

firm, and rigid. The leaves are three inches long, an inch broad, ſinuated, and dentated at the edges; they ſtand alternately on the ſtalk, and cloſe. The flowers are very large, and of a beautiful yellow colour, in ſhape much like thoſe of the primroſe.

It is a native of Virginia; it was brought into England in 1680, and is now common in our gardens. C. Bauhine calls it, Lyſimachia lutea corniculata; Moriſon, Lyſimachia non pappoſa lutea Virginica.

The other ſpecies are, 1. The narrow-leaved, long-horned OEnothera. 2. The little-flowered, willow-leaved OEnothera. 3. The betony-leaved, rough-fruited OEnothera. 4. The arſmart-leaved, little-flowered OEnothera. 5. The nerium-leaved OEnothera.

## EPILOBIUM.

THE calyx is a deciduous perianthium, compoſed of four oblong, acuminated, coloured leaves: the corolla conſiſts of four roundiſh, patent petals, ſomewhat emarginated: the ſtamina are eight ſubulated filaments, alternately ſhorter; the antheræ are oval, compreſſed, and obtuſe: the germen is cylindric, very long, and placed below the receptacle: the ſtyle is filiform; the ſtigma is divided into four parts, thick, obtuſe, and revolute: the fruit is an extremely long, cylindric, ſtriated capſule, formed of four valves, and containing four cells; the ſeeds are numerous, oblong, and coronated with a downy matter; the receptacle is very long, of a tetragonal figure, ſquare, free, flexile, and coloured.

This genus comprehends the Chemænerion of Tournefort, the Lyſimachia ſiliquoſa of others. In ſome ſpecies the ſtamina and piſtil are erect, in others they are declinate, and in ſome of theſe the declination is ſideways, in others downwards.

1. *Epilobium floribus difformibus, piſtillo declinato.* Roſe-bay
*The difform-flowered Epilobium, with a declinated piſtil.* Willow-herb.

This is the talleſt and moſt beautiful of all this genus. It's root is white, oblong, thick, and creeping. The ſtalk is thick, ſmooth, furrowed, and variegated with green and purple. The leaves ſtand very cloſe; they are three or four inches long, ſcarce more than half an inch broad, ſmall at the baſe, and terminate in a point. The flowers are large, and of a bright red colour, and ſtand on pedicles in a regular order, ſo as to form a tall, beautiful ſpike, on the top of the ſtalk.

It is a native of England, but not common; we have it in Cane-wood near Highgate. C. Bauhine calls it, Lyſimachia Chamænerion dicta, latifolia; others, Onagra and Chamænerion.

2. *Epilobium foliis lanceolatis ſerratis.* Common purple
*The Epilobium, with lanceolated, ſerrated leaves.* Willow-herb.

The root is creeping, moderately thick, and of a reddiſh colour. The ſtalk is round, hairy, thick, and four feet high. The leaves are four inches long, near three quarters of an inch broad, pointed at the ends, ſerrated about the edges, of a pale green colour, and ſomewhat hairy. The flowers are of a pale purple colour; they grow on ſingle pedicles, from the alæ of the leaves toward the top of the plant, and ſtand on long pods: the tops of the plant have a very ſingular, agreeable ſmell.

It is common about waters. C. Bauhine calls it, Lyſimachia ſiliquoſa hirſuta parvo flore, and deſcribes a variety of it with the flowers larger, as another ſpecies; in this error moſt others alſo follow him.

The other ſpecies of Epilobium are, 1. The great, ſmooth Epilobium. 2. The narrow-leaved Epilobium, with bifid petals. 3. The chickweed-leaved Epilobium. 4. The trifoliate Epilobium. 5. The ſhining, denticulated-leaved Epilobium. 6. The prunella-leaved Epilobium. 7. The almond-leaved, ſmooth Epilobium. 8. The origanum-leaved Epilobium.

## ERICA.

THE calyx is a permanent perianthium, compoſed of four oval, erect, coloured leaves, larger than the flower: the corolla conſiſts of a ſingle petal, erect, and divided into four ſegments at the edge: the ſtamina are eight capillary filaments, affixed to the receptacle; the antheræ are bicornate: the germen is roundiſh; the ſtyle is filiform, declinate, and longer than the ſtamina: the ſtigma is coronated, of a quadragonal figure, and divided into four parts: the fruit is a roundiſh capſule, ſmaller than the cup, covered, formed of four valves, and contains four cells: the ſeeds are numerous and very ſmall. There are ſome ſpecies which have a double calyx.

1. *Erica foliis quadrifariam imbricatis, triquetris, glabris, erectis, corollis inequalibus calyce brevioribus.* Common Heath.
*The quadrifariouſly imbricated-leaved Erica, with ſhort corollæ.*

The root is woody and brachiated; the ſtem woody, thin, and covered with a pale brown bark: it grows to about two feet high, and is very ramoſe. The leaves are oblong and ſlender, of a ſquare figure, compoſed of four ſeries of ſmall leaves, and green all the winter. The flowers are ſmall, and of a bright red colour, and ſtand in a beautiful order on the tops of the branches.

It it common every-where on heaths. C. Bauhine calls it, Erica vulgaris glabra.

2. *Erica foliis ſubulatis, ciliatis, quaternis, corollis globoſo-ovatis, terminatricibus confertis.* Beeſom-Heath.
*The ſubulated, ciliated, four-leaved Erica, with globoſe flowers terminating the branches.*

The root is extremely long, divaricated, tough, and woody; the ſtem is alſo woody, and is uſually in part procumbent. The leaves are ſomewhat broad, ſhort, and of a dark colour; they ſtand four at a joint, round the ſtalks, which are a little hairy. The flowers are large, of a fine bright red colour, and of an oval figure, approaching to roundneſs; they are placed in cluſters at the tops of the branches.

It is frequent with us on heaths. C. Bauhine calls it, Erica ex rubro nigricans ſcoparia; Ruppius, Erica ſpuria.

The other ſpecies are, 1. The tall, white Erica. 2. The long-leaved, purple Erica. 3. The juniper-leaved, many-flowered Erica. 4. The greeniſh-flowered Erica. 5. The great Erica, with deciduous leaves. 6. The arbutus-flowered Erica. 7. The ternate-leaved, procumbent Erica. 8. The procumbent, herbaceous Erica. 9. The myrtle-leaved Erica. 10. The great, ſhort-leaved Erica. 11. The ſhort, capillaceous-leaved Erica.

## DAPHNE.

THERE is no calyx: three flowers uſually proceed from the ſame germen: the germen conſiſts of a ſingle leaf: the tube is cylindric, imperforated, and larger than the limb: the limb is divided into four oval, acute, plane, patent ſegments: the ſtamina are eight very ſhort filaments, inſerted into the tube, the alternate ones lower: the antheræ are roundiſh, erect, and contain two cells: the germen is oval; there is no ſtyle; the ſtigma is depreſſed, plane, and capitated: the fruit is a roundiſh berry, containing only one cell; the ſeed is ſingle, round, and fleſhy.

1. *Daphne floribus ſeſſilibus infra folia elliptico-lanceolata.* Mezereon.
*The ſeſſile-flowered Daphne, with elliptico-lanceolate leaves.*

This is a ſhrub of three or four feet high. The root is long, thick, and divaricated. The ſtem is ſmall and tough; it's bark thin, greyiſh, and tough, and, under this, there is a green one. The flowers appear before the leaves; they are ſmall, and of a beautiful pale

pale red colour, very numerous, and make a very beautiful appearance. The leaves grow ſeveral from the ſame tubercle; they are long, narrow, ſoft, and of a pale green colour; the berries are red.

It is a native of many parts of Europe, but not of England. C. Bauhine calls it, Laureola folio deciduo, flore purpureo, officinis laureola fœmina; others, Chamælea and Mezereon.

2. *Daphne floribus racemoſis lateralibus, foliis lanceolatis integris.* Spurge Laurel.

*The racemous, lateral-flowered Daphne, with undivided, lanceolated leaves.*

This riſes to a ſhrub of four feet high; it's leaves remain green all winter; it's root is long and divaricated; the ſtem as thick as a man's thumb, and covered with a ſmooth bark; toward the top it divides into ſeveral branches, and, on the upper parts of theſe, ſtand cluſters of long, narrow, thick, gloſſy, dark green leaves and flowers; theſe are ſmall, and of a yellowiſh-green colour.

It is common in our woods. C. Bauhine calls it, Laureola ſemper virens flore viridi; others, Laureola and Laureola mas.

Both theſe ſpecies are ſtrong cathartics, but they are too rough to be given with ſafety.

## GNIDIA.

THE calyx is a coloured perianthium, of an infundibuliform ſhape, and formed of a ſingle leaf: the tube is very long, and filiform: the limb is divided into four parts, and plane: the corolla conſiſts of four plain, ſeſſile petals, ſhorter than the cup, and inſerted into it: the ſtamina are eight erect, ſetaceous filaments, about the length of the flower, and their antheræ are ſimple: the germen is oval; the ſtyle is filiform, of the length of the ſtamina, inſerted into the ſide of the germen: the ſtigma is capitated, and hiſpid; there is no pericarpium: the ſeed is ſingle, oval, and obliquely acute, and is retained in the bottom of the cup.

This comprehends the Struthia of Van Royen.

## LACHNÆA.

THE calyx is a permanent, one-leaved perianthium: the tube is long and ſlender; the limb divided into four unequal parts; the upper ſegment is erect and ſmall, the other three are reflex, and the intermediate one the largeſt: there is no corolla; the ſtamina are eight ſetaceous filaments, erect, and of about the length of the corolla: the antheræ are ſimple; the germen is oval; the ſtyle is filiform, of the length of the ſtamina, inſerted into the ſide of the germen, and it's ſtigma capitated and hiſpid: there is no pericarpium; but the ſeed, which is ſingle, oval, and obliquely acute, remains in the bottom of the cup.

Theſe characters ſufficiently diſtinguiſh the Lachnæa, without a farther deſcription.

## PASSERINA.

THE calyx is wanting; the corolla is of very ſhort duration; it is compoſed of a ſingle petal: the tube is cylindric, ſlender, and ventricoſe below the middle: the limb is patent, and divided into four parts; the ſegments are oval and obtuſe: the ſtamina are eight ſetaceous filaments, of the length of the limb, and are inſerted into the top of the tube: the antheræ are of an oval figure, and erect; the germen is oval, and ſtands within the tube of the corolla; the ſtyle is filiform, and grows from one ſide of the top part of the germen, and is of the length of the tube of the corolla: the ſtigma is capitated, and is all over hiſpid: the fruit is a coriaceous capſule, of an oval figure, with only one cell: the ſeed is ſingle, oval, pointed at each end, with oblique extremities.

Theſe characters ſufficiently diſtinguiſh the Paſſerina, without a farther deſcription.

## STELLERA.

THE Stellera has no calyx; the corolla is deciduous, and is formed of a ſingle petal, and divided into four ſegments, including the ſtamina, which are eight ſlender, ſhort filaments; the antheræ are roundiſh; the fruit is a ſingle, naked ſeed.

Theſe characters ſufficiently diſtinguiſh the Stellera, without a farther deſcription.

## SANTALUM.

THE calyx is a mere margin, coronating the germen, and ſlightly quadridentated; the corolla conſiſts of a ſingle petal, of a campanulated form; the limb is plane, quadrifid, and acute; the ſtamina are eight filaments, inſerted into the top of the corolla, and alternately ſhorter; the antheræ are ſimple; the germen is turbinated, and placed under the receptacle of the flower; the ſtyle is of the length of the ſtamina; the ſtigma is ſimple; the fruit is a berry.

Of this genus there is only one known ſpecies.

### SANTALUM. The yellow and White Saunders Tree.

The root is large and brachiated. The tree grows to forty or fifty feet high, and is very ramoſe; it's bark is of a deep brown colour; the outer part of the wood is white, the heart yellow. The leaves ſtand in an irregular manner on the branches; they are pinnated; the pinnæ are uſually three pair and an odd one, each an inch and a half long, three quarters of an inch broad, thick, of a fine green colour, and ſweet ſmell, when bruiſed. The flowers are of a beautiful blue colour; the fruit is a berry of the ſize of our cherries.

It is a native of the Eaſt Indies, and furniſhes us with the white and yellow Saunders of the ſhops, the firſt being the outer part of the wood, the latter the heart; they are both eſteemed cordial and cephalic. The red Saunders of the ſhops is the wood of a ſiliquoſe tree, of a very different claſs from this; nor are the woods, indeed, at all alike; one would wonder how they came by the ſame name.

## MEMECYLUM.

THE calyx is a margin, coronating the germen; the corolla conſiſts of four petals; the ſtamina are eight ſlender filaments; the antheræ are tumid; the germen is roundiſh; the fruit is a berry.

Theſe characters ſufficiently diſtinguiſh the Memecylum, without a farther deſcription.

## VACCINIUM.

THE calyx is a very ſmall, permanent perianthium, ſtanding on the germen: the corolla is formed of a ſingle petal, of a campanulated form, divided into four revolute ſegments at the edge; the ſtamina are eight ſimple filaments; the antheræ are bicornate, furniſhed at the back with two patent ariſtæ, and ſplitting at the top; the germen is placed below the receptacle; the ſtyle is ſimple, and longer than the ſtamina, and the ſtigma obtuſe: the fruit is a globoſe, umbilicated berry, containing four cells; the ſeeds are ſmall.

This genus comprehends the Vaccinium and Oxycoccus of Tournefort.

The number of the ſtamina, &c. often varies, adding a fourth; the calyx is in ſome ſpecies entire, in others divided into four parts; the corolla in the Oxycoccus of Tournefort is, when fully blown, revolute almoſt to the baſe.

1. *Vaccinium*

1. *Vaccinium caule angulato, foliis ovatis ſerratis, deciduis.* **Black Whortleberries.**
*The angular-ſtalked Vaccinium, with oval, ſerrated, and deciduous leaves.*

The root is very long, woody, and creeping. The ſtalk is woody, green, angulated, and tough, a foot or more in height, and ramoſe; the leaves ſtand thick, and are an inch long, half an inch broad, pointed at the ends, and ſerrated. The flowers are ſmall, and of a hollowed figure, and pale red colour; they ſtand on ſingle pedicles. The fruit is a round, umbilicated, bluiſh-black berry.

It is common with us on heaths. J. Bauhine calls it, Vitis Idæa anguloſa.

2. *Vaccinium ramis filiformibus, foliis ovatis perennantibus, pedunculis ſimplicibus, ſtipula duplici.* **Marſh Whortle.**
*The thin-ſtalked, oval, perennial-leaved Vaccinium, with ſimple peduncles and a double ſtipula.*

The root is long, very ſlender, creeping, and of a reddiſh colour. The ſtalks are tough and woody, very thin, reddiſh in colour, and procumbent. The leaves ſtand alternately; they are very ſmall, oval, and like the leaves of ſerpyllum. The flowers grow at the tops of the branches, three or four together; each has it's own pedicle, and ariſes from a kind of durable caſe; they are ſmall and purple. The berries are large and red, marked with a purple, cruciform umbilicus, often yellow, and ſpotted with red.

It is found in boggy places. C. Bauhine calls it, Vitis Idæa paluſtris; others, Oxycoccus and Vaccinium paluſtris.

The other ſpecies are, 1. The great Vaccinium, or Vitis Idæa of the ſhops. 2. The ſmaller-fruited, black Vaccinium. 3. The red Vaccinium. 4. The oblong, whitiſh-leaved Vaccinium. 5. The Ceylon Vaccinium, with white berries. 6. The pyrola-leaved Vaccinium. 7. The acute-leaved, marſh Vaccinium.

## DIOSPYROS.

THE calyx of the flower is a ſmall, permanent perianthium, formed of a ſingle leaf, lightly divided into four ſegments, and obtuſe: the corolla conſiſts of a ſingle petal, of an ovato-campanulated figure, very lightly divided into four ſegments, obtuſe and ſmall: the ſtamina are eight ſhort, ſetaceous filaments: the antheræ are oblong and acuminated; the germen is roundiſh; the ſtyle is ſingle, and longer than the ſtamina, lightly divided into four ſegments, and the ſtigmata obtuſe: the fruit is a large, globoſe berry, containing ſeveral cells, and placed on a very large, patent calyx; the ſeeds are oval and acuminated.

This genus comprehends the Guaiacana of Tournefort. There is one ſpecies which adds one to the number of all the parts of fructification.

*Claſs the Eighth. Order the Second.*

## OCTANDRIA DIGYNIA.

*Plants which have in every flower eight ſtamina and two ſtyles.*

## MOERHINGIA.

THE calyx is a permanent, patent perianthium, compoſed of four little, lanceolated leaves: the corolla is patent, and compoſed of four oval, undivided petals, ſhorter than the cup: the ſtamina are eight capillary filaments; the antheræ are ſimple; the germen is globoſe; the ſtyles are two, erect, and of the length of the ſtamina; the ſtigmata are ſimple; the fruit is a capſule, of a ſubglobоſe figure, formed of four valves, containing only one cell; the ſeeds are numerous, roundiſh, and convex on one ſide, and angular on the other

1. *Moerhingia*

1. *Moerhingia pedunculis unifloris.* Mossy Chickweed.
*The single-flowered Moerhingia.*

The root is slender and fibrated; the plant is very small and delicate. The stalks are numerous, round, very slender, and procumbent, three or four inches long, and ramose: the leaves stand two at a joint; they are an inch, or more, in length, as thin as a fine thread, and of a bright green colour. The flowers stand singly on the pedicles, and are small and white, the capsules brownish.

It is common on the Alps and Apennines. C. Bauhine calls it, Alsine tenuifolia muscosa; others, Alsine muscosa.

2. *Moerhingia scapis bifloris.*
*The biflorous Moerhingia.*

The root is perennial and small; the stalks numerous, and very thick set with leaves toward the base; the leaves very narrow, and about half an inch long: the stalks which support the flowers rise from these; they are half an inch long, and have about their middle a pair of very minute leaves; from the alæ of these grow pedicles for the flowers, which are small and white, always two upon the stalk.

Linnæus first discovered this in Lapland; he there calls it, Sagina ramis erectis bifloris; but, when he called it thus, he had not examined it's characters.

## CHRYSOSPLENIUM.

THE calyx is a coloured, permanent perianthium, patent, and divided into four oval segments, two of the opposite ones smaller than the others: there is no corolla: the stamina are eight very short, erect, subulated filaments, placed in a quadragonal receptacle: the antheræ are simple; the germen is immersed in the receptacle, and terminates in two styles, of a subulated figure, and of the length of the stamina: the stigmata are obtuse: the fruit is a capsule, divided into two parts, and armed with two prominences, or beaks, surrounded by the green cup, and formed of two valves, but contains only one cell: the seeds are numerous, and very small.

1. *Chrysosplenium foliis alternis.* The greater golden Saxifrage.
*The alternate-leaved Chrysosplenium.*

The root is small and creeping: the stalk is very tender, green, round, and a little hairy, square, and in part procumbent, and five or six inches in length: the leaves are roundish, somewhat cordated at the base, and crenated deeply about the edges, of a pale green colour, and a little hairy; they stand alternately, and have pedicles an inch or two in length. The flowers are very small, and of a bright yellow, or gold colour.

It is common on bogs. Ray calls it, Saxifraga aurea foliis pediculis oblongis insidentibus.

2. *Chrysosplenium foliis oppositis.* The lesser golden Saxifrage.
*The opposite-leaved Chrysosplenium.*

The root is creeping and small; the stalks are square, hairy, in part procumbent, and about four inches long: those which produce flowers are usually shorter, but more erect than the rest. The leaves are small, roundish, and crenated at the edges; they stand in pairs, on very short pedicles. The flowers are very small, and yellow; they stand on very short pedicles, in the divarications of the branches.

It is common in boggy places. C. Bauhine calls it, Saxifraga rotundifolia aurea.

## GALENIA.

THE calyx is a very small, hollow perianthium, divided into four oblong segments: there is no corolla: the stamina are eight capillary filaments, nearly of the length of the cup: the antheræ are didymous; the germen is roundish; the styles are

are two, ſimple and reflex: the ſtigmata are ſimple; the fruit is a roundiſh capſule, having two cells; the ſeeds are two, oblong and angulated.

Theſe characters ſufficiently diſtinguiſh the Galenia, without a farther deſcription.

*Claſs the Eighth. Order the Third.*

## OCTANDRIA TRIGYNIA.

*Plants which have in every flower eight ſtamina and three ſtyles.*

## POLYGONUM.

THERE is no calyx, but the corolla has by ſome been called a calyx, and has a ſingular kind of green, thick ſubſtance, growing to it's outer part, much reſembling one: the corolla conſiſts of a ſingle petal, narrow at the baſe, and imperforated: the limb is open, and divided into five oval, obtuſe, permanent ſegments: the ſtamina are eight very ſhort, ſubulated filaments: the antheræ are roundiſh and incumbent; the germen is triquetrous; the ſtyles are three, very ſhort, and filiform; the ſtigmata are ſimple: there is no pericarpium, but the corolla remains, and ſurrounds the ſeed, which is ſingle, triquetrous, and acute.

Linnæus has of late been willing to include the Biſtorta, Helxine, and Perſicaria, all under this common genus; they are, indeed, all nearly allied, but it appears much more eligible to keep them ſeparate, as there are evident characters, though but ſmall ones, to ſupport the diſtinction.

### POLYGONUM. Knot-graſs.

There is ſcarce any known plant which varies ſo extremely from it's uſual appearance as the Polygonum, under the accidents of more or leſs nouriſhment, and other ſuch variations of circumſtances; it has been, from this, deſcribed under the names of ſeveral different ſpecies by authors, but is in reality one and the ſame plant under them all. It's root is fibrous and white; the ſtalks are numerous, round, jointed, and tough; the leaves ſtand alternately, and are naturally of a figure approaching to oval, but lanceolated at the end; they are, however, ſometimes broader and roundiſh, ſometimes oblong, ſometimes very narrow, and ſometimes remarkably ſhort. Theſe varieties have given occaſion to four imaginary ſpecies, under the names of, 1. Polygonum lato ſubrotundo folio. 2. Polygonum anguſtis foliis. 3. Polygonum brevi anguſtoque folio; and, 4. Polygonum anguſto oblongo folio: any of theſe will, however, by culture, be reduced to the primitive appearance, and all will appear alike: the flowers in all are ſmall; they ſtand in the alæ of the leaves, without pedicles, and are of a pale reddiſh colour.

It is very common in all our uncultivated places.

## PERSICARIA.

THERE is no calyx, unleſs, as ſome have done, we call the corolla by that name: the corolla is permanent, and is divided into five oval, obtuſe, hollow, erect, and alternately connivent ſegments: the ſtamina are often only five filaments, of a ſubulated figure: the antheræ are ſimple; the germen is roundiſh; the ſtyle is bifid, and the ſtigmata are obtuſe; there is no pericarpium, but the corolla remains, and ſurrounds and incloſes the ſeed, which is ſingle, of an oval figure, and compreſſed.

There is great irregularity in this genus, both in regard to it's claſs, and to itſelf, in the ſeveral ſpecies. The number both of the ſtamina and ſtyles is uncertain: the ſtamina are in ſome five, and longer than the corolla, with a ſingle ſtyle; in others they are ſix, ſhorter than the corolla, and the ſtyle double; in others they are eight; and, in ſome, the corolla is divided only into four ſegments, the lower one reflex. If to this it be added that ſeveral of the ſpecies vary extremely in their manner of growing, and have thence been deſcribed each under the names of ſeveral different ſpecies, it will appear that no genus of plants, either from nature or art, has been ſo much ſubject to error and confuſion.

1. *Perſicaria floribus hexandris digynis.* Spotted
*The Perſicaria, with flowers with ſix ſtamina and two ſtyles.* Arſmart.

The root is fibrous; the ſtalks are numerous, thick, round, ſucculent, jointed, and two feet high: the leaves ſtand ſingly at the joints; they are three inches long, an inch, or more, in breadth, and pointed at the end: the flowers ſtand in cluſters, or ſhort ſpikes, on the extremities of the branches; they are ſmall and reddiſh: the leaves are uſually ſpotted in the middle, with a large black ſpot; ſometimes they want this; and in ſome plants it is roundiſh, in others in form of a creſcent; the flowers are alſo ſometimes white. Theſe and other as trivial and accidental variations have been deſcribed as diſtinct ſpecies by many authors. The plant, in it's common ſtate, is called by C. Bauhine and others, Perſicaria mitis and Maculoſa.

It is common every-where with us about ditches, and on dunghils.

2. *Perſicaria floribus hexandris ſemidigynis.* Sharp
*The Perſicaria, with hexandrous, ſemidigynous flowers.* Arſmart.

The root is oblong, ſlender, white, tough, and fibrated: the ſtalks are numerous, round, ſlender, green, and a foot and half high: the leaves ſtand alternately; they are three inches long, near an inch broad, pointed at the ends, and of a pale green: the flowers ſtand in long ſlender ſpikes, at the extremities of the branches. The whole plant is of an acrid taſte, the other is mild.

This is common with us about waters, and in various places puts on very different forms, appearing larger or ſmaller, erect or procumbent, &c. in theſe it has been deſcribed under the names of many different ſpecies. In it's common ſtate, C. Bauhine calls it, Perſicaria urens, ſive Hydropiper.

Of the other more certainly diſtinct ſpecies are, 1. The willow-leaved Perſicaria. 2. The perennial, ſhrubby Perſicaria. 3. The narrow-leaved, ſhrubby Perſicaria. 4. The Perſicaria, with leaves woolly underneath. 5. The procumbent, long-ſpiked Perſicaria.

## BISTORTA.

THERE is no calyx; the corolla conſiſts of a ſingle petal, narrow and imperforated at the baſe: the limb is erect, and divided into five oval, and alternately connivent ſegments: the ſtamina are eight ſubulated filaments, longer than the corolla; the antheræ are roundiſh, ſmall, and incumbent: the germen is triquetrous; the ſtyles are three, very ſhort and filiform, and the ſtigmata are ſimple: the flower remains, and ſupplies the place of a pericarpium, ſurrounding the ſeed, which is ſingle, triquetrous, and acute.

1. *Biſtorta foliis ovato-oblongis acuminatis.* Biſtort.
*The Biſtort, with ovato-oblong, acuminated leaves.*

The root is thick, oblique, and variouſly contorted, blackiſh on the ſurface, and reddiſh within: the leaves are three inches long, and near two in breadth; they ſtand on long pedicles, edged with narrow, foliaceous appendages, and are of a deep green on the upper ſide, and whitiſh underneath: the ſtalk is round, ſlender, jointed, and two feet high: the leaves ſtand alternately on it, and at it's top is a ſpike of flowers, ſhort, thick, and very beautiful: the flowers are ſmall, and of a beautiful red.

It is a native of England, but not common; ſome meadows near Lambeth abound with it. C. Bauhine calls it, Biſtorta radice minus intorta; others, Biſtorta major. It's root is a good aſtringent, and is much uſed in the ſhops.

2. *Biſtorta foliis lanceolatis* Small
*The lanceolated-leaved Biſtort.* Biſtort.

The root is oblong, thick, oblique, and variouſly contorted, black on the ſurface, and white within: the radical leaves are broad and ſhort; thoſe on the ſtalks are three

or

or four inches long, not half an inch broad, and of a lanceolated figure: the ſtalk is ſlender, round, jointed, and ſix inches high; the leaves ſtand alternately on it; at the top ſtands a thin ſpike of whitiſh flowers.

It is found in the North of England. C. Bauhine calls it, Biſtorta Alpina media; J. Bauhine, Biſtorta minima; and others, Biſtorta ſobolifera.

## HELXINE.

THERE is no calyx: the corolla is permanent; it conſiſts of a ſingle petal, divided into five obtuſe, erecto-patent ſegments: the nectarium conſiſts of eight oval, coloured, very ſhort granules: the ſtamina are eight ſubulated filaments, of the length of the corolla: the antheræ are roundiſh and incumbent: the germen is triquetrous; the ſtyles are three, ſimple, and of the length of the ſtamina: the ſtigmata are capitated; the corolla remains and performs the office of a perianthium, ſurrounding the ſeed, which is ſingle, triquetrous, and acute.

This genus comprehends the Tragopyrum of authors, and ſome of the Perſicariæ of the ſame.

1. *Helxine caule erecto inermi, foliis cordato-ſagittatis.* Buck-wheat.
*The erect Helxine, with cordato-ſagittated leaves.*

The root is oblong, creeping, and fibrated: the ſtalk is ſingle, round, ſmooth, ſolid, ramoſe, and two or three feet high: the leaves ſtand on long pedicles near the bottom of the ſtalk; higher up they have ſcarce any; they are two inches and a half long, an inch and half broad, and of a deep green, cordated at the baſe, and pointed at the extremity: the flowers ſtand in a kind of lax ſpikes, on pedicles, an inch, or two, in length; they are ſmall, and of a purpliſh white.

It is a native of Germany. Dodonæus calls it, Tragopyrum; Tournefort, Tragopyrum vulgare erectum; and C. Bauhine, Eryſinum vulgare folio hederaceo. We cultivate it in fields for the ſeeds, which are good food for many animals.

2. *Helxine caule volubili.* Black Bindweed.
*The voluble-ſtalked Helxine.*

The root is ſlender, yellowiſh, and tough; the ſtalks are round, weak, ramoſe, and two feet long, but they ſupport themſelves, by twiſting about every thing they come near: the leaves ſtand ſingly, at conſiderable diſtances; they are an inch and half long, near an inch broad, and of a yellowiſh-green: the flowers are ſmall and whitiſh; they ſtand in looſe ſpikes, or oblong cluſters.

It is common in our corn-fields. Tournefort calls it, Tragopyrum vulgare ſcandens; J. Bauhine, Helxine ſemine triangulo; C. Bauhine, Convolvulus minor ſemine triangulo.

3. *Helxine foliis ovatis, caule recto inermi.* Oriental Arſmart.
*The oval-leaved, erect Helxine.*

This is an extreamly beautiful plant, and has ſo much of the external appearance of the perſicariæ, that it is not wonderful that it has been generally ranked among them. It's root is fibrous and white; it's ſtalk round, jointed, and ſix or ſeven feet high: it's leaves are ten inches long, and five broad, pointed at their ends, and of a deep green; the flowers are large, and of a beautiful bright purple; they ſtand in large, long ſpikes at the extremities of the branches.

It is a native of the Eaſt; but we have it frequently in our gardens. Tournefort calls it, Perſicaria orientalis nicotianæ folio, calycibus purpureis.

The other ſpecies of Helxine are, 1. The rough-fruited Helxine. 2. The Aſiatic, cereal Helxine. 3. The ramoſe, lanceolate-leaved Helxine, called long-leaved, racemous Arſmart; and, 4. The ſhrubby Helxine, called the ſhrubby mountain Dock.

PAUL-

## PAULLINIA.

THE calyx is a permanent perianthium, compoſed of four oval, patent leaves: the corolla conſiſts of four oblong petals, of an obverſely oval figure, patent, and twice as large as the cup: the ſtamina are eight ſhort, ſimple filaments; the antheræ are ſmall; the germen is turbinated, triquetrous, and obtuſe; the ſtyles are three, ſhort and filiform: the ſtigmata are ſimple and patent: the fruit is a large triquetrous capſule, formed of three valves, and containing three cells: the ſeeds are ſingle, and of an oval figure.

This genus comprehends the Seriana and the Cururu of Plumier; in the Seriana, the capſule carries the ſeed at the baſe; in the Cururu, at the apex. They are Americans, deſcribed by Plumier.

## CARDIOSPERMUM.

THE calyx is a permanent perianthium, compoſed of four obtuſe, hollow leaves, alternately larger; the corolla conſiſts of four petals, obtuſe, but terminated by a kind of point; they ſtand alternately with the larger leaves of the cup: the nectarium is very ſmall, and ſurrounds the germen; it is compoſed of four leaves, narrow at the ungues, obtuſe, and pointed at the extremities; two of them form an erect lip: the ſtamina are eight ſubulated filaments, ſcarce longer than the cup; three of them ſtand oppoſite to three others, and the remaining two on the ſide: the antheræ are ſmall: the germen is triquetrous; the ſtyles are three, and ſhort; the ſtigmata are ſimple: the fruit is a roundiſh, trilobated, and inflated capſule; it contains three cells, and opens at the extremity: the ſeeds are ſingle, globoſe, and marked with a heart at the baſe. This genus comprehends the Corindum and Veſicaria of authors.

There is only one known ſpecies of it.

### CARDIOSPERMUM.

The root is large, thick, and fibrated; the ſtalks are weak, ſlender, ſtriated, and ſupport themſelves bymeans of any thing ſolid in their way; they grow to three feet long: the leaves are divided into ſometimes three, ſometimes five lobes; theſe are oblong and ſerrated: the flowers are large and white: the fruit is inflated like the bladder of the winter cherry, and as large as a walnut: the ſeeds are large and black, the cordated ſpot white.

It is a native both of the Eaſt and Weſt Indies. C. Bauhine calls it, Piſum veſicarium fructu nigro alba macula notato.

## SAPINDUS.

THE calyx is a patent perianthium, compoſed of four plane, oval, coloured, deciduous leaves: the corolla is ſmaller than the calyx, and conſiſts of four oval petals: the ſtamina are filiform; the germen is triangular; the ſtyles are three, and ſhort; the ſtigmata are ſimple: the fruit conſiſts of three globoſe, inflated capſules, adhering together: the ſeed is a round nut. The three capſules, however, ſeldom all come to perfection; two of them are uſually abortive.

*Claſs*

*Claſs the Eighth. Order the Fourth.*

## OCTANDRIA TETRAGYNIA.

*Plants which have in every flower eight ſtamina and only four ſtyles.*

### PARIS.

THE calyx is a permanent perianthium, compoſed of four patent, acute, lanceolated leaves, of the bigneſs of the flower: the corolla conſiſts of four oblong, plane, patent petals: the ſtamina are eight ſubulated filaments; the antheræ are long and erect: the germen is round and marked with four faint angles: the ſtyles are four, patent and ſhorter than the ſtamina; the ſtigmata are ſimple: the fruit is a berry of a globoſe, tetragonal form, containing four cells, and ſtanding in the cup: the ſeeds are numerous, and arranged in a double ſeries.

This genus comprehends the Herba Paris of authors.

1. *Paris foliis quaternis.* Herb True-love.
*The four-leaved Paris.*

The root is oblong, ſlender, jointed, and creeping. The ſtalk is round, firm, and ſix or eight inches high. Near it's top there ſtand four leaves, ſometimes five, very rarely more; theſe are three inches long, an inch broad, and of a lanceolated figure, rough to the touch, and not indented about the edges: the flower is large and white; the berry black, when ripe.

It is found in many of our woods. C. Bauhine calls it, Solanum quadrifolium bacciferum; others in general, Herba Paris.

2. *Paris foliis ternis.* The leſſer Herb Truelove.
*The three-leaved Paris.*

The number of leaves on the ſtalk in this plant would not be enough to characteriſe a different ſpecies from the former; but there are, beſide theſe, ſufficiently certain and obvious diſtinctions: the root is ſmall, creeping, and reddiſh; the ſtalk very ſlender and weak; the leaves are never more than three; they are about three inches long, and three quarters of an inch in breadth, of a pale green, and even at the edges: the flower is ſmall and white, and it's petals of an oval figure, and larger than the leaves of the cup: the ſtamina alſo are only ſix in number; and the petals of the flower, and all the other parts, a fourth leſs in number than in the other; ſo that it almoſt runs away from the very genus. Authors in general, fond enough of making ſpecies out of varieties, have ranked this ſpecies as a variety.

### ADOXA.

THE calyx is a perianthium, plane, divided into two parts, permanent, and placed below the germen: the corolla is plane, and compoſed of a ſingle petal, divided into four oval, acute ſegments, larger than the cup: the ſtamina are eight ſubulated filaments, of the length of the cup: the antheræ are roundiſh; the germen is ſimple; the ſtyles are four, ſimple, erect, permanent, and of the length of the ſtamina; the ſtigmata are ſimple: the fruit is a globoſe berry, ſituated between the calyx and corolla; the calyx adheres to it's under part: the berry is umbilicated, and contains four cells: the ſeeds are ſingle and compreſſed. This is the fructification of the terminatory flower; the lateral ones all add a fifth to the number of the parts.

Of this genus there is only one ſpecies.

ADOXA. **Tuberous Moſchatel.**

The root is thick, white, and jointed; the leaves are compoſed of a number of oblong ſegments, arranged into a kind of tripartite order, on a long pedicle: the ſtalk riſes to about the height of the leaves, that is, to two or three inches; it is very ſlender and delicate, of a pale green, and ſmooth; about it's middle ſtand two leaves oppoſite to one another, like the radical ones, but ſmaller, and placed on ſhort pedicles: at the top ſtands a kind of ſquare head, ſmall, of a yellowiſh-green, and compoſed of five little flowers.

It is common in our woods. C. Bauhine calls it, Raunuculus nemorum Moſchatellina dictus; others, Moſchatellina foliis fumariæ bulboſæ.

## ELATINE.

THE calyx is a perianthium, compoſed of four roundiſh, plane, permanent leaves, of the bigneſs of the flower: the corolla conſiſts of four ſeſſile, oval, obtuſe, patent petals: the ſtamina are eight filaments, of the length of the corolla; the antheræ are ſimple: the germen is large, orbiculated, and ſomewhat compreſſed: the ſtyles are four, erect, parallel, and of the length of the ſtamina; the ſtigmata are ſimple: the capſule is large, orbiculated, of a globoſe figure, but depreſſed; it is formed of four valves, and contains four cells: the ſeeds are numerous, lunated, erect, and ſurround the receptacle in a rotatory manner.

This genus comprehends the Potamopithys of Buxbaum, and the Alſinaſtrum of Vaillant.

*Elatine foliis oppoſitis.*
*The oppoſite-leaved Elatine.*

The root is a cluſter of white, long, and moderately thick fibres: the ſtalks are numerous, round, ſmooth, weak, and ſix inches long; the leaves are of an oval figure, a quarter of an inch, or more, in length, and nearly as much in breadth: the flowers are ſmall and white.

This is a native of moſt parts of Europe; it grows in watery places. Vaillant calls it, Alſinaſtrum ſerpyllifolium flore albo tetrapetalo.

*Claſs the Eighth. Order the Fifth.*

## OCTANDRIA POLYGYNIA.

*Plants which have in every flower eight ſtamina and a great number of ſtyles.*

*Of this order there is only one known genus.*

## MICHELIA.

THE calyx is a deciduous perianthium, compoſed of eight obtuſe, lanceolated leaves: the corolla is ſmaller than the calyx, and conſiſts of eight lanceolated, acute petals: the ſtamina are eight ſubulated filaments, ſhorter than the corolla; the antheræ are acute: the germina are numerous, and formed into a kind of ſpike; there are no ſtyles: the ſtigmata are reflex; the fruit conſiſts of a number of globoſe berries, equal to that of the germina, and arranged into a cluſter. Theſe berries contain each a ſingle cell only, and in this are four ſeeds, convex on one ſide, and angular on the other. It is an oriental, deſcribed in the Hort Malab. 1. 19.

## *Claſs the Ninth.*

# ENNEANDRIA.

*Plants which have in every flower nine ſtamina.*

OF this claſs there are only four genera; one of theſe is of the monogynous kind, having only a ſingle ſtyle; two are of the trigynous, and the remaining one hexagynous.

## *Claſs the Ninth. Order the Firſt.*

# ENNEANDRIA MONOGYNIA.

*Plants which have nine ſtamina and only one ſtyle in the flower.*

## LAURUS.

THERE is no calyx: the corolla much reſembles a calyx, and has been miſtaken for one; it conſiſts of ſix erect, hollow, ovato-acuminated petals, alternately exterior. The nectarium is compoſed of three coloured, acuminated tubercles, terminating each in two hairs, and ſtanding round the germen: the ſtamina are nine filaments, ſhorter than the corolla, compreſſed, obtuſe, and placed in three's: the antheræ adhere to the edge of the upper part of the filaments on each ſide, and there are two globoſe corpuſcles affixed by a very ſhort filament to each of the ſtamina of the inner ſeries, near the baſe: the germen is oval; the ſtyle is ſimple, equal, and of the length of the ſtamina: the ſtigma is obtuſe and oblique: the fruit is a drupe of an oval, acuminated figure, containing only one cell, and contained in the corolla: the ſeed is a ſingle, ovato-acuminated nut; it's kernel of the ſame figure.

This genus comprehends the Laurus of Tournefort; and the Cinnamomum, Camphora, Perſea, Borbonia, Benzoe, and Saſſafras of others.

The greater number of the ſpecies of this genus, the cinnamon-tree, camphire-tree, &c. are of the hermaphrodite kind; but ſome, as the common bay, have the male flowers on ſeparate trees: in this caſe the ſtamina vary in number from eight to fourteen, and the corolla is naked, and divided into four parts. The little bodies, adhering to ſome of the filaments, are the great characteriſtics of the genus.

1. *Laurus foliis lanceolatis venoſis perennantibus, corollis quadrifidis.* The Bay-tree.
*The Laurus, with lanceolated, perennial leaves, and quadrifid corollæ.*

The root is ſtrong, woody, and divaricated: the ſhrub uſually ten or twelve feet high; ſometimes, however, it riſes with a ſingle trunk to the bigneſs of a tree. The leaves are hard, rigid, of a deep green, three inches long, and two broad; they ſtand thick and cloſe: the flowers are ſmall, and of a whitiſh yellow: the berries large, oblong, and black, when ripe.

It is a native of Italy; we have it in our gardens, almoſt every-where; it's berries are an excellent carminative, and much uſed in medicine.

2. *Laurus foliis oblongo-ovatis trinerviis, nitidis, planis.* The Cinnamon-tree.
*The oblongo-ovate, trinervous, plane-leaved Laurus.*

The root is large and brachiated; the bark of it greyiſh without, reddiſh within, and ſmells ſtrongly of camphire: the trunk is large, and the tree grows to a great height, and is very ramoſe: the leaves ſtand irregularly; they are of an oval figure, four inches long, thick, of a bright green, and ſupported on pedicles of half an inch long, thick and furrowed: the flowers are ſmall and white; they ſtand in cluſters on the extremities of the branches, and are of a very fragrant ſmell.

It

It is a native of Ceylon, where it is as common as any tree we have here. It's ſecond, or under bark, is the Cinnamon of ſuch uſe as an aſtringent, &c.

3. *Laurus foliis ovatis, utrinque acuminatis, trinerviis, nitidis, petiolis laxis.*
*The Laurus, with oval, gloſſy leaves, on lax pedicles.*

The Camphire-tree.

The root is large, thick, and brachiated; the trunk often three feet in diameter; the height of the tree that of our higheſt elms; it is very ramoſe, it's bark greyiſh, and rough on the trunk, but green on the young branches. The wood is white, but grows reddiſh in drying. The leaves ſtand irregularly, and much reſemble thoſe of the common bay-tree; they are more than three inches long, an inch and a half broad, ſomewhat curled about the edges, and terminate in a very long and narrow point; they are of a bright green on the upper ſurface, and of a greyiſh green underneath, and ſtand on pedicles of an inch long, ſomewhat hollowed. The flowers are very ſmall, and white; they ſtand in cluſters, on the tops of ramoſe pedicles, riſing from the alæ of the leaves: the fruit is a black ſhining berry.

It is a native of many parts of the Eaſt. Breynius calls it, Arbor Camphorifera Japonica foliis laurinis, fructu parvo globoſo, calyce breviſſimo.

The Camphire of the ſhops is prepared from the wood of this tree by a coarſe kind of ſublimation; all the parts of the tree ſmell ſtrongly of it.

4. *Laurus foliis enervibus, obverſe ovatis, utrinque acutis, integris, annuis.*
*The Laurus, with deciduous leaves, without ribs, of an obverſely oval figure.*

The Benjamin-tree.

The root is brachiated; the trunk two feet, or more, in diameter; the whole tree very tall, and ramoſe. The leaves are four inches long, and two and a half broad, largeſt at the further end, and of a pale green colour on the upper ſide, and whitiſh underneath. The flowers are very ſmall, and yellow; they ſtand in little cluſters: the fruit is large.

It is a native of the Eaſt and Weſt Indies. Many of the late writers have called it, Arbor limonii folio benzoinum fundens.

5. *Laurus foliis integris et trilobis.*
*The Laurus, with undivided and trilobate leaves.*

The Saſſafras-tree.

The root is brachiated, very long, and ſpreading, but not penetrating deep into the ground. The trunk is ſingle, moderately thick, but not very high; the top ramoſe and ſpreading. The leaves ſtand irregularly on the branches, and are green all the year; the young ones are of an oval figure, undivided, and obtuſely pointed at the extremity; the others are divided into three lobes each, and reſemble, in ſome degree, thoſe of the fig; they are of a duſky green on the upper ſide, and whitiſh underneath. The flowers ſtand in cluſters, on long pedicles; they are ſmall, and are ſucceeded by berries, of the ſhape and ſize of thoſe of the bay.

It is a native of America; we have it in our gardens. C. Bauhine calls it, Saſſafras arbor ficulneo folio.

The bark is an excellent diaphoretic and attenuant, and is in great eſteem, as is alſo the wood.

8

9

Michelia

Butomus

Tropæolum

Cardiospermum

Adoxa

Hekaxine

Laurus

Sapindus

Oenothera

Daphne

Paris

Bistata

Rheum

B. Coleman

*Claſs the Ninth. Order the Second.*

## ENNEANDRIA TRIGYNIA.

*Plants which have in each flower nine ſtamina and three ſtyles.*

### SPONDIAS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, divided into five ſegments at the edge: the corolla conſiſts of five oval, plane, patent petals: the ſtamina are nine filaments; five of them ſtand in a circular order, the reſt are equal in length to them and to the cup: the antheræ are ſimple; the germen is oval; there is ſcarce any ſtyle; the ſtigmata are three, obtuſe, and permanent: the fruit is a berry, of an oval figure; the ſeeds are four in every cell of the berry.

It is an American, deſcribed by Plumier under the name of Monbin.

### RHEUM.

THERE is no calyx; there are, indeed, a few partial, vague ſpathæ, but they are not to be called by that name: the corolla conſiſts of a ſingle petal, which is narrow at the baſe, and impervious: the limb is divided into ſix obtuſe ſegments, alternately ſmaller: the ſtamina are nine capillary filaments, inſerted into the corolla, and of the ſame length with it: the antheræ are didymous, oblong, and obtuſe: the germen is ſhort and triquetrous; the ſtyles are ſcarce viſible; the ſtigmata are reflex and plumoſe; there is no pericarpium: the ſeed is ſingle, large, triquetrous, acute, and ſurrounded with membranaceous rims.

This genus approaches nearly to the docks, or rumices, in many reſpects, but is extremely different in others.

Of this genus there is only one known ſpecies.

### RHEUM. The Rhapontic Plant.

The root is large and brachiated; the radical leaves are of a roundiſh figure, a foot in diameter, of a ſtrong green colour, marked with large longitudinal ribs, and placed on long pedicles. The ſtalk is large, thick, ſtriated, hollow, and two feet high; the leaves ſtand alternately on it, at conſiderable diſtances, and are large and roundiſh, but ſomewhat pointed. The flowers are ſmall and white, and are placed in vaſt cluſters together.

It is a native of Thrace and Scythia; we have it in ſome gardens. Proſper Alpinus calls it, Rhaponticum; Moriſon and others have made it a ſpecies of Dock, but erroneouſly: Tournefort firſt declared it to be a diſtinct genus, and Linnæus has followed him.

It's root is the Rhapontic of the ſhops, the true Rha, or Rheum, of Dioſcorides, and the reſt of the antients, for they were not acquainted with our rhubarb. This root purges more gently than rhubarb, but is a more powerful aſtringent: it ought to be more known in the ſhops than it is at preſent.

*Claſs the Ninth. Order the Third.*

## ENNEANDRIA HEXAGYNIA.

*Plants which have in every flower nine ſtamina and ſix ſtyles.*

*Of theſe there is only one known genus.*

### BUTOMUS.

THE calyx is a common involucrum, ſhort, and compoſed of three leaves: the umbel is ſimple: the corolla conſiſts of ſix roundiſh, hollow, fading petals, alternately exterior, ſmaller, and more acute: the ſtamina are nine ſubulated filaments; ſix of them are placed exteriorly: the antheræ are bilamellated: the germina are ſix, oblong and acuminated: the ſtyles are as many: the ſtigmata are ſimple: the fruit conſiſts of ſix oblong and gradually attenuated capſules, erect, formed each of a ſingle valve, and opening inwards: the ſeeds are numerous, of an oblong, cylindric form, and obtuſe at both ends.

Of this genus there is only one known ſpecies.

BUTOMUS. **The flowering Rush.**

The root is oblong, thick, and divided, part penetrating into the mud, part creeping upon, or but juſt under, the ſurface of it. The radical leaves are numerous, a foot long, of a triangular figure, and duſky green colour. The ſtalk is round, thick, naked, and two feet high; at it's top ſtand ten or fifteen large, beautiful, reddiſh-white flowers, in a kind of umbel.

It is common with us about waters. C. Bauhine calls it, Juncus floridus major; others, Juncus floridus.

*Claſs the Tenth.*

## DECANDRIA.

*Plants which have in each flower ten ſtamina.*

OF the Decandria ſome have only one ſtyle, ſome two, ſome three, ſome five, and ſome ten. The genera of this claſs are, therefore, to be arranged into five orders, under the names of Monogynia, Digynia, &c.

*Claſs the Tenth. Order the Firſt.*

## DECANDRIA MONOGYNIA.

*Plants which have in every flower ten ſtamina and only one ſtyle.*

THE genera compriſed within the limits of this order are very numerous, but there is an obvious diſtinction among them, ſome having the ſtamina declinated, others erect; according to this, therefore, they may be conveniently arranged into two diviſions.

*Claſs the Tenth. Order the Firſt.*

*Diviſion the Firſt.*

*Decandria Monogynia, with declinated ſtamina.*

## SOPHORA.

THE calyx is a ſhort perianthium, formed of a ſingle leaf, and of a campanulated figure; it's baſe is gibbous upwards; it's rim is divided into five ſegments, oblique and obtuſe: the corolla is of the papilionaceous kind, and compoſed of five petals: the vexillum is oblong, gradually broader, ſtrait, and it's edges reflex: the alæ are two, oblong, of the length of the vexillum, and appendiculated at the baſe: the carina is formed of two petals, like the alæ, with their lower edges approximated, and is of a navicular figure: the ſtamina are ten diſtinct, parallel, ſubulated filaments, of the length of the corolla, and buried in the carina: the antheræ are very ſmall, and aſſurgent: the germen is oblong and cylindric: the ſtyle is of the ſize and ſituation of the ſtamina: the ſtigma is obtuſe: the fruit is a very long, ſlender legumen, having only one cell, and nodoſe at the ſeeds; theſe are numerous and roundiſh.

There is but one known ſpecies of this genus. Dillenius makes it a ſpecies of Ervum. It agrees with diadelphous papilionaceous plants in all things, but that the ſtamina are diſtinct. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CERCIS.

THE calyx is an extremely ſhort perianthium, of a campanulated figure, formed of one leaf, gibbous below, and containing a honey juice; it's rim divided into five ſegments, erect and obtuſe: the corolla conſiſts of five petals, inſerted into the calyx, and greatly reſembles a papilionaceous flower: the alæ are ten petals, bent upwards, and affixed to long ungues: the vexillum is a ſingle petal, of a roundiſh figure, unguiculated, and placed under the alæ, which are inferior to it in length: the carina conſiſts of two petals, which converge ſo as to form a cordated part, including the fructifications, affixed to the ungues: the nectarium is a glandule of a ſtyliform figure, placed under the germen: the ſtamina are ten diſtinct, ſubulated filaments; four of them are longer than the reſt, and covered: the antheræ are oblong, incumbent, and aſſurgent: the germen is of a lineari-lanceolate figure, affixed to a long ſtyle: the ſtyle is of the length and ſituation of the ſtamina: the ſtigma is obtuſe and aſſurgent: the fruit is an oblong, obliquely-acuminated legumen, having only one cell: the ſeeds are roundiſh, and annexed to the upper ſuture.

This genus comprehends the Siliquaſtrum of authors.

1. *Cercis foliis cordato-orbiculatis glabris.* Judas-tree.
*The Cercis, with ſmooth, cordato-orbiculated leaves.*

The root is brachiated and ſpreading: the trunk moderately thick; it ſometimes grows to the height and ſtature of a moderate tree, but more uſually it has the appearance of a ſhrub. The branches are few, and purpliſh: the flowers appear early in ſpring, four, or more, together, in little cluſters; they are moderately large, and of a beautiful purple. The leaves ſtand alternately; they are ſmooth, of a roundiſh figure, and three inches in diameter.

It is a native of Spain, France, and Italy; we have it in gardens. Dodonæus calls it, Arbor Judæ.

2. *Cercis foliis cordatis pubeſcentibus.* Canada Judas-tree.
*The Cercis, with hoary, cordated leaves.*

The root is brachiated and very long; the ſhrub fifteen feet high; ſometimes, though rarely, it grows into a tree. The leaves ſtand alternately; they are roundiſh, of the ſize of a crown-piece, ſoft to the touch, and a little hairy; the flowers are of a pale red colour; the pods very long, and nodoſe.

It

It is a native of North America; we have it in ſome of our gardens. Tournefort calls it, Siliquaſtrum Canadenſe.

## BAUHINIA.

THE calyx is a deciduous perianthium, of an oblong figure, opening longitudinally in it's under part, reclinate on one ſide, and opening into five parts at the baſe, the five leaves it is compoſed of cohering at their upper part: the corolla conſiſts of five lanceolated, undulated petals, their tops attenuated and reflex; the lower ones ſomewhat the larger, and ſtanding on ungues of the length of the calyx: the ſtamina are ten filaments, of which the nine ſuperior ones grow together, ſo as to form a cylindric body, opening below, and ſhorter than the corolla; the tenth, which ſtands below all the others, is very long: the antheræ are oval, and are often wanting on the nine conjunct filaments, never in the tenth: the germen is oblong, and ſtands on a pedicle: the ſtyle is filiform and declinate: the ſtigma is obtuſe and aſſurgent: the fruit is a long, cylindric legumen, having only one cell: the ſeeds are numerous, round, compreſſed, and run longitudinally along the pod.

1. *Bauhinia foliis cordato-ſubrotundis, lobis rotundatis.*
*The roundiſh cordated-leaved Bauhinia, with rounded lobes.*

The root is large, brachiated, and ſpreading. The tree grows to fifteen or twenty feet high, and is very ramoſe; the trunk is often eight inches in diameter; the leaves are an inch and a half long, and about as much in breadth, of a roundiſh figure, but cordated at their top, and the lobes that ſinuoſity divides them into of a roundiſh figure; they are of a pale green colour, ſoft to the touch, and of a ſtrong ſmell, when bruiſed. The flowers are large, and of a yellowiſh colour, and ſtriated.

It is a native of both the Eaſt and Weſt Indies. Burman calls it, Bauhinia folio ſubrotundo, flore flaveſcente ſtriato; others, Mandaru.

The other ſpecies are, 1. The purple-flowered, large-leaved Bauhinia, called St Thomas's-tree. 2. The broader and more deeply ſinuated-leaved, purple-flowered Bauhinia. 3. The white-flowered Bauhinia, with large leaves.

## PARKINSONIA.

THE calyx is a deciduous perianthium, formed of a ſingle leaf, patent, and divided into five ſegments: the corolla conſiſts of five petals, nearly equal in ſize, placed in a circular direction, larger than the cup, and the four upper ones oval, the lower one reniform: the ſtamina are ten declinated filaments: the antheræ are oblong: the germen is long, cylindric, and declinate: the ſtyle is ſcarce viſible; the ſtigma is obtuſe and aſſurgent: the fruit is a very long, cylindric legumen, nodoſe at the ſeeds, and acuminated: the ſeeds are numerous, and are placed one within every protuberance of the legumen.

Of this genus there is but one known ſpecies. It is an American, deſcribed by Plumier.

## CASSIA.

THE calyx is a deciduous perianthium, compoſed of five hollow, lax, coloured leaves: the corolla conſiſts of five hollow, roundiſh petals; the lower ones larger, and more diſtant than the others: the ſtamina are ten declinated filaments; the three lower longer than the reſt, the three upper ſhorter: the three lower antheræ are very large, and arcuated, terminating in a beak, and opening at the tops; the four lateral ones open without a beak; the three upper ones are very ſmall, and contain ſcarce any farina: the germen is cylindric, long, and pedunculated: the ſtyle is very ſhort; the ſtigma is obtuſe and aſſurgent: the fruit is an oblong legumen, divided by tranſverſe ſepta: the ſeeds are numerous, roundiſh, and affixed to the upper edges of the valves.

This genus comprehends the Caſſia and Senna of Tournefort, and the Chamæcriſta of Rivinus. In the Caſſia of authors the pod is oblong, and the valves, or ſepta, entire. In the Sena of authors the pod is gibbous and inflex.

1. *Caſſia*

1. *Caſſia foliolis quinque parium lanceolatis inferioribus rotundioribus.*
*The Caſſia, with five pairs of lanceolated pinnæ, the lower ones rounder.*

The Caſſia Fiſtula-tree.

This is a large and ſpreading tree. It's trunk is covered with a greyiſh outer bark, and, within that, a reddiſh one. The leaves are pinnated, and very large; the rib on which the pinnæ ſtand is fifteen inches, or more, in length; the baſe ſomewhat tumid, the colour green: there are uſually five or ſix pairs of the pinnæ on each rib; they are four or five inches long, two and a half broad, and terminate in a point; their baſe is rounded; they are thick, and of a deep green colour, and have ſome general reſemblance to the leaves of our walnut-tree. The flowers are large, and of a beautiful yellow colour; they ſtand on long pedicles, great numbers together, and each has it's own pedicle beſide, two inches long, and very ſlender; the pods which ſucceed theſe flowers are near two feet long, cylindric, woody, and contain, together with the ſeeds, a black, ſweet, pulpy matter, which is the Caſſia of the ſhops, an excellent, mild cathartic.

It is a native of Africa and the Eaſt Indies, but it has been long tranſplanted into America, where it thrives, as if it was native there. Bontius calls it, Arbor Caſſiam ſolutivam ferens; Van Rheede, Canna.

2. *Caſſia pinnis lanceolatis, fructu incurvo compreſſo.*
*The crooked and compreſſed-fruited Caſſia, with lanceolated pinnæ.*

The Sena Shrub.

The root is brachiated and ſpreading. The ſhrub grows to five or ſix feet high. The trunk is woody and hard; the branches are long, ſlender, and tough. The leaves are pinnated, and ſtand alternately; the rib is about an inch long; the pinnæ are four, five, or ſix pairs; there is no odd one at the end; the pinnæ are of a pale whitiſh-green, oblong, and of a lanceolated figure. The flowers ſtand in long ſeries, at the tops of the branches, and are moderately large, and yellow, ſtriped with reddiſh; the pods are compreſſed, and crooked.

It is a native of Perſia, and is cultivated in Syria and Arabia, whence the dried leaves are ſent to Alexandria, and thence diſtributed throughout the world. Authors call it, Sena, Sena orientalis, and Sena foliis acutis. It is in great uſe and repute as a purge.

The other ſpecies are, 1. The ſix-leaved Caſſia, with bicapſular pods. 2. The ſtinking Caſſia, with alated pods. 3. The dwarf Caſſia, with pods like fœnugreek. 4. The privet-leaved, Virginian Sena. 5. The hairy-podded Caſſia. 6. The many-podded Caſſia, called occidental Sena, and Chamæcriſta pavonis; and, 7. The little-flowered, Virginian, baſtard Sena.

## POINCIANA.

THE calyx is an oblong, lax, hollow, deciduous perianthium, compoſed of five leaves, of which the lower one is larger than the reſt, and declinate: the corolla is formed of five petals, and is unequal; the four upper petals are roundiſh, and nearly equal; the fifth is larger, difform, and crenated: the ſtamina are ten extremely long, declinated, ſetaceous filaments: the antheræ are oblong: the germen is ſubulated, declinate, and long; it terminates in a ſtyle, of the length of the ſtamina, and the ſtigma is acuminated: the fruit is an oblong, compreſſed legumen, with ſepta: the ſeeds are ſingle, and are placed lengthwiſe in the pod.

Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CÆSALPINIA.

THERE is no calyx: the corolla is of the ringent kind, formed of a ſingle petal: the tube is ventricoſe and ſubgloboſe: the limb is divided into four parts, of which the upper ſegment is twice as large as the reſt, concave, patent, and undi-

vided; the oppoſite ſegment to this is erecto-patent, and undivided; the lateral ones are equal, crenated, erect, and equal to the ſecond: the ſtamina are five very long, crooked, filiform filaments, and bend toward the larger ſegment: the antheræ are ſimple; the germen is ſlender and oblong; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is capitated: the fruit is an oblong, acuminated legumen, containing one cell: the ſeeds are numerous and oval. We have the credit of Plumier for theſe characters, but they are monſtrous ones; probably there is ſome error: the ſtamina, in the courſe of nature, ought to be ten; there ought to be a cup, &c.

It is an American, deſcribed by Plumier.

## GUILANDINA.

THE male flower has a deciduous perianthium, formed of one leaf, and lightly divided into five ſegments: the tube is cylindric, and marked with ten ſtriæ: the limb hollow; the ſegments linear: the corolla conſiſts of five lanceolate, hollow, ſeſſile, equal petals, inſerted into the mouth of the calyx, their extremities reaching beyond it's verge: the ſtamina are ten erect, ſubulated filaments, alternately ſhorter, inſerted into the calyx, and longer than it: the antheræ are obtuſe and incumbent: the fruit ſucceeding the female flower is a legumen of a rhomboidal form, with it's upper ſuture convex, ſmooth, ventricoſe, yet compreſſed, containing only one cell, divided by tranſverſe valves into many partitions: the ſeeds are numerous, oſſeous, of a globoſe, compreſſed figure, and are lodged ſingly between the valves.

*Guilandina aculeata foliolis ovalibus cum acumine.* The Bonduc.
*The prickly Guilandina, with oval-pointed leaves.*

The root is long, ſpreading, and full of fibres. The ſhrub grows to ſix or eight feet high; the young ſhoots are green, the older branches browniſh; the whole ſhrub is very thick ſet with thorns. The leaves are pinnated; the pinnæ are ſmall, of a roundiſh, or oval, figure, but pointed, and a great number of pairs of them ſtand along the middle rib, at the bottom of which are placed two reddiſh ſpines, bending downward. The leaves ſtand in pairs on the branches, and, from their alæ, ariſe pedicles, on which the flowers ſtand in ſpikes; they are moderately large, and yellow. The fruit, when ripe, is bluiſh.

It is a native of the Eaſt and Weſt Indies. Plumier calls it, Bonduc vulgare minus polyphyllum.

## GUAIACUM.

THE calyx is a deciduous perianthium, hollow, compoſed of one leaf, divided into five ovato-oblong ſegments: the corolla conſiſts of five petals, hollow, patent, of an ovato-oblong figure, inſerted into the calyx, and the upper ones ſmaller than the others: the ſtamina are ten erect filaments, inſerted into the calyx: the antheræ are ſmall; the ſtyle is filiform, ſtrait, and long: the germen is ovato-acuminated; the ſtigma is ſlender and ſimple: the fruit is a roundiſh, obliquely-acuminated drupe, furrowed on one ſide; the ſeeds are oval nuts, covered with pulp.

1. *Guaiacum fructu ſubrotundo.* The great
*The round-fruited Guaiacum.* Guaiacum-tree.

The root is brachiated and long; the tree grows to the height of our aſh. It's trunk is often two feet in diameter: the branches are long and knotty; the leaves ſtand in pairs, and are pinnated; each is compoſed of four leaves; two at the top, or extremity, of the ſtalk, two about the middle; they are roundiſh, an inch and a half long, and an inch broad, firm in their texture, of a pale green colour, and without pedicles. The flowers ſtand in cluſters at the tops of the branches; they are large, and of a beautiful blue colour. The fruit is roundiſh, hollowed, and red.

It is a native of the American iſlands. Plumier calls it, Guaiacum flore cæruleo, fructu ſubrotundo.

2. *Guaiacum*

2. *Guaiacum fructu tetragono.* The leſſer Guaiacum-tree.
*The ſquare-fruited Guaiacum.*

The root is brachiated; the trunk a foot, or more, in diameter, and the tree moderately tall. The leaves are pinnated, but they conſiſt of more pinnæ than thoſe of the former; four or five pairs are frequent on the ſtalk, or rib, and yet this is ſeldom more than two inches long; they are ſmall, and pointed at the ends. The flowers ſtand in cluſters, and are large, very beautiful, of a bright blue colour, and fimbriated round the edges. The fruit is yellow, and of a quadrangular figure, ſomewhat like that of our enonymus.

This is a native of St Domingo, and ſome other parts of America. Plumier calls it, Guaiacum flore cæruleo fimbriato, fructu tetragono.

The wood of both ſpecies is indifferently ſent over to us under the name of Guaiacum; and, on wounding the trees of either kind, the ſame acrid reſin flows out.

## CYNOMETRA.

THE calyx is compoſed of a ſingle leaf, divided into four parts; two of the ſegments are longer than the others, and placed oppoſite: the fruit is a fleſhy, lunated legumen, or pod, containing a ſingle ſeed.

Theſe characters ſufficiently diſtinguiſh the Cynometra, without a farther deſcription.

## ANACARDIUM.

THE calyx is a deciduous perianthium, compoſed of one leaf, divided into five parts, erect and acuminated: the corolla conſiſts of a ſingle petal: the tube is very ſhort; the limb is divided into five lanceolated, reflex ſegments, longer than the cup: the ſtamina are two capillary filaments, of the length of the corolla: the antheræ are ſmall; the germen is roundiſh: the ſtyle is ſubulated, inflex, and of the length of the corolla: the ſtigma is acute: the receptacle is very large, fleſhy, and of a turbinated, oval figure: the ſeed is a large nut, of a kidney-like ſhape, placed at the extremity of the receptacle.

This genus comprehends the Acajou of Tournefort. There is only one known ſpecies of it; the fruit called Anacardium in the ſhops is of another genus.

ANACARDIUM. The Caſhew-nut.

The root is large and brachiated; the tree grows to twenty or thirty feet high, and is very ramoſe and ſpreading. The leaves ſtand very thick on the branches; they are of a kind of oval figure, five inches long, and about three broad; they ſtand on ſhort pedicles, and are ſmooth, tough, and of a bright ſhining green colour on both ſurfaces. The flowers are ſmall, and grow in a kind of umbels, at the tops of the branches. The fruit is a nut of a kidney-like ſhape, and about three quarters of an inch long; it ſtands on the extremity of a fleſhy receptacle, of the bigneſs of a large pear; of a mixed yellow and purple colour, and of a ſweetiſh, but ſomewhat auſtere, taſte: the nut at the end of this has a double rind, and, in the interſtice between, contains a yellow, cauſtic, oily liquor; within there is a white, eſculent kernel.

It is a native of the hotter parts of America. C. Bauhine calls it, Anacardii altera ſpecies.

## DICTAMNUS.

THE calyx is a very ſmall, deciduous perianthium, compoſed of five leaves, of an oblong, acuminated figure: the corolla conſiſts of five petals, of an ovato-lanceolate figure, acuminated, unguiculated, and unequal; three of them are turned upwards, and two are placed obliquely at the ſides: the ſtamina are ten ſubulated filaments, of the length of the corolla, placed between the two lateral petals, declinated, and unequal: the antheræ are quadrangular and aſſurgent: the germen is quadrangular; the ſtyle is ſimple, ſhort, declinated, and crooked: the ſtigma is acute and aſſurgent: the fruit is compoſed of five capſules, growing together by their inner ſides; they are compreſſed,

compreſſed, acuminated, diſtant at the tops, and formed of two valves: the ſeeds are numerous and turbinated.

Of this genus there is only one known ſpecies.

### DICTAMNUS. Fraxinella.

The root is perennial, long, and white: the ſtalk is round, hairy, glutinous to the touch, and often of a purpliſh colour: the leaves are pinnated and large; they ſtand alternately on the ſtalks, and are compoſed each of three or four pairs of oval, pointed pinnæ, annexed to a middle rib, with an odd leaf at the end. The tops of the ſtalks are formed into a kind of ſpikes, of large and very beautiful flowers; they are uſually red, ſometimes white. The pedicles are hairy, and covered with a ſoft, reſinous matter, very fragrant, and ſo inflammable, that, if a candle be brought near it, the whole upper part of the plant is on fire in an inſtant.

It is a native of France and Germany, and is frequent in our gardens. It's root is the radix fraxinellæ of the ſhops, much recommended as a cephalic. C. Bauhine calls it, Dictamnus albus ſive Fraxinella; others only Fraxinella. The Dictamnus Creticus is of another claſs.

## *Claſs the Tenth. Order the Second.*

## *Diviſion the Second.*

## *Decandria Monogynia, with the ſtamina erect.*

### TOLUIFERA.

THE calyx is a perianthium of a campanulated figure, compoſed of a ſingle leaf, divided into five nearly equal ſegments, one only more remote than the others. The corolla conſiſts of five petals inſerted into the receptacle; four of them are equal and linear, and ſomewhat longer than the cup; the fifth is twice as large as the others, obverſely cordated, and it's unguis is of the length of the cup: the ſtamina are ten very ſhort filaments; the antheræ are longer than the calyx: the germen is oblong; there is ſcarce any viſible ſtyle; the ſtigma is acute; the fruit is hitherto unknown.

Of this genus there is only one known ſpecies, which is the tree that produces the balſam of Tolu of the ſhops, and is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

### MONOTROPA.

THERE is no calyx. The corolla conſiſts of ten oblong, deciduous petals, parallello-erect, and ſerrated at their tops; the alternately exterior ones have gibboſe baſes, hollowed on their ſides, and full of a honey juice: the ſtamina are ten, erect, ſubulated filaments; the antheræ are ſimple: the germen is roundiſh and acuminated; the ſtyle is cylindric, and of the length of the flower; the ſtigma is obtuſely capitated: the fruit is an oval, pentagonal, obtuſe capſule, formed of five valves: the ſeeds are numerous and paleaceous. Such is the ſtate of the terminatory flower, but the lateral ones, if there be any, have a fifth leſs of all the parts.

This genus comprehends the Orobanchoides of Tournefort, and the Hypopitys of Dillenius.

1. *Monotropa floribus lateralibus octandris, terminatrici decandra.*
*The Monotropa, with the lateral flowers, with eight ſtamina, the terminatory one ten.*

The root is extreamly long, and moderately thick; the ſtalk is as thick as a man's finger, when in it's full vigour; it is yellow, contorted, and, as it were, like a rope; there are no leaves on it, but only ſome ſquammoſe remains; at the top ſtand ſeveral flowers, ſmall, and of a whitiſh yellow; when the plant begins to flower, it is of a pale

pale yellow, afterwards it becomes blackiſh; it's utmoſt height is not more than ten inches; it's ſmell very remarkable, like that of primroſe roots, eſpecially when it is paſt flowering.

It is a native of England, but is ſcarce; I have only met with it in the Weſt riding of Charlton-foreſt, Suſſex. Plot calls it, Hypopitys lutea verbaſculi odore; others ſimply, Hypopitys.

2. *Monotropa caule unifloro decandro.*

*The Monotropa, with one flower on the ſtalk, with ten ſtamina.*

The root is oblong and thick; the ſtalk ſlender, ſucculent, and brown; the height of the whole plant ſix inches; the flower is larger than in the other ſpecies, and of a browniſh yellow.

It is a native of Virginia, and ſome other parts of North America.

## ZYGOPHYLLUM.

THE calyx is a perianthium, compoſed of five oval, obtuſe, erect, hollow leaves: the corolla is compoſed of five petals, broadeſt at the top, obtuſe, emarginated, and larger than the cup: the nectarium conſiſts of ten convergent leaves, and includes the germen: the ſtamina are ten ſubulated filaments, ſhorter than the corolla; the antheræ are oblong and incumbent: the germen is oblong, and attenuated at the baſe: the ſtyle is ſubulated, and of the length of the ſtamina; the ſtigma is ſimple: the fruit is an oval, pentagonal capſule, formed of five valves, containing five cells, with ſepta adhering to the valves: the ſeeds are numerous, roundiſh, and compreſſed: the figure of the fruit is ſubject to variation; and there is a ſpecies, in which the parts of fructification are a fifth leſs.

This genus comprehends the Fabago of Tournefort.

*Zygophyllum capſulis priſmatico-pentaedris.* Bean Capers.

*The Zygophyllum, with priſmatic, pentaedral capſules.*

The root is long, thick, perennial, and white; the ſtalks are numerous, firm, round, ſmooth, green, jointed, and ſucculent. At every joint ſtand two pedicles, thick, an inch long, and membranated: the leaves are roundiſh, ſucculent, of a bluiſh-green, and grow too from the ſame baſe; they are two inches and a half long, and two inches broad: the flowers ſtand on ſhort pedicles, which riſe in pairs from the alæ of the leaves; they are moderately large and white.

It is a native of Syria; but we have it in our gardens. Dodonæus calls it, Capparis Fabago; C. Bauhine, Capparis portulacæ folio.

## ADENANTHERA.

THE calyx is an extreamly ſmall perianthium, compoſed of a ſingle leaf, divided into five ſegments at the top; the corolla is of a campanulated form, and conſiſts of five petals, ſeſſile, lanceolated, convex inwardly, and concave below: the ſtamina are ten, erect, ſubulated filaments, ſomewhat ſhorter than the corolla: the antheræ are roundiſh, incumbent, and have at their exterior extremity a globoſe glandule: the germen is oblong, and gibbous in it's lower part; the ſtyle is ſubulated, and of the length of the ſtamina: the ſtigma is ſimple; the fruit is a long compreſſed legumen: the ſeeds are numerous and roundiſh.

It is an oriental, deſcribed in the Hort. Mal. 6. 14.

## HÆMATOXYLON.

THE calyx is a perianthium, compoſed of a ſingle leaf, divided into five oval, permanent ſegments: the corolla conſiſts of five oval, equal petals, ſomewhat larger than the cup: the ſtamina are ten ſubulated filaments, ſomewhat longer than the

corolla; the antheræ are ſmall: the germen is of an ovato-oblong figure; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is thick and emarginated: the fruit is a capſule of a lanceolate, obtuſe figure, compoſed of two navicular valves, and containing one cell: the ſeeds are oblong and compreſſed.

## MELIA.

THE calyx is a very ſmall perianthium, compoſed of a ſingle leaf, divided into five ſegments, erect and obtuſe: the corolla conſiſts of five long, patent petals, of a lineari-lanceolate figure: the nectarium is cylindric, formed of a ſingle leaf, of the length of the corolla, and divided lightly into ten ſegments: the ſtamina are ten very ſhort filaments, inſerted into the top of the nectarium; the antheræ do not riſe above it: the germen is conic; the ſtyle is cylindric, and of the length of the nectarium; the ſtigma is obtuſe and emarginated: the fruit is a ſoft, globoſe drupe; the ſeed is a nut, of a roundiſh figure, marked with five furrows, and contains five cells, with a ſingle, oblong kernel in each.

This genus comprehends the Azederach of Tournefort and others.

1. *Melia foliis pinnatis.*
*The pinnated-leaved Melia.*

The Bead-tree.

The root is brachiated; the trunk two feet thick; the bark rough and ſcabrous; the tree grows to thirty or forty feet high, and is very ramoſe and ſpreading: the leaves are pinnated and very large, a foot and half in length, and compoſed of a great many pairs of pinnæ, with an odd leaf at the end. The flowers ſtand on long pedicles, in conſiderable cluſters; they are ſmall, of a very ſweet ſmell, and of a bluiſh or purpliſh colour. The fruit is large, and, when ripe, of a fine yellow colour.

It is a native of Syria; we have it in many gardens. C. Bauhine calls it, Azederach arbor folio fraxini, flore cæruleo. There is only one known ſpecies of this genus beſide this, which is the ramoſe-leaved, ever-green, pale-flowered Melia, or Indian Azederach.

## RUTA.

THE calyx is a ſhort, permanent perianthium, divided into four parts: the corolla conſiſts of four oval, hollow, patent petals, with very narrow ungues: the ſtamina are eight ſubulated, patent filaments, of the length of the corolla: the antheræ are erect and ſhort; the germen is gibbous, and marked with a cruciform figure, and with eight points at the baſe: the ſtyle is erect and ſubulated; the ſtigma is ſimple: the fruit is a gibbous capſule, compoſed of four lobes, and, in ſome meaſure, divided from the top into four parts; it contains four cells, and opens four ways at the top: the ſeeds are numerous, ſcabrous, of a kidney-like ſhape, and angular. Theſe are the characters of the lateral flowers: the top flower, in ſome ſpecies, has an addition of a fourth part in all the fructifications.

This genus comprehends the Ruta of authors in general, and the Pſeudoruta of Micheli: in the Pſeudoruta the petals are plane and entire, and the number of all the parts of fructification quinary.

1. *Ruta foliis decompoſitis, ſegmentis latiuſculis.*
*The Ruta, with decompound leaves, with broad ſegments.*

Common Rue.

The root is divaricated, woody, yellow, and fibrated: the ſtalks are woody, round, covered with a whitiſh bark, and grow to two or three feet high; the young ſhoots are green; the leaves are formed of a multitude of roundiſh ſegments, placed on ramoſe pedicles: the flowers ſtand in cluſters at the tops of the ſtalks, and are beautiful and yellow.

It is a native of France, Italy, and Africa; it is every-where in our gardens. C. Bauhine calls it, Ruta hortenſis latifolia.

2. *Ruta*

2. *Ruta foliis decompoſitis anguſtioribus, petalis villoſis.*
*The decompound, narrow-leaved Ruta, with hairy petals.*

The root is yellow, woody, long, and divaricated; the trunk an inch in diameter; the leaves very large, but narrow and oblong, and the ſegments they are compoſed of are alſo narrow: the flowers are large, hairy, and of a beautiful bright yellow.

It is a native of Africa, and of ſome parts of Europe. Moriſon calls it, Ruta chalepenſis anguſtifolia florum petalis villis ſcatentibus.

The other ſpecies are, 1. The great, ſtinking, wild Rue. 2. The dwarf Rue, with large and few ſegments in the leaves. 3. The broad-leaved, hairy-flowered Rue. 4. The white-flowered, prickly Rue. 5. The flax-leaved Rue. 6. The ternate, narrow-leaved, large-flowered Rue, called, Pſeudoruta, by Micheli.

## FRAGONIA.

THE calyx is a very ſmall, deciduous perianthium, compoſed of five lanceolate, erect, patulous leaves: the corolla conſiſts of five patent petals, of a cordated form; their ungues long, ſlender, and inſerted into the calyx; the ſtamina are ten, erect, ſubulated filaments, longer than the calyx: the antheræ are roundiſh; the germen is pentangular; the ſtyle is ſubulated; the ſtigma is ſimple: the fruit is a capſule of a rotundo-acuminated figure; the valves that compoſe it are ten, which form five lobes, and as many compreſſed cells; the ſeeds are ſingle and roundiſh.

*Fragonia foliolis lanceolatis planis lævibus.* Prickly Cretic
*The plane, ſmooth, lanceolated Fragonia.* Trefoil.

The root is ſmall, oblong, and divaricated; the ſtalk is ſtriated, procumbent, and very ramoſe: the leaves ſtand three on each pedicle, and two of theſe pedicles grow together at every divarication of the ſtalk: each leaf is oblong, ſmooth, ſmall, and terminates in a ſpine; and at the baſes of the pedicles ſtand other more rigid ſpines bending downwards: the flowers ſtand ſingly on ſhort pedicles, ariſing from the divarications of the branches; they are very large, and of a beautiful purple.

It is a native of Italy and France. C. Bauhine calls it, Trifolium ſpinoſum Creticum, a name moſt others have borrowed.

## TRIBULUS.

THE calyx is a perianthium, divided into five parts, and a little ſhorter than the corolla: the corolla conſiſts of five oblong, obtuſe, patent petals: the ſtamina are ten very ſmall, ſubulated filaments; the antheræ are ſimple; the germen is oblong, and of the length of the ſtamina; there is no ſtyle: the ſtigma is capitated: the fruit is of a roundiſh figure, and aculeated; it is compoſed of five capſules, gibbous on one ſide, and armed with three or four points on the other, angulated and convergent: the ſeeds are numerous, turbinated, and oblong.

*Tribulus foliolis ſexparium ſubæqualibus.* Land Caltrops.
*The Tribulus, with ſix pairs of nearly equal pinnæ.*

The root is very long, ſlender, white, ſimple, and fibrated; the ſtalks are numerous, round, ſtriated, hairy, geniculated and procumbent, uſually of a reddiſh colour; ſix or eight inches long, and ramoſe: the leaves ſtand alternately, except at the top of the ſtalks, where they are uſually oppoſite; they are compoſed of about ſix pairs of oblong pinnæ, arranged on a middle rib, and are ſomewhat hairy: the flowers ſtand ſingly on long pedicles, ariſing from the alæ of the leaves; they are large and yellow.

It is a native of France and Italy. Dodonæus calls it, Tribulus terreſtris; C. Bauhine, Tribulus terreſtris ciceris folio, fructu aculeato.

## JUSSIÆA.

THE calyx is a ſmall, permanent perianthium, placed on the germen, and compoſed of five ovato-acute ſegments: the corolla conſiſts of four or five roundiſh patent petals; the ſtamina are eight or ten filaments, very ſhort and filiform: the antheræ are roundiſh; the germen is oblong; the ſtyle is filiform; the ſtigma is capitated, plane, and marked with five ſtriæ: the fruit is oblong, thick, coronated, and opens longitudinally: the ſeeds are numerous, and diſpoſed in ſeries.

*Juſſiæa, erecta floribus tetrapetalis octandris ſeſſilibus.*
*The erect Juſſiæa, with four-leaved, octandrous, ſeſſile flowers.* — Catalonian Jaſmine.

The root is oblong, thick, white, divaricated, and fibrated: the ſtalk is round, erect, thick, and robuſt, and of the height of a man: the leaves ſtand alternately; they are ſmooth, undivided, viſcous, oblong, and lanceolated: the flowers are large and yellow; they ſtand ſingly at the alæ of the leaves, and divarications of the ſtalks.

It is a native of America. Seba calls it, Jaſminum Catalonicum; Plukenet, Lyſimachia foliis parietariæ.

## FRANKENIA.

THE calyx is an oblong, tubulated perianthium, formed of a ſingle leaf, permanent, and divided into five ſhort ſegments at the extremity: the corolla conſiſts of five petals, with narrow ungues, of the length of the cup: the limb is plane; the bracteæ round, plane, and patent: the ſtamina are ten filaments, longer than the tube; the antheræ are ſimple; the germen is roundiſh; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is divided into three parts: the fruit is an oval capſule, covered by the cup. It is formed of three valves, and contains a ſingle cell; the ſeeds are numerous, oval, and minute.

1. *Frankenia floribus axillaribus ſolitariis.*
*The axillary, ſolitary-flowered Frankenia.* — Procumbent Sea Heath.

The root is ſmall, oblong, tough, and white; the ſtalk is rigid, uneven, procumbent, and very ramoſe; it grows to eight inches long: the leaves are very ſmall, oblong, and of a ſomewhat lanceolated figure; they ſtand four at a joint, ſurrounding the ſtalk, and have no pedicles: the flowers are large, and of a beautiful purple; they ſtand ſingly in the axillæ of the branches.

It is found on our ſea-coaſts. Ray calls it, Erica ſupina maritima Anglica; C. Bauhine, Polygonum marinum minus folio ſerpylli.

2. *Frankenia floribus terminatricibus confertis.*
*The Frankenia, with cluſtered, terminatory flowers.* — Thyme-leaved Sea Chickweed.

The root is long, woody, and white; the ſtalks are robuſt, ſquare, hairy, and ſix or eight inches long, partly procumbent, partly erect: the leaves ſtand ſix or eight at a joint, without pedicles; they are ſhort, and of a lanceolated figure: the flowers are large and white; they ſtand in cluſters ten, or more, together, on the tops of the branches.

It is found on the ſhores of the Mediterranean. Tournefort calls it, Alſine Cretica maritima ſupina caule hirſuto.

The other ſpecies are, 1. The ſmooth, broader, glaucous-leaved, white-flowered Frankenia. 2. The broader-leaved, hairy, quadrifoliate, ſmaller-flowered Frankenia. 3. The narrow-leaved, pale-flowered Frankenia.

## CLETHRA.

THE calyx is a permanent perianthium, compoſed of five leaves, of an oval figure, hollow and erect: the corolla conſiſts of five oblong, erecto-patent petals, twice the length of the cup, and broadeſt toward their extremities: the ſtamina are ten ſubulated filaments, of the length of the corolla: the antheræ are oblong, erect, and ſplit at the top: the germen is roundiſh; the ſtyle is filiform, erect, permanent, and increaſing: the ſtigma is divided into three parts: the fruit is a roundiſh capſule, incloſed in a cup; it is formed of three valves, and contains three cells: the ſeeds are numerous and angular.

It is an American, mentioned by Gronovius, in his Fl. Virg. 47.

## PYROLA.

THE calyx is a very ſmall, permanent perianthium, divided into five ſegments: the corolla conſiſts of five roundiſh, hollow, patent petals: the ſtamina are ten ſubulated filaments, ſhorter than the corolla: the antheræ are large, nutant, and bicornate at top: the germen is roundiſh, but angulated: the ſtyle is filiform, permanent, and longer than the ſtamina: the ſtigma is thick: the fruit is a roundiſh, depreſſed, pentagonal capſule, containing five cells, and opening at the angles: the ſeeds are numerous and paleaceous: the ſtamina and ſtyle are in ſome erect, in others declinated ſideways: the figure of the ſtigma alſo varies.

1. *Pyrola ſtaminibus adſcendentibus, piſtillo declinato.* **Engliſh Winter-green.**
*The Pyrola, with aſcendent ſtamina, and a declinate piſtil.*

The root is fibrous and white: the radical leaves are ſix or eight in number; they are of a roundiſh figure, and deep green colour, and about an inch long, thick, ſmooth, gloſſy, and placed on pedicles of three inches long. The ſtalk is ſingle, ſimple, erect, and ſeven or eight inches high; it has a few ſmall, acute leaves on it, and, at the top, ſtands a kind of ſhort ſpike of flowers; they are large, white, and very beautiful.

It is a native of the north of England. C. Bauhine calls it, Pyrola rotundifolia major; others, Pyrola vulgaris.

2. *Pyrola racemis unilateralibus.* **Tenderer Winter-green.**
*The Pyrola, with flowers only on one ſide.*

This is a much more delicate, and leſs robuſt, plant than the former. The root is ſmall and creeping. The radical leaves are an inch long, three quarters of an inch broad, thin, ſoft to the touch, and ſerrated. The ſtalk is five or ſix inches high, very ſlender, and uſually bending. The flowers are ſmaller than thoſe of the former; they are of a beautiful milk-white colour, and ſtand in a kind of cluſter, on one ſide only of the ſtalk. The antheræ are longer than the corolla, and the ſtigma is prominent beyond them.

It is a native of moſt parts of Europe, in woods. C. Bauhine calls it, Pyrola folio mucronato ſerrato; Cluſius, Pyrola tenerior.

The other ſpecies are, 1. The umbellated, arbutus-flowered Pyrola. 2. The round-leaved Pyrola, with a ſingle flower. 3. The roundiſh, but ſerrated-leaved, Pyrola. 4. The ſhrubby, long-leaved Pyrola.

## ANDROMEDA.

THE calyx is a very ſmall, permanent, coloured perianthium, divided into five ſegments: the corolla is of an inflated, oval, or campanulated figure, formed of a ſingle petal, and divided into five reflex ſegments at the extremity: the ſtamina are ten ſubulated filaments, ſhorter than the corolla, and ſcarce affixed to it: the antheræ are bicornate and nutant: the germen is roundiſh; the ſtyle is cylindric, longer than the ſtamina, and permanent; the ſtigma is obtuſe: the fruit is a roundiſh, pentagonal

capſule, compoſed of five valves, containing five cells, and opening in the angles: the ſeeds are numerous, ſmooth, and roundiſh.

This genus comprehends the Ledum of Micheli, the Chamædaphne of Buxbaum, the Polifolia of the ſame author, and the Chamærhododendros of Tournefort. The figure of the corolla varies, but the number of the ſtamina diſtinguiſhes this genus from the erica.

1. *Andromeda foliis alternis lanceolatis margine reflexis.* Wild Roſemary.
*The alternate, lanceolate, and reflex-edged leaved Andromeda.*

The root is woody, creeping, and fibrated. The ſtem is woody, low, and ramoſe. The leaves ſtand alternately; they are oblong, narrow, lanceolated, and have their edges reflex. The flowers are ſmall and reddiſh.

It is found on boggy grounds in the North of England. Ray calls it, Ledum paluſtre noſtras arbuti flore; C. Bauhine, Viti Ideæ adfinis polifolia montana.

2. *Andromeda foliis linearibus obtuſis ſparſis.*
*The Andromeda, with linear, obtuſe, ſcattered leaves.*

The root is woody, fibrated, and perennial. The ſtalks are in great part procumbent; they grow to eight or ten inches long, and are brown, ſcabrous, and ramoſe. The branches are often erect. The leaves are ſhort, linear, and obtuſe; they ſtand very cloſe and thick. The flowers ſtand on ſingle pedicles, of an inch long; they are large, of a deep blue colour, and narrow at the mouth.

It is common in the northern parts of Europe, on bogs on the mountains. Rudbeck calls it, Erica flore purpuraſcente pendulo, petiolo longo rubro, piceæ folio; Martin, Erica rarior.

The other ſpecies are, 1. The very narrow cluſtered-leaved Andromeda. 2. The obtuſe, imbricated-leaved Andromeda. 3. The blackiſh-leaved Andromeda. 4. The hairy Andromeda. 5. The ſerpyllum-leaved Andromeda.

## ARBUTUS.

THE calyx is a ſmall, permanent, obtuſe perianthium, divided into five parts, and placed under the germen: the corolla conſiſts of a ſingle petal; it is of an oval figure, plane at the baſe, hollow, and divided at the mouth into five ſmall, obtuſe, revolute ſegments: the ſtamina are ten filaments, of a ſubulato-ventricoſe figure, very ſlender at the baſe, and affixed to the edge of the baſe of the corolla; they are of half the length of the corolla: the antheræ are bifid, and nutant: the germen is of a globoſe figure, and ſtands on a receptacle, marked with ten dots: the ſtyle is cylindric, and of the length of the corolla: the ſtigma is thick and acute: the fruit is a roundiſh berry, with five cells: the ſeeds are ſmall and oſſeous.

This genus comprehends the Arbutus and the Uva urſi of Tournefort, &c. it is nearly allied to the Vaccinium.

1. *Arbutus caulibus procumbentibus, foliis integerrimis.*
*The procumbent-ſtalked and undivided-leaved Arbutus.*

The root is woody, brown, and perennial. The ſtalks are numerous, diffuſe, and procumbent; they are from a foot to three or four in length, rounded, ſomewhat unequal, perennial, ramoſe, and uſually reddiſh. The leaves are of a vertically-oval figure; they ſtand in pairs, and are ſmooth, perennial, and have their edges turned in. The flowers ſtand in cluſters on the tops of the branches, eight or ten together; the top of the cluſter bends, and every flower has it's own pedicle, and a little ſquamma at it's baſe: the calyx is purple, and very ſmall; the flower moderately large, oval, and white.

This is a native of the northern parts of Europe, almoſt univerſally. Tournefort, Lobel, &c. call it Uva urſi; C. Bauhine, Vitis Idæa foliis carnoſis et veluti punctatis; others, Myrtillus ruber minor.

The

The other ſpecies are, 1. The black-fruited Arbutus, or Vitis Idæa, called the Black Whortle. 2. The broader-leaved Arbutus; and, 3. The arboreſcent, long-leaved Arbutus, or Strawberry-tree.

## LEDUM.

THE calyx is a very ſmall perianthium, formed of one leaf, divided into five ſegments at the edge: the corolla conſiſts of five oval, hollow, patent petals: the ſtamina are ten patent, filiform filaments, of the length of the corolla: the antheræ are oblong; the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is obtuſe: the fruit is a roundiſh capſule, containing five cells, and opening in five places at the baſe: the ſeeds are numerous, oblong, narrow, pointed at each end, and very ſlender.

Of this genus there is only one known ſpecies.

### LEDUM. Marſh Ciſtus.

The root is creeping, tough, and woody. The ſtalks are numerous, woody, and firm; they grow to three feet high; they are very ramoſe, and their bark greyiſh. The leaves ſtand very thick; they are three quarters of an inch long, very narrow, and of a browniſh-green colour. The flowers are moderately large, and ſtand on the tops of the branches. The whole plant has a very ſtrong ſmell, and is glutinous to the touch.

It is frequent in Germany and Sweden. Ruppius calls it, Ledum rorismarini folio; C. Bauhine, Ciſtus ledon foliis roriſmarini, ferrugineis.

## MELASTOMA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, ventricoſe, and ſcarce at all divided at the extremity: the corolla conſiſts of five roundiſh petals, inſerted into the margin of the cup: the ſtamina are ten ſhort filaments, inſerted into the cup: the antheræ are long, ſomewhat crooked, and erect: the germen is roundiſh, and ſtands under the cup; the ſtyle is emarginated and crooked: the fruit is a roundiſh berry, included in the cup, and contains five cells; it is coronated with a cylindric margin: the ſeeds are numerous.

This genus comprehends the Melaſtoma of Burman, and the Acinodendron of the ſame author.

## BARTRAMIA.

THE calyx is a perianthium, divided into five ſegments: the corolla conſiſts of five cuneiform petals: the ſtamina are eight oblong filaments: the ſtyle is capillary: the fruit is of a globoſe figure, and has hooked ſpines all over it.

Theſe characters ſufficiently diſtinguiſh the Bartramia, without a farther deſcription.

## SCHINUS.

THE calyx is a very ſmall perianthium, divided into five parts at the edge: the corolla conſiſts of five patent petals: the ſtamina are ten; the ſtyle oblong; the germen roundiſh: the fruit is a globoſe berry; the ſeed is ſingle, globoſe, and large.

This genus comprehends the Molle of Tournefort and others; there is only one known ſpecies of it.

### SCHINUS.

The root is brachiated, and very large; the tree tall and ſpreading. The leaves are pinnated; the rib is compreſſed, and there ſtand on it four or five pairs of pinnæ, oblong, narrow, and very lightly ſerrated about the edges, principally toward the extremities. The flowers ſtand in large cluſters, on peculiar pedicles; they are very ſmall, and of a yellowiſh-green colour. The berries are red, when ripe, and much reſemble thoſe of the aſparagus. The leaves of the young ſhoots are often laciniated; when rubbed, they have a ſtrong ſmell of fennel.

It is a native of Peru. C. Bauhine calls it, Lentiſcus Peruviana; J. Bauhine and others, Molle.

*Claſs the Tenth. Order the Second.*

## DECANDRIA DIGYNIA.

*Plants which have in every flower ten ſtamina and two ſtyles.*

## DIANTHUS.

THE calyx is a long, cylindric, ſtriated, permanent perianthium; it's mouth is erect, and divided into five ſegments; it's baſe is ſurrounded with four ſquammulæ, two of which ſtand lower than the reſt: the corolla conſiſts of five petals, the ungues of which are of the length of the cup; they are narrow, and inſerted into the receptacle: the limb is plane, and the bracteæ of the petals broadeſt at the extremity, and ſerrated: the ſtamina are ten ſubulated filaments, of the length of the cup, patulous at their tops: the antheræ are of an oval, oblong figure, compreſſed, and incumbent: the germen is oval; the ſtyles are two, ſubulated, and longer than the ſtamina: the ſtigmata are bent back and acuminated: the fruit is a cylindric, covered capſule, conſiſting of one cell, and opening four ways at the top: the ſeeds are numerous, compreſſed, and roundiſh; the receptacle is free, quadragonal, and but of half the length of the fruit.

This genus comprehends the Caryophyllus of Tournefort, &c. and the Tunica of Dillenius. The ſtyles in ſome ſpecies are but little longer than the ſtamina; in others they exceed them greatly, but they are, in this caſe, always revolute a great way.

1. *Dianthus caulibus uniflori, ſquammis calycinis ovatis, corollis multifidis.*
*The ſingle-flowered Dianthus, with the ſquammæ of the cup oval, and the corollæ multifid.*

Maiden Pink.

The root is ſlender, white, and fibrated. The ſtalks are round, green, ſlender, and procumbent. The leaves ſtand very cloſe, in pairs, on theſe, and are oblong and narrow; from the procumbent ſtalks riſe others, erect, ſlender, and four or five inches high; on theſe ſtand one or two pairs of oblong, narrow leaves, ſurrounding the ſtalk at their baſe, and, at the top of each ſtalk, ſtands a ſingle, large, and beautiful flower, of a pale red colour; ſometimes there are two, or more, flowers on the ſtalk, but a ſingle one is moſt uſual.

It is found in barren places with us. Ray calls it, Caryophyllus minor repens noſtras; C. Bauhine, Carophyllus humilis flore unico. Authors have made ſeveral other imaginary ſpecies from the different accidents of this.

2. *Dianthus floribus ſolitariis, ſquammis calycinis ſubovatis, corollis crenatis.*
*The ſingle-flowered Dianthus, with the ſquammæ of the cup ſuboval, and the corollæ crenated.*

Clove July-flower.

The root is ſmall, white, and fibrated. The ſtalk is erect, round, jointed, and a foot and a half high. The leaves ſtand in pairs, and are long, narrow, pungent at the ends, and of a bluiſh-green colour. The top of the ſtalk divides into ſeveral branches, and on the extremities of theſe ſtand the flowers, which are large, and of a fine ſmell; their colour varies to infinity, but the variations all conſiſt of red and white, in different mixtures and proportions; a deep purpliſh red is the moſt common.

It is one of the great ornaments of our gardens. The carnations are all varieties of this ſpecies, owing principally to culture. The flowers are uſed as a cordial.

The other ſpecies are, 1. The common, wild Pink. 2. The ſingle-flowered, procumbent, Chineſe Dianthus. 3. The laciniated-flowered Dianthus. 4. The common, broad-leaved, wild Dianthus. 5. The barbated, broad-leaved Dianthus, called Sweet-

Sweetwilliams. 6. The proliferous Dianthus. 7. The narrow-leaved, barbated Dianthus, or Deptford Pink. Tournefort has made about a hundred ſpecies, from the varieties of one or other of theſe.

## SAPONARIA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, oblong, and divided into five ſegments at the edge: the corolla conſiſts of five petals: the ungues are narrow, angulated, and of the length of the cup: the limb is plane; the bracteæ broadeſt toward the extremity, and obtuſe: the ſtamina are ten ſubulated filaments, of the length of the tube of the corolla, alternate, inſerted into the ungues of the petals: the antheræ are oblong and incumbent: the germen is cylindric; the ſtyles are two, ſtrait, parallel, and of the length of the ſtamina; the ſtigmata are acute: the fruit is a covered capſule, nearly of the length of the cup; there is only one cell in it, and it's figure is cylindric: the ſeeds are numerous and ſmall; the receptacle is free: the germen and capſule are, in ſome ſpecies, more ſhort and rounded, and the ſegments of the cup are deeper in ſome than in others; in ſome they are almoſt five-leaved.

1. *Saponaria calycibus monophyllis cylindraceis, foliis ovato-lanceolatis.*

*The ovato-lanceolate leaved Saponaria, with cylindric, monophyllous cups.*

Common Soapwort.

The root is ſlender, jointed, creeping, and reddiſh on the ſurface. The ſtalks are two or three feet high, ſmooth, round, jointed, and, though thick, not very ſtrong. The leaves ſtand in pairs; they are two inches and a half long, and an inch and a half broad, ſmooth, and marked with three large, longitudinal ribs. The flowers ſtand in a kind of umbels at the tops of the ſtalks; they are of a pale fleſh colour, or elſe white, and the petals not bifid,

It is common in many parts of England. C. Bauhine calls it, Saponaria major lævis; others, Saponaria vulgaris.

2. *Saponaria calycibus pentaphyllis, corymbis faſtigiatis, foliis linearibus, caule adſcendente.*

*The linear-leaved, aſcendent-ſtalked Saponaria, with pentaphyllous cups.*

The root is oblong, ſlender, white, and fibrated. The ſtalks are numerous, jointed, often reddiſh, and oblique; they grow to four, five, or more, inches in length. The leaves are long, and very narrow: the flowers ſtand in a kind of umbel at the top, and are uſually white.

It is a native of Germany and Sweden. Dillenius makes it a kind of Spergula. C. Bauhine calls it, Caryophyllus ſaxatilis floribus gramineis umbellatis corymbis.

3. *Saponaria calycibus pentaphyllis corollis, crenato-emarginatis, foliis ſubulatis.*

*The Saponaria, with five-leaved cups, crenato-emarginated corollæ, and ſubulated leaves.*

The root is ſlender, oblong, white, and woody. The ſtalks are round, ſlender, green, and grow to four inches. The leaves are extremely narrow, oblong, and ſubulated; they ſtand two at every joint. The flowers ſtand only toward the tops of the ſtalks, and are of a pale red colour, ſtreaked with purple.

It is a native of moſt parts of Europe. C. Bauhine calls it, Caryophyllus minimus muralis; Dillenius, Spergula foliis knawel flore purpuraſcente; others make it a Lychnis.

The other ſpecies are, 1. The hairy, cupped, diffuſe-ſtalked Saponaria, called the little-flowered, oriental Lychnis. 2. The common, perfoliate, red-flowered Saponaria, called red corn Lychnis. 3. The graſſy-leaved, ſaxifrage Saponaria. 4. The heath-

leaved, umbellated-flowered Saponaria. 5. The broader-leaved Saponaria; and, 6. The oblong-leaved Saponaria.

## SCLERANTHUS.

THE calyx is a tubulated, permanent perianthium, formed of one leaf, and divided into five ſegments: there is no corolla: the ſtamina are ten very ſmall, erect, ſubulated filaments, inſerted into the calyx: the antheræ are roundiſh; the germen is roundiſh; the ſtyles are two, erect and capillary, and of the length of the ſtamina; the ſtigmata are ſimple: the fruit is an oval capſule, contained in the baſe of the cup, which is ſhut up at the neck: the ſeeds are two, convex on one ſide, and plane on the other.

This genus contains the Knawel of Dillenius; Vaillant confounds it with the Alchimilla.

1. *Scleranthus calycibus fructus clauſis.* Hoary, perennial Knawel.
*The Scleranthus, with the calyces of the fruit ſhut.*

The root is oblong and tough. The ſtalks are numerous and procumbent, round, ſlender, jointed, and, toward the tops, ramoſe. The whole plant is of a greyiſh colour, and appears hoary. The leaves ſtand in pairs; they are oblong, narrow, pointed at the ends, and embrace the ſtalk at their baſe: the flowers are very numerous; they ſtand in little cluſters, at the extremities of the ramifications, and are large and white.

It is common on ſandy grounds, and is the plant at the roots of which the Coccus Polonicus is found in Poland; I have alſo met with the ſame inſect here at it's roots. C. Bauhine calls it, Polygonum cocciferum; Ray, Knawel incanum flore majore perenne. The inſect, or coccus, at it's root, affords a very valuable ſcarlet dye.

2. *Scleranthus calycibus fructus patulis.*
*The Scleranthus, with the cups of the fruit patulous.*

The root is oblong, ſlender, and woody. The ſtalks are round, jointed, ſlender, and procumbent. The leaves ſtand in pairs; they are broadeſt at the baſe, and terminate in a point; they are hollowed, and of a pale green colour. The flowers ſtand in the divarications of the ſtalks, and, at their extremities, they are ſmall, and of a greeniſh-white colour.

It is common in ſandy places. C. Bauhine calls it, Polygonum montanum vermiculatæ foliis; Dalechamp, Polycarpum.

## MITELLA.

THE calyx is a perianthium, of a campanulated figure, formed of one leaf, and lightly divided at the edge into five ſegments: the corolla conſiſts of five patent petals, of an oblong figure, longer than the ſegments of the cup, and with their ungues narrow, and inſerted into the calyx: the ſtamina are ten filaments, inſerted alſo into the calyx, and broadeſt at the top: the antheræ are roundiſh and erect: the germina are two, of an ovato-acuminate figure, parallel, but convergent, and opening inwards: the ſtyles are unequal; the ſtigmata are ſimple: the fruit is a capſule, of a globoſe figure, but with a point, formed of two valves, and opening between them, containing only one cell: the ſeeds are numerous, and of a roundiſh oblong figure. The petals in ſome are entire, in others multifid.

1. *Mitella petalis multifidis.*
*The Mitella, with multifid petals.*

The root is fibrous; the radical leaves are very large, often of the bigneſs of the palm of a man's hand; they are broad, roundiſh, of a dark green, and hairy on both ſurfaces; they ſtand on pedicles three or four inches long: the ſtalks are a foot, or more, high, ſlender, hairy, round, and naked to the middle, where they have two leaves, ſmaller, more angulated, and crenated than the radical ones, and placed oppoſite. The upper

upper half of the ſtalk forms a kind of ſpike of flowers; they are ſmall, and of a red colour in various degrees, from deep purple to whitiſh, and ſtand on long pedicles.

It is a native of America. Tournefort calls it, Mitella Americana florum petalis fimbriatis.

2. *Mitella petalis integris.*
*The Mitella, with undivided petals.*

The roots are fibrous and white; the ſtalks are ſlender, hairy, and procumbent: the leaves are large, of a roundiſh figure, and duſky-green colour, hairy and crenated round the edges: the flowers ſtand in a kind of ſpikes on ſtalks, of four or five inches long, very ſlender and erect; they are ſmall, and of a pale red.

It is a native of America, and of ſome parts of Europe. Tournefort calls it, Mitella Americana florum petalis integris; Bodæus, Cortuſa Indica vel Hedera terreſtris Indica, a name ſince uſed by many others.

There is but one other known ſpecies of this genus; this is, The deep-purple, hairy-flowered Mitella. The Roucou, or Mitella Americana maxima tinctoria, is of a very different claſs. See BIXA.

## SAXIFRAGA.

THE calyx is a ſhort, acute, permanent perianthium, formed of a ſingle leaf, divided into five ſegments: the corolla is larger than the calyx, and conſiſts of five plane petals, narrow at the baſe; the ſtamina are ten ſubulated filaments, alternately ſhorter; the antheræ are roundiſh: the germen is of a roundiſh, acuminated figure, and terminates in two ſhort ſtyles; the ſtigmata are obtuſe: the fruit is a biroſtrated capſule, of a figure approaching to oval; it contains two cells, and opens between the points; the ſeeds are numerous and ſmall.

This genus comprehends the Geum and the Saxifraga of Tournefort and others. In the Saxifrages the capſule and germen are ſurrounded with the receptacle of the corolla: in the Geum they ſtand upon it, and are not ſurrounded by it.

1. *Saxifraga foliis reniformibus lobatis, caule ramoſo, radice granuloſa.* White Saxifrage.
*The granulous-rooted, ramoſe-ſtalked Saxifraga, with kidney-ſhaped, lobated leaves.*

The root is compoſed of a number of thick, white fibres, to which are annexed a great many tuberous bodies, of the ſize of a ſmall pea, and of a purpliſh colour: the radical leaves are of a roundiſh but reniform ſhape, crenated round their edges ſo deeply, as to be in a manner divided into lobes; they are about three quarters of an inch in diameter, and ſtand on pedicles three inches long: the ſtalk is round, thick, ten inches high, and ramoſe; the leaves ſtand alternately, and are more angulated than the radical ones: the flowers are large, white, and beautiful.

It is common in our meadows. C. Bauhine calls it, Saxifraga rotundifolia alba; others ſimply, Saxifraga alba. The tuberoſities at the root are diuretic; they are kept in the ſhops, under the name of Saxifrage ſeeds.

2. *Saxifraga foliis cuneiformibus retuſis radicalibus ſinuato-ſerratis, caule paniculato.* London Pride, or None ſo pretty.
*The paniculate-ſtalked, cuneiform, retuſe-leaved Saxifraga.*

The root is a cluſter of fibres, white and moderately thick; the radical leaves are numerous, arranged in an orbicular form, and procumbent; they are of a figure approaching to round, an inch long, and ſerrated, and, as it were, prickly round the edges: the ſtalks are ſlender, round, hairy, and ramoſe; the flowers are ſmall and numerous; when nearly examined, they are extreamly beautiful; their ground colour is a pale whitiſh-red, but they are elegantly ſpotted with purple.

It

It is a native of the Pyrenæan mountains. Ray calls it, Geum foliis ſubrotundis, piſtillo floris rubro. It is frequent in our gardens, and has been found wild on ſome of the Welſh mountains.

The other ſpecies are, 1. The Saxifraga, with cartilaginous, edged, crenated leaves, called ſilver-edged Sedum. 2. The palmated-leaved, uniflorous Saxifraga. 3. The palmated and cordated-leaved Saxifraga. 4. The little ſpring Saxifraga, called rue whitlow graſs. 5. The ſuboval, crenated-leaved Saxifraga, with naked ſtalks, and capitated flowers. 6. The marſh Saxifraga, with oblong, crenated leaves. 7. The ſubulated-leaved Saxifraga, called pale-flowered, mountain Sedum. 8. The Saxifraga, with linear-ciliated leaves. 9. The purple, heath-like, mountain Saxifraga. 10. The moſſy, trifid-leaved Saxifraga. 11. The ſerrated, ſedum-leaved Saxifraga. 12. The roundiſh, ſerrated-leaved Saxifraga. 13. The longer-leaved Saxifraga. 14. The greater, tridactylate-leaved Saxifraga. 15. The little, round-leaved Saxifraga. 16. The oblong-leaved, ramoſe-ſtalked Saxifraga.

## HYDRANGEA.

THE calyx is a ſmall, permanent perianthium, formed of one leaf, divided into five ſegments: the corolla conſiſts of five equal, roundiſh petals, larger than the ſegments of the cup: the ſtamina are ten filaments, alternately ſhorter, but all exceeding the corolla in length: the antheræ are roundiſh and didymous; the germen is roundiſh, and placed under the receptacle; the ſtyles are two, ſhort and diſtant; the ſtigmata are obtuſe and permanent: the fruit is a roundiſh, didymous capſule; the two permanent ſtyles make two beaks to it, and it is rendered angular by many ribs. It is coronated by the cup, and divided into two cells by a tranſverſe membrane: the ſeeds are numerous, angular, acuminated, and very ſmall.

It is a native of North America, deſcribed by Gronovius.

## ROYENA.

THE calyx is a permanent, ventricoſe perianthium, formed of a ſingle leaf, and divided into five obtuſe ſegments: the corolla is formed of a ſingle petal; the tube is of the length of the calyx; the limb is patent, reflex, and divided into five oval ſegments: the ſtamina are ten very ſhort filaments, growing to the corolla; the antheræ are oblong, acute, didymous, erect, and of the length of the tube: the germen is oval and hairy; it terminates in two ſtyles, ſomewhat longer than the ſtamina; the ſtigmata are ſimple: the fruit is an oval capſule, formed of four valves, marked with four furrows, but containing only one cell: the ſeeds are four oblong, triangular nuts, included in a calyptra.

It is an American, deſcribed by Houſton, under the name of a ſpecies of Staphylodendron.

### *Claſs the Tenth. Order the Third.*

## DECANDRIA TRIGYNIA.

### *Plants which have in every flower ten ſtamina and three ſtyles.*

## MALPIGHIA.

THE calyx is a ſmall, hollow, permanent perianthium, divided into five parts; there is a callous, melliferous glandule placed under each of the retroflex ſinus's of this cup. The corolla conſiſts of five large, hollow, kidney-ſhaped petals, with long and linear ungues: the ſtamina are ten ſmall, erect, and ſomewhat broad filaments, placed ſo as to form a kind of cylinder: the antheræ are ſimple; the germen is roundiſh, and very ſmall; the ſtyles are three, erect and ſhort; the ſtigmata are obtuſe: the fruit is a large, globoſe berry, of an uneven ſurface, and containing only one cell: the ſeeds are three oſſeous, oblong, obtuſe, angulated, and contain each an oblong, obtuſe kernel.

It is an American, deſcribed by Plumier, 36.

BANIS-

## BANISTERIA.

THE calyx is a very ſmall, permanent perianthium, with tubercles underneath it; there are two melliferous glandules under every ſegment of the cup, excepting only one: the ſegments are five, ſo that in all there are eight of theſe glandules: the corolla conſiſts of five large, patent, orbiculated petals, crenated, and with oblong, linear ungues: the ſtamina are ten very ſmall filaments; the antheræ are ſimple; the germina are three; they are alated and grow together; the ſtyles are three, and ſimple; the ſtigmata are obtuſe: the fruit conſiſts of three capſules, running into long alæ, containing each only one cell, with little appendages at the ſides, and not open: the ſeed is ſingle, covered and dentated at the lateral margin.

It is an American, deſcribed by Plumier, and by Houſton under the name of a ſpecies of Clematitis.

## TRIOPTERIS.

THE calyx is a very ſmall, permanent perianthium, divided into five ſegments: the corolla conſiſts of ſix ſeeming petals, oval, erecto-patulous, equal, and permanent, ſurrounded by three others, ſmaller than themſelves, but equal to one another: the ſtamina ſtand out of the petals, and are inſerted into the receptacle; they are ten capillary filaments, the exterior ones ſhorter than the others: the antheræ are ſimple; the germen is trifid; the ſtyles are three, ſimple and erect; the ſtigmata are obtuſe; there is no pericarpium: the ſeeds are three, erect and carinated on the back; each of them has externally, at it's baſe, an ala, and at it's apex two: theſe alæ are what, in the flowering ſtate of the plant, appear to be petals, but they are not truly ſuch.

## GARIDELLA.

THE calyx is a ſmall, oblong, erect, acuminated perianthium, compoſed of five leaves: the corolla has no petals; but there are five long, equal, bilabiated nectaria: the exterior lip ſtands loweſt, and is plane, and divided into two linear, oblong, obtuſe ſegments; the interior lip ſtands higher, and is ſhort and ſimple: the ſtamina are ten ſubulated filaments, ſhorter than the corolla; the antheræ are erect and obtuſe; the germina are three, oblong, compreſſed, erect, and acuminated; there are ſcarce any ſtyles: the ſtigmata are ſimple: the fruit conſiſts of three oblong, compreſſed, acuminated capſules, formed of two valves, with the interior future convex: the ſeeds are numerous and ſhort.

Of this genus there is only one ſpecies.

### GARIDELLA. Fennel-leaved Nigella.

The root is oblong, thick, and tough, but annual: the ſtalks are numerous, ſtrait, ſlender, erect, and ramoſe; the leaves ſtand alternately, and there are but few of them; they are oblong, large, and divided into a multitude of fine ſlender ſegments: the flowers ſtand on the tops of the ramifications, and are large, and of a pale whitiſh colour.

It is a native of France. C. Bauhine calls it, Nigella Cretica folio fœniculi. It's ſeeds are of a fragrant ſmell.

## CHERLERIA.

THE calyx is a perianthium, compoſed of five equal, lanceolated leaves: the corolla has properly no petals: the nectaria are five in number, roundiſh and emarginated, very ſmall, and placed in a circular direction: the ſtamina are ten ſubulated filaments, the alternate ones affixed to the nectarium: the antheræ are ſimple; the germen is oval; the ſtyles are three, and bent back; the ſtigmata are ſimple: the fruit is a capſule of an ovated figure, formed of three valves, and containing three cells: the ſeeds are numerous, convex on one ſide, and angulated on the other.

It is a native of Switzerland, deſcribed by Haller.

## DRYPIS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, inflated, and divided into five ſegments: the corolla conſiſts of five petals; their ungues are of the length of the cup, and narrow: the limb is plane; the bracteæ divided into two linear, obtuſe ſegments: the ſtamina are ten filaments, nearly of the length of the corolla; the antheræ are ſimple: the germen is globoſe; the ſtyles are three, ſimple and patulous; the ſtigmata are ſimple: the fruit is a ſmall, globoſe, covered capſule, with only one cell, in which is a ſingle kidney-ſhaped ſeed.

Of this genus there is only one known ſpecies.

### DRYPIS.

The root is oblong, ſlender, white, tough, and fibrated: the ſtalk is angular, erect, jointed, and ramoſe: the leaves ſtand in pairs, and are oblong, narrow, deeply laciniated toward the baſe, and terminate in a long, narrow, prickly point; from the alæ of all the leaves riſe ſhort branches, the tops of which have two or three flowers arranged into a kind of umbel, and ſurrounded with ſpines; they are ſmall and white.

It is a native of Italy. Micheli, who has charactered it accurately, calls it, Drypis Italica aculeata floribus albis umbellatim compactis; Moriſon calls it, Carduus foliis tenuiſſimis ſpinoſis.

## CUCUBALUS.

THE calyx is a permanent, inflated perianthium, of a globoſe figure, formed of a ſingle leaf, and divided into five parts at the end: the corolla conſiſts of five petals, the ungues of which are of the length of the cup; the limb is plane, and the bracteæ bifid: the ſtamina are ſubulated filaments, uſually five in number; the antheræ are oblong; the germen is roundiſh; the ſtyles ſometimes three, ſometimes five, of a ſubulated figure, and longer than the ſtamina; the ſtigmata are oblong, hoary, and reflex; the fruit is a ſmall, roundiſh, acuminated capſule; the ſeeds are numerous and roundiſh.

This genus comprehends the Cucubalus of Tournefort, and the Beben of Malpighi, and many of the Lychnis's of authors. The figure of the calyx is the great diſtinguiſhing character; all the reſt is uncertain.

1. *Cucubalus caule ramoſo, floribus trigynis, fructu colorato globoſo.*

*The ramoſe-ſtalked Cucubalus, with coloured, globoſe fruit.*

**Berry-bearing Chickweed.**

The root is oblong, thick, and perennial; the ſtalks are numerous, round, procumbent, divaricated, and diffuſed: the leaves are placed two at every joint; they are moderately large, of an oval figure, but pointed at the end; the flowers are ſmall and white; the cup very much inflated, and the fruit a moderately large berry.

It is a native of Italy and Germany. C. Bauhine calls it, Alſine ſcandens baccifera; others, Cucubalus.

2. *Cucubalus calycibus fructus globoſis acuminatis, triginta ſtriis, foliis glabris.*

*The ſmooth-leaved Cucubalus, with the ripe cup globoſe, and marked with thirty ſtriæ.*

The root is oblong, thick, and fibrated; the ſtalks grow to two feet high, and are round, hairy, ramoſe, and ſtriated: the leaves are ſmooth, oblong, broad, and ſtand two at each joint: the flowers ſtand on moderately long pedicles at the tops of the branches, and in the divarications of the ſtalks; they are ſmall and purpliſh, and fade as ſoon as the

the ſun ſhines upon them: the cup, after the flower is fallen, ſwells out into a very large capſule, marked with not leſs than thirty high ſtriæ.

It is a native of Spain, where it is frequent in the corn-fields. C. Bauhine calls it, Lychnis latifolia calycibus turgidis ſtriatis.

3. *Cucubalus calycibus ſubovatis glabris reticulato-venoſis, capſulis trilocularibus.* **White Ben.**

*The ſmooth, oval-cupped Cucubalus, with trilocular capſules.*

The root is oblong, white, and woody; the ſtalk is round, jointed, ſmooth, ramoſe, and two feet high: the leaves are large, of an oval figure, ſmooth, though ſometimes accidentally hairy; they ſtand two at a joint, and are of a pale bluiſh-green colour: the flowers are moderately large and white; the cups inflated and ventricoſe; their ſurface is reticulated, and the longitudinal ſtriæ large.

It is common in our corn-fields. C. Bauhine calls it, Lychnis ſylveſtris quæ Ben album vulgo; others, Papaver ſpumeum. The Lychnis maritima repens of C. Bauhine and others is only a variety of this ſpecies.

The other ſpecies are, 1. The common wild, red Campion, or red Lychnis. 2. The common white Campion. 3. The uniflorous Campion. 4. The procumbent Lychnis, with great, ſtriated cups. 5. The night-flowering Campion. 6. The narrow-leaved Campion, with ſtriated cups. 7. The quadrifoliate, Virginian Lychnis. All theſe, though generally called Lychnis's and Campions, are properly Cucubali.

## SILENE.

THE calyx is a permanent perianthium, formed of a ſingle leaf, claviform, and divided into five ſegments: the corolla conſiſts of five petals; their ungues are narrow, of the length of the cup, and emarginated: the limb is plane, obtuſe, and emarginated: the nectarium is compoſed of two denticles, placed in the neck of each petal: the ſtamina are ten ſubulated filaments, alternately inſerted into the ungues of the petals: the antheræ are oblong; the germen is cylindric; the ſtyles are either three or five; they are ſimple, and longer than the ſtamina; the ſtigmata are bent: the fruit is cylindric and covered; it is divided into as many cells as there are ſtyles, and opens in five places at top: the ſeeds are numerous and kidney-ſhaped.

This genus comprehends the Viſcago of Dillenius, and many of the Lychnis's of other authors.

1. *Silene hirſuta, petalis emarginatis coronatis, floribus erectis, fructibus reflexis ſubſeſſilibus alternis.* **Small-flowered Campion.**

*The hairy Silene, with erect flowers, and ſubſeſſile, alternate fruits.*

The root is oblong and white; the radical leaves are three inches long, an inch broad, and ſomewhat hairy: the ſtalk is round, hairy, infirm, and a foot and half high: the leaves are like the radical ones, but ſmaller, and ſtand two at a joint: the flowers are very ſmall and white, and their cups ſtriated; they ſtand alternately in the alæ of the leaves, toward the top of the ſtalk.

It is a native of England. Ray calls it, Lychnis ſylveſtris flore albo minimo.

2. *Silene floribus faſtigiatis coronatis, foliis ſuperioribus cordatis glabris.*

*The faſtigiated and coronated-flowered Silene, with the upper leaves cordated.*

The root is oblong and white; the ſtalk is ſmooth, round, jointed, and erect, and has a viſcoſity over the joints: the leaves are ſmooth; the lower ones oblong, the upper ones cordated: the flowers terminate the branches, and are moderately large and red.

It is a native of France. C. Bauhine calls it, Lychnis viſcoſa purpurea latifolia lævis.

The

The other ſpecies of Silene are, 1. The ever-green, myrtle-leaved, white Ben. 2. The hyſſop-leaved, white-flowered Silene. 3. The tall, viſcous Silene, with moſſy flowers. 4. The hairy, white Lychnis, with the flowers on one ſide only of the ſtalks. 5. The narrow-leaved, Cretic Lychnis, with long pedicles to the flowers. 6. The Lychnis, with red, ſcarce viſible flowers. 7. The elegantly variegated, garden Lychnis, called Vulnera Chriſti. 8. The hairy Lychnis, with ſtellate flowers. 9. The beautiful, pale red-flowered, hairy, narrow-leaved Lychnis. 10. The red, Carolina Campion, ſcarce at all hairy. 11. The oval-leaved, Ruſſian Silene, with emarginated petals. 12. The narrow-leaved, red Lychnis. 13. The little umbelliferous, Pyrenæan Lychnis. 14. The hairy, mountain Lychnis, with nutant flowers. 15. The dwarf, ſmooth, Alpine Lychnis. 16. The graſſy-leaved, or moſſy-mountain Lychnis.

## STELLULARIA.

THE calyx is a permanent perianthium, compoſed of five ovato-lanceolate, hollow, acute, patent leaves: the corolla conſiſts of five petals, divided into two, at the extremities, the diviſion reaching down ſometimes as far as the ungues, plane, oblong, and falling very quickly: the ſtamina are ten filiform filaments, ſhorter than the corolla, and alternately longer and ſhorter; the antheræ are roundiſh; the germen is roundiſh; the ſtyles are three, capillary and patent; the ſtigmata are obtuſe; the fruit is an oval, covered capſule, formed of ſix valves, and containing one cell; the ſeeds are numerous, roundiſh, and compreſſed: ſome ſpecies have five ſtyles; others have the ſtamina of ſo little duration, that they are not to be counted.

This genus comprehends the Alſine of Tournefort.

1. *Stellularia foliis cordatis, floribus pentagynis.*
*The cordated-leaved Stellularia, with five ſtyles in the flower.* Great marſh Chickweed.

The root is oblong, ſlender, creeping, and perennial. The ſtalks are numerous, and grow to two feet high, but they are weak, and ſcarce able to ſupport themſelves erect. The leaves ſtand two at every joint; they are large, and of a pale green colour, and a little hairy. The flowers are of a fine bright white colour, and are moderately large.

It is common with us in wet places; it puts on various forms, and has been deſcribed under them, as if of various ſpecies, under the names of Alſine aquatica major, Alſine nemorum altiſſima, and Alſine marina.

2. *Stellularia foliis lanceolatis ſerrulatis.*
*The Stellularia, with lanceolated, ſerrulated leaves.* Stitchwort.

The root is oblong, ſlender, and creeping. The ſtalks are numerous, ſquare, hollow, and ten inches, or a foot, high; at every joint ſtand two rigid, narrow, graſſy, and long leaves. From the alæ of theſe, and on the tops of the ſtalks, grow the flowers; they are very large, and of a pure and bright white colour. The ſtalk is uſually divaricated into two parts toward the top, and theſe often into two more each, and a flower uſually ſtands alſo in each divarication.

It is a common plant in our fields and hedges, C. Bauhine calls it, Caryophyllus holoſteus arvenſis glaber flore majore; others, Gramen leucanthemum majus.

The other ſpecies of Stellulariæ to be mentioned are, 1. The common Chickweed. 2. The leſſer Stitchwort, or ſmall-flowered Holoſteus. 3. The very ſmall-leaved Stellularia. 4. The broader, ovated, and thin-leaved Stellularia. 5. The nightſhade-leaved Stellularia. 6. The St John's-wort-leaved Stellularia. 7. The nummularia-leaved Stellularia. 8. The round-leaved, Sicilian Stellularia. 9. The auricular-leaved Stellularia. 10. The purſlane-leaved Stellularia. 11. The white, umbellate-flowered Stellularia. 12. The ſerpyllum-leaved Stellularia. 13. The linear-leaved Stellularia. 14. The narrow-leaved, moſſy Stellularia. 15. The tamariſk-leaved Stellularia. 16. The toad flax-leaved Stellularia. 17. The ſhort, graſſy-leaved Stellularia.

lularia. 18. The fine-leaved, milk-white-flowered Stellularia; and, 19. The capillaceous-leaved Stellularia.

## ARENARIA.

THE calyx is a perianthium, compoſed of five oblong, acuminated, patent, and permanent leaves: the corolla conſiſts of five oval petals, ſcarce ſo long as the leaves of the cup, and fading: the ſtamina are ten ſubulated filaments, alternately interior: the antheræ are roundiſh; the germen is oval; the ſtyles are three, and erecto-reflex: the ſtigmata are thick: the fruit is an oval, covered capſule, containing one cell, and opening into five parts at the ſummit: the ſeeds are numerous, and kidney-ſhaped.

This genus comprehends many of the ſpecies of Alſine of Tournefort and others.

1. *Arenaria foliis ſubovatis acutis ſeſſilibus, corollis calyce brevioribus.*
*The ſuboval, acute, ſeſſile-leaved Arenaria, with flowers ſmaller than the cup.*

**Small, many-ſtalked Chickweed.**

The root is a cluſter of white fibres. The ſtalks are very numerous, round, ſlender, and ramoſe. The leaves are very ſmall, of an oval figure, but pointed at the extremity, and ſtand on ſhort pedicles; they are placed two at a joint. The whole plant grows to three or four inches high, and forms a tuft, or buſh, uſually of near as much in diameter. The flowers are white, and extremely ſmall.

It is frequent on walls and in dry places. C. Bauhine calls it, Alſine minor multicaulis.

2. *Arenaria foliis filiformibus, ſtipulis membranaceis vaginantibus.*
*The Arenaria, with filiform leaves, and membranaceous, vaginating ſtipulæ.*

**Purple Spurrey.**

The root is oblong, thick, and white. The ſtalks are numerous and procumbent; they are green, round, jointed, and four or five inches long. The leaves ſtand two at a joint, and are oblong, narrow, and pointed at the ends, and have ſtipulæ ſurrounding the ſtalk at their baſe. The flowers are ſmall and purple; they ſtand in divarications of the ſtalk, and at the tops of the branches.

It is common in dry places. C. Bauhine calls it, Alſine ſpergulæ facie minor, ſive Spergula purpurea. The plant called Spergula marina, Sea Spurrey, is a variety only of this ſpecies.

The other more remarkable ſpecies are, 1. The plantain-leaved Arenaria. 2. The purſlane-leaved, ſea Arenaria. 3. The narrower-leaved, ramoſe Arenaria. 4. The ſhort-leaved Arenaria. 5. The large-leaved Arenaria.

*Claſs the Tenth. Order the Fourth.*

## DECANDRIA PENTAGYNIA.

*Plants which have in every flower ten ſtamina and five ſtyles.*

## SPERGULA.

THE calyx is a perianthium, compoſed of five permanent leaves, of an oval, obtuſe figure, hollowed and patent: the corolla conſiſts of five oval, patent petals, hollowed, larger than the leaves of the cup, and very quickly fading: the ſtamina are ten ſubulated filaments, ſhorter than the corolla; the antheræ are roundiſh; the germen is oval; the ſtyles are five, erecto-reflex, and filiform: the ſtigmata are thick: the fruit is an oval, covered capſule, formed of five valves, but containing only one cell: the ſeeds are numerous, rounded, and ſurrounded with an emarginated rim.

1. *Spergula foliis verticillatis, pedunculis dichotomis.*
*The Spergula, with verticillated leaves, and dichotomous peduncles.*

**Great Spurrey.**

The root is oblong, ſlender, and white. The ſtalk is round, hollow, jointed, and eight or ten inches high, of a pale green colour, and, toward the top, ramoſe. The leaves are half an inch, or more, long, very narrow, and hollowed underneath; they ſtand in conſiderable numbers round the ſtalk, in a radiated manner, at every joint. The flowers are ſmall and white; the antheræ yellow.

It is common in corn-fields. C. Bauhine calls it, Alſine Spergula dicta major; others, ſimply, Spergula.

2. *Spergula foliis oppoſitis, pedunculis ſimplicibus.*
*The Spergula, with leaves in pairs, and with ſimple peduncles.*

**Knotty Chickweed.**

The root is oblong, ſlender, and white. The ſtalks are procumbent, round, jointed, ramoſe, and five inches long. The leaves ſtand in pairs, two at every joint; the joints are frequent, and the leaves are oblong, narrow, and pointed. The flowers are large and milk-white; they ſtand on the tops of the ſtalks, and in the divarications of the branches.

It is frequent in damp places, in moſt parts of Europe. C. Bauhine calls it, Alſine nodoſa Germanica; Ruppius, Arenaria paluſtris.

## CERASTIUM.

THE calyx is a permanent perianthium, compoſed of five ovato-lanceolated, acute, and patent leaves: the corolla conſiſts of five obtuſe, bifid, erecto-patent petals, of the ſize of the leaves of the cup: the ſtamina are ten filiform filaments, ſhorter than the corolla: the antheræ are roundiſh; the germen is oval: the ſtyles are five, capillary, erect, and of the length of the ſtamina; the ſtigmata are obtuſe: the fruit is a capſule, of an ovato-cylindric figure, very long, obtuſe, crooked, in part covered, containing only one cell, and opening in five places at the top: the ſeeds are numerous and roundiſh.

This genus comprehends the Myoſotis of Tournefort. There is a ſpecies which, inſtead of ten, has only five, ſtamina in each flower.

1. *Ceraſtium foliis lineari-lanceolatis obtuſis, corollis calyce majoribus.*
*The lineari-lanceolate, obtuſe-leaved Ceraſtium, with corollæ larger than the cup.*

**Large-flowered, mouſe-ear Chickweed.**

The root is oblong and creeping. The ſtalks are round, weak, in part procumbent, and grow to about ſix or eight inches long. The leaves ſtand in pairs, and have no pedicles; they are oblong, narrow, obtuſe, and hairy. The ſtalk about it's middle divides into two parts, theſe into two more each, and ſo on to the extremities. The flowers ſtand in theſe divarications, and on the tops of the ſtalks; they are large and white.

It is found in dry, hilly paſtures. C. Bauhine calls it, Caryophyllus arvenſis hirſutus flore majore.

2. *Ceraſtium erectum villoſo-viſcoſum.*
*The erect, hairy, and viſcous Ceraſtium.*

**Broad-leaved, mouſe-ear Chickweed.**

The root is fibrous; the ſtalks are round, erect, hairy, and five or ſix inches high. The leaves are placed two at every joint; they are of an oval figure, broad, ſhort, and obtuſe at their ends. The flowers are ſmall and white. The whole plant is hairy, and has ſomewhat viſcous about it.

It is common in dry places. Ray calls it, Alſine hirſuta myoſotis latifolia præcocior; C. Bauhine, Alſine hirſuta altera viſcoſa.

The

The other ſpecies are, 1. The long-leaved Ceraſtium, with larger flowers. 2. The ſmall-flowered, little Ceraſtium, with only five ſtamina. 3. The Alpine Ceraſtium, with procumbent ſtalks, and a large, ſnow-white flower. 4. The large, membranaceous-flowered, hairy, Alpine Ceraſtium. 5. The perfoliate, lychnis-leaved, oriental Ceraſtium. 6. The woolly, linaria-leaved Ceraſtium. 7. The creeping, hoary Ceraſtium. 8. The corniculate Ceraſtium, or horned Chickweed of Cluſius. 9. The broader and pointed-leaved Ceraſtium. 10. The narrow, rigid-leaved Ceraſtium. 11. The polygonum-leaved Ceraſtium.

## AGROSTEMMA.

THE calyx is a one-leaved perianthium; it's tube is ovato-oblong, coriaceous, and marked with ten ſtriæ; it's limb is of the length of the corolla, and 'tis divided into five ſlender, permanent ſegments: the corolla conſiſts of five petals; their ungues are of the length of the tube of the cup; the limb is patent, obtuſe, and ſhorter than the cup, or, at the moſt, does not exceed it: the ſtamina are ten ſubulated filaments: the antheræ are ſimple: the germen is oval; the ſtyles are five, filiform, erect, and of the length of the ſtamina: the ſtigmata are ſimple: the fruit is a capſule of an oblong, oval figure, covered, formed of five valves, and containing only a ſingle cell: the ſeeds are numerous, kidney-ſhaped, and punctated: the receptacles are free, as many as the ſeeds, and the interior ones the longer.

Of this genus there is only one known ſpecies.

### AGROSTEMMA. Cockle.

The root is oblong and white. The ſtalk is round, erect, hairy, of a whitiſh-green, and two feet high. The leaves ſtand in pairs, without pedicles, and ſurround the ſtalk at their baſe; they are three inches long, very narrow, and covered with long, white hairs. The flowers ſtand at the tops of the branches, and are very large, and of a beautiful deep purple colour.

It is common in our corn-fields. C. Bauhine calls it, Lychnis ſegetum major; others, Nigellaſtrum.

## CORONARIA.

THE calyx is a permanent, coriaceous perianthium, formed of a ſingle leaf, of a quinquangular figure, divided into five ſegments, with ſmaller angles between: the corolla conſiſts of five petals; their ungues are of the length of the cup, and increaſed by a margin; their bracteæ are cordated, and the limb is plane; the nectarium conſiſts of two denticles in the neck of every petal: the ſtamina are ten filaments, of the length of the tube of the corolla; the antheræ are incumbent: the germen is of a ſubcylindric figure; the ſtyles are five, diſtant, and of the length of the ſtamina; the ſtigmata are ſimple: the fruit is a cylindric capſule, containing one cell, and opening at the top; the ſeeds are numerous and roundiſh.

1. *Coronaria tomentoſa, foliis ovato-lanceolatis.* Roſe
*The woolly Coronaria, with ovato-lanceolated leaves.* Campion.

The root is oblong, ſlender, white, and fibrated; the ſtalks are round, robuſt, jointed, woolly, white in colour, and three feet high: the leaves ſtand in pairs; they are large, broad, of an oval figure, and have no pedicles; they are alſo white and woolly: the flowers are large, and of a beautiful purple, and they ſtand in great abundance on the tops of the branches.

It is a native of Italy; with us it is common in gardens. C. Bauhine calls it, Lychnis Coronaria Dioſcoridis ſativa.

2. *Coronaria glabra foliis lineari-lanceolatis.* Smooth
*The ſmooth Coronaria, with lineari-lanceolate leaves.* Cockle.

The root is oblong, ſlender, white, and woody; the ſtalk is erect, ramoſe, round, jointed, ſmooth, of a pale green, and a foot and half high: the leaves ſtand in pairs; they

they are very long and narrow, of a pale green colour, and have a few white hairs on them: the flowers are large and numerous; they ſtand on moderately long pedicles, are of a pale red, and the petals are emarginated.

It is a native of Sicily. Ray calls it, Pſeudomelanthium glabrum Siculum; Boccone, Lychnis foliis glabris calyce duriore; Moriſon, Nigellaſtrum flore rubello.

## LYCHNIS.

THE calyx is a roundiſh, inflated, permanent perianthium, formed of a ſingle leaf, and divided into five ſhort ſegments at the edge: the corolla conſiſts of five petals; their ungues are of the length of the cup, and are plane and membranated: the limb is plain, and the bracteæ of the petals are divided into either two or four ſegments: the nectarium is compoſed of two denticles, placed in the neck of every petal: the ſtamina are ten ſetaceous filaments, longer than the cup: the antheræ are incumbent; the germen is of a ſuboval figure; the ſtyles are five; they are longer than the ſtamina, and of a ſubulated figure; the ſtigmata are reflex and hoary: the fruit is a capſule, approaching to an oval figure, covered, formed of five valves, and contains only one cell: the ſeeds are numerous and roundiſh.

1. *Lychnis petalis quadrifidis, fructu ſubrotundo.* Cuckow-flower.
*The round-fruited Lychnis, with quadrifid petals.*

The root is oblong and creeping; the ſtalks are ſtriated, hollow, jointed, ramoſe, and two feet high, often of a reddiſh colour: the leaves ſtand in pairs, and have no pedicles; they are long, narrow, and of a deep green; the flowers ſtand on the tops of the branches, and are of a bright red: they are large, and ſo deeply divided, that the petals look ragged or fringed.

It is common in our meadows. C. Bauhine calls it, Caryophyllus laciniato flore; others, Lychnis plumaria pratenſis.

2. *Lychnis floribus faſciculatis faſtigiatis.* Conſtantinople Flower.
*The Lychnis, with faſciculated and faſtigiated flowers.*

The root is compoſed of a multitude of thick, divaricated fibres; the ſtalks are round, thick, rigid erect, hairy, and hollow; they grow to two or three feet high: the leaves ſtand two at every joint; they have no pedicles, and are large, oblong, broad, pointed at the ends, and of a deep green, hairy and rough to the touch: the flowers ſtand in large cluſters at the tops of the branches; they are large, and of a fine ſcarlet colour; the petals are bifid; the flowers ſtand very cloſe in the cluſter, and have an agreeable ſmell.

It is a native of Ruſſia and Tartary; it is frequent in our gardens, where it is called the Lychnis, or Conſtantinople Lychnis. It's flowers vary in colour, and other accidents; whence Tournefort and others have made ſeveral ſpecies of it. C. Bauhine calls it, Lychnis hirſuta flore coccineo major; J. Bauhine, Flos Conſtantinopolitanus.

## AVERRHOA.

THE calyx is a ſmall, erect perianthium, compoſed of five lanceolated, permanent leaves: the corolla conſiſts of five lanceolated petals, erect in their lower part, but patent in the upper: the ſtamina are ten ſetaceous filaments, alternately ſhorter; the five longeſt are of the length of the corolla: the antheræ are roundiſh; the germen is oblong; the figure of it obſcurely pentagonal: the ſtyles are five, ſetaceous and erect; the ſtigmata are ſimple: the fruit is an apple, of a turbinated and obtuſely pentagonal figure, containing five cells. the ſeeds are angular, and are ſeparated by membranes.

It is an oriental, figured in the Hort. Mal. 47.

## OXALIS.

THE calyx is a very ſhort, permanent perianthium, divided into five parts: the corolla is divided alſo into five parts, which cohere only by their ungues, and are erect, obtuſe, and emarginated: the ſtamina are ten erect, capillary filaments; the exterior ones ſhorter than the others: the antheræ are roundiſh and ſulcated: the germen is pentangular; the ſtyles are five, filiform, and of the length of the ſtamina: the ſtigmata are obtuſe; the fruit is a capſule of a pentagonal figure, containing five cells, and ſplitting longitudinally at the angles: the ſeeds are roundiſh.

This genus comprehends the Oxys of Tournefort, and the Oxyoides of Garcin. The capſule in ſome ſpecies is ſhort, and the ſeeds ſingle; in others it is long, and the ſeeds are numerous.

1. *Oxalis ſcapo unifloro, foliis ternatis, radice ſquammoſo-articulata*
*The ſingle-flowered, ternate-leaved Oxalis, with a ſquammous-articulated root.*

Wood Sorrel.

The root is oblong, of the thickneſs of a quill, jointed and ſcaly: the leaves ſtand three on each pedicle, and are of a cordated form: the pedicles are three or four inches long, very ſlender, and uſually reddiſh: the flowers ſtand ſingly, on pedicles of the ſame kind; they are large, and of a beautiful fleſh colour, or white ſtriated with pale red. The ſeed-veſſel is pentagonal, and, when ripe, burſts on the leaſt touch, and throws out the ſeeds with great violence.

It is common in our woods. C. Bauhine calls it, Trifolium acetoſum vulgare; others, Oxys, Acetoſella, and Lujula. The leaves are of a very agreeable acid taſte, and a conſerve is kept of them in the ſhops, as a refrigerant.

2. *Oxalis pedunculis multifloris, caule ramoſo herbaceo.*
*The many-flowered Oxalis, with a ramoſe, herbaceous ſtalk.*

Yellow Wood-ſorrel.

The root is oblong, ſlender, and furniſhed with a number of fibres: the ſtalks are ſlender, ramoſe, and ſtriated; the leaves ſtand three together, on long and very ſlender pedicles, and are ſomewhat hairy, and more deeply cordated than in the other ſpecies: the flowers are moderately large and yellow.

It is a native of Italy. Cluſius calls it, Oxys flore luteo.

## COTYLEDON.

THE calyx is a very ſmall perianthium, formed of one leaf, and divided into five ſhort ſegments at the edge: the corolla is of a campanulato-turbinated form, lightly divided into five ſegments, which are rolled back: the nectarium is compoſed of hollow ſquammulæ, one at the baſe of each of the germina; the ſtamina are ten ſtrait, ſubulated filaments, of the length of the corolla; the antheræ are erect, and furrowed in four places; the germina are five in number; they are oblong, thick, and terminate in ſo many ſubulated ſtyles, longer than the ſtamina: the ſtigmata are ſimple: the fruit conſiſts of five oblong, ventricoſe, acuminated capſules, each formed of a ſingle valve, and opening longitudinally inwards: the ſeeds are numerous and ſmall; there is ſometimes a fifth leſs in the ſeveral parts of the fructification.

1. *Cotyledon foliis rotundis, crenatis, umbilicatis.*
*The round, crenated, and umbilicated-leaved Cotyledon.*

Venus Navel-wort.

The root is tuberous, and furniſhed with a number of fibres; the leaves are round, and half an inch, or more, in diameter, lightly crenated round the edges, ſometimes almoſt entire; they ſtand on pedicles of two or three inches long, which are inſerted into their middle, not at the edge: the ſtalk is round, and moderately thick; five or

ſix inches high, and furniſhed, from the top almoſt to the bottom, with numerous, oblong, greeniſh-white, ſtriated flowers.

It grows on old walls, but is not common. I met with it in vaſt abundance near Shepton Mallet in Somerſetſhire, on the walls by the road-ſide. C. Bauhine calls it, Cotyledon major; J. Bauhine, Cotyledon vera radice tuberoſa; and others, Umbilicus Veneris.

The other ſpecies are, 1. The ſhrubby, African Cotyledon, with orbiculated leaves, with purple edges. 2. The yellow-flowered, oblong-leaved Cotyledon. 3. The ſpotted-leaved, African Cotyledon. 4. The long, black, great-leaved, African, ſhrubby Cotyledon. 5. The ſcarlet, umbellated-flowered Cotyledon. 6. The auricula-leaved Cotyledon. 7. The orange-coloured flowered, orpine-leaved Cotyledon. 8. The oblong, tuberous-rooted Cotyledon.

## SEDUM.

THE calyx is a permanent perianthium, divided into five parts, erect and acute: the corolla conſiſts of five acuminated, lanceolated, plane, patent petals: the nectaria are five; each is a very ſmall, emarginated ſquammula, affixed to the outer part of the germen, near the baſe: the ſtamina are ten ſubulated filaments, of the length of the corolla; the antheræ are roundiſh: the germina are five, oblong, and terminate in as many ſtyles, which are ſhorter than the corolla; the ſtigmata are obtuſe; the fruit conſiſts of five erecto-patent, acuminated, compreſſed capſules, emarginated toward the baſe, and opening longitudinally upwards and downwards: the ſeeds are numerous and ſmall.

This genus comprehends the Sedum and Anacampſeros of Tournefort. The eſſential character conſiſts in the nectarium. The Cotyledon craſſula ſempervivum, Rhadiola, and Tillæa are all very nearly allied to this genus: and, in general, nature has made very numerous families of the ſucculent plants, witneſs the Cactus Meſembry anthemeum, &c.

1. *Sedum foliis ſubovatis adnato-ſeſſibilus, gibbis erectiuſculis alternis, racemo triplici.* Wall Pepper.

*The triple-cluſtered Sedum, with ſubovate, gibbous, alternate leaves.*

The root is fibrous: the ſtalks are ſlender, round, reddiſh, and ſucculent; they grow to three or four inches in length, but are ſcarce able to ſupport themſelves erect: the leaves are ſhort, pointed, thick, and ſucculent, and ſtand very cloſe upon them: the flowers are beautiful, moderately large, and yellow.

It is frequent on walls, and ſometimes on the ground. C. Bauhine calls it, Sempervivum minus vermiculatum acre; J. Bauhine, Sedum parvum flore luteo.

2. *Sedum foliis planiuſculis patentibus ſerratis, corymbo terminatrice.* Orpine.

*The patent, plane-leaved Sedum, with terminatory cluſters of flowers.*

The root conſiſts of a great number of fleſhy tubercles, with long fibres among them: the ſtalk is round, ſmooth, erect, ſucculent, often reddiſh, and grows to two feet high: the leaves ſtand irregularly, but very cloſe; they are oblong, broad, of a bluiſh-green, often with ſome reddiſhneſs among it, and are ſerrated about the edges; the flowers ſtand in a kind of umbel at the top of the ſtalk, and are large, and of a beautiful purple: the flowers are ſometimes white, and the leaves ſometimes entire.

It is common in our paſtures. C. Bauhine calls it, Telephium vulgare; others, Anacampſeros and Craſſula.

3. *Sedum foliis ſerratis, corymbo folioſo.* **Yellow Siberian Orpine.**
*The ſerrated-leaved Sedum, with a folioſe corymbus.*

The root is compoſed of tubercles and fibres; the ſtalks are numerous, round, ſucculent, and procumbent, except that, when in flower, they are a little raiſed; they are ſix or eight inches long: the leaves are of a lanceolated figure, and in part ſerrated: the flowers are large, yellow, and very beautiful; they ſtand in a kind of umbel, with leaves under them.

It is a new diſcovered ſpecies; it's native place Siberia. Amman calls it, Anacampſer os flore flavo.

The other principal ſpecies are, 1. The white-flowered, cylindric-leaved Sedum. 2. The compreſſed-leaved, rock Sedum. 3. The ſix-leaved, imbricated, yellow Sedum. 4. The oval, ſeſſile, gibbous-leaved Sedum. 5. The little, ſhorter-leaved Sedum; and, 6. The taller, ſucculent-leaved, ſmall-flowered Sedum.

## PENTHORUM.

THE calyx is a very ſmall, permanent perianthium, formed of one leaf, divided into five acute, equal ſegments: there is no corolla; the ſtamina are ten ſetaceous, equal, permanent filaments, of twice the length of the calyx; the antheræ are roundiſh and deciduous; the germen is divided into five parts, and terminates in five ſtyles, of a conic figure, erect, and of the length of the ſtamina: the ſtigmata are obtuſe: the fruit is a ſingle capſule, divided into five parts, with five conic angles, and containing five cells: the ſeeds are numerous, very ſmall, and compreſſed.

Of this genus there is only one known ſpecies; an American, deſcribed by Gronovius, in his Fl. Virg. 51.

*Claſs the Tenth. Order the Fifth.*

## DECANDRIA DECAGYNIA.

*Plants which have in every flower ten ſtamina and ten ſtyles.*

## PHYTOLACA.

THERE is no calyx; the corolla conſiſts of five roundiſh, hollow, patent, and permanent petals, coloured, and turned back at their extremities: the ſtamina are ten ſubulated filaments, of the length of the corolla; the antheræ are roundiſh and lateral: the germen is of an orbiculated figure, depreſſed, and divided externally into ten lobes, and terminates in as many very ſhort ſtyles, with ſimple, permanent ſtigmata: the fruit is an orbiculated, depreſſed berry, with ten longitudinal furrows, umbilicated with the piſtils, and containing ten cells: the ſeeds are ſingle, ſmooth, and of a kidney-like ſhape.

## NEURADA.

THE calyx is a very ſmall perianthium, divided into five parts, and placed upon the germen: the corolla conſiſts of five equal petals, and is larger than the cup: the ſtamina are ten filaments, of the length of the cup: the antheræ are ſimple; the germen is gibbous; the ſtyles are ten in number, and of the length of the ſtamina; the ſtigmata are ſimple: the fruit is an orbiculated, depreſſed capſule, convex on the under part, and armed with aſcendent prickles; it contains ten cells, in each of which is a ſingle ſeed.

Of this genus there is only one known ſpecies. Juſſieu has given it the name of Tribulaſtrum.

*Claſs*

## *Claſs the Eleventh.*

# DODECANDRIA.

*Plants which have in every flower twelve ſtamina.*

OF theſe ſome have only one ſtyle, others have two, and others numerous ones in each flower. According to this obvious and eſſential diſtinction, they are arranged into three orders.

## *Claſs the Eleventh. Order the Firſt.*

# DODECANDRIA MONOGYNIA.

*Plants which have in every flower twelve ſtamina and only one ſtyle.*

## GETHYLLIS.

THE calyx is an inflated, membranaceous ſpatha, of a lanceolated figure, compoſed of a ſingle leaf, and containing only one flower: the corolla is formed of a ſingle petal; the tube is extreamly long and filiform: the limb is plane, divided into ſix equal ſegments, of a lanceolated figure, and but of about a third part the length of the tube: the ſtamina are twelve, ſometimes eighteen ſetaceous filaments, ſhort, erect, and ſtanding on the tube: the antheræ are oblong; the germen is oblong, and ſtands ſeſſile within the ſpatha, under the receptacle of the corolla: the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is trifid and obtuſe; the fruit is an oblong, ventricoſe, triangular capſule, with three cells; the ſeeds are numerous.

## ASARUM.

THE calyx is a coriaceous, coloured, campanulated, and permanent perianthium, formed of a ſingle leaf, and lightly divided into three erect ſegments, with their extremities reflex; there is no corolla: the ſtamina are twelve ſubulated filaments, of about half the length of the cup; the antheræ are oblong, and grow to the middle of the ſides of the ſtamina: the germen is buried within the ſubſtance of the cup; the ſtyle is cylindric, and of the length of the ſtamina; the ſtigma is ſtellated, and divided into ſix reflex ſegments: the fruit is a coriaceous capſule, immerſed in the ſubſtance of the cup, and contains ſix cells; the ſeeds are numerous and oval.

This genus comprehends the Aſarum and the Hypociſtis of Tournefort and others; the Hypociſtis only adds a third part to the number, of all the organs of the fructification.

1. *Aſarum foliis ſubcordatis petiolatis.*
*The ſubcordated and petiolated-leaved Aſarum.* Aſarabacca.

The root is oblong, angular, nodoſe, ſlender, and creeping; the leaves are of a roundiſh figure, auriculated, thick, rigid, and of a deep green colour; they are an inch, or more, in diameter, and ſtand on long and moderately thick pedicles: the flowers are ſmall; they ſtand on very ſhort pedicles, riſing immediately from the root, and have a purpliſh tinge.

It is a native of many parts of Europe; we keep it in gardens. It is a vomit, but is rarely uſed.

2. *Aſarum foliolis ſeſſilibus acuminatis.*
*The ſeſſile and acuminated-leaved Aſarum.* Hypociſt.

The baſe of this plant adheres to the root of ſome of the ciſtus's; from this it riſes with a thick, fleſhy, juicy, yet tough, ſtalk, three or four inches high, and of a reddiſh,

10

11

Cercis

Cassia

Bauhinia

Poinciana

Ruta foliis ternatis angustis

Dictamnus

Zygophyllum

Phytolaca

Oxys

Melia

Melastoma

Fagonia

Lychnis

Garidella

Asarum foliis subcordatis

Lythrum

Agrimonia

Sempervivum

B. Cole Sculp.

diſh, yellowiſh, or whitiſh colour; this is uſually about half an inch thick at the baſe, and an inch and half, or more, at the top: it is ſurrounded every-where with a number of ſquammoſe leaves, half an inch long, and a third of an inch broad, of a yellowiſh or purpliſh colour, and terminating in an obtuſe point: the flowers are numerous, large, and uſually of a purpliſh colour; they ſtand in cluſters at the tops of the ſtalk, with leaves intermixed among them: it is eaſily ſeparated at it's baſe from the root it grows on, and leaves a hollow in it, but without the leaſt veſtige of any fibres.

It is a native of the Eaſt, and of ſome parts of Europe. C. Bauhine calls it, Hypociſtis officinarum. It varies in colour extreamly, and theſe varieties have been deſcribed as ſpecies.

We uſed to have an expreſſed juice of it kept in the ſhops, as an aſtringent; but at preſent all that is found there is counterfeit.

## RHIZOPHORA.

THE calyx is a perianthium, divided into four oblong, erect, acuminated, and permanent ſegments: the corolla is erect, and ſhorter than the calyx; it is divided into four lanceolated ſegments: the ſtamina are twelve erect filaments, alternately ſhorter; the antheræ are ſmall; the receptacle is oval; the germen is ſubulated; there is ſcarce any ſtyle; the ſtigma is acute: there is no pericarpium: the receptacle is of a ſubovate figure, fleſhy, and contains the baſe of the ſeed, which is ſingle, very long, of a clavated figure, and pointed.

This genus comprehends the Mangles of Plumier; the ſtamina vary from eight to twelve.

## LYTHRUM.

THE calyx is a cylindric, ſtriated perianthium, compoſed of a ſingle leaf, divided into twelve denticles, alternately ſmaller at the edge: the corolla conſiſts of ſix oblong, obtuſe, patent petals, inſerted by their ungues into the ſegments of the cup: the ſtamina are twelve filiform filaments, of the length of the cup; the upper ones are ſhorter than the inferior: the antheræ are ſimple and aſſurgent; the germen is oblong; the ſtyle is ſubulated, of the length of the ſtamina, and declinate: the ſtigma is orbiculated and aſſurgent; the fruit is an oblong, acuminated, covered, and bilocular capſule; the ſeeds are numerous and ſmall.

This genus comprehends the Salicaria of Tournefort. In ſome of the ſpecies, however, a ſixth part of the number is wanting.

1. *Lythrum foliis oppoſitis.* Purple-ſpiked Willow-herb.
*The oppoſite-leaved Lythrum.*

The root is white, woody, thick, and divaricated; the ſtalks are angular, thick, robuſt, and four or five feet high; they are uſually of a reddiſh colour: the leaves ſtand very irregularly, ſometimes two, ſometimes three, or more, at a joint; they are long, narrow, and pointed at the extremity: the flowers are of a fine florid red; they ſtand in long ſpikes on the tops of the ſtalks and branches.

It is common with us about waters. C. Bauhine calls it, Lyſimachia purpurea ſpicata. The ſtalk is ſometimes hexagonal, ſometimes quadrangular; the leaves ſometimes ſtand alternately. Under theſe ſeveral forms, it has been deſcribed as ſo many diſtinct ſpecies.

2. *Lythrum foliis alternis linearibus, floribus hexandris.*
*The alternate, linear-leaved Lythrum, with ſix ſtamina in the flower.*

The root is fibrous; the ſtalks are round, ſtriated, green, and eight inches high: the leaves ſtand alternately; they are oblong, narrow, and very like thoſe of the common hyſſop: the flowers are moderately large, oblong, and of a pale blue colour; they ſtand either ſingly, or two together, in the alæ of the leaves, from the bottom to the top of the plant.

It is found about waters. C. Bauhine calls it, Hyſſopifolia; Tournefort, Salicaria hyſſopi folio latiore.

The other ſpecies are, 1. The roundiſh-leaved Lythrum. 2. The very narrow-leaved Lythrum. 3. The broader, ſhort-leaved Lythrum. 4. The narrow and ſhort-leaved Lythrum.

*Claſs the Eleventh. Order the Second.*

## DODECANDRIA DIGYNIA.

*Plants which have twelve ſtamina and two ſtyles in each flower.*

## AGRIMONIA.

THE calyx is a ſmall, permanent perianthium, formed of a ſingle leaf, divided into five ſegments, placed on the germen, and ſurrounded with another cup: the corolla conſiſts of five plane, emarginated petals, with narrow ungues inſerted into the calyx: the ſtamina are an uncertain number of filaments, ſeven, ten, twelve, or more; they are very ſlender, ſhorter than the corolla, and inſerted into the calyx; the antheræ are ſmall, didymous, and compreſſed: the germen ſtands under the receptacle; the ſtyles are two; they are ſimple, and of the length of the ſtamina; the ſtigmata are obtuſe: there is no pericarpium: the calyx cloſes about it's neck, and becomes hard: the ſeeds are two, and round.

This genus comprehends the Agrimonia and Agrimonioides of Tournefort. In the Agrimonia, the exterior calyx grows to the interior one, and the ſeeds are two: the ſtamina from twelve to twenty; and the fruit ſurrounded with hairs. In the Agrimonioides, the exterior calyx is free from the inner one; the ſeed is ſingle, and the ſtamina are uſually ſeven.

1. *Agrimonia foliis omnibus pinnatis, fructibus hiſpidis.*
*The Agrimonia, with all the leaves pinnated, and with hiſpid fruit.* Agrimony.

The root is thick, oblong, fibrated, and of a duſky colour; the radical leaves are four or five inches long, and are compoſed of four or five pairs of oval, ſerrated pinnæ, adhering, without pedicles, to a middle rib, terminated by a ſingle, larger leaf at the end: the ſtalk is round, robuſt, hairy, erect, and two feet high; the leaves ſtand alternately on it, and are like the radical ones, but ſmaller: the flowers are large and yellow; they ſtand in a long ſlender ſpike at the top of the plant.

It is common in our paſtures. C. Bauhine calls it, Eupatorium veterum ſive Agrimonia. It has been eſteemed a cephalic, but now is not uſed

2. *Agrimonia pinnis rotundioribus, fructibus glabris.* Baſtard Agrimony.
*The ſmooth-fruited Agrimony, with roundiſh pinnæ.*

The root is oblong, thick, woody, and reddiſh; the radical leaves are pinnated, but the pinnæ are few, and of a roundiſh figure; they ſtand on long, hairy pedicles: the ſtalks are numerous, in part procumbent, hairy, reddiſh, and ramoſe; the leaves ſtand alternately, and are ſmall, ſhort, and auriculated at the baſe; the flowers are ſmall, few in number, and ſtand at the tops of the branches; they are yellow, and quickly fade: the fruit is ſmooth, and of the ſize of a wheat-corn.

It is a native of Italy; we have it in gardens. Tournefort calls it, Agrimonioides; C. Bauhine, Agrimoniæ ſimilis.

The other ſpecies are, 1. The larger-leaved, ſweet-ſcented Agrimony. 2. The ſmaller-leaved, ſweet Agrimony.

*Claſs*

*Claſs the Eleventh. Order the Third.*

## DODECANDRIA POLYGYNIA.

*Plants that have twelve ſtamina and ſeveral ſtyles in each flower.*

### SEMPERVIVUM.

THE calyx is a ſmall, permanent perianthium, divided into twelve hollow, acute ſegments: the corolla conſiſts of twelve oblong, lanceolated, acute, hollow petals, a little larger than the cup: the ſtamina are twelve thin, ſubulated filaments, of half the length of the corolla; the antheræ are roundiſh: the germina are twelve in number; they ſtand erect, and are placed circularly; they terminate in the ſame number of ſtyles, which are patent, and have acute ſtigmata: the fruit are twelve oblong, compreſſed capſules, placed in an orbicular order, acuminated outwards, and opening internally: the ſeeds are numerous, roundiſh, and ſmall: the number of the ſtamina and of the germina is not abſolutely determinate and certain in this genus.

1. *Sempervivum foliis radicalibus carnoſis, caulinis, imbricatis, membranaceis, corymbo racemoſo inflexo.* **Great Houſe-leek.**
*The fleſhy-leaved Sempervivum, with a racemous and inflex corymbus.*

The root is compoſed of a number of white fibres; the radical leaves are oblong, pointed, very thick and juicy, even at the edges, and diſpoſed in a circular form: the ſtalk is thick; ſucculent, round, and uſually reddiſh; it is thick beſet with ſmall leaves, pointed at the extremities: it grows to a foot high, and at the top divides into ſeveral ramifications, which turn back, and have on them a number of beautiful, pale red flowers.

It is common with us on houſe-tops. C. Bauhine calls it, Sedum majus vulgare.

2. *Sempervivum caule inferne nudo, lævi, ramoſo.*
*The Sempervivum, with the ſtalk at the bottom naked, ſmooth, and ramoſe.* **Tree Houſeleek.**

The root is brachiated; the ſtem grows to the thickneſs of a man's arm, and to three or four feet high; it is naked, and of a reddiſh colour, and ſends off a number of branches as thick as a man's thumb, which divide into others; and at the extremities of theſe ſtand round cluſters of leaves, arranged in the manner of the radical leaves of the common Houſeleek; they are of a bright green colour, oblong and broad, narroweſt at the baſe, and very lightly crenated about their edges, very ſucculent and tender. From the center of ſome of the cluſters of theſe leaves, on the upper branches of the plant, there grow thick pedicles, which ſupport numbers of large, whitiſh-yellow flowers.

It is a native of the iſlands of the Archipelago; it is common in our green-houſes Dodonæus calls it, Sedum arboreſcens majus.

*Claſs the Twelfth.*

## ICOSANDRIA.

*Plants which have about twenty ſtamina in every flower.*

THE claſſical character of the Icoſandria is this: the calyx is always hollow, and formed of a ſingle leaf: the corolla is affixed by it's ungues to the ſides of the calyx; and the ſtamina are affixed either to the ſide of the calyx, or to the corolla: the ſtamina are always more than twelve, uſually twenty, or about that number; but this is not ſo determinate and certain in them, as alone to conſtitute a generical character.

Of

Of the Icoſandria ſome have only one ſtyle in the flower, ſome have two, ſome three, ſome four, ſome five, and ſome a conſiderable number; they are, therefore, to be arranged into ſix orders, according to this diſtinction, under the names of Monogynia, Digynia, &c.

*Claſs the Twelfth. Order the Firſt.*

## ICOSANDRIA MONOGYNIA.

*Plants which have hollow, monophyllous cups, with the corollæ affixed by their ungues to the ſides of them, and about twenty ſtamina, inſerted either into the corolla; or into the ſide of the cup; and which have only one ſtyle.*

### CACTUS.

THE calyx is a deciduous perianthium, formed of a ſingle leaf, of a tubulato-concave form, ſtanding on the germen, and covered with a kind of ſquammoſe leaves: the corolla conſiſts of a great number of broad, obtuſe petals, the exterior ones ſhort, the interior longer and connivent: the ſtamina are numerous, ſubulated filaments, inſerted into the calyx, and ſhorter than the corolla: the antheræ are oblong and erect: the germen ſtands under the tube of the cup: the ſtyle is cylindric, and of the length of the ſtamina: the ſtigma is capitated, or multifid: the fruit is an oblong, umbilicated berry, containing only one cell, and covered with little leaves, like the calyx: the ſeeds are numerous, roundiſh, and ſmall.

This genus comprehends the Cereus, Opuntia, Melocactus, Tuna, and Pereſkia of authors. The Cereus is a long, cylindraceo-angulated plant; the Melocactus a roundiſh and angulated one; the Opuntia is ramoſe and dichotomous; and the Pereſkia is arboreſcent and folioſe, but the fruit alſo is folioſe.

1. *Cactus quatuordecim-angularis ſubrotundus.*
*The roundiſh Cactus, with fourteen angles.*

The Melon-thiſtle.

The root is fibrous. The plant riſes in an oblong, roundiſh form, reſembling a melon; it's height is about twelve inches, it's diameter nine or ten: it's ſurface is raiſed into fourteen longitudinal ridges, high, and beſet with tubercles, from which grow ſeries of very ſharp prickles; the tubercles are about nine on each ridge; the ſpines on each tubercle are about ten, and their length an inch. On the ſummit of the plant there ſtands a fine long and white downy matter, an inch high, and four inches in diameter in the tuft; among this ſtand longer ſpines, and the flowers, which are oblong, and of a fine red colour.

It is a native of the warmer parts of America; C. Bauhine calls it, Melocactus Indiæ occidentalis.

2. *Cactus ſexangularis longus rectus.*
*The long, ſexangular, ſtrait Cactus.*

The Torch-thiſtle.

The root is fibrous. The plant conſiſts of a ſingle ſtem, or body, of twenty, thirty, or more, feet in height, and of about five inches in diameter; of an angular figure, and deep green colour, and armed with cluſters of ſharp, firm ſpines, growing from tubercles, placed along the ribs; the number of ribs is, in general, ſix, but this is not certain; toward the top there are often eight or ten, and, toward the bottom, only five, The flowers grow from the ribs, uſually about the middle of the plant; they are, when open, of the ſize of a large roſe, and conſiſt of not leſs than forty petals; the outer ones purpliſh or greeniſh, the inner ones white; theſe ſtand but a very little time.

It is a native of Surinam, and many other parts of South America; we have it in our ſtoves. Herman and Ray call it, Cereus erectus altiſſimus Surinamenſis.

3. *Cactus*

3. *Cactus compreſſus articulatus ramoſus, articulis ovato-oblongis ſubinermibus.* **The Cochineal Plant.**

*The compreſſed, articulated Cactus, with oval joints, and few prickles.*

The root is fibrous. The plant is compoſed of a number of articulations, and grows to ten or twelve feet high. An oval body, thick, ſucculent, green, and eight or ten inches long, and ſix in diameter, firſt appears above the ground; from this grows another ſuch body, and from this others, each of which again produce more of the ſame kind, ſo as, in the whole, to compoſe a ramoſe body, compoſed of theſe articulations, fixed to another without pedicles; they are thick, ſucculent, and full of tubercles, from each of which grow a number of ſpines, but in this ſpecies they are leſs rigid and prickly than in the former. The flowers grow immediately out of the ſurface of theſe articulations; they are very large, and of a beautiful deep red, or of a paler red, ſtriated with a deeper. The fruit is large and ſucculent; it's juice of a blood red.

It is a native of Jamaica, and other parts of the Weſt Indies, but no where is ſo plentiful as in Mexico, where the Cochineal animal feeds on it. Dillenius calls it, Tuna mitior flore ſanguineo; others, Opuntia coccinellifera.

4. *Cactus caule tereti arboreo ſpinoſo, foliis lanceolato-ovatis.* **The Pereskia.**

*The arboreſcent, round-ſtalked Cactus, with lanceolato-oval leaves.*

The root is moderately thick, and divaricated. The plant aſſumes the form of a common tree. The trunk is thick, round, and beſet with ſpines, which are very rigid, long, and ſharp. The leaves ſtand irregularly; they have a downy matter at their inſertion on the ſtalks, and are of an oblong, and ſomewhat pointed, figure, thick, ſucculent, and green. The flowers are white, the fruit yellow and ſucculent, and covered with a kind of little leaves.

It is a native of Jamaica. Dillenius calls it, Pereſkia aculeata, flore albo, fructu flaveſcente; Plukenet, Portulaca Americana latifolia ad foliorum ortum lanugine obducta, longioribus aculeis horrida.

Theſe four ſpecies expreſs the four principal forms and manners of growing of the Cacti.

The other ſpecies are very numerous. Thoſe more uſually kept in our ſtoves are, 1. The round Cactus, with large tubercles. 2. The long, quadrangular Cactus, with compreſſed angles. 3. The tall, octangular Cactus, with obtuſe angles. 4. The common, oval, articulated Cactus, or Opuntia. 5. The great, articulated Cactus. 6. The bluiſh-flowered, great-ſpined, oval-jointed Cactus. 7. The climbing Cactus, with five obtuſe angles. 8. The little, ten-angled, very-ſpinoſe Cactus. 9. The triangular, ſcandent, articulated Cactus.

## PHILADELPHUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, divided into four acuminated ſegments: the corolla conſiſts of four large, patent, roundiſh, emarginated petals: the ſtamina are twenty ſubulated filaments, of the length of the cup: the antheræ are erect and quadriſulcous: the germen ſtands below the receptacle: the ſtyle is divided into four parts: the ſtigmata are ſimple: the fruit is an oval capſule, pointed at each end, and ſurrounded in the middle by the cup; it is compoſed of four valves, and contains as many cells: the ſeeds are numerous, oblong, and ſmall.

This genus comprehends the Syringa of authors. There is only one known ſpecies of it.

### PHILADELPHUS.

The root is brachiated and ſpreading. The ſhrub grows to ſix or eight feet high. It's bark is brown; it's wood brittle. The young ſhoots are long and green. The

leaves ſtand in pairs, and are large, oblong, broad, pointed at the extremity, and crenated about the edges; they are two inches and a half long, and near two inches broad, rugoſe, and of a pale green colour. The flowers ſtand in little cluſters, on the extremities of the branches; they are large, white, and very fragrant.

It is a common ſhrub in our gardens. C. Bauhine calls it, Syringa alba, ſive Philadelphus Athenæi.

## EUGENIA.

THE calyx is a permanent perianthium, compoſed of a ſingle leaf, divided into four oblong, obtuſe, hollow ſegments, and pregnant with a germen: the corolla conſiſts of four oblong, obtuſe, hollow petals, and is twice as large as the cup: the ſtamina are a great number of filaments, of the length of the corolla, and inſerted into the calyx: the antheræ are ſmall; the germen is turbinated, and ſtands under the receptacle: the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is ſimple: the fruit is a quadrangular, coronated drupe, containing only one cell: the ſeed is a roundiſh, ſmooth nut.

### EUGENIA. The Silver tree.

The root is long and brachiated. The tree grows to twenty feet high; it's trunk is ſtrait and regular; it's branches long; it's bark of a pale grey, and variegated with ſpots of a bright ſilvery white. The leaves ſtand in pairs; they are ſmooth, very thin, and of a greeniſh-yellow, an inch long, and near as broad at the baſe, whence they gradually diminiſh to a point; they are undivided at the edges, and have ſcarce any pedicles. The flowers are ſmall and whitiſh, and grow at the alæ of the leaves.

It is a native of Jamaica. Sir Hans Sloane calls it, Myrtifolia arbor cortice argenteo, flore pallide albicante.

## PSIDIUM.

THE calyx is a campanulated perianthium, compoſed of a ſingle leaf, lightly divided into five oval ſegments: the corolla conſiſts of five oval, hollowed, patent petals: the ſtamina are a great number of filaments, ſhorter than the corolla, and inſerted into the calyx: the antheræ are ſmall; the germen is roundiſh, and ſtands under the receptacle: the ſtyle is ſubulated, and very long: the ſtigma is ſimple: the fruit is a very large, oval berry, containing one cell, and coronated by the calyx: the ſeeds are numerous, very ſmall, and nidulant.

This genus comprehends the Guaicana of Tournefort.

### *Pſidium ramis quadrangulis.*
### *The quadrangular-branched Pſidium.*

The root is large and ſpreading; it's bark is of a browniſh-red. The tree grows to five-and-twenty feet high, and it's trunk to a foot and a half in diameter. The bark of the young ſhoots is reddiſh, or greeniſh; the leaves are oblong, thick, and pointed at the ends, of a dark green colour, ſmooth on the upper ſide, and ſcabrous underneath. The flower is of the ſize of that of a quince, and white. The fruit is of the ſize of a moderately large pear, uſually of a reddiſh colour, and of an agreeable taſte; but this, as well as the colour, is very different in the different ſtages of maturity. The fruit is eaten, and the bark of the root is uſed as an aſtringent.

## PUNICA.

THE calyx is a permanent perianthium, of a campanulated figure, compoſed of a ſingle leaf, coloured, and divided into five ſegments at the edge: the corolla conſiſts of five roundiſh, erecto-patent petals, inſerted into the calyx: the ſtamina are numerous, capillary filaments, ſhorter than the cup, and inſerted into the calyx: the antheræ are oblong; the germen ſtands below the receptacle; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is capitated: the fruit is a large, globoſe apple, coronated with the calyx, and formed into nine cells: the ſeeds are numerous, roundiſh,

roundiſh, and ſucculent; the receptacle is membranaceous, and divides every cell of the fruit into two parts.

Of this genus there is only one known ſpecies.

### PUNICA. The Pomegranate-tree.

The root is brachiated and large. The form of the plant is naturally that of a ſhrub, though, by culture and management, it ſometimes arrives at the height of a ſmall tree. The branches are long; the twigs long, ſlender, angular, and armed with ſharp and rigid ſpines. The leaves ſtand inordinately; they are oblong, moderately broad, of a bright green, obtuſely pointed, and placed on oblong pedicles, of a reddiſh colour. The flowers grow from the ſides of the branches; they are large, and of a fine deep red colour. The fruit is of the bigneſs of an orange, round, and covered with a hard rind.

It is a native of Italy, Spain, and Africa. Lobel calls it, Malus Punica; Tournefort, Punica quæ malum granatum fert. The flowers are ſometimes double, in which ſtate they are called Balauſtines, or the flowers of the wild pomegranate, and the fruit varies greatly in ſize and colour with culture; hence it is that we meet with the names of many ſpecies of the Punica, though they are but imaginary ones.

The flowers of the Pomegranate, and the bark of the fruit, are ſtrongly aſtringent.

## MYRTUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, erect, divided into five ſegments, and pregnant with a germen at it's baſe: the corolla conſiſts of five large, oval, undivided petals, inſerted into the calyx: the ſtamina are a number of capillary filaments, of the length of the corolla, and inſerted into the calyx: the antheræ are ſmall; the germen ſtands below the receptacle; the ſtyle is ſimple, and not ſhorter than the ſtamina: the ſtigma is obtuſe: the fruit is an oval berry, umbilicated by the cup, ſhut up, and contains three cells: the ſeeds are ſingle, and kidney-ſhaped.

*Myrtus floribus ſolitariis, calyce fructus diphyllo.* Common Myrtle.
*The ſingle-flowered Myrtus, with the cup of the fruit diphyllous.*

The root is brachiated and ſpreading. The trunk is thick and robuſt, and it's bark reddiſh. The ſhrub grows to ſix, eight, or more, feet in height. The leaves are an inch long, half an inch broad, pointed at the ends, and of a ſtrong green. The flowers ſtand ſingly, and are large and white. The berries are oblong, and black, when ripe.

It is a native of Italy, France, and Aſia; it is common in our gardens. C. Bauhine has made three ſpecies from this one, in it's different appearances. He calls them, 1. Myrtus Bætica latifolia. 2. Myrtus minor vulgaris. 3. Myrtus foliis minimis et mucronatis; it's leaves, indeed, differ extremely in the various plants of it.

The other ſpecies are, 1. The broad and more obtuſe-leaved Myrtus. 2. The cluſter, bay-leaved Myrtus. 3. The narrow-leaved Myrtus. 4. The broad, ſhort-leaved, cluſtered Myrtus. Several of theſe ſpecies have their berries ſometimes white, when ripe; and this has been made a new reſource of imaginary ſpecies.

## GARCINA.

THE calyx is a permanent perianthium, formed of four roundiſh, obtuſe, hollow, patent leaves: the corolla conſiſts alſo of four roundiſh, hollow, patent petals, and is ſomewhat larger than the cup: the ſtamina are ſixteen erect filaments, placed ſo as to form a cylindric body; they are ſimple, and ſhorter than the cup: the antheræ are roundiſh; the germen is ſuboval; the ſtyle is ſcarce apparent: the ſtigma is plane, patent, and peltated; it is permanent, and is divided into eight obtuſe ſegments: the fruit is a large, coriaceous, globoſe berry, containing only one cell, and coronated: the ſeeds are eight, convex on one ſide, angular on the other, villoſe and fleſhy.

## AMYGDALUS.

THE calyx is a deciduous perianthium, formed of a ſingle leaf, of a tubulated figure, divided into five obtuſe, patent ſegments: the corolla conſiſts of five petals, of an oblong, oval figure, obtuſe, hollow, and inſerted into the calyx: the ſtamina are thirty filiform, erect filaments, ſhorter than the corolla, and inſerted into the calyx: the antheræ are ſimple: the germen is roundiſh and villoſe: the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is capitated: the fruit is a great hairy, roundiſh drupe, with a longitudinal furrow: the ſeed is an oval, compreſſed nut, with the ſutures prominent on each ſide, with reticulated furrows, and punctated with holes.

This genus comprehends the Amygdalus and the Perſica of authors. The Amygdalus has the fruit dry and coriaceous; the Perſica has it ſoft and pulpy.

1. *Amygdalus foliis petiolatis, ſerraturis infimis glandulosis.* The Almond-tree.

*The Amygdalus, with petiolated leaves, and the lower ſerratures glandulous.*

The roots are brachiated, large, and ſpreading, The trunk is moderately large; the tree twenty or thirty feet high. The leaves are long, narrow, pointed at the extremities, and ſerrated about the edges. The flowers are moderately large, and beautiful; they are of a pale fleſh colour. The fruit is an inch long, and the ſtone nearly of it's whole ſize, ſomewhat compreſſed, and contains an oblong, compreſſed kernel, which is the Almond.

It is a native of Africa, but is now common throughout Europe. The Bitter Almond is the produce of the ſame ſpecies with the ſweet. Authors diſtinguiſh them, indeed, by the names of Amygdalus dulcis, and Amygdalus amara; but there is no diſtinction, except in the taſte of the kernel.

The oil of the bitter Almond is ſweet, and much more frequent than that of the other, being almoſt univerſally ſold in the ſhops under it's name.

2. *Amygdalus foliorum ſerraturis omnibus acutis.* The Peach-tree.

*The Amygdalus, with all the ſerratures of the leaves acute.*

The root is brachiated and ſpreading. The trunk grows to five inches in diameter; the branches are very long and ſpreading, and the tree, when a ſtandard, will riſe to twenty feet high. The bark is a reddiſh-brown, and ſmooth; the wood firm and reddiſh. The leaves are long, and ſomewhat broad, of a gloſſy green, ſerrated about the edges, and of a bitteriſh taſte. The flowers are of a pale red; the fruit large and ſucculent, and the ſtone large.

It is a native of Perſia, and is thence called Malus Perſica by authors. A ſyrup of the flowers is a gentle emetic.

Authors have made many imaginary ſpecies of the Peach-tree, from the ſlight differences of the fruit; but theſe are mere varieties. The only really diſtinct ſpecies we have to mention of this genus, beſide the two already deſcribed, are, 1. The dwarf, Indian Almond; and, 2. The dwarf, African Peach.

## PRUNUS.

THE calyx is a deciduous perianthium, compoſed of a ſingle leaf, of a campanulated form, and divided into five obtuſe, hollow, reflex ſegments, even at the edges: the corolla conſiſts of five large, roundiſh, hollowed, emarginated petals, inſerted into the calyx by their ungues, and patent: the ſtamina are about twenty-five filaments, of a ſubulated figure, nearly of the length of the corolla, and inſerted into the calyx: the antheræ are didymous and ſhort: the germen is roundiſh and entire: the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is orbiculated and entire: the fruit is a roundiſh drupe, with a longitudinal furrow: the ſeed is a roundiſh, compreſſed, acute nut, with the ſutures ſtanding out each way in an edge.

This

This genus comprehends the Prunus and Armeniaca, the Plum and the Apricot of authors.

1. *Prunus foliis lanceolato-ovatis.*
*The Prunus, with lanceolato-oval leaves.*
**The common Plum-tree.**

The root is brachiated and ſpreading. The tree grows to a conſiderable height. The leaves are oblong, broad, approaching to an oval figure, but pointed at the end, of a dark green colour, and ſerrated at the edges. The flowers are large, and white. The fruit is naturally large, blackiſh, and it's pulp of a ſweet taſte.

It is a native of moſt parts of Europe, and has been ſo altered by culture, as to produce a vaſt variety in it's fruit; whence authors have made many new ſpecies, on a very bad foundation. Authors call this native ſtate of the tree Prunus, Prunus domeſtica, and Prunus fructu magno dulci atro cæruleo.

The Prunes of the ſhops are the fruit of this dried.

2. *Prunus foliis ovatis cordatis.*
*The Prunus, with cordated, oval leaves.*
**The Apricot-tree.**

The root is large and ſpreading. The tree grows to thirty feet, or more, in height, and it's trunk to a conſiderable thickneſs. The leaves are of a roundiſh figure, approaching to oval, cordated at the baſe, and ſerrated round the edges. The flowers are large, beautiful, and of a pale red colour. The fruit is large, and it's pulp ſweet. Culture makes a great variation in the fruit of this tree, and thoſe who make diſtinct ſpecies of the great and little, the red, the black, and the yellow Plums, have made as many alſo of the Apricots. All this, however, is erroneous; theſe are varieties, not ſpecies.

The Apricot-tree is a native of Armenia.

3. *Prunus ſpinoſa foliis lanceolatis.*
*The ſpinoſe Prunus, with lanceolated leaves.*
**The Sloe Buſh.**

The root is ſpreading; the ſhrub low; it's bark blackiſh. The leaves are of a figure approaching to oval, but pointed at the extremities, and ſerrated. The flowers are ſmall and white; the fruit ſmall, round, and of a bluiſh-black colour.

It is common in our hedges. It's fruit is aſtringent, and an inſpiſſated juice of it is called the German Acacia, and uſed in the place of the true Succus Acaciæ.

The reader will eaſily be convinced that a diſſertation on the variety of Plums and Apricots would be the buſineſs of a writer on gardening, not on Botany. Linnæus has included, in ſome of his lateſt works, the Ceraſus and Padus, in this genus of Prunus, but the figure and ſtructure of the fruit, &c. forbid our aſſent to this.

## CERASUS.

THE calyx is a deciduous perianthium, formed of a ſingle leaf, of a campanulated figure, lightly divided into five obtuſe, hollow, ſerrated, and reflex ſegments: the corolla conſiſts of five hollow, roundiſh, large, emarginated patent petals, inſerted into the calyx: the ſtamina are about thirty ſubulated filaments; they are nearly of the length of the corolla, and are inſerted into the calyx: the antheræ are didymous and ſhort: the germen is roundiſh, and has a longitudinal furrow in it: the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is orbiculated, and emarginated on one ſide: the fruit is a drupe, of a ſubgloboſe figure, with a longitudinal furrow: the ſeed is a nut, of a ſubgloboſe figure, with the inferior ſuture riſing into a little edge.

1. *Ceraſus foliis ovato-lanceolatis.*
*The Ceraſus, with ovato-lanceolate leaves.*
**The Red Cherry-tree.**

The root is brachiated and large. The tree grows to a moderate ſize, and ſpreads out greatly in branches, The leaves are oblong, ſerrated, and pointed at the extremities. The flowers are large and white; the fruit is naturally round, large, and red.

red. The Heart Cherry, the May-duke Cherry, and all the other large red Cherries, are varieties of this ſpecies, and are moſtly owing to culture.

2. *Ceraſus foliis ovatis.* The Rock Cherry.
*The oval-leaved Ceraſus.*

The root is brachiated; the trunk thick, and uſually tortuous; the tree not very tall, but ſpreading. The leaves are oval, approaching to round, but little longer than wide, of a bright green colour, and ſerrated round the edges. The flowers are large, white, and fragrant. The fruit is ſmall, roundiſh, black, and bitter to the taſte: it's juice is of a deep purple colour.

It is a native of many of the northern parts of Europe. J. Bauhine calls it, Ceraſus ſylveſtris amara Mahaleb putata; C. Bauhine, Ceraſo affinis; Camerarius, Mahaleb.

The other really diſtinct ſpecies of this genus are, 1. The round-leaved, Alpine Ceraſus. 2. The cluſter Ceraſus. 3. The ſmall-fruited Ceraſus.

## PADUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, of a campanulated figure, villoſe at the baſe, divided into five ſegments, patent, and ſcarce at all reflex: the corolla conſiſts of five large, roundiſh, patent petals, inſerted by their ungues into the edge of the calyx: the ſtamina are twenty or thirty filaments, of a ſubulated figure, nearly of the length of the corolla, and inſerted into the calyx: the antheræ are roundiſh; the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is obtuſe and entire: the fruit is a roundiſh drupe: the ſeed is an oval, acuminated nut, with a furrow: the receptacle of the flower, which inveſts the inner ſurface of the cup, is hairy in this genus.

This comprehends the Lauroceraſus, and Ceraſus avium of authors.

1. *Padus glandulis duabus dorſo foliorum innatis.* The Laurel.
*The Padus, with two glandules on the back of the leaf.*

The root is brachiated and large. The tree grows to a moderate ſize; it's trunk is thick, and uſually tortuous; the young ſhoots are green. The leaves are green all the winter; they are four inches long, two broad, even at the edges, and of a firm ſtructure. The flowers are ſmall, white, and cluſtered together. The fruit is large, ſomewhat oblong, and black, when ripe.

It is a native of the Eaſt. Cluſius firſt brought it into Europe, in 1576; it is now every-where in our gardens. Authors call it, Lauroceraſus, and Lauroceraſus vulgaris.

2. *Padus glandulis duabus baſi foliorum ſubjectis.* The Bird's Cherry.
*The Padus, with two glandules at the baſe of the leaves.*

The root is brachiated and ſpreading. The tree grows to a moderate height. It's bark is brown; it's young ſhoots reddiſh. The leaves are oblong, broad, ſerrated, and of a dark green colour on the upper ſide, and whitiſh underneath, when the fruit is ripe. The flowers are large and white; they ſtand on ſeparate pedicles, on a long ſtalk, forming a kind of ſpike. The fruit is black, when ripe, and of a ſweet taſte, but not very agreeable.

It is a native of the north of England. C. Bauhine calls it, Ceraſus racemoſa ſylveſtris fructu non eduli.

The only known ſpecies, beſide theſe, is the leſſer Portugal Laurel, with oval leaves.

## STYRAX.

THE calyx is a ſhort, erect, cylindric perianthium, formed of a ſingle leaf, and divided into five ſegments: the corolla is of an infundibuliform ſhape, and conſiſts of a ſingle petal: the tube is cylindric, and no longer than the cup: the limb is large, patent, and divided into five lanceolated, obtuſe ſegments: the ſtamina are numerous filaments, placed in a circular direction, of a ſubulated figure, and inſerted

ſerted into the corolla: the antheræ are oblong and ſtrait; the germen is roundiſh; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is truncated; the fruit is a roundiſh drupe, having only one cell; the ſeeds are two, roundiſh, acuminated nuts, convex on one ſide, and plane on the other.

Of this genus there is only one known ſpecies.

STYRAX. The Storax-tree.

The root is large and divided; the tree grows to twenty or thirty feet high; the bark is of a duſky brown, the young roots reddiſh: the leaves ſtand alternately; they are of a roundiſh figure, but pointed at the extremities, and ſomewhat reſemble thoſe of the quince; they are an inch and a half long, nearly as broad, and whitiſh underneath: the flowers ſtand five or ſix together; they are large, white, and fragrant: the fruit is fleſhy, and of the ſize of a hazel nut.

The tree is a native of ſeveral parts of Europe, and of the Eaſt. In the latter part of the world it affords the fragrant reſin, called Styrax, on wounding it's trunk. C. Bauhine calls it, Styrax folio mali Cotonei; others ſimply, Styrax arbor.

## SAMYDA.

THE calyx of the Samyda is ſituated under the germen, and there is no corolla: theſe characters ſufficiently diſtinguiſh it from all the other genera, without a farther deſcription.

*Claſs the Twelfth. Order the Second.*

## ICOSANDRIA DIGYNIA.

*Plants which have hollow, monophyllous cups, with the corollæ affixed by their ungues to the ſides of them, and about twenty ſtamina inſerted either into the corolla, or into the ſide of the cup, and which have in every flower two ſtyles.*

## CRATÆGUS.

THE calyx is a permanent, concave, patent perianthium, compoſed of a ſingle leaf, and divided into five ſegments: the corolla conſiſts of five hollow, roundiſh, ſeſſile petals, fixed to the cup: the ſtamina are twenty in number; they are of a ſubulated figure, and inſerted into the cup: the antheræ are roundiſh; the germen is placed under the receptacle; the ſtyles are two, filiform and erect: the ſtigmata are capitated: the fruit is a fleſhy, roundiſh, umbilicated berry: the ſeeds are two, oblong, diſtinct, and cartilaginous.

1. *Cratægus foliis ovatis, repando-angulatis, ſerratis.* Virginia Thorn.
*The Cratægus, with oval, ſerrated, repando-angulated leaves.*

The root is ſpreading; the tree grows to twenty feet high, and is ramoſe: the leaves are divided deep in many places, but are in the whole of an oval figure, or approaching to ſuch; the flowers are moderately large and white: the fruit is of the ſize of of a ſmall nut, like the common haw in ſhape, but of a fine ſcarlet colour: the branches of the tree are armed with ſharp and robuſt thorns.

It is a native of Virginia. Plukenet calls it, Meſpilus apii folio Virginiana fructu, amplo coccineo.

2. *Cratægus foliis ovatis inæqualiter ſerratis.* The Wild Ser-
*The Cratægus, with oval, unequally ſerrated leaves.* vice-tree.

The root is brachiated; the tree not very tall, but ſpreading, often aſſuming the form of a ſhrub: the trunk is covered with a brown bark; the young ſhoots with a duſty white one: the leaves are broad, and ſomewhat oval; the flowers are ſmall, and of a greeniſh colour; the fruit is of a pear-faſhioned ſhape, and eſculent, but not very pleaſant to the taſte.

The tree is wild in the North of England. Ray calls it, Sorbus Anglica ſylveſtris.

The other ſpecies are, 1. The common white Thorn. 2. The oblong-leaved Cratægus. 3. The broad-leaved Cratægus. 4. The roundiſh-leaved Cratægus, or Aria of Theophraſtus. 5. The long, ſerrated-leaved Cratægus, called the Cotonaſter. 6. The arbutus-leaved Cratægus. 7. The laciniated-leaved Cratægus. 8. The great-leaved Cratægus, with robuſt ſpines.

*Claſs the Twelfth. Order the Third.*

## ICOSANDRIA TRIGYNIA.

*Plants which have hollow, monophyllous cups, with the petals affixed by their ungues to the ſides of them, and have about twenty ſtamina inſerted either into the corolla, or into the ſides of the cup, and in every flower three ſtyles.*

### SORBUS.

THE calyx is a permanent, concavo-patent perianthium, formed of a ſingle leaf, divided into five ſegments: the corolla conſiſts of five hollow, roundiſh petals, inſerted into the calyx; the ſtamina are twenty ſubulated filaments, inſerted into the calyx: the antheræ are roundiſh: the germen ſtands below the receptacle; the ſtyles are three, filiform and erect; the ſtigmata are capitated; the fruit is a ſoft, globoſe, umbilicated berry; the ſeeds are three, oblong, diſtinct, and cartilaginous.

1. *Sorbus foliis pinnatis, glabris.* The Quicken-
*The pinnated, ſmooth-leaved Sorbus.* tree.

The root is very long and divaricated; the tree grows to thirty feet high; it's trunk is ſtrait and even; it's branches numerous: the leaves are pinnated and large; the pinnæ are ſmooth, of an oblong figure, ſerrated at the edges, and whitiſh underneath: the flowers are white, moderately large, and ſtand in umbels: the fruit is moderately large, and of a fine bright red, with an admixture of yellow in it.

It is a native of many parts of England. J. Bauhine calls it, Sorbus aucuparia; C. Bauhine, Sorbus ſylveſtris foliis domeſticæ ſimilis.

2. *Sorbus foliis pinnatis incanis.* The true Ser-
*The Sorbus, with pinnated, hoary leaves.* vice-tree.

The root is ſimple and perpendicular; the tree is large; it's branches numerous and long; the leaves are pinnated, each conſiſting of eight or nine pairs of pinnæ, of an inch in length, and half an inch in breadth, ſtanding on long pedicles, hairy and ſerrated at the edges: the flowers are white, and ſtand in umbels: the fruit is large, oblong, turbinated, and fleſhy.

It is common, wild, in Italy and Germany. C. Bauhine calls it, Sorbus ſativa; others, Sorbus legitima.

The other ſpecies are, 1. The oval-fruited Sorbus. 2. The ſmall-fruited Sorbus.

*Claſs*

*Class the Twelfth. Order the Fourth.*

## ICOSANDRIA TETRAGYNIA.

*Plants with hollow, monophyllous cups, with the petals affixed by their ungues to the sides of them, with about twenty stamina inserted either into the corolla, or the sides of the cup, and with four styles.*

### TETRAGONIA.

THE calyx is a permanent perianthium, formed of four oval, deflexo-plane, coloured petals, revolute at the edge, and standing on the germen: there is no corolla: the stamina are twenty capillary filaments, shorter than the cup; the antheræ are oblong and incumbent: the germen is roundish, quadrangular, and placed under the receptacle; the styles are four, subulated, crooked, and of the length of the stamina: the stigmata are longitudinal and hoary: the fruit is a coriaceous crust, formed into a kind of square figure, by four longitudinal alæ: the opposite angles narrower; the seed is single, osseous, and contains four cells: the nuclei are oblong; four is the proper and natural number of the styles in the flower, but only two are sometimes visible.

Of this genus there is only one known species, which is sufficiently distinguished by these characters.

*Class the Twelfth. Order the Fifth.*

## ICOSANDRIA PENTAGYNIA.

*Plants which have monophyllous, hollow cups, with corollæ affixed by their ungues to the sides of them, with about twenty stamina inserted into the corolla or the cup, and with five styles.*

### AIZOON.

THE calyx is a permanent perianthium, formed of a single leaf, divided into five lanceolated segments; there is no corolla: the stamina are numerous, capillary filaments, inserted in several series into the sinus of the cup, and not equally distributed by the receptacle: the antheræ are simple; the germen is pentagonal; the styles are five, and simple; the stigmata are simple: the fruit is a ventricose capsule, of a pentagonal figure, and formed of five cells: the seeds are numerous and roundish; the stamina are in general placed three in a divisure of the calyx.

This genus comprehends the Ficoidea of Nissole.

### MESEMBRYANTHEMUM.

THE calyx is a permanent perianthium, divided into five acute, patent, short segments: the corolla consists of a multitude of petals, of a lanceolated figure, narrow, formed into several series a little longer than the cup, and cohering just at the base by their ungues: the stamina are numerous, capillary filaments, of the length of the cup; the antheræ are incumbent: the germen stands below the receptacle, and is coronated, with five obtuse angles: the styles are five, usually subulated, and erecto-reflex; the stigmata are simple: the fruit is a fleshy, roundish capsule, with a radiated umbilicus, and with a number of cells equal to that of the styles: the seeds are numerous and roundish.

This genus comprehends the Ficoides of Tournefort. The number of the styles is sometimes ten; sometimes they, and the segments of the calyx, are only four.

1. *Meſembryanthemum veſiculis hiſpidum, foliis alternis ovatis obtuſis undulatis.* The Ice Plant.

*The bliſtery, alternate, oval, obtuſe, and undulated-leaved Meſembryanthemum.*

The root is fibroſe and white; the ſtalk is round, ſucculent, variouſly divaricated, and of a pale green; the leaves are ſhort, obtuſe, undulated, and ſucculent: theſe and the ſtalks are beautifully ſpangled, with veſicles containing a clear fluid, and much reſembling little pieces of ice: the flowers are numerous, ſmall, and red.

It is a native of Africa, but is common in our ſtoves. Dillenius calls it, Meſembryanthemum cryſtallinum Plantaginis folio undulato.

2. *Meſembryanthemum foliis alternis teretibus obtuſis.* Flowering Kali.

*The alternate, cylindric, and obtuſe-leaved Meſembryanthemum.*

The root is oblong, ſlender, yellowiſh, and furniſhed with a few fibres; from the head of this riſe two thick, fleſhy, broad leaves, which lie flat on the ground, or are but little raiſed from it. From the center of theſe riſe two others of a finger's length, ſomewhat furrowed and roundiſh, and thick at the ends: from theſe riſe ſeveral more pairs of the like leaves, and at length the ſtalks; theſe are ſlender, rounded, and procumbent, or but little erect: the leaves ſtand alternately on them, and are rounded or cylindric, and obtuſe at the points: the flowers ſtand in the alæ of theſe, on thick pedicles; they are white; the antheræ yellow.

It is a native of Egypt, and of ſome of the ſouthern parts of Europe; it grows on the ſea-ſhores. C. Bauhine calls it, Kali craſſulæ minoris folio; Columna, Kali Neapolitanum Aizoides.

The other ſpecies are very numerous; the more ſingular and diſtinct are, 1. The cylindric-leaved, cape Meſembryanthemum. 2. The tripolium-leaved, ſilvery-flowered Meſembryanthemum. 3. The five-leaved, procumbent, ſcarlet-flowered Meſembryanthemum. 4. The yellow-flowered, conjugate, linguiform-leaved Meſembryanthemum. 5. The ſmooth, arcuated-leaved Meſembryanthemum. 6. The cord-leaved Meſembryanthemum. 7. The purple, triangular, acute-leaved Meſembryanthemum. 8. The long, triquetrous-leaved, yellow-flowered Meſembryanthemum. 9. The thick and ſcarlet Meſembryanthemum.

## MESPILUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, concavo-patent, and divided into five ſegments: the corolla conſiſts of five roundiſh, hollow petals, inſerted into the calyx: the ſtamina are twenty ſubulated filaments, inſerted into the calyx; the antheræ are ſimple; the germen ſtands under the receptacle: the ſtyles are five, ſimple and erect; the ſtigmata are capitated: the fruit is a globoſe, umbilicated berry, crowned with a connivent cup, but with the umbilicus almoſt perforated: the ſeeds are five; they are oſſeous and gibbous.

1. *Meſpilus foliis lanceolatis integerrimis ſubtus tomentoſis, calycibus acuminatis.* The Common Medlar.

*The lanceolated, undivided-leaved Meſpilus, with acuminated cups.*

The root is large and brachiated; the tree grows to no great height, but is ramoſe; the leaves are oblong, pointed at the ends, ſomewhat hairy on the upper ſurface, and more ſo underneath: the flowers ſtand ſingly; they are large and white: the fruit is large, and of a brown colour.

It is a native of Germany, and is common in our gardens. C. Bauhine calls it, Meſpilus Germanica folio laurino, non ſerrato, ſive Meſpilus vulgaris.

The other ſpecies of this genus are, 1. The laciniated-leaved Meſpilus. 2. The pear-

pear-leaved Virginian Meſpilus. 3. The almond-leaved, prickly Meſpilus. 4. The trilobate-leaved Meſpilus. 5. The rounder-leaved Meſpilus.

## PYRUS.

THE calyx is a permanent perianthium, compoſed of a ſingle leaf, hollow, and divided into five patent ſegments: the corolla conſiſts of five large, roundiſh, hollow petals, inſerted into the calyx: the ſtamina are twenty ſubulated filaments, inſerted into the calyx, and ſhorter than the corolla: the antheræ are ſimple; the germen ſtands under the receptacle; the ſtyles are five, filiform, and of the length of the ſtamina; the ſtigmata are ſimple; the fruit is an umbilicated apple of a figure, approaching to round, fleſhy, and containing five cells, formed by membranes: the ſeeds are oblong, obtuſe, acuminated at the baſe, convex on one ſide, and plane on the other.

This genus comprehends the Pyrus, the Malus, and the Cydonia of authors: all the kinds of pear, the apple, and the quince. It is wonderful, that authors have not attended to the perfect ſimilarity of the characters in all theſe. They have, for want of a due preciſion, raiſed varieties into ſpecies, and ſpecies into genera.

1. *Pyrus foliis ſerratis, pomis baſi productis.* The Pear-tree.
*The Pyrus, with ſerrated leaves, and lengthened fruit.*

The root is long and thick; the trunk large; the tree conſiderably high, and it's branches naturally erect: the leaves are placed alternately; they are roundiſh, or ſomewhat oblong, thick, and have long pedicles: the flowers are large and white; the fruit is naturally roundiſh, but lengthened at the baſe.

It is a native of Germany; our gardens afford infinite varieties of it from culture. Authors call it, Pyrus ſativa Bergamotta, and Bona Chriſtiana.

2. *Pyrus foliis ſerratis, pomis baſi concavis.* The Apple-tree.
*The ſerrated-leaved Pyrus, with fruit hollowed at the baſe.*

The root is ſpreading; the trunk thick; the tree low, and the branches uſually horizontal or oblique: the leaves are large, roundiſh, but pointed at the end, ſerrated and whitiſh underneath: the flowers are large and white, or reddiſh: the fruit roundiſh, and not lengthened, but hollowed, at the baſe.

It is a native of all Europe; we have infinite variety of the fruit in our gardens, owing ſolely to culture. The crab is the origin of all.

3. *Pyrus foliis integerrimis ſubrotundis ſubtus incanis.* The Quince-tree.
*The Pyrus, with roundiſh, undivided leaves, hoary underneath.*

The root is divided and ſpreading; the tree is low, and the bark browniſh; the leaves are large, roundiſh, of a deep green, often covered with a downy, looſe matter entirely, always hoary underneath: the flowers ſtand ſingly, and are large, beautiful, and of a pale fleſh colour: the fruit is large, lengthened at the baſe, and coronated with a long cup at the ſummit.

It is a native of Germany. All the botanical writers call it, Malus Cydonia and Cotonea. The authors, who have wrote on gardening, have made an almoſt infinite number of imaginary ſpecies, from the varieties of theſe three; but it is not the buſineſs of botanical writers to meddle with them.

## SPIRÆA.

THE calyx is a permanent perianthium, formed of a ſingle leaf, plane at the baſe, and lightly divided into five acute ſegments: the corolla conſiſts of five roundiſh, plane petals, inſerted into the calyx; the ſtamina are twenty ſubulated filaments, inſerted into the calyx, and ſhorter than the corolla: the antheræ are roundiſh; the germina

germina are five, oval and ſlender; the ſtyles are five, filiform, and of the length of the ſtamina; the ſtigmata are capitated: the fruit conſiſts of five oblong, compreſſed, acuminated capſules, each formed of two valves: the ſeeds are few, acuminated and ſmall. There is a ſpecies with but three ſtyles.

1. *Spiræa foliis obtuſis lanceolatis ſerratis, floribus duplicato-racemoſis.*
*The duplicato-racemoſe flowered Spiræa, with obtuſe, lanceolated, ſerrated leaves.* Spiræa.

The root is branched and ſpreading; the ſhrub riſes to four feet high; the branches are ſlender and reddiſh: the leaves ſtand irregularly; they are long, narrow, obtuſe, and ſerrated round the edges: the flowers are ſmall, and of a pale red; they ſtand in a kind of thick ſpikes, of four inches long.

It is a native of Siberia and Tartary; it is common in our gardens. C. Bauhine calls it, Frutex ſpicatus foliis ſalignis ſerratis.

2. *Spiræa foliis integerrimis, umbellis ſeſſilibus.*
*The undivided-leaved Spiræa, with ſeſſile umbels.* White ſhrubby Hypericum.

The root is ſmall, but branched; the ſhrub grows to three feet high; the branches are ſlender and tough; the bark of a deep brown: the leaves ſtand cloſely and irregularly; they are ſmall, and of a dark green: the flowers are of a beautiful white, and ſtand in a kind of little umbels, at the extremities of the branches on ſimple pedicles.

It is a native of America, but is common in our gardens. C. Bauhine calls it, Pruno ſylveſtri affinis Canadenſis. Jonquet, Hypericum fruteſcens Americanum flore albo.

The other ſpecies of Spiræa are, 1. The broader-leaved Spiræa. 2. The crenated-leaved, umbellated Spiræa.

## FILIPENDULA.

THE calyx is a ſmall, deciduous perianthium, formed of a ſingle leaf, divided into five reflexo-patent ſegments: the corolla conſiſts of five, or more, petals, inſerted into the calyx, oblong, obtuſe, plane, and patent: the ſtamina are a number of capillary filaments, inſerted into the calyx, and ſhorter than the corolla; the antheræ are ſimple: the germina are acuminated; they are uſually five, ſometimes more, and they terminate in ſo many ſhort ſtyles; the ſtigmata are capitated; there is no pericarpium, except the cruſts of the ſeeds: the receptacle is globoſe; the ſeeds are oblong, acuminated, and diſpoſed in a circular manner.

This genus comprehends the Filipendula and the Ulmaria of authors.

1. *Filipendula foliis pinnatis, foliolis uniformibus.*
*The pinnated-leaved Filipendula, with uniform foliola.* Dropwort.

The root is compoſed of a multitude of thick fibres, with large, roundiſh, or oval, tuberoſities adhering to them; in many parts black on the ſurface, and white within: the leaves are long, pinnated, and ſerrated about the edges: the pinnæ are ſmall, of a figure approaching to oval, and uniform: the ſtalk is uſually ſingle, ſtriated, hollow, erect, and ramoſe: the leaves are placed alternately; the flowers ſtand in a kind of umbels at the top of the branches; they are ſmall, ſweet-ſcented, white, and full of yellow antheræ.

It is a native of England; it grows in damp places. C. Bauhine calls it, Filipendula vulgaris.

2. *Fili-*

2. *Filipendula foliis pinnatis, folio impari trifido.*
*The Filipendula, with pinnated leaves, and the odd leaf trifid.*

Meadow Sweet.

The root is compoſed of a great number of thick, reddiſh fibres; the leaves are pinnated; the pinnæ broad, ſerrated, and ſcabrous, of a deep green on the upper ſurface, white underneath, and the leaf of which terminates the ſtalk or rib larger than the reſt, and trifid: the ſtalks are erect, rigid, ſtriated, and hollow: the flowers ſtand at their tops in a kind of umbels; they are white and ſweet-ſcented.

The plant is common about waters. Authors have called it, Barba capræ and Ulmaria. C. Bauhine, Barba capræ floribus compactis.

The other ſpecies are, 1. The laciniated-leaved Filipendula. 2. The ternate-leaved Filipendula.

*Claſs the Twelfth. Order the Sixth.*

## ICOSANDRIA POLYGYNIA.

*Plants which have monophyllous, hollow cups, with the corollæ affixed by their ungues to their ſides, and have about twenty ſtamina inſerted into the corolla, or into the cup, and numerous ſtyles.*

### ROSA.

THE calyx is a perianthium compoſed of a ſingle leaf, divided into five long, narrow, lanceolated ſegments, two of which alternately are appendiculated on each ſide, two others alternately naked, and the fifth appendiculated only on one ſide: the baſe is campanulato-globoſe: the corolla conſiſts of five obverſely cordated petals, of the length of the cup, and inſerted into the calyx; the ſtamina are very numerous, and very ſhort, capillary filaments, inſerted into the neck of the calyx; the antheræ are trigonal; the germina are numerous, and placed in the bottom of the cup; the ſtyles are of the ſame number; they are ſhort, villoſe, and cloſely compreſſed againſt the neck of the calyx, and inſerted into the ſides of the germina; the ſtigmata are ſimple: the fruit is formed of the fleſhy baſe of the cup; it is of a turbinated figure, coloured, ſoft, containing only one cell, drawn together at the neck, and coronated with ſome irregular laciniæ: the ſeeds are numerous, oblong, and hairy. The peculiar formation of the calyx is more conſtant and certain in the wild, than in the cultivated, kinds.

1. *Roſa caule aculeato, petiolis inermibus, calycibus ſemipinnatis.*
*The prickly-ſtemmed Roſe, with unarmed pedicles to the leaves, and ſemipinnate cups.*

The wild Briar.

The root is divaricated and ſpreading; the ſtem is three quarters of an inch in diameter, and grows to eight or ten feet high, but requires ſupport: the leaves are beautifully pinnated; the pinnules oval and ſerrated; the flowers are ſingle and large, of a white or pale red colour: the fruit is the common hip.

It is wild in our hedges, Authors call it, Roſa ſylveſtris and Roſa canina. All the variety of beautiful roſes in our gardens are varieties of this ſpecies, principally owing to culture; the red, the damaſk, the yellow, the monthly, the variegated, the white Roſe, the briar, and the like, are all produced from this original ſpecies. The flowers of the damaſk Roſe are purgative, thoſe of the red Roſe aſtringent, and the fruit of the wild Roſe pectoral. Preparations of them all are uſed in the ſhops.

2. *Roſa caule petioliſque aculeatis, calycibus indiviſis.*
*The Roſe, with the ſtem and petioles both prickly, and with undivided cups.*

The Burnet Roſe.

The root is divaricated. The trunk is robuſt, but low, very much branched, and very prickly. The leaves are pinnated; the pinnules are ſmall, roundiſh, and of a dark green colour. The flowers are ſmall and white; the fruit round.

It is a native of England. C. Bauhine calls it, Roſa ſylveſtris pomifera minor; J. Bauhine, Roſa pumila ſpinoſiſſima foliis pimpinellæ glabris.

The other genuine ſpecies of Roſe are, 1. The prickly-fruited, wild Roſe. 2. The great, apple Roſe. 3. The large-leaved Roſe. 4. The ſmooth Roſe.

## RUBUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, divided into five oblong, lanceolated, patent ſegments: the corolla conſiſts of five roundiſh petals, of the length of the cup, erecto-patent, and inſerted into the cup: the ſtamina are numerous filaments, inſerted into the cup, and ſhorter than the corolla: the antheræ are roundiſh and compreſſed; the germina are numerous; the ſtyles are capillary and ſmall, and ariſe from the ſides of the germina: the ſtigmata are ſimple and permanent: the fruit is a compound berry; the acini it is compoſed of are roundiſh, and arranged into a cluſter, convex, concave below, and each acinus has only one cell: the ſeeds are ſingle and oblong; the receptacle of the pericarpia is conic: the acini in moſt of the ſpecies grow together, ſo as to be inſeparable without breaking.

1. *Rubus foliis quinato-digitatis ternatiſque, caule petioliſque aculeatis.*
*The quinato-digitated and ternated-leaved Rubus, with the ſtem and petioles prickly.*

Common Bramble.

The root is oblong, nodoſe, and creeping. The ſtem is angulated, ſpinoſe, ſix feet long, but too weak to ſtand erect. The leaves ſtand three or five on a pedicle; when five, they are not pinnated, but digitated; they are large, oblong, broad, ſcabrous, and whitiſh underneath. The flowers are large and white, or fleſh-coloured; the fruit black, when ripe.

It is common in hedges throughout Europe. C. Bauhine and others call it, Rubus vulgaris, and Rubus fructu nigro.

2. *Rubus foliis quinato-pinnatis ternatiſque, caule hiſpido.*
*The hiſpid-ſtalked Rubus, with ternate and pinnated-quinate leaves.*

The Raſpberry Buſh.

The root is divaricated and ſpreading. The ſtem is round, ſlender, hiſpid, rather than prickly, eſpecially while young, and of a reddiſh colour. The leaves are large, oblong, and hairy; they ſtand three or five on a pedicle, and, when five, they are not digitated, as in the Bramble, but pinnated: the pedicles are about two inches long, and ſmooth. The flowers are white; the fruit red, tender, and ſucculent.

It is a native of moſt parts of Europe. C. Bauhine calls it, Rubus Idæus ſpinoſus; others, Rubus Idæus.

It's fruit is cooling and ſubacid; an agreeable ſyrup is made of it's juice.

The other ſpecies of Rubus are, 1. The ſmall, ternate-leaved, blue-fruited Rubus. 2. The herbaceous-ſtalked Rubus, called the Stone Bramble, and Chamærubus. 3. The ternate-leaved Rubus, with only one flower on the ſtalk. 4. The ſimple-leaved Rubus, with only one flower on the ſtalk, called the Chamæmorus. 5. The hoary Rubus.

## FRAGARIA.

THE calyx is a plane perianthium, compoſed of a ſingle leaf, lightly divided into ten ſegments, alternately exterior and narrow: the corolla conſiſts of five roundiſh, patent petals, inſerted into the calyx: the ſtamina are twenty ſubulated filaments, ſhorter than the corolla, and inſerted into the calyx: the antheræ are lunular; the germina are numerous, very ſmall, and collected into a head: the ſtyles are ſimple, and inſerted into the ſides of the germina: the ſtigmata are ſimple: there is properly no pericarpium: the common receptacle of the ſeed is of a roundiſh, oval figure, plane at the baſe, and pulpoſe, large, ſoft, and deciduous: the ſeeds are numerous, very ſmall, acuminated, ſcattered over the ſuperficies of the receptacle, and not deciduous.

*Fragaria flagellis reptans.* The Strawberry Plant.
*The Fragaria, with creeping tendrils.*

The root is long, reddiſh, and fibrated. The tendrils, or flagellæ, are round, knotty, and ſmooth; they run every way from the head of the root, and themſelves take root at the joints. The leaves are large, oblong, broad, ſerrated, and whitiſh underneath; they ſtand three on each pedicle: the pedicles are four or five inches long. The ſtalk is round, hairy, and ſhort, ramoſe at the top, and furniſhed with ſix or eight large, white flowers. The fruit is red, ſweet, and large.

It is a native of our woods. C. Bauhine calls it, Fragaria vulgaris. Culture alters it ſo much, as to have given riſe, by the varieties, to ſeveral imaginary ſpecies. The fruit is alſo very ſubject to variation; on the wild plant it is, in ſome places, very large, in ſome white, in ſome irregularly figured.

The other really diſtinct ſpecies are, 1. The ſcarlet, Virginian Fragaria. 2. The arboreſcent Fragaria, with green flowers. 3. The broader-leaved, deeply-ſerrated Fragaria, without tendrils.

## POTENTILLA.

THE calyx is a perianthium, formed of a ſingle leaf, plane, lightly divided into ten ſegments, alternately ſmaller, and reflex: the corolla conſiſts of five roundiſh, patent petals, inſerted by their ungues into the calyx: the ſtamina are twenty ſubulated filaments, ſhorter than the corolla, and inſerted into the calyx: the antheræ are oblong and lunulated: the germina are numerous, very ſmall, and collected into a head: the ſtyles are filiform, of the length of the ſtamina, and inſerted into the ſides of the germina: the ſtigmata are obtuſe: there is no pericarpium: the receptacle of the ſeeds is roundiſh, ſmall, and permanent, and is covered by the cup, and ſurrounded with the ſeeds, which are numerous and acuminated.

This genus comprehends the Quinquefolium and the Pentaphylloides of Tournefort, &c.

1. *Potentilla foliis pinnatis, caule repente.* Silver-Weed, or Wild Tanſey.
*The pinnated-leaved Potentilla, with a creeping ſtalk.*

The root is ſhort, reddiſh, and furniſhed with a multitude of fibres. The ſtalks are procumbent, and take root at their knots, or joints. The leaves are long, pinnated, and of a pale green colour on the upper ſide, and a ſilvery-white underneath; they are compoſed of about eight pairs of pinnæ, which are oblong, narrow, and ſerrated at the edges. The flowers ſtand on ſhort pedicles, and are of a beautiful yellow colour, and large.

It is common by way-ſides. C. Bauhine calls it, Potentilla; others, Argentina and Pentaphylloides ælatrum.

2. *Potentilla*

2. *Potentilla foliis digitatis, caule repente, pedunculis uniſloris.*

*The Potentilla, with digitated leaves, creeping ſtalks, and ſingle flowers.*

Common Cinquefoil.

The root is oblong, thick, and woody. The ſtalks are round, ſlender, and procumbent; they take root at their joints, and ſpread every way to two or three feet in length. The leaves ſtand five, or more, on each pedicle; they are of a duſky green colour, oblong, and ſerrated at the edges. The flowers ſtand ſingly, on long pedicles, and are large and yellow.

It is common by way-ſides. C. Bauhine calls it, Quinquefolium majus repens; others, Quinquefolium vulgare. It's root is aſtringent.

The other ſpecies are, 1. The ſhrubby Potentilla. 2. The ſilver-leaved, erect Potentilla. 3. The little, gold-yellow-flowered, Alpine Potentilla. 4. The ternate-leaved, erect, hairy Potentilla. 5. The white-flowered Potentilla, with leaves cut in at the ends. 6. The ſmaller-leaved, white Potentilla. 7. The woolly Potentilla. 8. The low, Canada Potentilla. 9. The ſtrawberry Cinquefoil. 10. The procumbent, ſhort-leaved Potentilla. 11. The ternate-leaved, ramoſe Potentilla.

## TORMENTILLA.

THE calyx is a plane perianthium, compoſed of a ſingle leaf, lightly divided into eight acute ſegments, alternately ſmaller: the corolla conſiſts of four obverſely cordated, plane petals, inſerted by their ungues into the calyx: the ſtamina are ſixteen ſubulated filaments, of half the length of the corolla, and inſerted into the calyx: the antheræ are ſimple; the germina are eight; they are ſmall, and form a kind of head: the ſtyles are of the length of the ſtamina; they are inſerted into the ſides of the germina, and the ſtigmata are obtuſe: the receptacle of the ſeeds is very ſmall; it is covered with ſeeds, and ſurrounded by the cup: the ſeeds are eight, oblong, and acuminated obtuſely.

Linnæus has, in his late writings, joined this genus with the Potentilla. The difference is principally in the number of the parts, but it is ſufficient.

There is only one ſpecies of it.

### TORMENTILLA.

The root is tuberous, and furniſhed with a number of fibres. The ſtalks are ſlender, hairy, reddiſh, round, a foot long, and ſcarce able to ſupport themſelves erect. The leaves are oblong, narrow, and ſerrated, and ſtand ſeven together, at every joint of the ſtalk. The flowers are ſmall, but of a beautiful yellow colour.

It is common on heaths. C. Bauhine calls it, Tormentilla ſylveſtris; others, Tormentilla vulgaris. It's root is a very good aſtringent.

## COMARUM.

THE calyx is a large, coloured, permanent perianthium, compoſed of a ſingle leaf, lightly divided into ten patent ſegments, alternately ſmaller, and inferior: the corolla conſiſts of five oblong, acuminated petals, ſcarce a third part ſo large as the calyx, into which they are inſerted: the ſtamina are twenty ſubulated filaments, inſerted into the cup, of the length of the corolla, and permanent: the antheræ are lunular and deciduous: the germina are numerous, roundiſh, and very ſmall; they are collected into a head: the ſtyles are ſimple, ſhort, and inſerted into the ſides of the germina: the ſtigmata are ſimple: there is no pericarpium: the common receptacle of the ſeeds is of the figure of a ſcrotum, very large, fleſhy, and permanent: the ſeeds are numerous, acuminated, and they cover the receptacle.

Of this genus there is only one known ſpecies.

## COMARUM.

The root is long, creeping, and blackiſh. The leaves are pinnated; there are uſually five or ſeven of the pinnæ on the ſame pedicle, arranged in pairs, with an odd one at the extremity; they are oblong, broad, ſerrated, and of a pale bluiſh-green colour. The ſtalks are round, ſmooth, in part procumbent, but often riſing a foot and a half, or more, erect; the leaves ſtand alternately on them. At the tops of the branches ſtand the flowers, which are purple, as is alſo the inſide of the calyx.

It is a native of the north of England. C. Bauhine calls it, Quinquefolium paluſtre rubrum; others, Pentaphyllum flore rubro.

## GEUM.

THE calyx is a perianthium, compoſed of a ſingle leaf, divided into ten ſomewhat erect ſegments, alternately very ſmall and acute: the corolla conſiſts of five petals, of a roundiſh figure, with narrow ungues, of the length of the calyx, and inſerted into it: the ſtamina are numerous, ſubulated filaments, of the length of the cup, and inſerted into it: the antheræ are ſhort, broad, and obtuſe: the germina are numerous, and are collected into a head: the ſtyles are long, thready, and inſerted into the ſides of the germina: the ſtigmata are ſimple: there is no pericarpium: the common receptacle of the ſeeds is oblong, hairy, and placed on the cup, which is, at that time, reflex: the ſeeds are numerous, compreſſed, hiſpid, and each furniſhed with a long, geniculated ſtyle.

This genus comprehends the Caryophyllata of Tournefort and others.

1. *Geum floribus erectis, fructu globoſo, ſeminum cauda uncinata nuda.* **Common Avens.**

*The erect-flowered Geum, with a globoſe fruit, and the tails of the ſeeds naked and uncinated.*

The root is ſhort, thick, tuberous, oblique, and furniſhed with fibres, of a reddiſh colour within, and of an aromatic ſmell. The leaves are pinnated and large; the pinnæ roundiſh, and the odd leaf, at the end, much largeſt, and divided into three ſegments: the ſtalk is erect, ſlender, a foot, or more, high: the leaves ſtand alternately on it. The flowers ſtand at the tops of the branches; they are erect, yellow, and moderately large. The fruit is a roundiſh, erect, hairy body, of the bigneſs of a ſmall nut.

It is common by way-ſides. C. Bauhine calls it, Caryophyllata vulgaris; Geſner, Geum urbanum.

2. *Geum floribus nutantibus, fructu oblongo, ſeminum cauda molli plumoſa.* **Purple marſh Avens.**

*The nutant-flowered Geum, with oblong fruit, and plumoſe tails to the ſeeds.*

The root is oblong and creeping. The leaves are pinnated, of a dark green colour, and ſomewhat hairy; the pinnæ are roundiſh, the terminatory leaf broad, and divided into three lobes. The ſtalks are numerous, round, hairy, and often reddiſh, a foot, or more, in height; the flowers ſtand alternately on them; they are placed on ſhort, reddiſh, hairy, bending pedicles; they are of a purple colour on the outſide, and of a pale red within, ſcarce appearing beyond the edge of the cup, and always hanging down. The fruit is oblong, and the tails of the ſeeds are beautifully plumoſe.

It is a native of the north of England. C. Bauhine calls it, Carophyllata aquatica nutante flore; Geſner, Geum rivale.

The other ſpecies are, 1. The ground ivy-leaved Geum. 2. The white-flowered, large-leaved, Virginian Geum. 3. The little, nutant-flowered Geum. 4. The great, yellow-flowered, Alpine Geum. 5. The divided-leaved, Alpine Geum. 6. The digitated-leaved, Alpine Geum.

## DRYAS.

THE calyx is a perianthium, formed of a ſingle leaf, divided into eight patent, linear, obtuſe ſegments, equal in ſize, and a little ſhorter than the corolla: the corolla conſiſts of eight oblong, emarginated, patent petals, inſerted into the calyx: the ſtamina are numerous, ſhort, capillary filaments, inſerted into the calyx: the antheræ are ſmall: the germina are ſmall, numerous, and formed into a cluſter: the ſtyles are capillary, and inſerted into their ſides: the ſtigmata are ſimple: there is no pericarpium: the ſeeds are numerous, roundiſh, compreſſed, and furniſhed with extremely long and lanigerous ſtyles.

The only known ſpecies of this genus has been confounded by moſt authors with the Caryophyllatæ.

### DRYAS.

The root is long, thick, woody, creeping, and of a reddiſh-black colour. The ſtalks are round, woody, diffuſe, and procumbent; they grow to ſix or eight inches long; they are reddiſh. The leaves ſtand alternately, and are ſimple, oblong, ſerrated, rugoſe, and hoary underneath; they are of a duſky green colour on the ſurface. The flowers are large and white; they ſtand ſingly on long, hairy pedicles.

It is a native of Sweden and Lapland. C. Bauhine calls it, Chamædrys Alpina ciſti flore; Ray, Caryophyllata Alpina chamædryos folio.

## *Claſs the Thirteenth.*

## POLYANDRIA.

### *Plants which have in every flower very numerous ſtamina.*

OF the Polyandria ſome have only one ſtyle, ſome have two, ſome three, ſome four, ſome five, ſome ſix, and, finally, ſome very numerous, ſtyles. The genera of this claſs will, therefore, be arranged, according to this diſtinction, into ſeven orders.

### *Order the Firſt.*

## POLYANDRIA MONOGYNIA.

### *Plants which have numerous ſtamina and only a ſingle ſtyle in the flower.*

OF theſe ſome have the ſtyle ſcarce viſible, others have it very long: the genera of each kind are numerous, and it will be convenient to arrange them in two diviſions, according to this obvious diſtinction.

### *Claſs the Thirteenth. Order the Firſt.*

### *Diviſion the Firſt.*

### *Polyandria Monogynia, with the ſtyle ſcarce viſible.*

## MARCGRAVIA.

THE calyx is a perianthium, compoſed of ſix ſquammæ, diſpoſed in pairs oppoſitely, and the inferior ones the ſmaller: the corolla conſiſts of a ſingle petal; it is of a conico-oval figure, and entire, and is every-where ſhut, and ſeparates from the parts of fructification at it's baſe: the ſtamina are numerous, ſhort, ſubulated filaments, deciduous, as the corolla, and patent: the antheræ are large, of an oblong oval figure, and erect: the germen is oval; there is no ſtyle; the ſtigma is obſolete: the fruit is a globoſe berry, with a ſingle cell: the ſeeds are numerous, nidulant, and very ſmall.

The

The flowers in this genus form a kind of umbel, and, in the midſt of it, there ſtand certain large ſeſſile bodies, of a ſtrange figure; they are formed each of a ſingle leaf, and are clavated, ringent, hollow in their lower part, and open at the baſe; they have ten acute, prominent labia before, and much reſemble the upper part of the aconite flower; theſe have uſually been called flowers, but they are not ſo; they are only excretory veſſels, or glands.

## MORISONA.

THE calyx is a fading perianthium, formed of a ſingle leaf, ventricoſe, lightly divided into two parts, patent at the mouth, dentated at the neck, and obtuſe: the corolla conſiſts of four oblong, obtuſe petals, patent beyond the cup: the ſtamina are numerous filaments: the antheræ are ſimple: the germen is oval; the ſtyle is ſimple; the ſtigma is capitated, and plano-convex: the fruit is a globoſe berry, with a hard, ſmooth rind, ſupported on the ſtyle, and containing only one cell: the ſeeds are numerous, reniform, and nidulant.

It is an American, deſcribed by Plumier, 23.

## BREYNIA.

THE calyx is a very ſmall perianthium, compoſed of a ſingle leaf, deciduous, and divided into four oval, coriaceous, patent ſegments: the corolla conſiſts of four oval, patent petals, and is ſomewhat larger than the cup: the ſtamina are very numerous, capillary filaments, longer than the corolla: the antheræ are erect and oblong: the germen is very long, very ſlender, clavated, and obtuſe: the ſtyle is ſcarce viſible; the ſtigma is obtuſe: the fruit is a very long, fleſhy, clavated, ſoft pod, formed of two valves, and containing only one cell: the ſeeds are numerous, kidney-ſhaped, fleſhy, and arranged longitudinally in the pod.

It is an American, deſcribed by Plumier, 16.

## CRATÆVA.

THE calyx is a deciduous perianthium, formed of a ſingle leaf, plane at the baſe, and lightly divided into four patent, oval ſegments: the corolla conſiſts of four oval petals, bent upwards toward the ſame ſide, and furniſhed with narrow ungues, of the length of the cup: the ſtamina are about ſixteen ſetaceous filaments, ſhorter than the corolla, and placed in a declinatory poſture, oppoſite to the petals: the antheræ are erect and oblong: the germen is of an oval figure, and is ſupported on a very long filament: the ſtigma is ſeſſile and capitated: the fruit is a very large, globoſe, fleſhy berry, containing one cell, and ſtanding on a thick ſtylus: the ſeeds are numerous, roundiſh, emarginated. and nidulatory.

This genus comprehends the Tapia of Plumier.

## CAPPARIS.

THE calyx is a perianthium, compoſed of four oval, hollow, and gibbous leaves: the corolla conſiſts of four very large, patent, roundiſh, emarginated petals: the ſtamina are numerous, filiform capillaments, of the length of the corolla: the antheræ are ſimple; the germen is oval, and is ſupported on a ſtylus of the length of the ſtamina: the ſtigma is obtuſe and ſeſſile: the fruit is a fleſhy, turbinated capſule, with a ſingle cell: the ſeeds are numerous, kidney-ſhaped, and nidulatory.

1. *Capparis caudice ſpinoſo, foliis ſubrotundis.* The Capers Shrub.
*The roundiſh-leaved, prickly Capparis.*

The root is long, divaricated, and ſpreading; the ſtems are numerous, three quarters of an inch thick, or more, and armed with ſharp, robuſt, and crooked ſpines, like thoſe of the bramble. The leaves ſtand alternately, and are of a roundiſh figure, ſometimes oblong and pointed; they are about two inches broad. The flowers ſtand

ſingly, on moderately long pedicles, ariſing from the alæ of the leaves; they are large, white, and beautiful.

It is a native of Italy. C. Bauhine calls it, Capparis ſpinoſa, fructu minore, folio rotundo; others, only Capparis. The buds make the pickled Capers, uſed in our ſauces.

The other ſpecies are, 1. The acute-leaved Capparis, with double ſpines. 2. The large-fruited Capparis, without ſpines. 3. The bay-leaved, arboreſcent Capparis of America.

## CAMBOGIA.

THE calyx is compoſed of four leaves; the corolla conſiſts of four petals; the fruit is an apple, containing eight cells.

### 1. *Cambogia fructu ſulcato.*
### *The Cambogia, with a ſulcated fruit.*

The root is very large, divaricated, and ſpreading; the tree very large, tall, and ramoſe; it's trunk often three feet in diameter. The leaves ſtand in pairs, and have ſhort pedicles; they are thick, firm, and of an ovato-lanceolate figure. The flowers ſtand in cluſters, at the extremities of the branches; they have ſhort pedicles, and are of a pale red, ſometimes of a yellow, colour. The fruit is of the bigneſs of an orange, roundiſh, but marked deeply with eight or nine furrows, with high ridges between them; it has a little kind of head at it's top, and is, at firſt, green, afterwards yellow, and, when ripe, white.

It is a native of the Eaſt Indies. Acoſta calls it, Carea pulli; Van Rheede, Caddam pulli; Hermans, Ghoraka.

### 2. *Cambogia fructu glabro.*
### *The ſmooth-fruited Cambogia.*

The root is large and ſpreading; the tree grows to ſixty feet high. The leaves ſtand in pairs, and are of a lanceolated figure. The flowers ſtand on ſhort pedicles, in little cluſters, at the tops of the branches. The fruit is of the bigneſs of a nutmeg, and is of a reddiſh-yellow, when ripe, which is alſo the colour of the flowers.

It is a native of Ceylon and Malabar. Herman calls it, Kanna ghoraka.

Both theſe trees, on wounding their bark, afford the Gambogium of the ſhops, a violent cathartic.

## ACTÆA.

THE calyx is a ſpathaceous perianthium, compoſed of four roundiſh, obtuſe, hollow, deciduous leaves: the corolla conſiſts of four deciduous petals, larger than the calyx, and of a quadrangulari-acuminated figure at each end: the ſtamina are about thirty capillary filaments, broadeſt at the top: the antheræ are roundiſh, didymous, and erect: the germen is oval; there is no ſtyle: the ſtigma is thick, and obliquely depreſſed: the fruit is a ſmooth, unilocular berry, of a figure approaching to oval, and with one furrow: the ſeeds are numerous, ſemicircular, truncated, and arranged in a double ſeries.

This genus comprehends the Chriſtophoriana of authors; there is but one known ſpecies of it.

### ACTÆA.

The root is oblong, thick, black without, yelloviſh within, and furniſhed with numerous fibres. The ſtalk is round, ſlender, ſtriated, jointed, and about two feet high. The leaves are large; they ſtand in a ternate order, on pedicles, which divide again into three parts, and, finally, the leaves are ſometimes ſo divided as to ſeem each compoſed of three others; they are oblong, of a deep green colour, ſerrated at the edges, and the terminatory leaf is uſually divided at leaſt into three lobes: the flowers are ſmall, white, and ſtand in cluſters: the berries are ſmall and black.

It is a native of moſt parts of Europe, in woods. C. Bauhine calls it, Aconitum racemoſum; other authors, in general, Chriſtophoriana. It varies in the colour of the berries; they are ſometimes white, ſometimes reddiſh; it is eſteemed poiſonous.

## BOCCONIA.

THE calyx is a deciduous, oval, obtuſe, hollow ſpatha, compoſed of two leaves: the corolla conſiſts of four very narrow petals: the ſtamina are uſually twelve very ſhort filaments: the antheræ are erect, and of the length of the cup: the germen is large, roundiſh, and contracted on each ſide: the ſtyle is ſimple, and ſlightly bifid: the ſtigmata are ſimple; the fruit is of an oval figure, but contracted on each ſide, long, compreſſed, containing only one cell, and filled with pulp: the ſeed is ſingle and globoſe.

It is an American, deſcribed by Plumier, 25.

## MUNTINGIA.

THE calyx is a perianthium, formed of a ſingle leaf, hollowed at the baſe, and divided into five large, permanent, and lanceolato-acute ſegments: the corolla conſiſts of five roundiſh petals, of the length of the cup; they are patent, and are inſerted into the cup: the ſtamina are numerous, capillary, and very ſhort filaments: the antheræ are ſimple; the germen is globoſe and hairy; there is no ſtyle; the ſtigma is capitated and pentagonal: the fruit is a round, unilocular berry, umbilicated with the ſtigma: the ſeeds are numerous, roundiſh, and ſmall.

It is an American, deſcribed by Plumier, 6.

## CHELIDONIUM.

THE calyx is a roundiſh ſpatha, compoſed of two oval, concave, obtuſe, deciduous leaves: the corolla conſiſts of four roundiſh, plane, patent petals, large, and narrow at the baſe: the ſtamina are numerous, plane filaments, about thirty, broadeſt at the top, and ſhorter than the corolla: the antheræ are oblong, compreſſed, erect, obtuſe, and didymous: the germen is cylindric, and of the length of the ſtamina: there is no ſtyle; the ſtigma is capitated and bifid: the fruit is a cylindric pod, formed of two valves, and containing only one cell: the ſeeds are numerous, oval, and ſmooth: the receptacle is linear between the valves, in form of a ſuture, and not opening.

This genus comprehends the Chelidonium and the Glaucium of Tournefort.

*Chelidonium glabrum pedunculis uniflori.* Yellow, horned Poppy.
*The ſmooth Chelidonium, with flowers, one on a peduncle.*

The root is long, robuſt, and white. The plant grows to two feet high, and is robuſt and branched. The ſtalks are round, of a pale greyiſh-green colour; the leaves are large, laciniated at their edges, and of a bluiſh-green. The flowers ſtand on ſingle pedicles, at the tops of the ſtalks; they are very large, and of a beautiful yellow colour.

It is a native of our ſea-coaſts. Tournefort calls it, Glaucium flore luteo.

The other ſpecies are, 1. The rough-leaved, purple-flowered Celandine; this is alſo called a horned Poppy. 2. The great Celandine, with the leaves finely divided. 3. The common, great Chelidonium.

## PAPAVER.

THE calyx is an oval, emarginated ſpatha, compoſed of two oval, hollow, deciduous leaves: the corolla conſiſts of four large, roundiſh, plane, patent petals, narroweſt at the baſe, and alternately ſmaller: the ſtamina are numerous, capillary filaments, much ſhorter than the corolla: the antheræ are compreſſed, oblong, erect, and obtuſe: the germen is roundiſh and large: there is no ſtyle; the ſtigma is peltated, plane, and radiated: the fruit is a capſule, containing one cell, coronated with a large, plane ſtigma, and opening with ſeveral foramina under it: the ſeeds are numerous and very ſmall; the receptacles are longitudinal plicæ, of the ſame number with the rays of the ſtigmata; they grow to the ſides of the fruit, or capſule.

*Papaver caule multifloro, foliis ſimplicibus glabris.*
*The ſimple, ſmooth-leaved Papaver, with many flowers on the ſtalks.*

Garden Poppy.

The root is fibrous and white. The plant riſes to four feet high. The ſtalk is robuſt and erect, round, of a greyiſh-green, and ſmooth. The leaves are four or five inches long, two and a half broad, ſmooth, laciniated at their edges, and of a bluiſh-green colour. The flowers ſtand at the tops of the branches, and are very large, of a whitiſh colour, but black toward the bottom. The fruit, which ſucceeds theſe, is the common Poppy-head of the ſhops.

It is a native of moſt parts of Europe, and is cultivated every-where in gardens. C. Bauhine calls it, Papaver hortenſe ſemine albo; others, Papaver album ſativum.

There are four varieties of this plant deſcribed as ſeparate ſpecies by authors: 1. The black-ſeeded Poppy. 2. The fimbriated, or criſtated, Poppy of C. Bauhine, with the flowers and ſeeds white. 3. The criſtated Poppy, with red flowers and black ſeeds; and, 4. The double-flowered, white Poppy. The old authors have recounted theſe as diſtinct ſpecies: our gardeners have of late multiplied the varieties of the double Poppies to an amazing number, and ſome have alſo added theſe to the number of ſpecies.

The truly diſtinct ſpecies of Papaver, beſide the common one, are, 1. The purple-flowered, horned Poppy, commonly called a Glaucium; of this alſo there are two varieties, called diſtinct ſpecies, the longer and ſhorter headed Argemone. 2. The great-flowered, very hairy, oriental Poppy. 3. The yellow, ſweet-flowered Poppy, with naked ſtalks. 4. The common field Poppy; the varieties of which, with large and with double flowers, have alſo been called diſtinct ſpecies. 5. The hoary-ſeeded Poppy. 6. The ſmaller, many-flowered Poppy. 7. The undivided-leaved, corn Poppy. 8. The yellow Poppy. 9. The coriander-leaved Poppy. 10. The hypecoum-leaved, oriental Poppy.

All the Poppies have a narcotic quality; the opium of the ſhops is the produce of the firſt ſpecies in Turky; with us the ſyrup of diacodium is made of the heads.

## ARGEMONE.

THE calyx is a roundiſh ſpatha, compoſed of three hollow, pointed, deciduous leaves: the corolla conſiſts of five roundiſh, erecto-patent petals, larger than the cup: the ſtamina are numerous, filiform, and of the length of the cup: the antheræ are oblong and erect: the germen is oval and pentangular: there is no ſtyle: the ſtigma is thick, obtuſe and reflex, divided into five parts, and permanent: the fruit is an oval, pentangular capſule, containing one cell, and ſeeming as if formed of five valves: the ſeeds are numerous, and very ſmall: the receptacles are linear, and grow to the angles of the pericarpium; they do not burſt.

This genus is nearly allied to the papaver; there is but one known ſpecies of it.

### ARGEMONE.

The root is fibrous. The plant grows to a foot high. The ſtalk is round, thick, and prickly. The leaves are oblong, jagged, and prickly at the edges, and of a pale green colour, variegated with lines and ſtreaks of white. The flowers are large and yellow, and grow in the alæ of the leaves.

It is a native of Mexico, and of ſome of the Caribbee iſlands. C. Bauhine calls it, Papaver ſpinoſum; Tournefort, Argemone Mexicana.

## SARACENA.

THE Saracena has a double perianthium; the lower is compoſed of three ſmall, oval, deciduous leaves; the upper one of five large, coloured, ſuboval, and deciduous ones: the corolla conſiſts of five petals, of an oval figure, bent, and covering the ſtamina; their ungues are ſtrait and oblong: the ſtamina are very numerous, ſmall filaments: the antheræ are ſimple; the germen is roundiſh; the ſtyle is cylindric, and very ſhort: the ſtigma is permanent; it is clypeated, peltated, pentangular, and covers the ſtamina: the fruit is a roundiſh capſule, with five cells: the ſeeds are numerous, roundiſh, and acuminated.

This

This genus comprehends the Calophyllon of Moriſon, and the Bucanophyllon of Plukenet.

*Saracena foliis brevioribus.*
*The ſhorter-leaved Saracena.*

**The hollow-leaved Plant.**

The root is brown, hard, oblong, and creeping; the leaves are of a ſtrange form, hollow and tumid: they are ten or twelve in number, four or five inches long, an inch in diameter, rounded, but ſomewhat gibboſe, narroweſt at bottom, and toward the top having a cavity there that will admit a man's thumb. At the top there ſtands a kind of lip, broad and patent, hoary underneath, and ſerving as a kind of operculum, being moveable, as it were, on a hinge; the opening of the cavity of the leaf is often covered with this. Theſe leaves ſtand erect; but there are, beſides theſe, a ſet of others, which are flat, roundiſh, two or three inches long, and ſpread round the baſe of theſe on the ground: the ſtalks are naked, and about a foot high; on the top of each ſtands a ſingle flower, which is an inch and a half long, near an inch in diameter, not quite erect, of an odd form, and of a purpliſh colour.

It is a native of many parts of America, in damp places, and about the ſea. C. Bauhine calls it, Limonio congener Cluſii; and moſt of our old writers deſcribe it under the name of the ſtrange, hollow-leaved plant.

The other ſpecies are, 1. The longer-leaved, yellow-flowered Saracena. 2. The ſlender-ſtalked Saracena.

## CLUSIA.

THE calyx is a perianthium, compoſed of five roundiſh, hollow, patent, and permanent leaves; the corolla conſiſts of five large, hollow, roundiſh petals: the nectarium is globoſe; it is formed of a ſingle leaf, and includes the germen, but is open at the ſummit, to give paſſage to the ſtigma: the ſtamina are very numerous, ſimple filaments, ſhorter than the corolla: the antheræ are ſimple; the germen is of an ovato-oblong figure; there is ſcarce any ſtyle: the ſtigma is ſtellated, plane, obtuſe, and has ſix dents at the edge: the fruit is an oval capſule, with ſix furrows on it; it is formed of ſix valves, and contains ſix cells; the valves open into a radiated form; the ſeeds are numerous, oval, and covered with a pulp, and fixed to a columnar, angular receptacle.

The number, in regard to the fruit, varies from five to ten; and the ſame proportion is obſerved in the ſtigma, the valves, and the cells.

It is an American, deſcribed by Plumier and by Plukenet, under the name of Cenchrimedea.

## MUNTINGIA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into five ſegments, and hollowed at the baſe: the ſegments are large, lanceolato-acuminated, and permanent: the corolla conſiſts of five petals, large, roundiſh, and inſerted into the cup: the ſtamina are numerous, and very ſhort, capillary filaments; the antheræ are ſimple: the germen is globoſe and hairy; there is no ſtyle: the ſtigma is capitated and pentagonal: the fruit is a globoſe berry, containing only one cell, and umbilicated with the ſtigma: the ſeeds are numerous, roundiſh, and very ſmall.

It is a native of South America, and is figured by Plumier.

## SANGUINARIA.

THE calyx is a deciduous ſpatha, formed of two leaves, oval, hollow, and ſhorter than the flower: the corolla conſiſts of eight oblong, obtuſe, very patent petals, alternately narrower, and placed interiorly: the ſtamina are numerous, ſimple filaments, ſhorter than the corolla; the antheræ are ſimple: the germen is oblong and compreſſed; there is no ſtyle: the ſtigma is thick, biſulcated by a ſtria of the length of the ſtamina, and permanent: the fruit is an oblong, ventricoſe capſule, formed of two

two valves, and pointed at each end: the ſeeds are numerous, roundiſh, and acuminated. Dillenius has figured it in his Hortus Elthamenſis.

## PODOPHYLLUM.

THE calyx is a ſpatha, emulating the figure of a perianthium; it is large, formed of three valves, of an oval figure, and hollowed, and is concavo-erect and deciduous: the corolla conſiſts of nine hollow, rounded petals, folded or plicated at the rim, and ſmaller than the cup: the ſtamina are about twenty very ſhort filaments; the antheræ are oblong and large; the germen is roundiſh; there is no ſtyle: the ſtigma is obtuſe and plicated: the fruit is a capſule of an oval figure, containing only one cell, and crowned with the ſtigma: the ſeeds are numerous and roundiſh, and the receptacle free.

This genus comprehends the Anapodophyllon of authors. There is but one known ſpecies of it.

PODOPHYLLUM. **The May Apple.**

The root is white, ſucculent, and tuberculous; the ſtalk riſes ſingle to ſix inches high, and there divides into two parts, of three or four inches long each; on each of theſe ſtands a large, ſingle leaf, of a roundiſh figure, but divided into ſix parts, of the breadth of a man's hand, or more: the flowers ſtand ſingly between the two branches of the ſtalks, on a pedicle of half an inch long; before it is open, it reſembles the fruit of the hip or wild roſe; but, when open, it is large and white: the fruit is at firſt green; and when ripe, reddiſh.

It is a native of Virginia, &c. Tournefort calls it, Anapodophyllum Canadenſe Morini.

## NYMPHÆA.

THE calyx is a large, coloured, and permanent perianthium, formed either of five or four leaves: the corolla conſiſts of a number of petals, uſually fifteen; they are ſmaller than the cup, and are inſerted into the ſide of the germen, in more than a ſingle ſeries: the ſtamina are very numerous filaments, often not leſs than twenty; they are ſhort, flatted, and crooked: the antheræ are oblong, and grow to the ſides of the ſtamina: the germen is oval and large; there is no ſtyle: the ſtigma is orbiculated, plane, peltato-ſeſſile, and marked with rays, crenated at the edge, and permanent: the fruit is a rude, oval, fleſhy berry, drawn together at the neck, coronated at the top, and contains ſeveral cells, from ten to fifteen, which are full of pulp: the ſeeds are numerous and roundiſh.

The calyx and corolla in this genus are very uncertain, in regard to number and figure. The Nymphæa of Boerhaave has the petals ſmall, and five roundiſh leaves to the cup: the Leuconymphæa, of the ſame author, has the cup ſcarce larger than the corolla, and conſiſting of four oval leaves; and the Nelumbo of Tournefort has the pericarpium truncated with cells, containing ſingle ſeeds, making their appearance at peculiar apertures in the diſk of the ſtigma. Yet all theſe are properly of the ſame genus.

*Nymphæa calyce magno pentaphyllo.* **Yellow Water Lily.**
*The Nymphæa, with a large pentaphyllous cup.*

The root is long, and as thick as a man's leg; the leaves are affixed to long pedicles, and ſwim on the ſurface of the water; they are ſomewhat longer than broad, and in ſome degree reſemble the flat bottom of a horſe's foot; the flowers are large and yellow, and they ſtand ſingly only on long pedicles, juſt ſhewing themſelves above the ſurface of the water.

The plant is common in our rivers. The botanical writers in general call it, Nymphæa lutea major.

The other ſpecies are, 1. The great, white, water Lily. 2. The dentated-leaved, water Lily. 3. The round-leaved, white Nymphæa. 4. The Nelumbo, or Indian Nymphæa, with red flowers, called, by botanical writers, the Faba Ægyptiaca.

*Claſs*

*Claſs the Thirteenth. Order the Firſt.*

*Diviſion the Second.*

*Polyandria Monogynia, with elongated ſtyles.*

## DELIMA.

THE calyx is a perianthium, compoſed of five oblong leaves; there is no corolla: the ſtamina are numerous, ſhort, and ſlender filaments: the antheræ are tumid and oblong; the germen is oval; the ſtyles moderately long and ſlender; the ſtigma capitated; the fruit is a capſule formed of two valves, and containing only two ſeeds.

There is but one known ſpecies of this genus, which needs no farther deſcription.

## SLOANEA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into ſeven ſegments, of a ſemi-lanceolated figure; there is no corolla, but the calyx is ſometimes taken for one: the ſtamina are numerous, ſubulated filaments, broadeſt at top, and of the length of the cup; the antheræ grow to their ſides: the germen is ſituated in the bottom of the cup: the ſtyle is ſubulated, and longer than the ſtamina; the ſtigma is acute: the fruit is a large, roundiſh, echinated capſule, formed of four valves; the ſeeds are oval, obtuſe, fleſhy, and have oblong nuclei.

It is a native of South America, and is figured by Plumier, 15.

## XYLON.

THE calyx is a permanent, campanulated perianthium, formed of one leaf, and divided lightly into five parts at the edge; the corolla conſiſts of a ſingle petal, divided into five oval, hollow, patent ſegments: the ſtamina are ſubulated, and of the length of the corolla; the antheræ are oblong, crooked, and incumbent: the germen is roundiſh; the ſtyle is ſlender, and of the length of the ſtamina: the ſtigma is capitated; the fruit is a large, oblong, turbinated capſule, formed of five woody valves, and containing five cells: the ſeeds are roundiſh, and affixed to a columnar, pentagonal receptacle, and have a quantity of fine down or cotton adhering to them.

*Xylon foliis digitatis, caule ſpinoſo.* **Prickly Cotton-tree.**
*The prickly-ſtalked, digitated-leaved Xylon.*

This grows to be a large tree, fifty feet, or more, in height: the wood is ſpungy and ſoft; the bark brown and prickly: the leaves are of a digitated form, and rounded in their circumference; they ſtand on long, ſtriated pedicles, nodoſe at the baſe: the flowers are large, and of a beautiful purple; they grow in cluſters: the fruit contains a great quantity of cottony matter about the ſeed.

It is a native of both the Eaſt and Weſt Indies. C. Bauhine calls it, Goſſipium arboreum caule ſpinoſo.

The other ſpecies are, 1. The willow-leaved, not prickly Xylon. 2. The larger-flowered, not prickly Xylon. 3. The fine downed Xylon or Cotton.

## MIMOSA.

THE calyx is a very ſmall perianthium, formed of a ſingle leaf, and divided into five ſhort ſegments at the top: the corolla is ſmall; it conſiſts of a ſingle petal of a campanulated form, lightly divided into five ſegments: the ſtamina are a number of very long, capillary filaments; the antheræ are incumbent: the germen is oblong; the ſtyle is filiform, and ſhorter than the ſtamina: the ſtigma is truncated; the fruit is a

long legumen or pod, with ſeveral tranſverſe partitions in it: the ſeeds are numerous and roundiſh.

This genus comprehends the Mimoſa of Tournefort, the Acacia of the ſame author, and the Inga of Plumier. In ſome the ſtamina are very numerous; in others they are regularly ten, in others only five, and in ſome but four; in this laſt caſe, the calyx and corolla are divided only into four ſegments. The legume of the Mimoſa is articulated, and the leaves are ſenſitive; the legume of the Acacia is cylindric, and the leaves do not move on the touch; the legume of the Inga is fleſhy, and the leaves are pinnated, and their rib alated.

After theſe diſtinctions, the deſcription of even a ſingle ſpecies is not neceſſary. The Mimoſæ of authors are, 1. The narrow-leaved Mimoſa. 2. The broader-leaved Mimoſa. 3. The Mimoſa, with glomerated pods. 4. Prickly, large-leaved Mimoſa. 5. The prickly and more robuſt Mimoſa. 6. The Mimoſa, with leaves on long pedicles.

The Acaciæ of authors are very numerous, but all that are called diſtinct ſpecies are not ſuch: the more remarkable and certainly diſtinct are, 1. The Farneſian Acacia, with double, diſtinct ſpines. 2. The true Ægyptian Acacia, whence the Succus Acaciæ and Gum Arabic. 3. The great-leaved Acacia. 4. The purple-flowered Acacia, with compreſſed pods. 5. The broad-leaved, white-flowered Acacia. 6. The tamarind-leaved Acacia. 7. The purple, walnut-leaved Acacia. 8. The very ſmall-leaved Acacia. 9. The bull's-horn, or thick-ſpined Acacia. 10. The very numerous and ſmall-leaved Acacia. 11. The tall, yellow-flowered Acacia.

## CARYOPHYLLUS.

THE calyx is double; there is a perianthium for the flower, and another for the fruit: the perianthium of the fruit is permanent, very ſmall, acute, and divided into four ſegments, and placed under the germen: the perianthium of the flower is placed upon the germen, and is compoſed of four roundiſh and hollow leaves: the corolla conſiſts of four petals, roundiſh, crenated, and ſmaller than the leaves of the cup: the ſtamina are numerous, capillary filaments; the antheræ are ſimple: the germen is oblong, large, and terminated by four rigid and patent corniculæ: the ſtyle is ſimple, and inſerted into a quadrangular receptacle; the ſtigma is alſo ſimple: the fruit is oval, and contains a ſingle cell, and is umbilicated with the corniculæ of the germen, which then become connivent: the ſeed is ſingle, oval, and large.

Of this genus there is but one known ſpecies.

### CARYOPHYLLUS. The Clove-tree.

This grows to fifteen or twenty feet high; it's trunk is thick, and it's bark ſmooth and brown; the branches are numerous and ſpreading: the leaves ſtand very thick on them; they are four inches long, near two in breadth, and of the ſhape of thoſe of the bay-tree: the flowers ſtand in cluſters; they are ſmall, of a beautiful blue, and very fragrant.

It is a native of Ternate, and ſome of the Molucca Iſlands. The cloves, uſed with us as a ſpice, are the embryo fruit, with the unopened flowers affixed to them. They are gathered in November.

## MESNA.

THE calyx is a permanent perianthium, compoſed of four ſmall, oval leaves: the corolla conſiſts of four large, hollow, rounded petals: the ſtamina are very numerous filaments, of the length of the cup: the antheræ are ſimple: the germen is roundiſh; the ſtyle is ſimple, and the ſtigma quadridentated: the fruit is a coriaceous capſule, of a roundiſh, acuminated figure, formed of four valves, and marked with as many elate ſutures running longitudinally: the ſeeds are four, large, fleſhy, of a turbinated, triquetrous form, and obtuſe.

Of this genus there is but one known ſpecies, an Aſiatic, figured in the Hortus Mal. 3. 53.

MAMMEA

12

Dryas

Eugenia

The Silver Tree

13

Mesna

Psidium

Styrax

Mespilus

Punica

Amygdalus

Rubus

Prunus

Myrtus

B. Cole Sculp.

Padus

Syringa

Tormentilla

Saracena

Chelidonium

Tilia

Nymphæa

Caryophyllus

Podophyllum

Vateria

Argemone

Capparis

Irevia

## MAMMEA.

THE calyx is a deciduous perianthium, compoſed of two ſmall, concave, oval leaves: the corolla conſiſts of four roundiſh, hollow, patent petals, larger than the leaves of the cup: the ſtamina are numerous, ſimple filaments, of about half the length of the corolla; the antheræ are roundiſh; the germen is roundiſh; the ſtyle is conic, and of the length of the ſtamina; the ſtigma is ſimple and permanent: the fruit is a very large, fleſhy berry, pointed with the ſtyle of a ſpherical figure, and containing only one cell: the ſeed is callous, and of an oval figure.

It is a native of South America, figured by Plumier 4.

## CALOPHYLLUM.

THE calyx is a deciduous, coloured perianthium, divided into four ſegments: the corolla conſiſts of four roundiſh, hollow, patent petals, and is larger than the cup: the ſtamina are numerous, capillary filaments, ſhorter than the corolla; the antheræ are roundiſh; the germen is roundiſh; the ſtyle is of the length of the ſtamina, and ſimple; the ſtigma is capitated; the fruit is a large, globoſe drupe, with only one cell: the ſeed is a large, ſingle, globoſe, acuminated nut.

It is a native of the Eaſt Indies, and of South America. Plumier calls it Calaba.

## EUPHORBIA.

THE calyx is a rugoſe, bellied, coloured perianthium, permanent, compoſed of a ſingle leaf, and divided into four, ſometimes into five, ſegments at the edge: the corolla conſiſts of four, ſometimes five, petals; they are thick, gibbous, turbinated, truncated, and ſituated irregularly, alternately with the ſegments of the cup, and are affixed by their ungues to the edge of the cup; theſe, as well as the cup, are permanent: the ſtamina are numerous filaments, twelve, or more, ſlender and affixed to the receptacle, and longer than the corolla: the antheræ are globoſe and didymous; the ſtyle is ſimple and ſhort; the germen roundiſh, but three-cornered: the ſtigmata are three, ſemibifid and obtuſe: the fruit is a roundiſh, trilobated capſule, containing three cells, and hanging on the ſtyle, which becomes elongated; the ſeeds are ſingle and roundiſh.

This genus comprehends the Tithymalus, the Tithymaloides, the Eſula, and the Euphorbium of authors.

The Euphorbium has a fleſhy or angular ſtalk; and the petals, in ſome ſpecies, are trifid; it has no leaves. The Tithymalus has leaves on the ſtalk, and the ſtalk of the common kind; and the Tithymaloides has the calyx, gibbous on the lower ſide.

After theſe diſtinctions, deſcriptions of any of the ſpecies are not neceſſary. The ſpecies, called Euphorbia by authors, are, 1. The thick-ſtalked, cereus-like Euphorbia, from which the Euphorbium of the ſhops is obtained. 2. The thinner-ſtalked, cereus-like Euphorbia. 3. The ſeven-ribbed Euphorbia, with long ſpines. 4. The many-ribbed, tuberculous Euphorbia. 5. The four or five-ribbed, thick Euphorbia. 6. The tuberous, ſquammous-ſtalked Euphorbia. 7. The Meduſa Euphorbia. 8. The conic Euphorbia. 9. The opuntia-like Euphorbia. 10. The Euphorbia, without prickles.

Of thoſe, called by Boerhaave Tithymaloides, there are, 1. The large, myrtle-leaved Euphorbia. 2. The nerium-leaved Euphorbia. 3. The broader, nerium-leaved Euphorbia.

The ſpecies, called Tithymals by authors, are very numerous. We have, native in our own kingdom, 1. The wood-ſpurge, or great almond-leaved Euphorbia. 2. The longer-leaved, wood Euphorbia. 3. The rough-fruited Euphorbia. 4. The ſea-ſpurge, or Euphorbia. 5. The knobby-rooted Euphorbia. 6. The wild, broad-leaved Euphorbia. 7. The long-leaved, corn Euphorbia. 8. The round-leaved, ſea Euphorbia. 9. The dwarf, annual Euphorbia. 10. The ſun-ſpurge, or Euphorbia. 11. The little, round-leaved Euphorbia. 12. The little, purple, round-leaved Euphorbia.

The ſpecies of other parts of the world are yet more numerous: they are, 1. The broad-leaved, tree Euphorbia. 2. The ſoft-leaved, tree Euphorbia. 3. The roundiſh-leaved, tree Euphorbia. 4. The almond-leaved, tree Euphorbia. 5. The box-leaved, tree Euphorbia. 6. The great, long-leaved Euphorbia, or Cataputia. 7. The leſſer Cataputia. 8. The broad-leaved, Spaniſh Euphorbia. 9. The hoary Euphorbia. 10. The flax-leaved Euphorbia. 11. The red-headed Euphorbia. 12. The toad-flax-leaved, lunated-flowered Euphorbia. 13. The flax-leaved, tree Euphorbia. 14. The prickly, ſea Euphorbia. 15. The willow-leaved Euphorbia. 16. The ſhrubby, bog Euphorbia. 17. The little, hairy, round-leaved Euphorbia. 18. The cordated-leaved Euphorbia. 19. The procumbent Euphorbia.

## TRIUMFETTA.

THERE is properly no calyx; ſome have taken the corolla for a calyx, but erroneouſly: the corolla conſiſts of five linear, erect, obtuſe petals; they are hollowed and bent backward; the point is prominent, below the apex, and they are deciduous: the ſtamina are ſixteen equal, erect, ſubulated filaments, of the length of the corolla; the antheræ are ſimple: the germen is roundiſh; the ſtyle is of the length of the ſtamina; the ſtigma is bifid and acute: the fruit is a globoſe capſule, every-where ſurrounded with hooked prickles, and contains four cells: the ſeeds are two, convex on one ſide, and angular on the other, but one of the two ſeeds of each cell uſually ripens.

It is a native of South America, and is figured by Plumier, 8.

## PEGANUM.

THE calyx is a permanent perianthium, compoſed of five linear, erect, acute leaves, of the length of the corolla: the corolla is compoſed of five petals, of an oblong, oval figure, and placed erecto-patent: the ſtamina are fifteen ſubulated filaments, dilated at the baſe, and of about half the length of the corolla: the antheræ are oblong and erect: the germen is roundiſh, but ſomewhat trigonal; the ſtyle is filiform, and three-cornered, and of the length of the antheræ; the ſtigmata are three, and longer than the ſtyle: the fruit is a capſule, of a roundiſh but ſomewhat trigonal figure; it is compoſed of three valves, and contains three cells: the ſeeds are numerous, oval, and pointed.

### PEGANUM. Wild Rue, or Harmel.

The root is fibrous; the ſtalks are numerous, firm, hard, and grow to a foot, or more, in height: the leaves are divided into a multitude of long and narrow ſegments; the flowers ſtand at the tops of the branches, and are large and white; the antheræ are yellow.

It is a native of the Eaſt, and grows in looſe ſand, where ſcarce any other plant can live. Tournefort calls it, Harmala; C. Bauhine, Ruta ſylveſtris flore albo magno; others, Ruta Syriaca.

## ELÆOCARPUS.

THE calyx is a ſmall perianthium, compoſed of five oblong, pointed leaves: the corolla conſiſts of five petals; the ſtamina are a number of oblong, ſlender filaments; the antheræ are tumid; the germen is oval and thick; the ſtyle ſlender; the ſtigma capitated; the fruit is a drupe, with a criſp nucleus.

## MICROCOS.

THIS genus is very nearly allied to the Elæocarpus: the calyx is a perianthium, compoſed of five oblong leaves: the corolla is formed of five petals; the ſtamina are numerous, oblong, ſlender filaments; the antheræ are oval; the germen is roundiſh; the ſtyle is ſlender, and the ſtigma ſmall: the fruit is a drupe, as in the former, but the nucleus is fibrous.

Theſe

Theſe two genera are ſufficiently diſtinguiſhed by their corollæ, calyces, and fruit; both from all the others of this diviſion, and from each other.

## MENTZELIA.

THE calyx is a perianthium, divided into five ſegments; it is patent, and is placed on the extremity of a very long germen: the ſegments are of a lanceolated figure, and deciduous: the corolla conſiſts of five petals, of an obverſely ovated figure, patent, and ſomewhat larger than the calyx: the ſtamina are numerous, ſetaceous, erect filaments; the antheræ are ſimple; the germen is cylindric, and very long; it ſtands under the calyx; the ſtyle is ſetaceous, and of the length of the corolla; the ſtigma is ſimple: the fruit is a long, cylindraceo-clavate capſule, containing only one cell; the ſeeds are numerous, ſmall, and roundiſh.

It is a native of South America, figured by Plumier.

## OCHNA.

THE calyx is a deciduous perianthium, compoſed of five, ſmall, patent leaves, of an ovato-lanceolated figure: the corolla conſiſts of five roundiſh petals; their ungues are of the length of the leaves of the calyx; they are patent, and very obtuſe at the extremities: the ſtamina are a number of very ſmall, connivent filaments: the germen is oval; the ſtyle ſubulated, longer than the ſtamina, and erect: the fruit is a very large, fleſhy, roundiſh, truncated receptacle, containing on each ſide a ſingle berry, of an oval figure, and immerſed at the baſe: the ſeed is ſingle and oval.

It is a native of South America, and is figured by Plumier, under the name of Jabotapita.

## CISTUS.

THE calyx is a permanent perianthium, compoſed of five roundiſh, hollow leaves, two of which are alternately ſmaller, and placed lower than the reſt: the corolla conſiſts of five large, plane, patent petals, of a roundiſh figure: the ſtamina are a great number of capillary filaments, ſhorter than the corolla; the antheræ are roundiſh and ſmall; the germen is roundiſh; the ſtyle is ſimple, and of the length of the ſtamina; the ſtigma is plane and orbiculated: the fruit is a roundiſh, covered capſule; the ſeeds are numerous, roundiſh, and ſmall.

This genus comprehends the Ciſtus and the Helianthemum of Tournefort. The Ciſtus has a capſule with only one cell; that of the Helianthemum has five or ten cells.

1. *Ciſtus arboreus foliis rugoſis, ovatis, et lanceolatis.* **Long-leaved Male Ciſtus.**
*The ſhrubby Ciſtus, with oval and lanceolated leaves.*

The root is brachiated and creeping; it grows to four feet high: the ſtalks are brittle; the leaves toward the lower part grow together at their baſes in pairs, and are of an oval figure; the reſt are ſeparate, and pointed at the ends; they are all rugoſe and hoary. The flowers are as big as thoſe of the wild roſe, and of a pale fleſh colour.

It is a native of all the warmer parts of Europe. C. Bauhine calls it, Ciſtus mas folio oblongo incano; Parkinſon, Ciſtus mas vulgaris.

2. *Ciſtus ſtipulis quaternis, foliis oblongis, caule procumbente.* **Dwarf Ciſtus.**
*The procumbent, oblong-leaved Ciſtus, with quaternate ſtipulæ.*

The root is oblong and woody; the ſtalks are a foot long, numerous, hard, and procumbent: the leaves ſtand in pairs; they are half an inch long, and a third of an inch in breadth: the flowers are of the breadth of a ſhilling, and of a bright yellow.

It is common with us by road-ſides. C. Bauhine calls it, Chamæciſtus flore luteo.

The other ſpecies of the Ciſtus-kind are, 1. The rounder-leaved Ciſtus. 2. The great, hoary-leaved Ciſtus. 3. The oblong, narrow, hoary-leaved Ciſtus. 4. The tall, ſage-leaved Ciſtus. 5. The procumbent, ſage-leaved Ciſtus. 6. The narrow-leaved Ciſtus Ladanifera. 7. The willow-leaved Ciſtus Ladanifera. 8. The bay-leaved Ciſtus Ladanifera. 9. The poplar-leaved Ciſtus Ladanifera. 10. The broader, hairy-leaved Ciſtus Ladanifera. 11. The narrower, hairy-leaved Ciſtus Ladanifera. 12. The roſemary-leaved Ciſtus Ladanifera.

Of the Helianthemum, or dwarf Ciſtus-kind, are, 1. The narrow-leaved, hairy, white-flowered Ciſtus. 2. The ſerpyllum-leaved, yellow-flowered Ciſtus. 3. The myrtle-leaved Ciſtus. 4. The narrow-leaved, taller Ciſtus. 5. The thyme-leaved Ciſtus. 6. The ſhrubby, marjoram-leaved Ciſtus. 7. The ſmooth, thyme-leaved Ciſtus. 8. The willow-leaved Ciſtus. 9. The lavender-leaved Ciſtus. 10. The ſpotted-flowered Ciſtus. 11. The umbellated-flowered Ciſtus. 12. The broad-leaved Ciſtus. 13. The narrow-leaved Ciſtus. 14. The plantain-leaved Ciſtus. 15. The origanum-leaved Ciſtus. 16. The Ciſtus, with narrow leaves, hoary underneath.

## CORCHORUS.

THE calyx is a deciduous perianthium, compoſed of five erect, acute leaves, of a lineari-lanceolated figure: the corolla conſiſts of five oblong, obtuſe petals, narroweſt at the bottom, erect, and of the length of the cup: the ſtamina are a great number of capillary filaments, ſhorter than the corolla; the antheræ are ſmall: the germen is oblong and ſulcated; the ſtyle is thick and ſhort, and the ſtigma is bifid: the fruit is a very large cylindric, acuminated pod, compoſed of five valves, ſometimes only of two, and contains five cells: the ſeeds are numerous, angular, and acuminated.

*Corchorus capſulis oblongis ventricoſis.* Jew's
*The oblong and ventricoſe-podded Corchorus.* Sallad.

The root is oblong and white; the plant riſes to a foot and half high: the ſtalk is ſmooth; the leaves are oblong, three inches in length, and half as much in breadth, ſerrated round the edges, and the loweſt ſerratures longer than the reſt, and terminating in a kind of hair, that bends back with them: the flowers are yellow, and of the breadth of a ſhilling; the pods are three inches long, and ſtriated with yellow lines.

It is a native of Ægypt. C. Bauhine calls it, Corchorus Plinii; J. Bauhine, Corchorus, ſive Melochia.

The other ſpecies are, 1. The roundiſh, podded Corchorus. 2. The linear, podded Corchorus.

## SAUVAGEA.

THE calyx is a permanent perianthium, compoſed of five acute, lanceolated leaves: the corolla conſiſts of five obtuſe, equal petals, ſhorter than the leaves of the cup: the nectarium conſiſts of five leſſer leaves, placed alternately with the petals: the ſtamina are numerous, capillary filaments, ſhorter than the petals, and ſituated out of the corolla, but within the cup: the antheræ are roundiſh; the germen is oval; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is ſimple; the fruit is an oval, acuminated capſule, covered by the cup, containing one cell, and in it a number of ſeeds.

## TILIA.

THE calyx is a perianthium, divided into five parts, hollow, coloured, deciduous, and nearly of the ſize of the corolla: the corolla conſiſts of five oblong, obtuſe petals, crenated at the extremities: the ſtamina are numerous filaments, thirty, or more; they are ſubulated, and of the length of the corolla; and the antheræ are roundiſh: the germen is roundiſh; the ſtyle is filiform, and of the length of the ſtamina; the ſtigma is obtuſe and pentagonal: the fruit is a coriaceous capſule, of a globoſe figure, divided into five cells, formed of five valves, and opening at the baſe: the

ſeeds

ſeeds are ſingle and roundiſh; one ſeed only of the five uſually ripens, and the very cells of the others often diſappear, ſo that the fruit ſeems unilocular.

*Tilia foliis latioribus profundius ſerratis.* The common Lime.
*The broader and more deeply ſerrated-leaved Tilia.*

The tree grows to fifty feet high. The wood is white; the bark dark brown; the branches are numerous; the leaves two inches and a half long, and two inches broad; they are deeply ſerrated at the edges. The flowers are white and fragrant.

It is common in our plantations. C. Bauhine calls it, Tilia fœmina folio majore.

The other ſpecies are, 1. The ſmaller-leaved Tilia. 2. The hairy-leaved Tilia, with red twigs.

## VATERIA.

THE calyx is a ſmall, acute, permanent perianthium, divided into five ſegments: the corolla conſiſts of five oval, patent petals: the ſtamina are numerous filaments, ſhorter than the corolla: the antheræ are ſimple; the germen is roundiſh; the ſtyle is ſimple and ſhort; the ſtigma is capitated: the fruit is a turbinated, coriaceous capſule, ſituated on the ſtyle, which is reflex, and marked with three ſutures; it is formed of three valves, and contains one cell: the ſeed is ſingle and oval.

It is an Aſiatic, deſcribed in the Hortus Malabaricus, vol. 4. fol. 15.

## CHRYSOBALANUS.

THE calyx is a permanent perianthium, formed of a ſingle leaf, plane, and divided into five parts at the top: the corolla conſiſts of five plane, oval, patent petals: the ſtamina are numerous, erect, villoſe filaments, placed in a circular order: the antheræ are ſmall; the germen is oval: the fruit is a large, oval berry, with one cell; the ſeed a brittle, rugoſe, oval nut, with five remarkable furrows.

It is an American, deſcribed by Plumier, under the name of Icaco.

## PLINIA.

THE calyx is a ſmall, plane, acute perianthium, formed of a ſingle leaf: the corolla conſiſts of a ſingle petal, divided into five oval, hollow ſegments: the ſtamina are numerous, capillary filaments, of the length of the corolla: the antheræ are ſmall; the germen is ſmall; the ſtyle is ſubulated, and more than of the length of the ſtamina: the ſtigma is ſimple: the fruit is a large, globoſe berry, ſtriated, and containing only one cell: the ſeed is ſingle, very large, globoſe, and ſmooth.

It is an American, figured by Plumier.

## PORTULACA.

THE calyx is a ſmall, bifid, permanent perianthium, compreſſed at the top, and ſituated on the germen: the corolla conſiſts of five plane, erect, obtuſe, emarginated petals, larger than the calyx: the ſtamina are very numerous, capillary filaments, of about half the length of the corolla: the antheræ are ſimple; the germen is oval; the ſtyle is ſimple and ſhort: the ſtigmata are ſix in number, oblong, and of the length of the ſtyle: the fruit is an oval, covered capſule, containing only one cell, and opening horizontally at the middle: the ſeeds are numerous and ſmall.

*Portulaca foliis cuneiformibus ſeſſilibus.* Common Purſlain.
*The Portulaca, with cuneiform leaves without pedicles.*

The root is oblong, white, and woody. The ſtalks are numerous, procumbent, and a foot long, reddiſh, thick, round, and ſucculent. The leaves are thick and ſucculent, narroweſt at the baſe, and broadeſt at the other extremity. The flowers are ſmall and yellow; the fruit is of the ſize of a barley-corn.

It is a native of France and Italy, and is common in our gardens. C. Bauhine calls it, Portulaca latifolia ſativa; it is eaten at our tables.

The

The other ſpecies are, 1. The narrow-leaved Portulaca. 2. The broad-leaved, red-flowered Portulaca. 3. The oblong, narrow, and gloſſy-leaved Portulaca. 4. The procumbent, capparis-leaved Portulaca. 5. The woolly Portulaca.

## ANACAMPSEROS.

THE calyx is a permanent, bivalve perianthium, of an ovato-acuminated figure; the valves are hollowed, acute, and embrace one another: the corolla conſiſts of five roundiſh, hollow, patent petals, nearly equal in ſize: the ſtamina are numerous, capillary filaments, of about half the length of the corolla: the antheræ are ſimple; the germen is roundiſh; the ſtyle is ſimple; the ſtigmata are three, and are thick: the fruit is an oval, but ſomewhat triangular, capſule, formed of three valves, containing three cells: the receptacle is free: the ſeeds are numerous, ſmall, and roundiſh.

This genus comprehends the Telephiaſtrum of Dillenius.

*Anacampſeros foliis ovatis convexis acutiuſculis.*
*The Anacampſeros, with oval, convex, and ſomewhat acute leaves.*

The root is white and fibrous: the ſtalk is round, very ramoſe, and procumbent: the leaves are thick, ſucculent, and pointed at the extremities: the flowers ſtand on long pedicles, at the extremities of the branches; they are of a bright and beautiful red colour.

It is a native of Ethiopia, but it is kept in ſome of our ſtoves. Dillenius calls it, Telephiaſtrum flore globoſo; Ray, Portulaca ſempervirens flore rubro.

The other ſpecies are, 1. The tree Anacampſeros, with cuneiform leaves. 2. The ſhort-leaved Anacampſeros.

## THEA.

THE calyx is a very ſmall, plane, permanent perianthium, divided into ſix roundiſh, obtuſe leaves: the corolla conſiſts of ſix large, roundiſh, hollow, equal petals: the ſtamina are numerous filaments, about two hundred; they are very ſlender, capillary, and ſhorter than the flower: the antheræ are ſimple; the germen is globoſe and trigonal: the ſtyle is ſubulated, and of the length of the ſtamina: the ſtigma is triple: the fruit is a capſule, formed of three globular bodies, growing together; it contains three cells, and opens into three parts at the top: the ſeeds are ſingle, globoſe, and internally angulated.

Of this genus there is but one known ſpecies.

### THEA. The Tea-tree.

This ſhrub grows to five feet high, and is very ramoſe. It's root is ſpreading and fibrous. It's leaves are about an inch long, near half an inch broad, ſerrated, and terminate in a point. The flowers are large, white, and very beautiful.

It is a native of China and Japan. It is planted alſo in many parts of the Eaſt, for the ſake of it's leaves, which are our Tea. All the kinds of that precious commodity are the leaves of the ſame ſpecies, and differ only according to the time at which they are gathered, and the manner of curing them; ſome are gathered in the bud, ſome, when opening, and ſome, when more fully expanded; and ſome are dried with artificial heat, ſome without.

## BIXA.

THE calyx is a very ſmall, permanent perianthium, divided into five ſhort ſegments at the top: the corolla is double; the exterior one conſiſts of five large, oblong, equal, and thick petals; the interior, of five petals alſo, like thoſe of the other, but thinner: the ſtamina are numerous, ſetaceous filaments, of about half the length of the corolla: the antheræ are erect; the germen is oval; the ſtyle is filiform, and of the length of the ſtamina: the ſtigma is parallely bifid, and compreſſed: the fruit

is

is an ovato-cordated, compreſſed capſule, ſurrounded with hairs, formed of two valves, opening at the angles, containing only one cell, but with an interior bivalve membrane: the ſeeds are numerous, turbinated, and truncated at the umbilicus: the receptacle is linear, longitudinal, and grows to the middle of the valves.

Of this genus there is but one known ſpecies.

### BIXA. The Roucou-tree.

The tree riſes to twenty or thirty feet high; the wood is white, the bark brown. The leaves ſtand alternately; they are of a heart-like ſhape, pointed at the extremity, about three inches long, and are placed on long pedicles. The flowers ſtand in cluſters, at the extremities of the branches, and are large and white. The fruit is of the ſize of a large plum.

It is a native of the warmer parts of America. Tournefort calls it, Mitella maxima tinctoria; Plukenet, Orleana, or Orellana folliculis lappaceis. A reddiſh matter, uſed in dying, is prepared from the fruit, and other parts of the tree, called, by a very improper name, Terra Orleana.

*Claſs the Thirteenth. Order the Second.*

## POLYANDRIA DIGYNIA.

*Plants which have in every flower numerous ſtamina and two ſtyles.*

### HELIOCARPUS.

THE calyx is a deciduous perianthium, compoſed of four long, and ſomewhat broad, linear, and patent leaves: the corolla conſiſts of four petals, conſiderably ſhorter and narrower than the leaves of the cup, but alſo linear in figure: the ſtamina are ſixteen ſubulated filaments, nearly of the length of the cup: the antheræ are didymous, linear, and incumbent: the germen is roundiſh: the ſtyles are two, erect, and of the length of the ſtamina: the ſtigmata are acute and diſtant: the fruit is a pedunculated capſule, of a turbinated, oval figure, containing two cells, and ſurrounded perpendicularly with pinnately ramoſe radii: the ſeeds are ſingle and oval.

It is a native of America, and is deſcribed by Houſton.

### PÆONIA.

THE calyx is a ſmall, permanent perianthium, compoſed of five roundiſh, hollow leaves, unequal both in their ſize and ſituation: the corolla conſiſts of five very large, roundiſh, hollow, patent petals, narroweſt toward the baſe: the ſtamina are very numerous, ſhort, capillary filaments: the antheræ are large, oblong, quadrangular, erect, and contain four cells: the germina are two; they are oval, erect, and hairy: there are no ſtyles; the ſtigmata are compreſſed, oblong, obtuſe, and coloured: the fruit conſiſts of two capſules, reflexo-patent, of an oblong, oval figure, hairy, containing each one cell, formed each of a ſingle valve, and opening longitudinally inwards: the ſeeds are numerous, oval, ſmooth, beautiful, and coloured. The number of the germina, though naturally two, varies greatly; in ſome flowers there are five.

### PÆONIA. The Piony.

The root is compoſed of a number of oblong tuberoſities. The plant riſes to three feet high. The ſtalks are round, reddiſh in many places, ramoſe, and robuſt. The leaves are compoſed of ſeveral ſmaller ones, and are of a bluiſh-green colour on the upper ſurface, and hoary underneath. The flowers ſtand ſingly on the tops of the branches; they are as large as roſes, and of a beautiful crimſon colour.

This is the natural ſtate of the Piony; culture gives it double flowers, and alters their colour into that of all the degrees between a deep blood colour and white. The leaves of the plant alſo become broader or narrower, from the ſame means; the ſpecies, however, is the ſame in all. Authors have called the varieties by names, as if diſtinct ſpecies:

cies; Pæonia fœmina, Pæonia multiplex, &c. Tournefort enumerates near twenty of them.

It is a native of ſome parts of Europe, and of the iſlands of the Archipelago. C. Bauhine and others call it, Pæonia mas. It's root is an antiepileptic.

## CALLIGONUM.

THE calyx is a permanent perianthium, compoſed of five roundiſh and hollowed leaves: there is no corolla: the ſtamina are numerous, very ſmall filaments: the antheræ are didymous; the germen is oval: there is no ſtyle, but the ſtigmata are two, and obtuſe: the fruit is an oval, compreſſed, ſtriated, hairy pericarpium, with bifid tops, turning backwards: the ſeed is ſingle.

This genus comprehends the Polygonoides of Tournefort.

*Claſs the Thirteenth. Order the Third.*

## POLYANDRIA TRIGYNIA.

*Plants which have numerous ſtamina and three ſtyles in every flower.*

## RESEDA.

THE calyx is a perianthium, formed of a ſingle leaf, and divided into ſeveral narrow, erect, acute, permanent ſegments; two of theſe are placed at a greater diſtance than the reſt, for the uſe of the melliferous petal: the corolla conſiſts of certain unequal petals, ſome one of them always ſemitrifid; the upper one gibbous at the baſe, containing a honey-like juice, and of the length of the calyx: the nectarium is a plane, erect gland, produced from the receptacle, placed on it's upper ſide, between the ſtamina and the upper petal, and connivent with the baſe of the petals, more dilated from the ſame ſide: the ſtamina are numerous, ſhort filaments: the antheræ are erect, obtuſe, and of the length of the corolla: the germen is gibbous, and terminates in ſome very ſhort ſtyles: the ſtigmata are ſimple: the fruit is a gibbous, angulated capſule, acuminated with the ſtyles, and open between them; it contains only one cell: the ſeeds are numerous, kidney-ſhaped, and grow to the angles of the capſule.

This genus comprehends the Reſeda luteola and Seſamoides of Tournefort; but it varies ſo extremely in it's fructification, that there is not in all botany a genus ſo difficult to be characteriſed or aſcertained; the ſeveral ſpecies have ſurpriſing variations from one another, though evidently all of the ſame family. The eſſential characters are the trifid petals, one of them melliferous at the baſe, and the open capſule.

*Reſeda foliis omnibus trifidis, inferioribus pinnatis.*
*The Reſeda, with all the leaves trifid, and the lower ones pinnated.* **Baſe Rocket.**

The root is oblong and white. The ſtalks are numerous, ſlender, and a foot and a half high. The leaves are finely divided into narrow, trifid ſegments. The flowers are ſmall and yellow, and are placed in long ſpikes, at the tops of the ſtalk and branches.

It is a native of England, in dry places. C. Bauhine calls it, Reſeda vulgaris; and, it's leaves being ſometimes curled up, authors have made another ſpecies from this variety, under the name of Reſeda criſpa.

The other ſpecies are, 1. The pinnated-leaved, great Rocket. 2. The whole-leaved Reſeda, or Phyteuma. 3. The little, white Reſeda, called Seſamoides Salamanticum parvum. 4. The linaria-leaved Reſeda. 5. The broad-leaved, yellow Reſeda. 6. The willow-leaved Reſeda, called Luteola, or dyers-weed. 7. The little, toad-flax leaved Reſeda, or Luteola. 8. The purple-flowered Reſeda. 9. The ſtellated-fruited Reſeda.

## DELPHINIUM.

THE Delphinium has no calyx: the corolla conſiſts of five unequal petals, diſpoſed circularly; of theſe the upper one is anteriorly more obtuſe than the others, and is emarginated, and extended behind into a tubulated horn, which is ſtrait, long, and obtuſe; the others are of an ovato-lanceolated figure, and patent, and are nearly equal: the nectarium is bifid, and is placed anteriorly among the petals on the upper part; behind it is protended outwards, and is incloſed in the tube of the corolla: the ſtamina are numerous, very ſmall, ſubulated filaments, broadeſt at their baſe, and inclinated toward the petal that has the ſpur: the antheræ are erect and ſmall; the germina are ſometimes three, ſometimes there is but one, of an oval figure; the ſtyles are of the length of the ſtamina; the ſtigmata are ſimple and reflex: the fruit conſiſts of one, or of three, capſules, of an ovato-ſubulated figure, ſtrait, compoſed of a ſingle valve, and opening inwards: the ſeeds are numerous and angular.

This genus comprehends the Delphinium of Tournefort, the Buccinum of Malphigi, and the Staphiſagria; but the nectarium in the Staphiſagria is double.

*Delphinium caule ſimplici, nectariis monophyllis.* Lark's-ſpur.
*The Delphinium, with a ſimple ſtalk and one-leaved nectaria.*

The root is fibrous. The plant riſes to two or three feet high. The ſtalk is ſlender, but ſtrong. The leaves are placed alternately, and very cloſe; they are of a deep green colour, divided into five ſegments, and ſmooth. The flowers are large, and naturally of a fine deep blue colour; but they vary from this into red and white.

It is common in gardens. C. Bauhine calls it, Conſolida hortenſis flore ſimplici majore; Tournefort, Delphinium vulgare.

Tournefort has enumerated not leſs than four-and-twenty varieties of this, as diſtinct ſpecies. The other really diſtinct ſpecies of Delphinium are, 1. The tall, hoary Delphinium. 2. The aconite-leaved Delphinium, called Aconitum lycactonum. 3. The narrower-leaved Delphinium; this has alſo been divided into ten or a dozen ſpecies by Tournefort. 4. The platanus-leaved Delphinium, called Staphiſagria, or Staveſacre, the ſeeds of which are kept under that name in the ſhops, and uſed to deſtroy vermin in children's heads.

## ACONITUM.

THERE is no calyx: the corolla conſiſts of five unequal petals, the oppoſite ones equal; the upper petal is galeated and tubulated, inverted, and has it's back upwards; it is obtuſe, and it's top is turned back to the very baſe; it is acuminated, and the baſe is oppoſite: the too lateral petals are broad, rounded, erecto-oppoſite, and connivent; the two lower ones are oblong, and bend downwards: the nectaria are two; they are ſtriated under the upper petal; they are hollow, nutant, and have an oblique opening, and a crooked tail, and they are placed upon long, ſubulated filaments, or peduncles: the ſtamina are numerous, very ſmall, ſubulated filaments, broadeſt toward the baſe, and inclinated toward the upper petal: the antheræ are erect and ſmall: the germina are in moſt ſpecies three, in ſome five; they are oblong, and terminate in ſo many ſtyles, of the length of the ſtamina: the ſtigmata are reflex and ſimple: the fruit is compoſed of as many capſules as there were germina; they are of an ovato-ſubulated figure, ſtrait, formed each of a ſingle valve, and open inwards: the ſeeds are numerous, angular, and rugoſe.

This genus comprehends the Aconitum, Napellus, and Anthera of Tournefort, Rivinus, &c.

*Aconitum*

*Aconitum foliorum laciniis linearibus, diſtinctis, ubique ejuſdem latitudinis.*

*The Aconite, with the ſegments of the leaves linear and diſtinct, and all the way of the ſame breadth.*

Healing Wolf's Bane.

The root is compoſed of a number of oval tubera, furniſhed with ſome fibres; they are brown without, and white within: the plant grows to a foot, or more, in height; the ſtalk is rigid, ſtriated, and hairy: the leaves are divided into long, narrow ſegments, of a duſky green on the upper ſide, and hoary underneath: the flowers are moderately large, and yellow, and are of a good ſmell.

It is a native of the Alps and Pyrenees; it's root is kept in the ſhops, under the name of Anthoræ Radix, and ſuppoſed an alexipharmic. C. Bauhine calls it, Aconitum ſalutiferum.

The other ſpecies of Aconite are, 1. The plantain-leaved, yellow Aconite. 2. The finely, divided-leaved Aconite. 3. The great, blue Aconite, or Napellus. 4. The narrow-leaved, inflex-ſpiked Aconite. 5. The broader-leaved, reflex-ſpiked Aconite. 6. The dwarf, blue-flowered Aconite. 7. The many-flowered, pyramidal-ſpiked Aconite. 8. The tall, dark-leaved Aconite.

*Claſs the Thirteenth. Order the Fourth.*

## POLYANDRIA TETRAGYNIA.

*Plants which have numerous ſtamina and four ſtyles in each flower.*

### TETRACERA.

THE calyx is a permanent perianthium, compoſed of ſix roundiſh, patent leaves; the exterior ones alternately ſhorter: the ſtamina are numerous, ſimple filaments, of the length of the calyx; they are permanent, and the antheræ are ſimple: the germina are four, oval and ſeparate from one another: the ſtyles are ſubulated and very ſhort; the ſtigmata are obtuſe: the fruit is compoſed of four capſules; they are of an oval figure, reflex, formed each of a ſingle valve, opening by a ſuture in the upper part, and containing only one cell: the ſeeds are ſingle, roundiſh, and covered.

This is an American deſcribed by Houſton, but confounded with the Petræa.

*Claſs the Thirteenth. Order the Fifth.*

## POLYANDRIA PENTAGYNIA.

*Plants which have numerous ſtamina and five ſtyles in every flower.*

### AQUILEGIA.

THERE is no calyx; the corolla conſiſts of five plane, patent, equal petals, of a lanceolato-ovate figure: the nectaria are five in number; they are equal, and ſtand alternately with the petals: they are corniculate, and grow gradually wider at their upper part; their opening is oblique, aſcending upwards, and internally affixed to the receptacle; in the lower part they are carried into a tube, which is long, attenuated, pendulous, and has it's extremity obtuſe and crooked: the ſtamina are numerous, ſubulated filaments, from thirty to forty; the exterior ones are the ſhorter: the antheræ are oblong, erect, and of the height of the nectaria: the germina are five, of an ovato-oblong figure, and terminate in ſubulated ſtyles, longer than the ſtamina; the ſtigmata are erect and ſimple. There are ten ſhort, rugoſe paleæ, which ſeparate the germina: the fruit conſiſts of five ſtrait, parallel, cylindric, acuminated capſules; each conſiſts of a ſingle valve, and opens from the top inwards: the ſeeds are numerous, oval, carinated, and adhere to the ſuture.

*Aquilegia*

*Aquilegia nectariis incurvis.* Common Columbine.
*The Aquilegia, with crooked nectaria.*

The root is large, oblong, and fibrated; the plant riſes to two feet high: the ſtalks are ſlender and branched; the leaves are of the compoſite kind; their pedicles are uſually divided in a ternate manner, and the leaves are three on each ultimate pedicle; they are broad, and of a bluiſh-green: the flowers hang from the tops of the ſtalks; they are large, and naturally of a beautiful blue, ſometimes reddiſh or white.

C. Bauhine calls this, Aquilegia ſylveſtris; others, Aquilegia ſimplex ſive vulgaris. Culture makes a great variety in the colour and ſtructure of the flowers, rendering them double, &c. Tournefort and others have deſcribed all theſe varieties as diſtinct ſpecies, under the names double Columbines, roſe Columbines, and the like.

The other really diſtinct ſpecies are, 1. The early, dwarf Aquilegia, with ſtrait nectaria. 2. The ſmall-flowered, thalictrum-leaved Aquilegia. 3. The great-leaved, ſmaller-flowered Aquilegia.

## NIGELLA.

THERE is no calyx, though in ſome ſpecies the floral leaves give an appearance of one: the corolla conſiſts of five plane, oval, obtuſe petals, patent, and narroweſt toward the baſe: the nectaria are eight, they are very ſhort, and are placed in a circular direction, and each is bilabiated: the outer lip is the larger, and ſtands loweſt; it is bifid, plane, convex, and marked with two dots: the interior one is ſhort and narrow; the ſtamina are numerous, ſubulated filaments, ſhorter than the corolla: the antheræ are compreſſed, obtuſe, and erect: the germina of the piſtil are, in ſome ſpecies, five, in others ten; they are oblong, compreſſed, convex, erect, and terminate in ſubulated ſtyles, which are angular, very long, revolute, and permanent: the ſtigmata are longitudinal and adnate: the fruit conſiſts of as many capſules as there were germina; they are oblong, compreſſed, acuminated, joined by an internal ſuture, and open upwards and inwards: the ſeeds are numerous, angular, and rough.

*Nigella foliis involucro folioſo cinctis.* Common Nigella.
*The Nigella, with the leaves ſurrounded with a folioſe involucrum.*

The root is oblong, hard, and yellow; the plant riſes to a foot and half high: the ſtalk is a foot high, ſmooth, ſtriated, and hollow; the leaves are divided into a number of fine narrow ſegments: the flowers are large, blue, and ſurrounded at the baſe with five floral leaves as with a cup.

It is a native of France. C. Bauhine calls it, Nigella anguſtifolia flore majore ſimplici cæruleo.

The other ſpecies are, 1. The yellow, oriental Nigella. 2. The hairy-leaved, white-flowered Nigella. 3. The Spaniſh Nigella, with broad leaves, and large blue flowers. 4. The Cretic Nigella.

Authors have taken varieties for ſpecies, and have extended the number much beyond this. Tournefort mentions a red-flowered, a white-flowered, and the like, as ſpecies which are, in reality, only varieties of the common kind.

*Claſs the Thirteenth. Order the Sixth.*

## POLYANDRIA PENTAGYNIA.

*Plants which have in every flower numerous ſtamina and ſix ſtyles.*

## STRATIOTES.

THE calyx is a permanent ſpatha, formed of two leaves, compreſſed, obtuſe, connivent, and carinated on each ſide: beſides this, there is alſo a perianthium, which is formed of a ſingle leaf, divided into three ſegments, and is acute and deciduous:

ous: the corolla conſiſts of three obverſely cordated, erecto-patent petals, of double the ſize of the cup: the ſtamina are twenty filaments, of the length of the perianthium, and are inſerted into the receptacle; the antheræ are ſimple: the germen ſtands under the receptacle of the perianthium: the ſtyles are ſix; they are divided into two parts, and are of the length of the ſtamina; the ſtigmata are ſimple: the fruit is a berry covered with the cup; it is of an oval figure, attenuated at each end, and in ſome meaſure hexaedral, and contains ſix cells: the ſeeds are numerous, oblong, crooked, and, as it were, alated.

Of this genus there is but one known ſpecies.

### STRATIOTES. Freſh-Water Soldier.

The root is compoſed of a number of long and thick fibres; the plant floats on the ſurface of the water, and theſe deſcend eight or ten inches from it, and have tufts of fibrils at their ends: the leaves are numerous, oblong, ſerrated at the edges, and in ſome degree prickly, and terminate in a point; they reſemble the leaves of aloes, but are not above four inches long: the flowers ariſe among theſe; they ſtand on ſhort pedicles, and are moderately large and white.

It grows in ſtanding waters in Lincolnſhire, and ſome other parts of England. C. Bauhine calls it, Aloe paluſtris; others, Militaris aizoides, and Aloides.

## *Claſs the Thirteenth. Order the Seventh.*

## POLYANDRIA POLYGYNIA.

*Plants that have numerous ſtamina and numerous ſtyles in every flower.*

### DILLENIA.

THE calyx is a permanent perianthium, compoſed of five large, coriaceous, roundiſh, hollow leaves: the corolla conſiſts of five coriaceous, large, roundiſh, hollow petals: the ſtamina are very numerous filaments, arranged together in a globular form: the antheræ are oblong and erect; the germina of the piſtil are about twenty in number, of an ovato-oblong figure, and acuminated, compreſſed, and connected on their inner ſides: the ſtigmata are large, of a lanceolated figure, plane on the outſide, permanent, and form a kind of ſtar: the fruit is roundiſh, and is externally covered with a number of capſules equal to that of the ſtigmata; theſe are oblong, and divided by a furrow; within there is a large, columnar, pulpous receptacle: the ſeeds are numerous and very ſmall.

Of this genus there is but one known ſpecies.

#### DILLENIA.

The root is brachiated; the tree riſes to fifty feet high; the leaves are as large as thoſe of our laurel, and reſemble them in ſhape: the flower is five inches in diameter, white, and ſweet-ſcented; the fruit is as large as an orange.

It is a native of the Eaſt Indies, and is figured in the Hortus Malabaricus, under the name of Syalita.

### LIRIODENDRON.

THE calyx is a deciduous perianthium, compoſed of three oblong, hollow, patent leaves, reſembling petals of a flower: the corolla conſiſts of petals, ſix or nine in number, oblong, erect, obtuſe, narroweſt at the baſe, and equal: the ſtamina are numerous filaments, ſhorter than the corolla, and linear, and are inſerted into the receptacle of the fructification: the antheræ are linear, and are ſituated longitudinally on the inner ſide of the filaments: the germina are numerous, and arranged in a conic form; the ſtyles are ſhort, and the ſtigmata ſimple; there is no pericarpium: the ſeeds are cloſely arranged together in an imbricated manner; they are numerous,

and

and terminate each in a ſquamma of a lanceolated figure, and have an acute angle from the inner ſide, near the baſe of the ſquamma: the baſe is compreſſed and acute.

This genus comprehends the Tulipifera of authors. There is but one known ſpecies of it.

LIRIODENDRUM. The Tulip-tree.

The tree riſes to ſixty or ſeventy feet high, and is very ramoſe: the leaves are four or five inches long, three broad, and divided into three parts, but with the middle part truncated, or as if cut off: the flowers are an inch and a half long, and an inch in diameter, of a beautiful mixture of a greeniſh, reddiſh, and whitiſh, with ſome yellow, colour.

The tree is a native of North America; but it is common in our gardens. Cateſby calls it, Tulipifera; others, Tulipifera aceris folio, media lacinia veluti abſciſſa.

## MAGNOLIA.

THE calyx is a deciduous perianthium, compoſed of three oval, hollow leaves, reſembling petals: the corolla conſiſts of nine oblong, hollow, obtuſe petals, narroweſt toward the baſe: the ſtamina are very numerous, ſhort, acuminated, compreſſed filaments, inſerted into the common receptacle of the piſtils below the germina: the antheræ are linear, and adhere on each ſide to the edges of the filaments: the germina are numerous, of an ovato-oblong figure, and cannaliculated receptacle: the ſtyles are bent back and contorted; the ſtigmata are hairy, and are placed longitudinally on the ſtyles: the fruit is a ſtrobilus, of an oval figure, compoſed of compreſſed, roundiſh, acute, ſcarcely imbricated, but cluſtered, capſules; they are ſeſſile, and each is formed of two valves, containing a ſingle cell, and opening outwards: the ſeeds are ſingle, and kidney-ſhaped, and hang by filaments from the ſinus's of the ſquammæ of the fruit.

*Magnolia corollis ampliſſimis.* The Laurel-leaved
*The great-flowered Magnolia.* Tulip-tree.

The root is brachiated; the trunk covered with a pale brown bark: the leaves are ten inches long, and four broad, firm, hard, and like thoſe of our laurel: the flowers are five or ſix inches in diameter, white, and very fragrant: the fruit is of the bigneſs of an egg, with a great deal of a beautiful purple in it.

It is a native of many parts of America; we have it in ſome of our gardens.

The other ſpecies are, 1. The long-leaved Magnolia. 2. The ſhort-leaved Magnolia.

## UVARIA.

THE calyx is a perianthium, formed of three leaves; the corolla conſiſts of ſix petals: the ſtamina are very numerous, and cluſtered together; the ſtyles are numerous; and the fruit is compoſed of a multitude of pendulous berries, each containing ſeveral ſeeds.

Theſe characters diſtinguiſh the Uvaria ſufficiently, without any farther deſcription.

## ANONA.

THE calyx is a ſmall perianthium, compoſed of three cordated, hollowed, and acuminated leaves: the corolla conſiſts of ſix cordated, ſeſſile petals, three alternately interior and ſmaller; there are ſcarce any viſible ſtamina, but the antheræ are extreamly numerous, and are placed on the ſides of the germen: the germen is placed on a roundiſh receptacle, and is itſelf of a roundiſh figure; there are no ſtyles, but a number of obtuſe ſtigmata: the fruit is a very large berry, of a roundiſh, oval figure, covered with a ſquammoſe, punctated bark, and containing only one cell: the ſeeds are numerous, hard, of an oval, oblong figure, and are placed circularly.

This genus comprehends the Guanabanus of Plumier.

*Anona*

*Anona foliis lineari-lanceolatis.*
*The lineari-lanceolated-leaved Anona.*

The tree grows to a conſiderable height; the bark is rough and brown; the branches numerous and thick: the leaves are eight inches long, and about two and a half broad, pointed at the ends, and of a firm texture: the flower is ſmall; the fruit is of the ſize of the largeſt orange, and covered with a ſcaly coat.

It is a native of the Eaſt and Weſt Indies. C. Bauhine calls it, Guanabanus Oviedi fructu ſquammato.

## HEPATICA.

THE calyx is a permanent perianthium, formed of three oval leaves, and remote from the receptacle of the corolla: the corolla conſiſts of two or three ſeries of petals; there are three petals in each ſeries, and they are longer than the cup, and of an ovato-oblong figure: the ſtamina are numerous filaments, thirty, or more, of the length of the cup; the antheræ are didymous and erect: the germina are numerous, twenty, or more; they are oblong and acuminated; there are no ſtyles: the ſtigmata are obtuſely capitated; there is no pericarpium: the receptacle is very ſmall and obtuſe; and the ſeeds are arranged in it in a globular form: they are numerous, oval, but pointed at both ends, and ſlightly hairy.

Of this genus there is but one known ſpecies; but authors have made ſeveral, by deſcribing it's varieties as ſuch, under the names of the double blue-flowered Hepatica; the double red Hepatica, and the like.

## PULSATILLA.

THE calyx is a uniflorous involucrum, placed remote, but proper, and compoſed of a ſingle leaf, divided into a number of fine narrow ſegments: the corolla conſiſts of ſix plane, erect, acuminated, long petals: the ſtamina are a great number of filiform filaments, of about half the length of the flower: the exterior ones ſtand loweſt; the antheræ are didymous and erect: the germina are numerous; the ſtyles are capillary, longer than the ſtamina, and permanent: the ſtigmata are ſimple; there is no pericarpium: the receptacle is capitated, oblong, tophous, and hairy: the ſeeds are numerous, compreſſed, and hairy, and have the ſtyles adhering to them, very long and hairy.

The involucrum is the character which diſtinguiſhes this genus from the Anemone.

*Pulſatilla foliis decompoſitis ternatis.*
*The Pulſatilla, with ternate, decompound leaves.*

The root is fibrous; the leaves are divided into a multitude of long and narrow ſegments, in a ternate order; they are of a duſky green, and not gloſſy: the ſtalk riſes to ſix or eight inches high, and the flower is large and beautiful; ſometimes blue, ſometimes red, ſometimes white.

It was originally brought from the Eaſt into our gardens, where culture has produced a great many varieties of it, which have been deſcribed by too many authors, under the names of diſtinct ſpecies, and called Anemone tenui folio, flore duplice, and the like. C. Bauhine calls this, Anemone tenui folio, ſimplici flore; Van Royen, Pulſatilla foliis ternatis.

The other ſpecies are, 1. The thicker-leaved, large-flowered Pulſatilla, or common Paſque flower. 2. The ſmaller-flowered, thinner-leaved Pulſatilla. 3. The ſmallage-leaved Pulſatilla. 4. The broad-leaved, yellow Pulſatilla.

## ANEMONE.

THERE is no calyx: the corolla conſiſts of two or three orders of petals, three in each order or ſeries; they are of an oval figure, and erecto-patent: the ſtamina are numerous, capillary filaments, of about half the length of the corolla: the antheræ are didymous and erect; the germina are numerous, and collected into a head; the ſtyles are acuminated, and very ſhort; the ſtigmata are obtuſe; there is no pericarpium: the receptacle is globoſe or oblong, and attenuated and punctated: the ſeeds are numerous, acuminated, and have the ſtyles affixed to them.

This genus comprehends the Anemone, Anemonoides, and Anomone-Ranunculus of authors; they have endeavoured to diſtinguiſh theſe by the ſeeds, but there is no ſuch diſtinction in nature.

1. *Anemone foliis ſubrotundis et laciniatis, caule unifloro.* Yellow Anemone.
*The roundiſh and laciniated-leaved, yellow-flowered Anemone.*

The root is tuberous and oblong; the radical leaves are roundiſh, large, ſerrated at the edges, of a deep green on the upper part, and purpliſh underneath: they ſtand on long pedicles, and are of a firm texture: the ſtalk riſes to ſix inches high, and has on it three laciniated leaves; and from the origin of theſe riſes alſo a pedicle, which ſupports a large, ſingle, yellow flower.

It is a native of Portugal. C. Bauhine calls it, Anemone cyclaminis ſive malvæ folio lutea; J. Bauhine, Anemone latifolia flore flavo.

2. *Anemone ſeminibus acutis, foliolis inciſis, caule unifloro.* White-Wood Anemone.
*The acute-ſeeded, divided-leaved, ſingle-flowered Anemone.*

The root is tuberous, oblong, and oblique; the leaves ſtand on long pedicles, and are divided into fine and numerous ſegments: the ſtalk is ſix inches high, and weak; the leaves on it are three, all growing from the ſame part, and like thoſe of the root: the flower is ſingle; on the ſummit of the ſtalk, it is large, and white or reddiſh.

It is common in our woods. C. Bauhine calls it, Anemone nemoroſa flore albo majore.

The other really diſtinct ſpecies are, 1. The yellow, wood Anemone, called Wood Ranunculus. 2. The trifoliate, oval-leaved Anemone. 3. The broad-leaved, red Anemone. 4. The rounder, geranium-leaved, large-flowered Anemone. 5. The upright, white, wild Anemone. 6. The large-flowered, five-leaved Anemone. Culture has made an infinite number of varieties in the colour and ſtructure of the flowers of theſe ſpecies, and too many authors have deſcribed thoſe varieties as ſpecies. Tournefort has no leſs than a hundred and fifty Anemonies.

## ATRAGENE.

THE calyx conſiſts of four leaves; the corolla is formed of twelve petals; the ſtamina are very numerous; the ſtyles ſhort; the ſtigmata ſmall; the ſeeds are caudated. Theſe ſhort characters ſufficiently diſtinguiſh the Atragene from all the other plants of this claſs.

## CLEMATIS.

THERE is no calyx; the corolla conſiſts of four lax, oblong petals, of an uncertain ſhape: the ſtamina are numerous, ſubulated filaments, ſhorter than the corolla: the antheræ adhere to the ſides of them; the germina are numerous, roundiſh, compreſſed, and terminate in ſubulated ſtyles, which are a longer than the ſtamina; the ſtigmata are ſimple; there is no pericarpium; the receptacle is capitated and ſmall; the ſeeds are numerous, roundiſh, compreſſed, and have the ſtyle adhering to them.

This genus comprehends the Clematitis, Flammula, and Viticella of authors. The Clematis has lanceolated petals and seeds, winged with long, hairy setæ; the Flammula has eight pistils, orbiculated seeds, and a very long plume; the Viticella has deltoide petals, and seeds with naked and crooked points: some have five petals.

*Clematis foliis pinnatis foliolis ovato-lanceolatis integerrimis.* **Erect Flammula.**
*The pinnated-leaved Clematis, with ovato-lanceolated foliola.*

The root is fibrous and white; the stalks are woody, but very slender; they rise to three feet, or more, in height, and support themselves erect; they are hollow and jointed: the leaves are composed of oval, but pointed, pinnules, and are of a blackish green on the upper side, and hoary underneath: the flowers are large and white.

It is a native of Germany. C. Bauhine calls it, Flammula recta; others, Flammula alba erecta.

The other species are, 1. The simple, lanceolated-leaved, blue Clematis. 2. The wild Clematis, called Traveller's Joy and Viorna. 3. The pear-leaved Clematis. 4. The five-leaved, creeping Clematis. 5. The serrated-leaved Clematis. 6. The dwarf Clematis. 7. The blue, erect, larger-leaved Clematis.

## THALICTRUM.

THERE is no calyx; the corolla consists of four roundish, hollow, obtuse, deciduous petals: the stamina are numerous filaments, broadest in their upper part, compressed, and longer than the corolla: the antheræ are oblong and didymous: the styles are numerous and very short; the germina roundish, one on every style: the stigmata thick; the pericarpium consists of a carinated, sulcated bark, containing only one cell: the seed is single and oblong.

This genus varies greatly in the several species. In some the corolla has five leaves; in some the stamina and pistils are only twelve each: the styles, which are placed under the germina, are in some long, in others short; and in some the cortex of the seed has three longitudinal alæ.

*Thalictrum caule folioso sulcato, panicula multiplici erecta.* **Common Meadow Rue.**
*The folioso, sulcated-stalked Thalictrum, with a multiple, erect panicle.*

The root is composed of a number of long, brown fibres: the plant rises to four feet high; the stalk is hollow, smooth, and ramose; the leaves are divided into a great number of broad and short segments: the flowers are of a mixture of a blackish purple and white; they are small, and stand in great clusters on the tops of the stalks.

The plant is common in our meadows. Authors call it, Thalictrum vulgare.

The other species are, 1. The rugose, trifid-leaved Thalictrum. 2. The glaucous-leaved, yellow Thalictrum. 3. The purple, columbine-leaved Thalictrum. 4. The white, aquilegia-leaved Thalictrum, 5. The dwarf, American Thalictrum. 6. The great, yellow-flowered Thalictrum. 7. The asphodel-rooted Thalictrum. 8. The early, dwarf Thalictrum. 9. The narrow-leaved Thalictrum. 10. The small, broad-leaved Thalictrum. 11. The great, red-leaved Thalictrum. 12. The fœtid Thalictrum.

## ADONIS.

THE calyx is a perianthium, composed of five obtuse, hollow, somewhat coloured, and deciduous leaves: the corolla consists of five oblong, obtuse, beautiful petals, sometimes there are more than five: the stamina are numerous, very short, subulated filaments: the antheræ are oblong and inflected; the germina are numerous, and collected into a head; there are no styles; the stigmata are acute and reflex; there is no pericarpium: the receptacle is oblong, spicated, and holds five series of seeds: the seeds are numerous, irregular, and angular, gibbous at the base, and their apex reflex and prominent.

*Adonis*

*Adonis radice annua.* Red
*Annual-rooted Adonis.* Maiths.

The root is fibrous and white; the ſtalk is erect, thick, and firm, and grows to eighteen inches high. The leaves are divided into fine, long, narrow ſegments. The flowers ſtand at the tops of the branches; they are moderately large, and of a very beautiful ſcarlet colour.

It is a native of moſt parts of Europe. Authors call it, Flos Adonis and Eranthemum. Culture makes the flower larger and deeper-coloured.

## RANUNCULUS.

THE calyx conſiſts of five oval, hollow, coloured leaves: the corolla conſiſts of five obtuſe petals, with ſmall ungues: the nectarium is a cavity in each petal, above the unguis: the ſtamina are numerous filaments, of about half the length of the flower: the antheræ are erect, oblong, obtuſe, and didymous: the germina are numerous, and collected into a head: there are no ſtyles; the ſtigmata are reflex, and very ſmall; there is no pericarpium; the receptacle connects the ſeeds by means of very minute peduncles: the ſeeds are numerous, irregular, and have reflex apices.

The eſſential character of this genus conſiſts in the nectarium, which is in ſome a ſimple hollow; in others it is ſurrounded with a membranaceous edge, and, in ſome, it is ſhut up with an emarginated ſquammula; the other parts of the fructification vary greatly.

This genus comprehends the Ranunculus, Ficaria, and Ranunculoides of authors. In the Ficaria the calyx has but three leaves, and the petals are numerous; in one ſpecies there are but five ſtamina.

*Ranunculus foliis lanceolatis, caule erecto.* Great
*The upright-ſtalked, lanceolate-leaved Ranunculus.* Spearwort.

The root is compoſed of a cluſter of white fibres. The plant riſes to three or four feet high. The ſtalk is round, ſmooth, thick, and branched. The leaves are a foot long, and about an inch broad, thick, ſmooth, and pointed. The flowers ſtand at the tops of the branches; they are yellow, beautiful, and of three quarters of an inch in diameter.

It is frequent in ditches in the Iſle of Ely, and other fenny places. C. Bauhine calls it, Ranunculus longifolius paluſtris major; others, Flammeus major.

The other ſpecies of Ranunculus are very numerous; thoſe wild in our fields and waters are, 1. The common creeping Ranunculus. 2. The bulbous-rooted Ranunculus. 3. The erect, pale-leaved Ranunculus. 4. The erect, aconite-leaved Ranunculus. 5. The little-flowered, annual, field Ranunculus. 6. The ſmall-flowered, wood Ranunculus. 7. The echinated-ſeeded, field Ranunculus. 8. The round-leaved, water Ranunculus. 9. The ivy-leaved, water Ranunculus. 10. The various leaved, water Ranunculus. 11. The fine-leaved, water Ranunculus. 12. The circinnated-leaved, water Ranunculus. 13. The fennel-leaved, water Ranunculus. 14. The leſſer Spearwort. 15. The plantain-leaved Ranunculus. 16. The Ranunculus, called little Celandine, or Pilewort.

The wild Ranunculi of other parts of the world are, 1. The graſſy-leaved Ranunculus. 2. The large-leaved, Apennine Ranunculus. 3. The ſmall-flowered, ſoft-leaved Ranunculus. 4. The aſphodel-rooted, cyclamen-leaved Ranunculus, or Thora. 5. The parnaſſia-leaved Ranunculus. 6. The water-caltrop-leaved Ranunculus. 7. The aſarum-leaved, nodoſe Ranunculus. 8. The apium-leaved Ranunculus. 9. The ſtellated, echinated, Cretic Ranunculus. 10. The broad-leaved, bullated, tuberous-rooted Ranunculus. 11. The purple-flowered, grumoſe-rooted, Aſiatic Ranunculus. 12. The broader-leaved, yellow-flowered, grumoſe-rooted, Aſiatic Ranunculus. 13. The rue-leaved, yellow Ranunculus. 14. The broad-leaved, Cretic, tuberous-rooted Ranunculus. 15. The ſmall-flowered, dwarf, round-leaved Ranunculus. 16. The tall, white, hairy Ranunculus. 17. The aconite-leaved, white Ranunculus. 18. The very broad-leaved, hairy, mountain Ranunculus. 19. The fine-leaved, mountain Ranunculus.

nunculus. 20. The great-flowered, rock Ranunculus. 21. The purple-flowered, ſmallage-leaved Ranunculus. 22. The pucedanum-leaved, water Ranunculus. 23. The fennel-leaved, hellebore-rooted Ranunculus. 24. The great-flowered, jointed-ſtalked, fennel-leaved Ranunculus. 25. The betony-leaved Ranunculus. 26. The bulbous, graſſy-leaved Ranunculus. 27. The ſingle-flowered, graſſy-leaved Ranunculus. 28. The dwarf, graſſy-leaved, white-flowered Ranunculus. 29. The plantain-leaved Ranunculus.

From the Aſiatic and ſome other ſpecies of this genus, particularly thoſe from the tenth to the fourteenth of this laſt diviſion, culture has raiſed all that beautiful variety of Ranunculus's of our gardens, which are by too many authors called diſtinct ſpecies.

## ISOPYRUM.

THERE is no calyx: the corolla conſiſts of five equal, oval, patent, deciduous petals: the nectaria are five; they are equal, tubulated, and very ſhort; their openings are oblique, ſimple, and ſituated within the corolla: the ſtamina are numerous, capillary filaments, ſhorter than the corolla: the antheræ are ſimple; the germina are oval; the ſtyles are ſimple, and of the length of the germina: the ſtigmata are obtuſe, and of the length of the ſtamina: the fruit is compoſed of two crooked, lunated pods, containing each only one cell, and in it numerous ſeeds.

Theſe characters ſufficiently diſtinguiſh the Iſopyrum from all the reſt of this claſs.

## HELLEBORUS.

THERE is no calyx: the corolla is compoſed of five, or more, large, hollowed, roundiſh petals: the nectaria are five; they are very ſhort, and placed circularly; they are each compoſed of a ſingle leaf, tubulated, with a ringent mouth, opening inwards, and they are narroweſt below: the ſtamina are numerous, ſubulated filaments: the antheræ are compreſſed, narroweſt below, and erect: the germina are corniculated, and terminate in ſubulated ſtyles: the ſtigmata are thick; the fruit is compoſed of ſeveral compreſſed, bicarinated capſules; the inferior carina ſhorter, the upper convex, and opening: the ſeeds are numerous, round, and affixed to a ſuture.

The eſſential character of this genus is in the nectarium; the reſt of the parts of fructification vary.

This genus comprehends the Trollius and Aconitum of Rivinus, and the Helleboraſter of authors. In the Trollius the petals are numerous and connivent, the nectaria unilabiated. In the Aconitum the petals are ſix, and deciduous, and the flower ſtands on a leaf. In the Helleboraſter the petals are five, and permanent; the piſtils from three to five.

*Helleborus ſcapo biſloro ſubnudo, foliis pedatis.* **True black**
*The two-flowered Helleborus, with pedated leaves.* **Hellebore.**

The root is black, and compoſed of a multitude of thick fibres, ariſing from a ſmall head. The leaves ſtand on pedicles of four or five inches long; they are large, and divided to the baſe, uſually into nine ſegments. The flowers grow on ſtalks of about four inches high; they are large and white.

It is a native of Germany. C. Bauhine calls it, Helleborus niger flore roſeo; others, Helleborus niger verus.

It's root is the black Hellebore of the ſhops, a purge and a deobſtruent, good in ſuppreſſions of the menſes.

The other ſpecies are, 1. The great-flowered, wild, black Hellebore. 2. The great, wild Hellebore. 3. The great-leaved Hellebore. 4. The narrow-leaved Hellebore. 5. The great-flowered, autumnal Hellebore. 6. The trifoliate Hellebore. 7. The yellow, dwarf Hellebore, or winter Aconite. 8. The globoſe-flowered Hellebore, called globoſe Ranunculus. 9. The ſmaller-flowered, globoſe Hellebore.

## CALTHA.

THERE is no calyx: the corolla conſiſts of five large, oval, plane, patent, deciduous petals: the ſtamina are numerous, capillary filaments, ſhorter than the corolla: the antheræ are compreſſed, obtuſe, and erect: the germina are from five to ten in number, and are oblong, compreſſed, and erect: there are no ſtyles; the ſtigmata are ſimple: the fruit conſiſts of as many capſules as there were germina; they are ſhort, acuminated, patent, bicarinated, and open at the upper future: the ſeeds are numerous and roundiſh, and adhere to the upper future.

Of this genus there is but one ſpecies.

CALTHA. **Marſh Marygold.**

The root is fibrous; the ſtalk is round, thick, and a foot high. The leaves are two inches broad, crenated at the edges, and roundiſh. The flowers ſtand at the tops of the branches, and are very large and yellow.

It is common in our meadows. C. Bauhine calls it, Caltha paluſtris.

*Claſs the Fourteenth.*

## DIDYNAMIA.

*Plants which have in every flower two effective ſtamina and two uſeleſs ones.*

*The Didynamia comprehends the labiated and perſonated flowered Plants of Authors.*

THE calyx is an erect, tubulated perianthium, formed of a ſingle leaf, divided into five ſegments, often unequal ones, and permanent: the corolla is monopetalous and erect; the baſe is tubulated; it contains a honey-juice, and performs the office of a nectarium: the limb is commonly ringent; the upper lip is ſtrait; the lower patent, divided into three ſegments; the middle one the larger. The ſtamina are four ſubulated filaments, inſerted into the tube of the corolla, and reclined towards it's back; two of them intermediate and ſhort, all running parallel, and rarely exceeding the corolla in length: the antheræ are uſually hid under the upper lip of the corolla, and connivent. The germen is uſually placed above the receptacle: the ſtyle is ſingle, filiform, and bent in the ſame manner as the ſtamina; it is uſually placed between them, and is a little longer than they are, and it's apex is bent: the ſtigma is uſually emarginated. The fruit, if there be any, is uſually bilocular: the ſeeds, if there is no fruit, are four, and are lodged in the bottom of the cup; if there be a fruit, they are more numerous, and are affixed to a receptacle ſituated in it's center.

Theſe are the characters common to all the genera of this claſs. After thus delivering them at large here, we ſhall not repeat them at the head of every genus, but give only, as the generical character, the particulars in which each genus differs from all the others; only in the firſt, the Teucrium, we ſhall deliver them at large, as a ſpecimen of their general diſtribution.

The eſſential character of the claſs is, that there are four ſtamina, two of which are ſhorter than the others, and are placed together, and connivent; and that the ſtyle is ſingle, and ſtands within an irregular corolla.

The genera of this claſs are very numerous; they may commodiouſly be divided into two ſeries, according to their wanting, or having, a pericarpium, under the titles of Gymnoſpermia and Angioſpermia; and theſe, as they have bilabiated or quinquifid cups, or as their ſtigmata are ſimple or double, and their corolla perſonated, patulous, or polypetalous, may be again arranged into ſeveral ſubdiviſions.

*Claſs the Fourteenth. Series the Firſt.*

## DIDYNAMIA GYMNOSPERMIA.

*Plants which have two effective ſtamina and have no capſule for their ſeeds.*

*Diviſion the Firſt.*

*Such as have the calyx divided into five nearly equal ſegments.*

## TEUCRIUM.

THE calyx is a permanent perianthium, compoſed of a ſingle leaf, ſlightly divided into five ſegments, and gibbous at the baſe: the corolla is ringent, and formed of a ſingle petal: the tube is cylindric and ſhort, and terminates in an incurvated opening: the upper lip is erect, acute, and deeply divided into two ſegments, which ſtand apart; the lower lip is divided into three ſegments; the lateral ones are of the figure of the upper lip, and ſomewhat erect; the middle one is much larger, and rounded: the ſtamina are four ſubulated filaments, longer than the upper lip of the corolla, crooked and prominent between the diviſure of it: the antheræ are ſmall; the germen is divided into four parts; the ſtyle is filiform, and like the ſtamina in figure and ſituation: the ſtigmata are two, and ſlender: the ſeeds are four, roundiſh, and lodged in the baſe of the cup.

This genus comprehends the Teucrium, Polium, Scordium, Chamædrys, Apiga, Pſeudomarum, Iva, and Chamæpitys of authors; all which have been erroneouſly ſeparated by Tournefort and Rivinus.

In the Teucrium the calyx is campanulated, and the middle ſegment of the lower lip is hollow. In the Polium the flowers are collected into cluſters, terminating the branches. In the Chamædrys the flowers grow from the alæ of the leaves, and the calyx is campanulated. In the Marum the leaves are ſhort and ſmall, and the ſmell is acrid. In the Scordium there is a ſtrong ſmell of garlic. In the Iva the calyx is very gibbous in the lower part. Such are the diſtinctions which have been ſuppoſed generical.

*Teucrium foliis ovato-lanceolatis ſerrulatis, floribus ſæpius binatis.*

*The ovato-lanceolate, ſerrated-leaved Teucrium, with flowers uſually binate.*

Water Germander, or Scordium.

The root is fibrous; the ſtalks are ſquare, procumbent, and hairy. The leaves ſtand in pairs; they are three quarters of an inch long, half an inch broad, and of a pale green colour. The flowers are ſmall and red; they uſually grow two together, from the alæ of the leaves. The whole plant has a garlic-like ſmell.

It is a native of England, in wet places, but is not common. Authors call it, Scordium, and Scordium officinarum.

It is ſuppoſed a great alexipharmic, and, as ſuch, is an ingredient in many of the ſhop compoſitions.

The other ſpecies of Teucrium are, 1. Of thoſe called Teucria by authors, 1. The ſinuated-leaved, ſhrubby, Bætic Teucrium. 2. The broader-leaved Teucrium. 3. The Teucrium, with inflated cups. 4. The perennial, ſupine, laciniated-leaved Teucrium. 5. The annual, laciniated-leaved Teucrium.

2. Of thoſe called Polia by authors there are, 1. The lavender-leaved Polium. 2. The very narrow-leaved Polium. 3. The common yellow Polium. 4. The common white Polium. 5. The long-headed Polium. 6. The creeping Polium. 7. The erect, maritime Polium. 8. The procumbent, ſea Polium. 9. The purple-flowered, hoary Polium. 10. The ground-ivy-leaved Polium. 11. The germander-leaved, purple Polium. 12. The ſhort-headed Polium. 13. The roſemary-leaved Polium. 14. The ſhrubby, narrow-leaved Polium. 15. The erect, narrow-leaved Polium, with ſhort heads. 16. The toad-flax-leaved Polium. 17. The little, procumbent, ſerrated-leaved Polium.

18. The

18. The gnaphalium-like Polium. 19. The broad-leaved, ſerrated Polium. 20. The ſerpyllum-leaved Polium. 21. The thyme-leaved, purple Polium, or Teucrium called Polium.

Of the Teucria, called Chamædrys by authors, there are, 1. The common, great Chamædrys. 2. The leſſer, creeping Chamædrys. 3. The hairy, Alpine Chamædrys. 4. The baum-leaved, ſhrubby Chamædrys. 5. The leſſer baum-leaved Chamædrys. 6. The Chamædrys, called common Teucrium. 7. The ſhrubby, Alpine, gloſſy-leaved Chamædrys. 8. The purple, Cretic, ſhrubby Chamædrys. 9. The fine-leaved, many-flowered Chamædrys. 10. The nettle-leaved Chamædrys. 11. The hoary, lanceolated-leaved, ſea Chamædrys. 12. The multifid-leaved Chamædrys. 13. The prickly, multifid-leaved Chamædrys. 14. The broad-leaved, oriental Chamædrys.

Of thoſe called Ajugæ by Rivinus, and by others Bugulæ, are, 1. The ſmooth Bugula. 2. The hairy-leaved Bugula. The flowers of both theſe are naturally blue, but they vary into all the degrees of red and white, and hence authors have made many imaginary ſpecies from the varieties of each.

Of the Teucria, called Chamæpitys by authors, are, 1. The ſerrated-leaved, ſcented Chamæpitys. 2. The common, or trifid-leaved Chamæpitys. 3. The large, red-flowered, trifid-leaved Chamæpitys.

## SATUREIA.

THE calyx of the Satureia is erect, and the ſegments of the corolla are nearly equal; for the reſt ſee the claſſical character.

This genus comprehends the Satureia and the Thymbra of Tournefort and others.

1. *Satureia pedunculis biflоris.* **Summer Savory.**
*The biflorous, peduncled Satureia.*

The root is oblong, hard, and woody. The plant riſes to a foot high; the ſtalk is woody: the leaves are near an inch long, very narrow, and ſomewhat hairy. The flowers ſtand in the alæ of the leaves, two on each peduncle; they are ſmall and whitiſh; the ſeeds are brown.

It is a native of the ſouth of France; we have it in our gardens. C. Bauhine calls it, Satureia hortenſis.

It is a carminative, and is kept as ſuch in the ſhops.

2. *Satureia pedunculis dichotomis.* **Winter Savory.**
*The Satureia, with dichotomous peduncles.*

The root is fibrous: the plant grows to a foot high: the ſtalks are woody and ramoſe; the leaves thick-ſet, very narrow, and of a bright green colour: the flowers are moderately large and white, with a bluſh of red.

It is a native of the ſouth of France. C. Bauhine calls it, Satureia durior.

It is uſed in ſauces.

The other ſpecies of Satureia are all called Thymbræ: they are, 1. The Cretic Satureia, or legitimate Thymbra of authors. 2. The marjoram-leaved Thymbra, called common Marum. 3. The round-leaved, Spaniſh Thymbra. 4. The coris-leaved, Spaniſh Thymbra. 5. The ſpiked Thymbra.

## LAVANDULA.

THE calyx is of an ovated figure, very ſlightly dentated at the rim, and ſupported by a ſquamma. For the reſt ſee the claſſical character.

*Lavandula foliis duplicato-pinnatifidis.* **Jagged-leaved Lavender.**
*The duplicately pinnatifid-leaved Lavender.*

The root is hard, woody, oblong, and divaricated: the plant riſes to a foot and a half high: the ſtalks are robuſt, ſquare, and hairy; the leaves are finely divided into narrow ſegments, hoary, and very fragrant: the flowers are ſmall and blue; they ſtand in a ſpike, like thoſe of Lavender, at the top of a naked ſtalk.

It

It is common in our gardens. C. Bauhine calls it, Lavandula folio diſſecto; J. Bauhine, Lavandula multifido folio.

The other ſpecies of Lavandula are, 1. The common Lavender of our gardens. 2. The Arabian Stæchas. 3. The broad-leaved Lavender. 4. The ſhort-ſpiked, broad-leaved Lavender. 5. The oblong and ſerrated-leaved Lavender. 6. The ſhrubby, broad, crenated-leaved Lavender.

All the ſpecies are good in medicine as cephalics and cordials.

## HYSSOPUS.

THE lower lip of the corolla has the intermediate ſegment crenated: the ſtamina are erect and diſtant. For the reſt ſee the claſſical character.

*Hyſſopus caule acute quadrangulo glabro.*
*The acutely-quadrangular, ſmooth-ſtalked Hyſſopus.*

The root is a tuft of white fibres: the plant grows to five feet high; the ſtalk is firm and green: the leaves ſtand on pedicles, and are of a cordated form, ſmooth, and ſharply ſerrated at their edges: the flowers are ſmall and yellow, and ſtand in a kind of ſquare ſpikes, at the tops of the branches.

It is a native of Virginia. Tournefort calls it, Sideritis altiſſima ſcrophulariæ folio, flore flaveſcente.

The other ſpecies are, 1. The common Hyſſop. 2. The Siberian, large, blue-flowered Hyſſop. 3. The laciniated-leaved Hyſſop. 4. The myrtle-leaved Hyſſop. 5. The tall, hairy Hyſſop.

## NEPETA.

THE middle ſegment of the lower lip of the corolla is crenated: the ſtamina ſtand cloſe to one another. For the reſt ſee the claſſical character.

*Nepeta foliis ſeſſilibus, nudis, calycibus fructus ovatis æqualibus.* Tall, white Sideritis.
*The naked, ſeſſile-leaved Nepeta, with the cups in ſeed oval and equal.*

The root is oblong and fibrated: the plant grows to five feet high: the ſtalks are ſquare, hairy, and ramoſe; the leaves are two inches and a half long, an inch and a half broad, ſerrated, terminating in a point, and of a deep green colour on the upper ſurface, and hoary underneath: the flowers are large, and of a pale red; they are diſpoſed in a kind of ſpikes.

It is a native of Spain. J. Bauhine calls it, Mentha cataria Hiſpanica, olim Sideritis altiſſima flore albo.

The other ſpecies are, 1. The common, hoary Nepeta. 2. The interruptedly-ſpicate Nepeta. 3. The veronica-leaved Nepeta. 4. The common, leſſer Nepeta. 5. The narrow-leaved Nepeta. 6. The tuberous-rooted, betony-leaved Nepeta. 7. The leſſer, fibroſe-rooted, betony-leaved Nepeta.

## BETONICA.

THE calyx is ariſtated: the upper lip of the corolla is plane and emarginated: the tube is cylindric. For the reſt ſee the claſſical character.

*Betonica ſpicata corollis majoribus.* Common, Wood Betony.
*The ſpiked Betonica, with larger corollæ.*

The root is thick, tuberous, and fibrated; the leaves ſtand on long pedicles, and are hairy, of a blackiſh-green colour, and crenated round the edges: the ſtalks are ſquare, and a foot high; the flowers of a bright red colour, and diſpoſed in ſhort ſpikes.

It is common in our woods. C. Bauhine calls it, Betonica purpurea.
It is a famous cephalic.

The other ſpecies of Betonica are, 1. The taller, narrower-leaved, white-flowered Betonica. 2. The great, broad-leaved, yellow, hairy Betonica. 3. The yellowiſh, white-flowered Betonica, called ſmooth Sideritis. 4. The yellow, ſage-leaved, ſea Betonica.

## SIDERITIS.

THE lower lip of the corolla is trilobous and undivided: the calyx is ariſtated. The reſt ſee in the claſſical character.

*Sideritis foliis ovato-prælongis ſuperne crenatis.*
*The oblong, oval-leaved Sideritis, crenated in the upper part.*

The root is oblong, woody, and divaricated; the ſtalks are procumbent, ſix or eight inches long, ſquare, whitiſh, and hoary: the leaves ſtand in pairs; they are oblong, moderately broad, and crenated toward their extremities: the flowers are ſmall, and of a whitiſh-red colour; they ſtand in cluſters, round the tops of the ſtalks.

It is a native of France. C. Bauhine calls it, Sideritis hirſuta procumbens.

The other ſpecies are, 1. The procumbent Sideritis, with undivided leaves. 2. The Sideritis, with deeply-divided leaves. 3. The hyſſop-leaved, Alpine Sideritis. 4. The narrow-leaved, Spaniſh Sideritis, called Tragoriganum. 5. The narrow-leaved, crenated Sideritis. 6. The ſhrubby, Spaniſh Sideritis. 7. The trifid-leaved Sideritis. 8. The procumbent, hyſſop-leaved Sideritis. 9. The Sideritis, called Marrubiaſtrum vulgare, and Alſine triſſaginis folio. 10. The Sideritis, called the motherwort-leaved Marrubiaſtrum.

## MENTHA.

THE corolla is nearly equal, and divided into four ſegments; the broader ſegment is emarginated. For the reſt ſee the claſſical character.

This genus comprehends the Mentha, Menthaſtrum, and Pulegium of authors.

*Mentha floribus ſpicatis, foliis oblongis ſerratis.* **Long-leaved Horſemint.**
*The ſpiked-flowered Mentha, with long, ſerrated leaves.*

The root is white and creeping: the plant grows to two or three feet high: the ſtalk is ſquare, robuſt, and ramoſe; the leaves are two inches and a half long, narrow, ſharply ſerrated at the edges, and of a greyiſh-green colour: the flowers are ſmall, and of a whitiſh-red colour; they ſtand in long ſpikes, at the tops of the branches.

It grows with us in wet places. C. Bauhine calls it, Mentha ſylveſtris folio longiore; others, Menthaſtrum ſpicatum longifolium.

The other ſpecies of Mentha are, 1. The round-leaved Mentha. 2. The large, purple-flowered, round-leaved Mentha. 3. The verticillate, roundiſh-leaved Mentha. 4. The garden, Baſil Mentha. 5. The curled, roundiſh-leaved, ſpiked, garden Mentha. 6. The great, curled-leaved, Daniſh Mentha. 7. The round-leaved, water Mentha. 8. The round, rough-leaved, ſpiked Mentha. 9. The hairy, verticillate, field Mentha. 10. The narrow-leaved, ſpiked Mentha. 11. The ſhort-ſpiked, pepper Mentha. 12. The broad-ſpiked, long-leaved, water Mentha.

Of thoſe called by authors Pulegium there are, 1. The common Pennyroyal. 2. The ſmall, hoary Pennyroyal. 3. The narrow-leaved Pennyroyal. 4. The broad-leaved Pennyroyal.

## GLECHOMA.

THE two pairs of the antheræ, ſeparately, are arranged in form of croſſes.

*Glechoma foliis reniformibus crenatis.* Ground Ivy.
*The Glechoma, with kidney-shaped, crenated leaves.*

The root is fibrous; the stalks are square, procumbent, and jointed; the leaves are roundish, of a dusky green, hairy, and crenated about the edges: the flowers are moderately large, and of a beautiful blue.

It is common under our hedges. C. Bauhine calls it, Hedera terrestris vulgaris.

It varies in the size and figure of the leaves, and colour of the flowers, and has hence been divided by authors into several imaginary species.

## ORVALA.

THE upper lip of the corolla is divided into three lobes, each of which is terminated by three points: the lower lip is cordated and crenated.

This genus comprehends the Papia of Micheli. There is but one known species of it.

### Orvala.

The root is fibrous; the stalk is robust, and three feet high: the leaves stand in pairs; they have long pedicles; they are two inches and a half long, an inch and a half broad near the base, deeply laciniated at the edges, and terminate in a sharp point: the flowers are large and purple, and stand in clusters at the joints of the stalks.

It is a native of Italy.

## AJUGA.

THE upper lip of the corolla is extreamly small; for the rest, see the classical character. This genus comprehends the Bugula of authors.

*Ajuga tetragono-pyramidalis.* Hairy Bugle.
*The tetragonously-pyramidal Ajuga.*

The root is fibrous and white; the stalk is square and hairy; the plant grows to a foot and a half high: the leaves stand on long pedicles; they are three inches long, narrow, lightly hairy, and crenated: the flowers are blue, and stand in a lax spike.

It is a native of France and Italy. J. Bauhine calls it, Consolida media Genevensis.

The other species are, 1. The common Bugle. 2. The great Alpine Bugle.

## LAMIUM.

THE upper lip of the corolla is undivided, and forms a kind of arch: the lower lip is divided into two lobes: the opening has on each side a dentated edge.

This genus comprehends the Lamium of Tournefort, and the Galeopsis of Rivinus.

*Lamium foliis floralibus sessilibus amplexicaulibus obtusis.*
*The Lamium, with the floral leaves sessile, and surrounding the stalks.*

The root is fibrous and white; the stalks are square, weak, six or eight inches long, and hollow: the lower leaves have pedicles; they are crenated and pointed; those on the upper part of the stalks meet, and surround it; the flowers grow from the alæ of these, and are moderately large, and of a pale red.

It is common in our ploughed fields. C. Bauhine calls it, Lamium folio caulem ambiente.

The other species are, 1. The roundish-leaved, purple-flowered Lamium, called Galeopsis. 2. The lesser, roundish-leaved Galeopsis. 3. The oblong-leaved, red-flowered Lamium. 4. The common, white Lamium. 5. The Lamium, with blotched leaves. 6. The pellitory of the wall-leaved Lamium. 7. The purple Lamium, with finely divided leaves. 8. The common, little, red Lamium.

## GALEOPSIS.

THE upper lip of the corolla is crenated and arched: the lower lip is bidentated in it's upper part: the calyx is ariſtated.
This genus includes the Cannabis Spuria of Rivinus, and the Tetrahit of Dillenius.

*Galeopſis ramis ſummis ſtrigoſis.* **Hemp-leaved Dead-nettle.**
*The Galeopſis, with the tops of the branches ſtrigoſe.*

The root is fibrous and white; the plant riſes to three feet high: the ſtalk is ſquare, hollow, and ramoſe: the leaves are two inches long, narrow, hairy, and ſerrated: the flowers are moderately large, and of a pale red; their cups are prickly.
It is common in our corn-fields. C. Bauhine calls it, Urtica aculeata foliis ſerratis; others, Cannabis ſpuria.
The other ſpecies are, 1. The yellow-flowered, hemp-leaved Galeopſis. 2. The narrow-leaved Galeopſis, with variegated flowers. 3. The purple, ſpreading, field Galeopſis, called Ladanum ſegetum, and Sideritis rubra. 4. The betony-leaved Galeopſis. 5. The oblong-leaved, yellow-flowered Galeopſis, called yellow Dead-nettle. 6. The larger-leaved, yellow Galeopſis. 7. The rounder-leaved Galeopſis. 8. The teucrium-leaved, ſhrubby Galeopſis.

## STACHYS.

THE upper lip of the corolla is arched: the lower lip is reflex, divided into three ſegments; the middle one largeſt, reflex, and emarginated.
This genus comprehends ſome of the Galeopſides of Tournefort.

*Stachys foliis oblongo-cordatis, floribus verticillatis.* **Baſe Hoar-hound.**
*The oblongo cordated-leaved Stachys, with verticillate flowers.*

The root is thick, tuberous, and fibrated; the plant riſes to two feet high: the ſtalk is ſquare, robuſt, and hoary: the leaves are oblong, crenated, and hoary: the flowers grow in cluſters round the ſtalk, at the upper joints, in ſuch manner as to form a kind of ſpike; they are moderately large and red.
It is a native of Germany and France. C. Bauhine calls it, Stachys major Germanica.
The other ſpecies are, 1. The betony-leaved Stachys, with variegated flowers. 2. The broad-leaved, ſmooth, field Stachys. 3. The great-ſpiked, ſtinking Stachys. 4. The marſh Stachys, with betony leaves.

## BALLOTA.

THE calyx is of a hypocrateriform ſhape, with five indentings at the end, and marked with ten ſtriæ: the upper lip of the corolla is crenated.
Of this genus there is but one known ſpecies.

### BALLOTA.

The root is fibrous; the plant riſes to three feet high; the ſtalks are ſquare, thick, and hairy: the leaves are of a ſomewhat cordated form, an inch and a half long, and near as much in breadth at the baſe; of a duſky green, and crenated: the flowers are red, and ſtand in round cluſters at the joints of the ſtalks.
It is common by way-ſides. C. Bauhine calls it, Marrubium nigrum fœtidum; others, Ballota.

## MARRUBIUM.

THE calyx is of a hypocrateriform ſhape, divided into ten parts at the end, and marked with ten ſtriæ: the upper lip of the corolla is bifid and linear.

This genus comprehends the Marrubium of Tournefort, and the Pſeudo-dictamnus of Rivinus.

*Marrubium foliis cordatis, caule fruticoſo.* Baſtard Dittany.
*The cordated-leaved, ſhrubby-ſtalked Marrubium.*

The root is hard, oblong, and brachiated; the plant riſes to a foot and half high: the ſtalks are numerous, ſquare, and hoary; the leaves are three quarters of an inch in diameter, roundiſh, thick, whitiſh, and hoary, much reſembling thoſe of the Dittany of Crete: the flowers are purple, and ſtand in round cluſters at the joints of the ſtalk.

It is a native of Crete. C. Bauhine calls it, Pſeudo-dictamnus inodorus.

The other ſpecies are, 1. The common, white Marrubium. 2. The rounder-leaved, white Marrubium. 3. The great, broader-leaved Marrubium. 4. The hairy Marrubium. 5. The narrow-leaved Marrubium. 6. The ſtellated and aculeated, cupped Marrubium. 7. The procumbent, ſilvery-leaved Marrubium. 8. The Molucca-cupped Marrubium. 9. The curled and rugoſe-leaved Marrubium. 10. The great, white-leaved Marrubium. 11. The great, blackiſh, and hairy-leaved Marrubicum. 12. The ſcrophularia-leaved Marrubium. 13. The ground-ivy-leaved Marrubium. The ſix laſt are called, by authors, Pſeudo-dictamni.

## LEONURUS.

THE calyx is of a cylindric figure, ſtriated, and terminated by patulous denticulations: the upper lip of the corolla is erect and barbated; the involucrum ſetaceous.

This genus comprehends the Leonurus and Cardiaca of Tournefort, and the Galeobdolon of Dillenius.

*Leonurus foliis tripartitis multifidis linearibus obtuſiuſculis.* Ruſſian Motherwort.
*The Leonurus, with tripartite, multifid, linear, obtuſe leaves.*

The root is creeping and fibrated; the ſtalks are numerous, ſquare, hairy, and two feet high: the leaves are ſomewhat like thoſe of the coronopus, divided into three principal parts, and from theſe into others; they are of a bright green on the upper ſurface, and whitiſh underneath: the flowers ſtand in thick cluſters at the joints of the ſtalk; they are ſmall and red.

It is a native of Ruſſia. Amman calls it, Ballote inodora foliis Coronopi.

The other ſpecies of Leonurus are, 1. The common Cardiaca. 2. The ſmooth-leaved, finely-divided Cardiaca. 3. The great, purple-flowered, ſideritis-leaved Leonurus. 4. The ſmaller-flowered, catamint-leaved Leonurus. 5. The origanum-leaved Leonurus.

## PHLOMIS.

THE calyx has five folds or plicæ, and is marked with ten ſtriæ: the upper lip of the corolla is incumbent and hairy; the involucrum is foliaceous.

*Phlomis foliis cordatis villoſis, caule fruticoſo.* Sage Mullein.
*The ſhrubby-ſtalked, cordated, hairy-leaved Phlomis.*

The root is woody and fibrated; the ſtalks are numerous, woody, ſquare, and whitiſh: the leaves are very hoary and white, like thoſe of ſage, but larger: the flow-

ers ſtand in round cluſters about the upper parts of the ſtalks; they are large and yellow.

It is a native of Spain. C. Bauhine calls it, Verbaſcum latis ſalviæ foliis.

The other ſpecies of Phlomis are, 1. The little, purple-flowered Phlomis. 2. The ſmooth, nettle-leaved Phlomis; theſe are both Ruſſian. 3. The narrower-leaved, yellow Phlomis. 4. The round-leaved, purple, ſhrubby Phlomis. 5. The pointed-leaved, purple, ſhrubby Phlomis. 6. The purple, clary-leaved Phlomis. 7. The very white, ſhrubby, Spaniſh Phlomis. 8. The very white, herbaceous Phlomis.

## MOLUCCELLA.

THE calyx is of a campanulated figure, and is larger than the corolla.

*Moluccella calycibus ſeptem dentatis.* Prickly
*The Moluccella, with cups indented in ſeven places.* Molucca.

The root is fibrous; the ſtalks are numerous, ſquare, a foot and half high, and ramoſe: the leaves are of a roundiſh figure; they ſtand on long pedicles, and are jagged at the edges: the flowers are red, and ſtand in cluſters in large cups.

It is a native of the Molucca's. C. Bauhine calls it, Meliſſa Moluccana fœtida.

The other ſpecies are, 1. The ſweeter-ſcented, ſmooth-cupped Molucca. 2. The ſhrubby, Sicilian Molucca.

*Claſs the Fourteenth. Order the Firſt.*

*Diviſion the Second.*

*Dydinamia Gymnoſpermia, with bilabiated cups.*

## OCYMUM.

ONE of the two lips of the cup is divided into four ſegments, the other into two. One of the lips of the flower is divided into four ſegments, the other is undivided.

*Ocymum foliis ovatis glabris.* Great
*The ſmooth, oval-leaved Ocymum.* Baſil.

The root is fibrous; the plant riſes to a foot high, or more: the ſtalk is green and tender: the leaves ſtand on pedicles, and are oblong, broad, and of a pale green: the flowers are white, or reddiſh, and are moderately large; they ſtand in cluſters round the tops of the ſtalks, ſo as to form a kind of ſpike.

It is a native of Ceylon, but is frequent in our gardens. C. Bauhine calls it, Ocymum caryophyllatum majus.

The other ſpecies are, 1. The little, oval-leaved Ocymum. 2. The great, fimbriated-leaved Ocymum. 3. The green, oblong, leaved Ocymum. 4. The blackiſh-leaved, rue Ocymum. 5. The citron Ocymum. 6. The aniſe Ocymum. 7. The ſhort-ſpiked Ocymum. 8. The narrow, ſerrated-leaved Ocymum. 9. The narrow, bullated-leaved Ocymum.

## TRICHOSTEMA.

THE upper lip of the corolla is falcated; the ſtamina are extremely long.

It is a native of North America, deſcribed by Gronovius, in his Flora Virginica. The characters diſtinguiſh it ſufficiently, without a deſcription.

## THYMUS.

THE mouth or opening of the calyx is closed up with hairs. For the rest, see the classical character.

This genus comprehends the Thymus, Serpyllum, and Acinos of many authors.

*Thymus verticillis lanuginosis, dentibus calycinis setaceis pilosis.*
*The Thymus, with woolly verticils, and the denticles of the cup hairy.*

Herb Mastic.

The root is oblong, woody, and fibrated; the plant grows to a foot and half high: the stalks are woody, ramose, and durable: the leaves are very small, and resemble those of common Thyme: the flowers are small and white, and are placed in thick clusters around the tops of the stalks.

It is a native of Spain. C. Bauhine calls it, Sampsuchus sive Marum mastichen redolens.

The other species of Thymus are, 1. The common, garden Thyme. 2. The broader-leaved Thyme. 3. The capitated, Cretic Thyme. 4. The procumbent Thyme. 5. The capillaceous, hairy-leaved Thyme, with great heads. 6. The dittany-headed Thyme. 7. The smooth, glossy-leaved, sea Thyme. 8. The long-leaved, autumnal, headed Thyme. 9. The broad-leaved, hairy Thyme. 10. The common, wild Thyme. 11. The great-flowered, wild Thyme. 12. The hoary-headed, wild Thyme. 13. The lemon-scented, wild Thyme. 14. The smooth, narrow-leaved Thyme. 15. The hairy, narrow-leaved, wild Thyme. 16. The short-leaved, wild Thyme, called creeping Marum.

## MELISSA.

THE calyx is of a subcampanulated figure; the upper lip of the corolla is arched, and divided into two parts: the lower lip is divided into three segments, and the middle one is cordated. The rest see in the classical character.

This genus comprehends the Melissa and the Calamint of authors.

*Melissa foliis oblongis rugosis hirsutis, corollis longiusculis.*
*The long-flowered Melissa, with rough, hairy leaves.*

Baum-leaved Archangel.

The root is fibrous; the plant rises to a foot and half high: the stalks are square, hairy, jointed, and robust: the leaves are two inches long, an inch and half broad toward the base, rugose, and of a blackish-green: the flowers are long, pendent, and red; they stand three or four together in the alæ of every leaf.

It is a native of England, but is not common here. C. Bauhine calls it, Lamium montanum Melissæ folio.

The other species of Melissa are, of the Baum-kind, 1. The common, garden Melissa. 2. The strong-smelling, lightly-hairy Melissa. 3. The dwarf, broad-leaved, great-flowered Melissa. 4. The great-flowered, narrow-leaved Melissa. 5. The plantain-leaved Melissa.

Of the Calamint-kind there are, 1. The roundish, large-leaved Calamint. 2. The smaller-leaved, strong-smelling Calamint. 3. The tall, dentated-leaved Calamint. 4. The great-flowered Calamint. 5. The small-flowered Calamint. 6. The ocymum-leaved Calamint. 7. The savory-leaved Calamint. 8. The marum-leaved Calamint. 9. The thyme-leaved Calamint.

## CLINOPODIUM.

THERE is an involucrum, with a multitude of hairs placed under the clusters of flowers. The rest of the parts see in the classical character.

*Clinopodium*

*Clinopodium verticillis denſis, foliis ſubrotundis.* Great, Wild
*The roundiſh-leaved, thick-cluſtered Clinopodium.* Baſil.

The root is oblong and oblique: the plant grows to a foot and half high; the ſtalks are ſquare, ſlender, and hairy: the leaves are ſmall and roundiſh; they are hairy, and of a pale green: the flowers are oblong and red; they are placed at the joints of the the ſtalks in large tufts.

It is common in dry places. C. Bauhine calls it, Clinopodium origano ſimile.

The other ſpecies are, 1. The taller, large-leaved Clinopodium. 2. The low, ſmaller-leaved Clinopodium. 3. The baſil-like, field Clinopodium. 4. The acinos-leaved Clinopodium. 5. The ſpicated and verticillate Clinopodium. 6. The hyſſop-leaved Clinopodium.

## ORIGANUM.

THE Origanum has a ſquare, ſpiked ſtrobilus, collecting the cups into a head.
This genus comprehends the Origanum and Majorana of Tournefort.

*Origanum foliis ſubrotundis, ſpicis confertis glabris.* Wild Mar-
*The round-leaved Origanum, with ſmooth, confert ſpikes.* joram.

The root is fibrous; the ſtalks are numerous, ſquare, rigid, and two feet high: the leaves are roundiſh, half an inch in diameter, and of a dark green; the ſpikes are of a purpliſh colour, and three quarters of an inch long.

It is frequent with us by road-ſides. C. Bauhine calls it, Origanum vulgare ſpontaneum.

The other ſpecies are, 1. The procumbent, hairy Origanum. 2. The ſmall-leaved, Cretic Origanum. 3. The Origanum onites. 4. The rounder-leaved, pot Marjoram, or the pennyroyal-leaved Origanum. 6. The broad-leaved, ſmooth, procumbent Origanum. 7. The woolly Origanum, called dittany of Crete. 8. The ſmall-headed Origanum. 9. The ſhrubby Origanum, with umbellated heads.

Of thoſe called Majorana there are, 1. The common, ſmall Marjoram. 2. The broader-leaved, hairy Origanum. 3. The rounder-leaved, ſcutellated Origanum. 4. The five-leaved Origanum.

## DRACOCEPHALUM.

THE opening or mouth of the corolla is inflated, and the upper lip is hollow and longitudinally connivent.
This genus comprehends alſo the Moldavica and Pſeudo-meliſſa.

*Dracocephalum floribus verticillatis, ſerraturis capillaceis.* Turky
*The verticillate-flowered Dracocephalum, with capillary* Baum.
*ſerratures.*

The root is fibrous; the ſtalks are branched, ſquare, and rigid, a foot and half high: the leaves an inch an half long, and about half an inch broad, and finely ſerrated; they have the ſmell of Baum: the flowers are blue; they ſtand at the alæ of the leaves in cluſters.

It is a native of Turky. C. Bauhine calls it, Meliſſa peregrina folio oblongo.

The other ſpecies are, 1. The American Dracocephalum of Breynius. 2. The betony-leaved, blue-flowered Dracocephalon. 3. The trifoliate, ſcented Dracocephalum. 4. The ſpiked-flowered, ſmooth, whole-leaved, Ruſſian Dracocephalum. 5. The ſmall, germander-leaved Dracocephalum. 6. The verticillate Dracocephalum, with rounded bracteæ. 7. The betony-leaved Dracocephalum, with little, blue, pendulous flowers. 8. The very ſmall-flowered, blue Dracocephalum.

## HORMINUM.

THE calyx is campanulated, and the upper lip of the corolla is hollow; for the reſt, ſee the claſſical character. Dillenius makes this but a ſpecies of Meliſſa, Hort. Elth. 2. 16; but the cup and upper lip of the corolla diſtinguiſh it from that, and all the other genera, ſo that it needs no farther deſcription.

## MELITTIS.

THE upper lip of the calyx is emarginated: the upper lip of the corolla is plane; the lower one crenated. Rivinus has figured this, 1. 29. under the name of Meliſſophyllum. It needs no farther deſcription than this character.

## CUNILA.

THE calyx is ariſtated, and the upper lip of the corolla is arched. This genus comprehends the Marrubiaſtrum of Tournefort. The reſt of it's parts ſee in the claſſical character.

*Cunila calycis labio ſuperiore trifido, inferiore bipartito.*
*The Cunila, with the upper lip of the cup divided into three, the lower into two parts.*

The root is yellowiſh, woody, and divaricated; the ſtalk is ſquare, hairy, and a foot and a half high: the leaves are oblong, of a whitiſh green, and hairy, and lightly ſerrated toward their extremity; the flowers are very minute, ſcarce appearing, except on a cloſe examination; they are variegated with purple, yellow, and white.

It is a native of Italy. C. Bauhine calls it, Sideritis montana parvo varioque flore.

The other ſpecies are, 1. The germander-leaved Cunila. 2. The prickly, cupped Cunila. 3. The baum-leaved Cunila.

## BRUNELLA.

THE ſtamina are bifurcated, and only one of the two points has an anthera on it.

*Brunella bracteis cordatis.* **Self-heal.**
*The Brunella, with heart-ſhaped bracteæ.*

The root is fibrous; the ſtalks are ſquare, rigid, and ſix or eight inches high: the leaves an inch long, and half an inch, or more, broad, of a blackiſh-green: the flowers are blue, and ſtand in thick, ſhort ſpikes, at the top of the ſtalks.

It is common by way-ſides. C. Bauhine calls it, Brunella major folio non diſſecto; others, Brunella vulgaris.

This ſpecies varies greatly: it's flower is ſometimes larger than uſual; it's leaves are ſometimes auriculated, ſometimes deeply crenated, and ſometimes diſſected finely. C. Bauhine and others have made four diſtinct ſpecies of theſe varieties; and others have greatly farther increaſed the number, by adding the variations of the flowers into red, white, &c.

The other really diſtinct ſpecies are, 1. The great, broad-leaved Brunella. 2. The hyſſop-leaved Brunella.

## SCUTELLARIA.

THE mouth of the calyx is originally open; but, after the flower is fallen, it becomes ſhut up, as it were, with an operculum.

This genus comprehends the Caſſida of Tournefort.

*Scutellaria*

*Scutellaria foliis ſubcordatis ſerratis, ſpica interrupta.*
*The ſubcordate, ſerrated-leaved Scutellaria, with an interrupted ſpike.*

The root is oblong and oblique; the ſtalks are ſquare, rigid, and a foot and a half high: the leaves are an inch and a half long, an inch broad, ſerrated and hairy: the flowers ſtand in long, looſe ſpikes; they are large and purple.

It is a native of Italy. Columna calls it, Caſſida; C. Bauhine, Lamium peregrinum ſive Scutellaria.

The other ſpecies are, 1. The procumbent, great-flowered Scutellaria. 2. The tall, American Scutellaria. 3. The common, blue-flowered Scutellaria. 4. The little, purple-flowered Scutellaria. 5. The mallow-leaved Scutellaria. 6. The baum-leaved Scutellaria. 7. The origanum-leaved Scutellaria.

## PRASIUM.

THE fruit conſiſts of four berries, each containing a ſingle ſeed. The reſt ſee in the claſſical character.

*Praſium foliis ovato-oblongis ſerratis.*
*The Praſium, with oblong, oval, ſerrated leaves.*

The root is oblong, divaricated, and fibrated: the ſtalks are as thick as a gooſe-quill, round, but ridged, ſo as to appear ſquare; they grow to two feet high: the leaves are green all the winter; they are oblong and ſerrated; the flowers are moderately large and white, variegated with ſtreaks of yellow; they ſtand in the alæ of the leaves toward the tops of the ſtalks.

It is a native of Sicily and Crete. Moriſon calls it, Meliſſa fruticoſa teucrii facie.

*Claſs the Fourteenth. Order the Second.*

## DIDYNAMIA ANGIOSPERMIA.

*Plants with two effective ſtamina and with the ſeeds incloſed in capſules.*

*Diviſion the Firſt.*

*Such as have ſimple ſtigmata and perſonated corollæ.*

## BARTSIA.

THE calyx is divided into two lobes, and is emarginated and coloured: the corolla is leſs coloured than the calyx; the upper lip of it is the longer. The reſt of the parts ſee in the claſſical character. Theſe ſufficiently diſtinguiſh the Bartſia from all the other genera, even without any farther deſcription.

## RHINANTHUS.

THE calyx is divided into four parts, and is ventricoſe: the capſule is obtuſe and compreſſed. This genus comprehends the Criſta galli, the Elephas, and ſome of the Pediculares of Tournefort.

*Rhinanthus corollæ labio ſuperiore breviore.* Yellow
*The Rhinanthus, with the upper lip of the corolla ſhorter.* Rattle.

The root is oblong, ſlender, and woody; the ſtalk is round, rigid, and firm, and grows to a foot high: the leaves are oblong, crenated, and of a dark green; the flowers are numerous, ſmall, and yellow; they ſtand in long ſeries.

It is common in our meadows every-where. C. Bauhine calls it, Pedicularis pratenſis lutea, ſive Criſta galli.

The other ſpecies are, 1. The taller Rhinanthus, with hairy cups. 2. The ſpicated, pale-flowered Rhinanthus. 3. The viſcous, ſerrated-leaved Rhinanthus. 4. The umbellated, yellow Rhinanthus. 5. The narrow-leaved Rhinanthus. 6. The oblong, ſerrated-leaved Rhinanthus. 7. The great-flowered Elephas, with an erect trunk. 8. The ſmall-flowered Elephas, with an erect trunk. 9. The crooked-trunked Elephas.

## EUPHRASIA.

THE calyx is cylindric, and divided into four ſegments; the capſule is of an oblong, oval figure.

This genus comprehends the Euphraſia of Tournefort, and the Odontites of Dillenius.

*Euphraſia foliis ovatis acute dentatis.* **Common Eyebright.**
*The acutely-dentated, oval-leaved Euphraſia.*

The root is white, oblong, and ſlender: the ſtalk is round, thick, rigid, brown, and ſix or eight inches high: the leaves are half an inch long, oval, of a bluiſh-green colour, and dentated: the flowers ſtand all along the tops of the ſtalks; they are white, and very beautiful, though ſmall.

The plant is common in our meadows. C. Bauhine calls it, Euphraſia vulgaris.

The other ſpecies are, 1. The taller and more ramoſe Euphraſia. 2. The blue-flowered, tall, ſimple-ſtalked Euphraſia. 3. The little, yellow, Alpine Euphraſia. 4. The Euphraſia with finely-divided leaves. 5. The lanceolated, ſerrated-leaved Euphraſia.

## MELAMPYRUM.

THE calyx is divided into four parts: the upper lip of the corolla is compreſſed, and it's edge bent back: the capſule is oblique, and opens on one ſide.

*Melampyrum ſpicis conicis, laxis, laceris.* **Purple-eared Cow-wheat.**
*The Melampyrum, with conic, lax, lacerated ſpikes.*

The root is oblong, ſmall, and woody: the ſtalks are hairy, of a purpliſh colour, and ſquare: the leaves are broad, oblong, and deeply laciniated; thoſe toward the lower part of the ſtalk narrower, thoſe about the top ſhort, broad, and purpliſh: the flowers ſtand among theſe, and form a kind of ſpike; they are variegated with yellow and purple.

It is very common in the corn-fields of France, Spain, and Germany. C. Bauhine calls it, Melampyrum purpuraſcente coma; J. Bauhine, Triticum vaccinium.

The other ſpecies are, 1. The broad-leaved, yellow Melampyrum. 2. The purple and white-flowered, creſted Melampyrum. 3. The narrower-leaved Melampyrum. 4. The ſmaller-leaved, larger-flowered Melampyrum.

## LATHRÆA.

THE calyx is divided into four parts, and there is an emarginated, depreſſed gland at the baſe of the future of the germen.

This genus comprehends the Clandeſtina, Phelypæa and Squammaria, or Anblatum, of Tournefort. Linnæus has, indeed, ſeparated theſe into three genera, in his Genera Plantarum, but he has ſince found they are all but one genus.

*Lathræa*

*Lathræa caule ſimpliciſſimo, corollis nutantibus, labio inferiore trifido.*
*The ſimple-ſtalked, nodding-flowered Lathræa, with the lower lip trifid.*

Great Toothwort.

The root is white, tender, and ſucculent, variouſly divaricated, and formed of a beautiful arrangement of ſcales: the ſtalk is five or ſix inches high, as thick as one's little finger, tender, ſucculent, brittle, and ſurrounded by a thin ſkin; there are membranes, reſembling leaves, on the lower part of it, and, on the upper, there is placed a ſeries of large, duſky-coloured flowers, all hanging on one ſide.

It is found in dark, ſhadowy lanes. C. Bauhine calls it, Orobanche radice dentata major.

The other ſpecies of Lathræa are, 1. The blue, cluſtered-flowered, cordated-leaved Lathræa. 2. The oblong-leaved Lathræa; and, 3. The low, ſmaller-flowered Lathræa.

## SWALBEA.

THE calyx is divided into four ſegments; the upper ſegment is very ſmall, the lower one is large and emarginated.

It is an American, deſcribed by Gronovius, in his Flora Virginica, 71. The diviſion of the cup ſufficiently diſtinguiſhes it, without a deſcription.

## PEDICULARIS.

THE calyx is divided into five parts; the capſule is mucronated and oblique.

*Pedicularis caule ramoſo, floribus ſolitariis, calycibus quinquefidis crenatis.*
*The ramoſe, ſingle-flowered Pedicularis, with crenated cups.*

Red Rattle.

The root is fibrated and white: the ſtalks are round, procumbent, and of a purpliſh colour; the leaves are finely divided, and of a deep green colour: the flowers ſtand towards the extremities of the ſtalks; they are ſmall, and of a bright red colour.

The plant is frequent in our meadows. C. Bauhine calls it, Pedicularis rubra vulgaris.

The other ſpecies are, 1. The taller, erect Pedicularis. 2. The ſhort, obtuſe-leaved Pedicularis. 3. The teucrium-leaved, red, ſpiked Pedicularis. 4. The narrow-leaved Pedicularis. 5. The fern-leaved Pedicularis. 6. The tuberous-rooted Pedicularis. 7. The finely-divided-leaved Pedicularis.

## TOZZIA.

THE calyx is divided into five parts at the extremity; the capſule is globoſe and unilocular.

Of this genus there is but one known ſpecies.

### Tozzia.

The root is oblong, moderately thick, ſquammated, and furniſhed with a great number of fibres at the bottom: the ſtalk is ſquare, and a foot high: the leaves are oval; they ſtand in pairs, and are ſlightly crenated, and have no pedicles: the flowers grow ſingly, from the alæ of the leaves, on ſhort pedicles; they are ſmall and yellow.

It is a native of Italy. Micheli has figured it under the name of Tozzia.

## CHELONE.

THE calyx is divided into five parts: there is the rudiment of a fifth ſtamen between the upper ones.

It

It is a native of North America. Gronovius has described it in his Fl. Virg. 71: the rudiment of the fifth stamen, however, sufficiently distinguishes it, without any farther description.

## GESNERIA.

THE calyx is divided into five segments, and situated on the germen: the corolla is crooked.

It is a native of America, described by Plumier, 9. The characters of the calyx and corolla sufficiently distinguish it, without any farther description.

## GERARDIA.

THE calyx is divided into five segments: the corolla has two lips; the lower lip is divided into three emarginated lobes, the middle one is also bifid.

This also is an American, described by Plumier, 9. The characters here delivered will distinguish it from all the others of this class, without any farther description.

## ANTIRRHINUM.

THE calyx is composed of five leaves: the base of the corolla protuberates downwards, and contains a honey-like juice.

This genus comprehends the Antirrhinum, Linaria, Asarina, Cymbalaria, and Elatine of authors.

1. *Antirrhinum corollis acaudatis, calycibus brevissimis.* **Great Snap-dragon.**
*The very short, cupped Antirrhinum, with no tails to the flowers.*

The root is white, oblong, and woody; the stalks are numerous, round, rigid, and two feet high: the leaves are an inch and a half long, very narrow, and placed closely on the stalk: the flowers are large, and of a pale red colour; they stand in a kind of spikes, at the tops of the stalks.

It is a native of France, C. Bauhine calls it, Antirrhinum majus folio longiore; it is common in our gardens.

2. *Antirrhinum foliis ternis ovatis.* **Spanish Toad-flax.**
*The ternate, oval-leaved Antirrhinum.*

The root is white, oblong, and thick: the stalks are numerous, a foot high, round, and thick: the leaves stand three at a joint, and are broad, short, and surround the stalk at the base; they are of a bluish-green colour, and flattish; the flowers are purple and yellow.

It is a native of Spain. C. Bauhine calls it, Linaria triphyllos minor lutea; others, Linaria Valentina.

3. *Antirrhinum caule flaccido, foliis cordatis quinquelobiis.* **Cymbalaria.**
*The weak-stalked Antirrhinum, with cordated, quinquelobate leaves.*

The root is fibrous; the stalks are round, slender, weak, and trailing: the leaves are half an inch broad, of a dark green colour, and divided into five parts: the flowers stand on single, tortuous pedicles, arising from the alæ of the leaves; they are small, purple in colour, and have a spur behind.

It is a native of Italy, but grows on the walls of the Thames about London, from the refuse of gardens. C. Bauhine calls it, Cymbalaria.

The other species of this genus are very numerous, and have been rendered much more so by authors, who have mistaken varieties for species. The Asarina of authors is but one species, properly called the round-leaved Antirrhinum.

Those called Antirrhinum by authors are, 1. The common, field Antirrhinum. 2. The little, field Antirrhinum. 3. The yellow Antirrhinum. 4. The broad-leaved, great-

great-flowered Antirrhinum. 5. The hairy, origanum-leaved Antirrhinum. 6. The red valerian-leaved Antirrhinum. 7. The tall, narrow-leaved, Spaniſh Antirrhinum. 8. The graſſy-leaved, ſmall-flowered Antirrhinum.

Thoſe called Linariæ are, 1. The broad-leaved, Portugal Linaria. 2. The great-flowered, broad-leaved Linaria. 3. The blue-flowered, three-leaved Linaria. 4. The larger three-leaved Linaria. 5. The daiſy-leaved Linaria. 6. The moneywort-leaved Linaria. 7. The auriculated-leaved Linaria: theſe are called male and female Elatine. 8. The hairy, yellow Linaria. 9. The ſerpyllum-leaved Linaria. 10. The polygonum-leaved Linaria. 11. The hairy, ternate-leaved Linaria. 12. The polygala-leaved Linaria. 13. The broad-leaved, procumbent Linaria. 14. The common, yellow Linaria. 15. The narrow-leaved, purple and yellow-flowered Linaria. 16. The great, purple, ſweet Linaria. 17. The ſweet, capillary-leaved Linaria. 18. The narrow, hoary-leaved Linaria. 19. The little, yellow-flowered Linaria. 20. The blue, field Linaria. 21. The four-leaved, yellow Linaria. 22. The little-flowered, fleſhy-leaved, procumbent Linaria. 23. The blue, creeping Linaria. 24. The procumbent, four-leaved Linaria. 25. The mollugo-leaved Linaria. 26. The viſcous, hairy, ſea Linaria. 27. The long-tailed-flowered, narrow-leaved Linaria. 28. The thyme-leaved Linaria.

## CYMBARIA.

THE calyx is divided into a great number of linear ſegments: the reſt ſee in the claſſical character.

Of this genus there is but one known ſpecies.

### CYMBARIA.

The root is brown, woody, and creeping: the ſtalks are ſlender, round, and five or ſix inches high: the leaves are oblong, narrow, and very ſharp-pointed: the flowers are very large, and yellow; they grow on ſhort pedicles, from the alæ of the leaves: the leaves grow ſometimes ſingly, ſometimes two together.

The plant is a native of Ruſſia.

## *Claſs the Fourteenth. Order the Second.*

### *Diviſion the Second.*

*Didynamia Angioſpermia, with the ſtigma ſimple and the corolla patulous.*

## LINNÆA.

THE calyx is double; that of the fruit is compoſed of two leaves, that of the corolla is divided into five ſegments, and ſtands upon the fruit: the corolla is campanulated. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CRANIOLARIA.

THE calyx of the flower is double: the perianthium is compoſed of four leaves; the ſpatha of one leaf.

It is an American, deſcribed by Houſton as a ſpecies of Martynia, but the characters given here ſufficiently diſtinguiſh it from that and every other genus.

## ÆGINETIA.

THE ſpatha is formed of a ſingle valve: the baſe of the corolla is globoſe; the ſtigma is alſo globoſe, and reflex.

It is an Aſiatic, deſcribed in the Hortus Mal. 11. 7.

## HEBENSTRETIA.

THE calyx is formed into two labia, of which the lower one is the longeſt: the corolla has only one lip, which is aſcendent, and divided into four ſegments: the capſule contains two ſeeds.

It is an Aſiatic. The characters ſufficiently diſtinguiſh it.

## CRESCENTIA.

THE calyx is divided into two equal parts: the corolla is gibbous; the fruit is a berry on a ſhort pedicle, containing a ſingle cell, and in it many ſeeds.

It is an American, deſcribed by Plumier, 16. The characters ſufficiently diſtinguiſh it.

## HALLERIA.

THE calyx is divided into three ſegments; the corolla into four: the ſtamina are longer than the corolla; and the fruit is a berry containing two cells.

## LANTANA.

THE calyx is lightly divided at the extremity into four parts: the ſtigma is uncinated and broken.

This genus comprehends the Camara, Mirobatindum, and Pſeudo-viburnum of authors.

*Lantana foliis oppoſitis, caule inermi, ſpicis oblongis.*
*The weak-ſtalked, oppoſite-leaved, long-ſpiked Lantana.*

The root is brachiated; the ſtem is angular, weak, and has a pith in it; it riſes to three or four feet high: the leaves are two inches long, and, in the broadeſt part, an inch broad, dentated about the edges, and much reſembling thoſe of ſage: the flowers are purple, and ſtand in ſpikes an inch long.

It is a native of America. Plumier calls it, Camara arboreſcens ſalviæ folio.

The other ſpecies are, 1. The prickly, oppoſite-leaved Camara, called ſcarlet Myrobatindum. 2. The larger-leaved Camara. 3. The more hoary Camara. Authors have added another under the name of the round-leaved Myrobatindum, but it is only a variety of the firſt.

## GMELINA.

THE calyx is obſcurely divided into four ſegments at the edge: the corolla is campanulated, and divided alſo into four ſegments: the antheræ are bipartite.

It is a native of Ruſſia; the characters ſufficiently diſtinguiſh it.

## LOESELIA.

THE calyx is divided into four parts: the corolla has but one lip, and that is divided into five ſegments; againſt this ſtand the ſtamina, which are bent: the fruit is a capſule, containing three cells, and in each ſeveral ſeeds.

It is an American, deſcribed by Houſton under the name of Royenia. The characters ſufficiently diſtinguiſh it, without any farther deſcription.

## SELAGO.

THE calyx is divided into four parts; the tube of the corolla is capillary: the limb is nearly equal; the ſeed is ſingle. The characters ſufficiently diſtinguiſh it.

## PETRÆA.

THE calyx is very large, patent, coloured, and divided into five ſegments: the corolla is alſo patent, and is of a rotated form.

*Petræa foliis rugoſis ovatis.*
*The oval, rugoſe-leaved Petræa.*

The root is brachiated; the ſhrub riſes to ten feet high: the leaves are three inches long, an inch and a half broad, even at the edges, and very rough to the touch: the flowers ſtand in long, ſlender ſpikes; they are ſmall, and of a pale yellowiſh hue.

It is a native of America.

The other ſpecies are, 1. The ſmaller-leaved Petræa. 2. The larger-flowered Petræa.

## CELSIA.

THE calyx is divided into five ſegments; the corolla is rotated; the ſtamina are bearded; and the capſule contains two cells. The characters ſufficiently diſtinguiſh it.

## CAPRARIA.

THE calyx is divided into five ſegments; the corolla is campanulated, ventricoſe, and divided into five ſegments: the capſule is formed of two valves; it contains only one cell, and in it a great number of ſeeds.

This genus comprehends the Samoloides of Boerhaave, and the Ageratum of Tournefort.

*Capraria foliis ſubovatis ſerratis.*
*The oval and ſerrated-leaved Capraria.*

The root is yellow, ſhort, and fibrated; the radical leaves are numerous, of an oblong, oval figure, ſmall, and ſerrated about the edges: the ſtalks are ſlender, and hang from out the cracks of the rocks: the flowers are moderately large, of a beautiful purple, and very ſweet-ſcented.

It is a native of Italy. C. Bauhine colls it, Ageratum ſerratum Alpinum.

The other ſpecies are, 1. The rapunculus-leaved Capraria. 2. The narrow-leaved, hairy Capraria. 3. The taller Capraria.

## DIGITALIS.

THE calyx is divided into five parts; the corolla is of a campanulated form, ventricoſe, and divided into three ſegments: the capſule is of an oval figure.

*Digitalis foliis calycinis lanceolatis, corollis acutis.*
*The Digitalis, with the calycine leaves lanceolate, and with acute corollæ.*

Yellow Foxglove.

The root is oblong, thick, and fibrated; the ſtalk is robuſt, thick, and four feet high: the leaves are ſix inches long, and near three broad, crenated, of a dark green above, and hairy below: the flowers are ſmall, and of a greeniſh-yellow; they ſtand in long ſeries on the tops of the ſtalks.

It is a native of Italy. C. Bauhine calls it, Digitalis lutea vel pallida parvo flore.

The other ſpecies are, 1. The common, purple Digitalis. 2. The ſmaller, purple Digitalis. 3. The oriental Digitalis, called Seſamum. 4. The trifid-leaved, white Digitalis. 5. The little Digitalis, called Gratiola. 6. The flax-leaved Digitalis. 7. The great-flowered, yellow Digitalis. 8. The narrow-leaved, little-flowered Digitalis. 9. The narrow-leaved, yellow Digitalis. 10. The broad-leaved, browniſh-flowered

flowered Digitalis. 11. The narrow-leaved, ferrugineous-flowered Digitalis. 12. The narrow-leaved, purple Digitalis. 13. The very narrow-leaved, blackish-flowered Digitalis.

## BIGNONIA.

THE calyx is of a cyathiform figure, and is divided into five segments: the mouth of the corolla is campanulated, and divided into five segments: the fruit is a pod, containing two cells: the seeds are membranaceous.

This genus comprehends the Bignonia of Tournefort, and the Pseudo-gelseminum of Rivinus.

*Bignonia foliis pinnatis, foliolis incisis, geniculis radicatis.*
*The pinnated-leaved Bignonia, rooting at the joints.*
The scarlet, Trumpet-flower.

The root is brachiated; the stem is slender, tortuous, ramose, and twelve feet, or more, in length; it needs support, and infixes it's roots from every joint, where it touches any thing: the leaves are pinnated, and seven inches long; the pinnæ three quarters of an inch long, half an inch broad, and serrated: the flowers stand four or five together, and are very large, and of a beautiful scarlet.

It is a native of America. Cornutus calls it, Gelseminum Indicum; others, Bignonia fraxini folio.

The other species are, 1. The yellow-flowered, ash-leaved Bignonia. 2. The short-podded Bignonia. 3. The very long-podded, yellow Bignonia. 4. The broad-podded Bignonia. 5. The violet-flowered, bifoliate Bignonia. 6. The box-leaved Bignonia. 7. The undulated-leaved Bignonia. 8. The cordated-leaved Bignonia. 9. The long, single-leaved Bignonia. 10. The five-leaved, red-flowered Bignonia.

## CITHARESEYLON.

THE calyx is campanulated, and divided into five segments: the corolla is infundibuliform and rotated: the segments are hairy above, and equal.

These characters sufficiently distinguish it, without a farther description.

## MARTYNIA.

THE calyx is divided into five segments: the corolla is campanulated, gibbous at the base, and contains a honey-juice there; the stamina are bent among one another, and there is a rudiment of a fifth between the upper ones.

*Martynia foliis ovato-lanceolatis.*
*The ovato-lanceolate-leaved Martynia.*

The root is tuberous and jointed: the stalk is round, thick, and spotted: the leaves are four inches long, and three broad, at the base: the flowers are an inch long, and near as much in breadth; they are of a beautiful blue.

It is a native of America; we have it in our stoves.

The other species are, 1. The larger-leaved, purple Martynia. 2. The white Martynia, with a long tube. 3. The divided-leaved Martynia.

## SCROPHULARIA.

THE calyx is divided into five parts: the corolla is of a globose figure; it's upper lip is bent downwards.

*Scrophularia*

*Scrophularia foliis cordatis, pedunculis ſolitariis multifloris.*
*The cordated-leaved Scrophularia, with ſingle, many-flowered peduncles.*

Yellow Figwort.

The root is tuberous and white: the ſtalk is ſquare; the leaves ſtand two at a joint, and are broadeſt near the baſe, and terminate in a point; from the ala of each riſes a peduncle which ſupports ſeveral flowers; theſe are ſmall and yellow.

It is a native of Italy, but is not common. C. Bauhine calls it, Scrophularia flore luteo.

The other ſpecies are, 1. The common, knobby-rooted Scrophularia. 2. The great, hairy Scrophularia. 3. The water Scrophularia. 4. The nettle-leaved Scrophularia. 5. The baum-leaved Scrophularia. 6. The betony-leaved Scrophularia. 7. The ſhrubby, teucrium-leaved Scrophularia. 8. The ſmooth, elder-leaved Scrophularia. 9. The yellow Scrophularia, with thick, roundiſh leaves. 10. The fern-leaved Scrophularia. 11. The ſhining, rock Scrophularia. 12. The five-leaved Scrophularia. 13. The ſhrubby, vervain-leaved Scrophularia.

## BESLERIA.

THE calyx is divided into five ſegments: the fruit is a berry of a globoſe form, containing ſeveral ſeeds.

It is an American, deſcribed by Plumier, 5. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CORNUTIA.

THE calyx has five indentings at the edge: the ſtamina are longer than the corolla: the fruit is a berry, containing only a ſingle ſeed.

This is an American alſo, deſcribed by Plumier, 17. It's characters ſufficiently diſtinguiſh it.

## BROWALLIA.

THE calyx has five indentings at the extremity: the corolla is patent, and is divided into five equal ſegments at the edge: the umbilicus is cloſed by the two large antheræ. Of this genus there is but one known ſpecies.

### BROWALLIA.

The root is fibrated; the plant grows to a foot and a half high: the leaves are placed alternately; they are oval, rough, and ſtand on pedicles: the flowers ſtand ſingly on peduncles, ariſing from the alæ of the leaves: they are blue, and the upper ſegment has a ſpot of yellow.

It is a native of South America.

## ERINUS.

THE calyx is compoſed of five leaves: the limb of the corolla is divided into five equal, emarginated ſegments.

It is an American. The characters ſufficiently diſtinguiſh it.

## BUCHNERA.

THE calyx has five obſcure indentings at it's edge; the corolla has five equal and obverſely cordated ſegments at it's edge. Theſe characters ſufficiently diſtinguiſh it.

## LIMOSELLA.

THE calyx is divided into five ſegments at the edge: the corolla is alſo divided into five equal ſegments: the capſule is formed of two valves; it contains a ſingle cell, and in it ſeveral ſeeds.

This genus comprehends the Plantaginella of Dillenius. There is but one known ſpecies of it.

### LIMOSELLA.

The root is ſmall, oblong, and fibrated: the leaves are numerous; they are placed on long pedicles, and are oblong and pointed. In the midſt of theſe riſes a ſingle ſtalk, very ſlender, and about an inch high, on which ſtands one ſmall, white flower.

It is common with us in muddy places. C. Bauhine calls it, Plantaginella paluſtris.

*Claſs the Fourteenth. Order the Second.*

*Diviſion the Third.*

*Didynamia Angioſpermia, with double ſtigmata.*

## OBOLARIA.

THERE is no calyx: the corolla is campanulated, and divided into four ſegments at the edge; the fruit is a capſule, formed of two valves, and containing ſeveral ſeeds. The characters diſtinguiſh it ſufficiently.

## OROBANCHE.

THE calyx is divided into four parts; the corolla is ringent: the capſule is formed of two valves; it contains a ſingle cell, and in it ſeveral minute ſeeds.

*Orobanche caule ſimplici, corollis majoribus.*
*The large-flowered, ſimple-ſtalked Orobanche.* Broom-rape.

The root is fibrous; the plant grows to a foot and a half high: the ſtalk is ſimple, very thick, of a brown colour, and ornamented with a few membranes inſtead of leaves; it is bulbous at the baſe, and at the top forms a ſpike of flowers; theſe are of a yellowiſh-brown, wide and gaping. The whole plant is of the ſame general, tawny, or yellowiſh-brown colour, and it has no leaves.

It is common in our broom-fields, and ſometimes in places where there is none of that ſhrub, J. Bauhine calls it, Orobanche flore majore.

The other ſpecies are, 1. The great, ſtinking Orobanche, with ſmaller flowers. 2. The purple-flowered, leſſer Orobanche. 3. The ſmall-flowered Orobanche. 4. The blue-flowered Orobanche. 5. The ſmall-flowered, ramoſe Orobanche. 6. The duſky-branched, American Orobanche.

## LIPPIA.

THE calyx is roundiſh, and has four indentings at the edge; it is erect, compreſſed, and membranaceous: the capſule is covered: it is formed of two valves; it contains only one cell, and in it two ſeeds.

It is an American, deſcribed by Houſton. Theſe characters ſufficiently diſtinguiſh it.

## MIMULUS.

THE calyx is of a priſmatic figure, and has four indentings at it's edge: the corolla is ringent, and it's upper lip is folded back at the ſides: the capſule contains two cells, and each ſeveral ſeeds. There is but one known ſpecies of this genus.

## MIMULUS.

The root is creeping; the plant riſes to two feet high; the ſtalk is robuſt, ſmooth, and ſquare: the leaves ſtand two at a joint; they have no pedicles, but embrace the ſtalk at their baſe; they are oblong and narrow: the flowers are large, and of a beautiful blue; they ſtand on pedicles ariſing from the alæ of the leaves.

It is a native of Virginia. Ray calls it, Digitalis perfoliata glabra flore violaceo minore; Moriſon, Digitalis Lyſimachiæ facie.

## BONTIA.

THE calyx is divided into five ſegments: the lips of the corolla are bent back; the fruit is a drupe of an oval figure, containing only a ſingle ſeed.

It is an American, deſcribed by Plumier, 23. It's characters ſufficiently diſtinguiſh it.

## SESAMUM.

THE calyx is divided into five ſegments: the corolla is of a campanulated form, and divided alſo into five ſegments, the loweſt of which is the largeſt: the ſtigmata are of a lanceolated figure, and the capſule contains four cells. Of this there is but one known ſpecies.

### SESAMUM. The Oily Grain Plant.

The root is oblong and fibrated: the ſtalk is ſingle, robuſt, firm, a foot and a half high, and fleſhy: the leaves ſtand on long pedicles; they are oblong, narrow, and ſerrated: the flowers are very large, of a beautiful blue on the outſide, and white within; they reſemble thoſe of the foxglove in ſhape, and they ſtand on pedicles ariſing from the alæ of the leaves.

It is a native of the Eaſt. It's ſeeds, and an oil extracted from them, were once kept in our ſhops; now both are unknown there.

## DODARTIA.

THE calyx has five indentings at it's edge; the lower lip of the corolla is twice as long as the other: the capſule is of a globoſe figure, and contains two cells.

It is an oriental, of which there is only one known ſpecies. The characters ſufficiently diſtinguiſh it.

## RUELLIA.

THE calyx is divided into five parts; the corolla is of a ſomewhat campanulated figure: the capſule burſts open, when ripe, by means of certain elaſtic denticles.

It is an American. There are two ſpecies; one a native of Virginia and Carolina, the other of Barbadoes. The former has a great many flowers on one common peduncle, the other only three.

## BARLERIA.

THE calyx is divided into five parts; two of the ſtamina are vaſtly ſmaller than the others: the capſule is formed of two valves; it is of a quadrangular figure, and contains only one cell: it is elaſtic without the ungues, or denticles of the Ruellia.

It is an American, deſcribed by Plumier 3. 31. The characters ſufficiently diſtinguiſh it.

## OVIEDA.

THE calyx is divided into five ſegments: the tube of the corolla is cylindric, and extreamly long: the fruit is a globoſe berry, containing two ſeeds.

It is an American, deſcribed by Plumier under the name of Valdia. The characters ſufficiently diſtinguiſh it.

COLUMNEA.

## COLUMNEA.

THE calyx is divided into five ſegments: the upper lip of the corolla is arched and undivided: the fruit is a globoſe berry, containing two cells, and in each ſeveral ſeeds.

It is an American, deſcribed by Plumier, 39. The characters ſufficiently diſtinguiſh it.

## CLERODENDRUM.

THE calyx is of a campanulated form, and divided into five ſegments; the tube of the corolla is filiform: the limb is divided into five equal ſegments: the ſtamina are extreamly long; they ſtand wide apart between the ſegments of the corolla: the fruit is a berry. Of this there is but one known ſpecies.

### CLERODENDRUM.

The root is yellow and fibrated: the ſhrub riſes to three feet high; the ſtem is brittle, and appears ſquare: the leaves are four inches long, and three broad: the flowers ſtand on long pedicles at the tops of the branches; they are large and white.

It is a native of Malabar, and is deſcribed in the Hort. Mal. under the name of Perager.

## VOLKAMERIA.

THE calyx is divided into five ſegments: the tube of the corolla is capillary, and it's limb is divided alſo into five equal ſegments: the ſtamina are long and ſeparate; the fruit is a dry capſule, containing two ſeeds.

It is an American. The characters ſufficiently diſtinguiſh it.

## VITEX.

THE calyx is terminated by five indentings: the corolla is divided into ſix ſegments at the extremity; the fruit is a berry, containing four ſeeds.

*Vitex foliis anguſtioribus.* — The Chaſte Tree.
*The narrower-leaved Vitex.*

The root is brachiated; the ſhrub riſes to four or ſix feet high; the bark is greyiſh; the leaves ſtand on long pedicles, and are divided deeply into five ſegments, ſo as to appear digitated: the flowers are ſmall and reddiſh; they ſtand in ſpikes.

It is a native of France. C. Bauhine calls it, Vitex foliis anguſtioribus cannabis more diſpoſitis.

The other ſpecies are, 1. The narrow-leaved Vitex, with ſmall, blue flowers. 2. The broad-leaved, ſerrated Vitex. 3. The dwarf, very narrow-leaved Vitex.

## ACANTHUS.

THE calyx is compoſed of three pairs of leaves: the corolla has but one lip, which is bent downward, and divided into four ſegments: the capſule contains two cells.

*Acanthus foliis ſinuatis inermibus.* — Common Bear's-breech.
*The Acanthus, with ſinuated leaves, without prickles.*

The root is oblong, thick, and fibrated; the plant riſes to three feet high; the ſtalk is round, green, and thick: the leaves are ten inches long, and four or five wide, of a beautiful green, and deeply ſinuated at the edges: the flowers are large and white, and ſtand in a ſpike at the top of the ſtalk.

It is a native of Italy. C. Bauhine calls it, Acanthus ſativus, ſive Mollis Virgilii.

The other ſpecies are, 1. The prickly Acanthus. 2. The Acanthus, with few, and thoſe ſhort, ſpines.

*Claſs the Fourteenth. Order the Second.*

*Diviſion the Fourth.*

*Didynamia Angioſpermia, with corollæ compoſed of numerous petals.*

## MELIANTHUS.

THE calyx is compoſed of five leaves, the lower one of which is gibbous: the corolla is compoſed of four petals, and has a nectarium between the two loweſt: the fruit is a capſule containing four cells.

*Melianthus foliis pinnatis, foliolis ſerratis.*
*The pinnated-leaved Melianthus, with ſerrated pinnulæ.*

The root is oblong, woody, ſlender, and fibrated: the plant grows to ſix inches high: the leaves ſtand on long pedicles; they are compoſed of ſeveral pairs of pinnæ, which are ſhort, broad, ſerrated, and obtuſely pointed: the flowers ſtand in ſpikes, of a browniſh colour, and three quarters of an inch long, and have a quantity of a ſweet honey-juice at their baſe.

It is a native of Virginia. Tournefort calls it, Melianthus Americanus minor.

The other ſpecies are, 1. The great, African, ſpiked Melianthus. 2. The procumbent, pimpernel-leaved, African Melianthus.

*Claſs the Fifteenth.*

## TETRADYNAMIA.

*Plants which have in every flower four efficacious ſtamina.*

THIS claſs comprehends the Herbæ flore cruciformi of Tournefort, and the Herbæ tetrapetalæ ſiliquoſæ et ſiliculoſæ of Ray.

The claſſical character ſhall be delivered here at large, as in the former claſs, and the diſtinctive characters only mentioned under the ſeveral genera, as in that claſs: the common characters of them all may, therefore, be referred to in this place.

The calyx is an oblong perianthium, compoſed of four leaves; theſe are of an oblong, oval figure, hollow, obtuſe, and connivent; they are deciduous; the oppoſite ones are equal, and the baſe is gibbous downwards: the calyx is, in this claſs, the nectarium, and it is, therefore, that it is made gibbous in this part. The corolla conſiſts of four petals, equal in ſize, and arranged in form of a croſs: their ungues are planoſubulate, erect, and ſomewhat longer than the calyx: the limb is plane; the bracteæ are broadeſt in the outer part, and are obtuſe, and ſcarce touch one another at the ſides: the inſertion of the petals is in the ſame circle with the ſtamina. The ſtamina are ſix erect, ſubulated filaments: two of theſe, placed oppoſite, are of the length of the cup; the other four are ſomething longer, and are, however, ſhorter than the corolla: the antheræ are oblong, and acuminated; they are thickeſt at the baſe, erect, and have their apices turned outwards. The gland of the nectarium is very variouſly formed, and ſituated, in the different genera; it is affixed often to the baſe of the ſtamina, particularly of the two ſhorter ones, and they are often bent ſo as not to preſs upon it; and, from that circumſtance alone, become ſhorter than the others. The germen is ſituated on the receptacle, and grows continually longer and longer: there is either no ſtyle, or one that is of the length of the longer ſtamina: the ſtigma is obtuſe. The fruit is a pod, compoſed of two valves, and often containing two cells; it ſplits, when ripe, from the apex to the baſe, and has often the diſſipimentum prominent at it's apex, beyond the valves: this has before performed the office of a ſtyle. The ſeeds are round and nutant; they are arranged alternately and longitudinally in the pods: the

receptacle is linear, and ſurrounds the diſſipimentum, and is immerſed in the ſutures of the pod.

Such are the claſſical characters of the Tetradynamia, common to all the genera, and, therefore, not neceſſary to be repeated under every generical name.

The Tetradynamia have ſome of them roundiſh pods, with the ſtyle adhering to them, often equal to the pod itſelf in length: others of them have very long pods, without this addition of a long ſtyle to them.

They are hence naturally arranged into two orders; the one containing thoſe with the round pods, under the title of Siliculoſæ; the other, thoſe with the long pods, under that of Siliquoſæ.

*Claſs the Fifteenth. Order the Firſt.*

## TETRADYNAMIA SILICULOSA.

*Plants which have four efficacious ſtamina and roundiſh, or ſhort, pods.*

### MYAGRUM.

THE pod is terminated by a conic ſtyle, and the cell contains uſually only one ſeed. This genus comprehends the Myagrum, and ſome of the Alyſſa, of Tournefort.

*Myagrum ſiliculis obverſe cordatis ſubſeſſilibus, foliis amplexicaulibus.*
*The cordated, ſeſſile-podded Myagrum, with leaves embracing the ſtalks.*

The root is oblong, thick, and fibrated: the ſtalks riſe to two feet high, or more; the leaves are large, broadeſt at the baſe, ſomewhat laciniated at the edges, and of a bluiſh-green colour: the flowers are ſmall and yellow.

It is common in corn-fields in moſt parts of Europe. C. Bauhine calls it, Myagrum monoſpermum latifolium.

The other ſpecies are, 1. The ſmaller Myagrum, with large flowers. 2. The narrower-leaved Myagrum. 3. The hairy, ſhort-leaved Alyſſum. 4. The longer-leaved, hairy Alyſſum. 5. The ſea Alyſſum.

### ANASTATICA.

THE pod is blunt, and coronated with a margin: the ſtyle is intermediate, mucronated, and oblique: the cell contains but a ſingle ſeed.

Of this genus there is but one known ſpecies.

ANASTATICA. **Roſe of Jericho.**

The root is woody, oblong, and ſimple: the ſtalks are numerous, woody, and ſix or ſeven inches long, very ramoſe, and of a greyiſh colour: the leaves ſtand ſingly; they are an inch and a half long, half an inch broad, ſerrated at the edges, and of a greyiſh-green colour, and hairy: the flowers are ſmall and white; they ſtand in cluſters, at the divarications of the branches.

It grows wild about the ſhores of the Red Sea. When the ſeeds are ripe, the branches draw up and contract, ſo that the whole plant forms a kind of a ball, or globular body, which will expand on laying it a little while in warm water.

### SUBULARIA.

THE pod is of an obverſely cordated figure, and entire: the valves are oval and hollow, and ſtand contrary to the diſſipimentum.

*Subularia*

*Subularia erecta folio rigidiſſimo.*
*The erect, rigid-leaved Subularia.*

The root is fibrous and white: the leaves are four inches long, rounded, as thick as a common ruſh, and terminate in a point at the extremities: the flowers are ſmall and white; the ſeeds numerous and yellow.

It grows on the mud, in the bottoms of our mountainous lakes in Wales. Ray calls it, Subularia lacuſtris, ſeu Calamiſtrum herba aquatico-Alpina.

The other ſpecies are, 1. The creeping, ſofter-leaved Subularia. 2. The long-leaved, brittle Subularia. 3. The ſoft, and thicker-leaved Subularia. 4. The largeſt Subularia, with the leaves hollowed within.

## LEPIDIUM.

THE pod is ſomewhat obverſely cordated; it's valves are hollowed, and it contains ſeveral ſeeds.

This genus comprehends the Lepidium and the Naſturtium of authors.

*Lepidium foliis integris ovato-lanceolatis.*
*The ovato-lanceolate, undivided-leaved Lepidium.*

The root is fibrous: the plant riſes to three feet high: the ſtalk is round, ſmooth, of a pale green colour, and firm: the leaves are four inches long, and two and a half broad, of a bright green colour, and even at the edges: the flowers ſtand in vaſt cluſters, at the tops of the branches; they are ſmall and white.

It is a native of England, but not very common. C. Bauhine calls it, Lepidium latifolium.

The other ſpecies are, 1. Of thoſe called Lepidia by Tournefort, 1. The dwarf, hairy Lepidium, or large Draba. 2. The dwarf, leſs hairy, Syrian Lepidium, called leſſer Draba, and broad-leaved Iberis by ſome. 3. The graſſy-leaved Lepidium, called common Iberis. 4. The ſhrubby, capillaceous-leaved, Spaniſh Lepidium.

Of thoſe called Naſturtium there are, 1. The common, garden Naſturtium, or garden Creſs. 2. The narrower-leaved, garden Creſs. 3. The broad-leaved, garden Naſturtium. 4. The umbellated, garden Naſturtium. 5. The fine divided-leaved Naſturtium. 6. The perfoliate and fine divided-leaved Naſturtium. 7. The rough-podded Naſturtium, or Coronopus Ruellii. 8. The little Naſturtium, with finely-divided leaves. 9. The dwarf, cardamine-leaved Naſturtium. 10. The ſhepherd's-purſe-leaved, dwarf Naſturtium. 11. The dwarf, vernal Naſturtium, with no leaves on the ſtalk.

## COCHLEARIA.

THE pod is of a ſomewhat heart-like figure, turgid and ſcabrous: the valves are gibbous.

*Cochlearia foliis ovato-lanceolatis ſinuatis.* Sea Scurvy-graſs.
*The Cochlearia, with ovato-lanceolate, ſinuated leaves.*

The root is fibrous: the ſtalks are ſtriated, oblique, and eight or ten inches high: the leaves are an inch long, half an inch broad, ſinuated at the edges, and pointed at the ends: the flowers are ſmall and white, and ſtand in conſiderable number toward the tops of the ſtalks.

It is common on our ſea-coaſts. C. Bauhine calls it, Cochlearia folio ſinuato.

The other ſpecies are, 1. The round-leaved Cochlearia. 2. The great, erect, long-leaved Cochlearia. 3. The ivy-leaved Cochlearia. 4. The pale red-flowered Cochlearia. 5. The procumbent, Daniſh Cochlearia. 6. The little, erect, Daniſh Cochlearia. 7. The woad-leaved Cochlearia; and, 6. The Cochlearia commonly called Horſeradiſh.

THLASPI.

## THLASPI.

THE pod is narrowest at the base, and emarginated; the valves are navicular; the seeds numerous.

This genus comprehends the Thlaspi and the Bursa pastoris of authors.

*Thlaspi siliculis orbiculatis, foliis oblongis dentatis glabris.*
*The orbiculated-podded Thlaspi, with oblong, smooth, dentated leaves.*

Treacle Mustard.

The root is oblong, slender, white, and fibrated: the stalk is round, erect, branched, and is ten inches high: the leaves stand singly on it, without pedicles; they are an inch long, half an inch broad, of a pale green colour, and notched at the edges: the flowers are tolerably large and white; the pods very large and broad.

It is a native of our corn-fields. C. Bauhine calls it, Thlaspi arvense siliquis latis.

It's seeds should be used in some of the compositions of the shops, but those of the common garden Cress are usually sold in their stead.

The other species are, 1. The sagittated and dentated-leaved Thlaspi, called common Thlaspi. 2. The umbellated Thlaspi. 3. The great and little perfoliate, field Thlaspi, for they are only varieties of the same species. 4. The hoary, smaller-leaved Thlaspi. 5. The shorter-leaved Thlaspi. 6. The narrow and thick-leaved Thlaspi. 7. The very narrow-leaved, clustered Thlaspi. 8. The daisy-leaved Thlaspi. 9. The common shepherd's-purse; from the varieties of which have been made, by authors, many species.

## IBERIS.

THE corolla is irregular; the two exterior petals are the larger.

*Iberis foliis lanceolatis acuminatis inferioribus serratis.*
*The Iberis, with lanceolated and acuminated leaves, the lower ones serrated.*

Candy Tuft.

The root is oblong, thick, and white: the plant grows to a foot high: the stalks are round and ramose, large, and of a pale green colour; the leaves are oblong, pointed, and of a dusky green: the flowers are large, and of a beautiful red, sometimes white; they stand in umbels, on the tops of the stalks.

It is a native of Crete; it is very common in our gardens. C. Bauhine calls it, Thlaspi umbellatum Creticum Iberidis folio.

The other species are, 1. The shrubby, leucoium-leaved Iberis. 2. The field Iberis, with umbellated flowers. 3. The narrow-leaved, purple, umbellated Iberis. 4. The acute-leaved Iberis.

## BISCUTELLA.

THE pod is bilobous, rounded, and compresso-plane: the leaves of the calyx are gibbous at the base.

This genus comprehends the Thlaspidium of Tournefort and Rivinus.

*Biscutella siliquis orbiculato-didymis a stylo dehiscentibus.*
*The Biscutella, with orbiculated, didymous pods, splitting from the style.*

Buckler Mustard.

The root is oblong, white, and fibrated: the stalks are numerous, slender, and eight or ten inches high: the radical leaves are numerous, three inches long, and about half an inch broad, serrated at the edges, and a little hairy: the stalks have three or four leaves on them; they are oblong, narrow, and hairy: the flowers are small and yellowish; they stand in clusters, at the tops of the stalks; the pods are beautiful, broad, peltated, and foliaceous.

It is a native of France and Italy. Clusius calls it, Thlaspi clypeatum.

The

14

Cymbaria

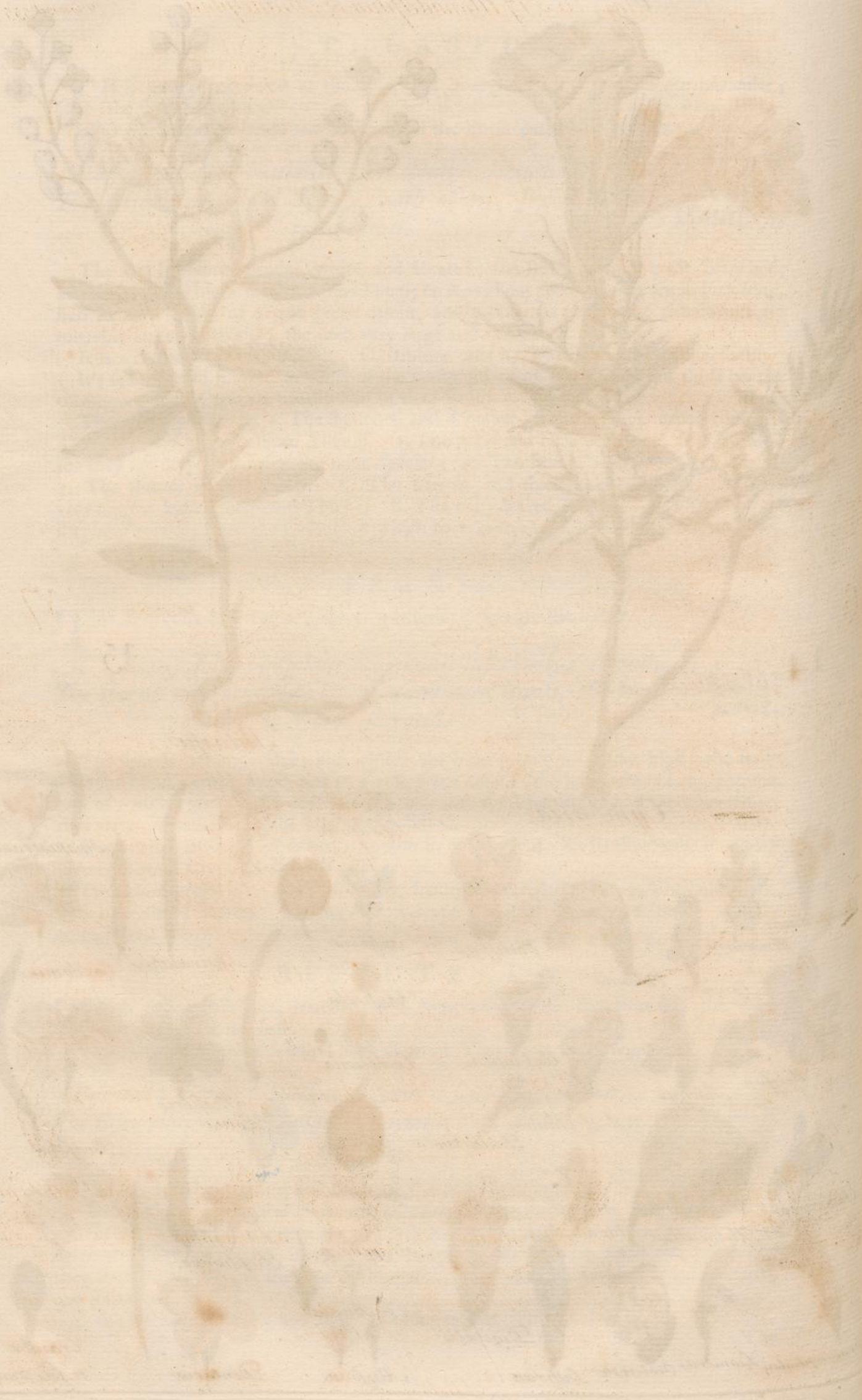
15

Thlaspi

Clinopodium
Teucrium
Lamium
Phlomis
Phelypæa
Melissa
Stachys
Antirrhinum
Anblatum
Dodartia
Betonica
Moluccella
Rhinanthus
Digitalis
Dracocephalon
Leonurus
Orobanche
Lathræa

Lepidium
Iberis
Clypeola
Cochlearia
Lunaria
Bunias
Alyssum
Cheiranthus
Hesperis
Raphanus
Dentaria
Sinapistrum
Cardamine
Brassica
Crambe

B. Cole Sculp.



The other ſpecies are, 1. The hairy Biſcutella, with a ſpur to the flower. 2. The rough, pale yellow-flowered Thlaſpidium. 3. The radiſh-leaved Thlaſpidium. 4. The leucoium-leaved, ever-flowering Thlaſpidium. 5. The ſhrubby, narrow-leaved Thlaſpidium. 6. The alkanet-leaved Thlaſpidium. 7. The ſpiked Thlaſpidium. 8. The narrow-leaved, ſmooth Thlaſpidium. 9. The little, rough Thlaſpidium, or Biſcutella.

## CLYPEOLA.

THE pod is of an orbiculated figure, undivided, and compreſſo-plane.
This genus contains the Ionthlaſpi of Tournefort and others.

*Clypeola ſiliculis unilocularibus monoſpermis.* Clypeated Buſtard.
*The Clypeola, with pods with ſingle ſeeds in them.*

The root is oblong, white, and fibrated: the ſtalks are numerous, rough, procumbent, and five or ſix inches long: the leaves are numerous, very ſmall, hoary, and white: the flowers are very ſmall and yellow: the pods form a kind of ſpike half-way down the plant.

It is a native of France and Italy. C. Bauhine calls it, Thlaſpi Clypeatum ſerpylli folio; Columna, Ionthlaſpi.

The other ſpecies are, 1. The ſhorter-leaved, yellow Clypeola. 2. The oblong-leaved Clypeola.

## ALYSSUM.

THE two ſhorter ſtamina in the flower have a denticulation on their inner ſide.
This genus comprehends the Alyſſon, Alyſſoides, and Veſicaria of Tournefort.

*Alyſſum ramulis ſuffruticoſis diffuſis, foliis punctato-echinatis.*
*The diffuſe-ſtalked, ſhrubby Alyſſum, with punctato-echinated leaves.*

The root is long, white, and woody: the ſtalks are numerous, ſeven or eight inches long, rough, and of a greyiſh-green colour: the leaves are oblong, narrow, punctated, and very rough to the touch: the flowers are moderately large and yellow.

It is a native of Italy. C. Bauhine calls it, Thlaſpi montanum luteum.

The other ſpecies of Alyſſum are, 1. The great, ſhort-leaved Alyſſum. 2. The little, hoary, ſerpyllum-leaved Alyſſum. 3. The maritime Alyſſum. 4. The halimus-leaved Alyſſum. 5. The narrow, ſilvery-leaved Alyſſum. 6. The prickly, ſhrubby Alyſſum. 7. The ſhrubby, hoary Alyſſum. 8. The large, yellow-flowered Alyſſum. 9. The polygonum-leaved, hoary Alyſſum. 10. The veronica-leaved Alyſſum. 11. The acute, auriculated-leaved Alyſſum. 12. The great-fruited, auriculated-leaved Alyſſum. 13. The trifid-leaved, mountain Alyſſum. 14. The green, leucoium-leaved Alyſſum. 15. The hoary, ſinuated-leaved Alyſſum. 16. The dentated-leaved, oriental Alyſſum, or Veſicaria.

## LUNARIA.

THE pod is of an elliptic ſhape, and compreſſo-plane: the valves are equal to the diſſipiment, and parallel.

*Lunaria foliis ovato-lanceolatis ſerratis.* Honeſty.
*The ovato-lanceolated, ſerrated-leaved Lunaria.*

The root is compoſed of a number of tuberoſities: the ſtalk riſes to two feet high: the leaves are ſomewhat like thoſe of the common nettle, broad, ſerrated, and hairy: the flowers ſtand in conſiderable numbers, on the upper part of the ſtalks; they are ſmall, and of a purpliſh colour: the pods are very broad, and of a ſilvery-white.

It is a native of Italy and Germany. C. Bauhine calls it, Viola Lunaria major ſiliqua rotunda.

The other ſpecies are, 1. The broader-leaved, white-flowered Lunaria. 2. The narrower-leaved, long-podded Lunaria. 3. The leucoium-leaved, long-podded Lunaria. 4. The ſmall-podded, leucoium-leaved Lunaria; and, 5. The Lunaria, with the wreathen pod.

## DRABA.

THE pod is of an oval, oblong figure; the valves are equal to the diſſipimentum: there is no ſtyle.

*Draba caulibus nudis, foliis inciſis.*
*The naked-ſtalked, cut-leaved Draba.*

The root is oblong, ſlender, fibrated, and white: the leaves are ſmall, of an oblong figure, jagged at the edges, and of a duſky green colour: the ſtalks are round, naked, and four inches high: the flowers ſtand in a kind of ſhort ſpikes, at the tops, and are ſmall and white.

It is a native of France. C. Bauhine calls it, Burſa paſtoris minor loculo oblongo, foliis laciniatis.

The other ſpecies are, 1. The long-leaved, hairy Draba. 2. The ſmooth, ſhorter-leaved Draba.

## VELLA.

THE pod has a diſſipimentum of twice the bigneſs of the valves, and of an oval figure. This character alone ſufficiently diſtinguiſhes it, without a farther deſcription.

There is but one ſpecies of this genus. C. Bauhine calls it, Naſturtium ſylveſtre erucæ affine.

### *Claſs the Fifteenth.*

### *Diviſion the Second.*

## TETRADYNAMIA SILIQUOSA.

*Plants which have four efficacious ſtamina in the flower, and long pods.*

## BUNIAS.

THE pod is of a ſquare figure, and the angles are unequal and acuminated. This genus comprehends the Erinago of Tournefort and others.

*Bunias foliis antrorſum ſinuatis.*
*The Bunias, with leaves ſinuated forwards.*

The root is oblong, white, and fibrated; the ſtalks are round, ſmooth, often reddiſh, and two feet high: the leaves are narrow, ſinuated, and hairy; there are very few of them on the ſtalks: the flowers are moderately large and yellow: the pods are ſhort, and terminate in a ſharp point.

It is a native of France. Tournefort calls it, Erucago ſegetum; C. Bauhine, Eruca ſiliqua quadrangula echinata.

The other ſpecies are, 1. The tall, oriental, dandelion-leaved Bunias. 2. The ſmall-leaved Bunias.

## CHEIRANTHUS.

THE germen in the flower has, on each ſide, a little denticular protuberance: the leaves of the calyx are two, and are gibbous at the baſe: the ſeeds are plane. This genus comprehends the Leucoium of Tournefort and others.

*Cheiranthus foliis lanceolatis obtuſis incanis, ſiliquis truncatis.*
*The obtuſe, lanceolated-leaved Cheiranthus, with truncated pods.*

Stock Gilly-flower.

The root is oblong, white, tortuous, and fibrated: the plant riſes to two or three feet high: the ſtalk is round, thick, hoary, and ramoſe: the leaves are three inches long, an inch and a half broad, obtuſely pointed, and white: the flowers ſtand in ſpikes, at the tops of the ſtalk, and are alſo white: the pods are long.

It is a native of the ſea-coaſts of Arabia, but is introduced into our gardens almoſt every-where, and has ſuffered ſtrange variations by culture. C. Bauhine calls it, Leucoium incanum majus. The varieties of our purple and white double and ſingle Stock-gilly-flowers are all from this ſingle ſpecies; tho' authors have deſcribed them as diſtinct ones.

The other ſpecies really diſtinct are, 1. The narrower green-leaved, white-flowered Cheiranthus. 2. The ſmall-flowered, white, perennial Cheiranthus. 3. The heſperis-leaved Cheiranthus. 4. The eruca-leaved Cheiranthus. 5. The ſinuated-leaved, ſea Cheiranthus. 6. The white, long-leaved, ſea Cheiranthus. 7. The common, yellow Cheiranthus, or Wall-flower. 8. The larger-flowered, tuberculous, yellow Cheiranthus. 9. The large-flowered, ſerrated-leaved Cheiranthus. 10. The narrow-leaved, pale yellow-flowered, Alpine Cheiranthus.

## HESPERIS.

THE petals of the corolla are bent obliquely: the pod is ſlender; the baſe of the ſtigma is bifurcated, and it's apex connivent.

*Heſperis caule ſimplici, foliis ovato-lanceolatis denticulatis.*
*The ſimple-ſtalked Heſperis, with ovato-lanceolate, denticulated leaves.*

Dames Violet.

The root is oblong, white, woody, and fibrated: the ſtalks are hairy, robuſt, and three feet high: the leaves are of a duſky green colour, hairy, ſerrated, and pointed at the ends, two inches long, and three quarters of an inch broad: the flowers ſtand at the tops of the branches; they are moderately large, and of a beautiful purple colour, ſometimes very pale, ſometimes quite white.

It is a native of Italy. Dodonæus calls it, Viola matronalis; C. Bauhine, Heſperis hortenſis.

The other ſpecies are, 1. The pale, ſcented, narrower-leaved Heſperis. 2. The common, ſcentleſs, field Heſperis. 3. The Heſperis, with articulated pods. 4. The common, roundiſh-leaved Heſperis, or Alliaria. 5. The very narrow, podded Heſperis. 6. The ſquare, podded, leucoium-leaved Heſperis. 7. The corniculate Heſperis, with a duſky flower. 8. The thick-leaved, procumbent, ſea Heſperis. 9. The hairy, blue Heſperis. 10. The dentated-leaved, large-flowered Heſperis. 11. The laciniated-leaved Heſperis, with lunated pods. 12. The ſhrubby Heſperis. 13. The coronopus-leaved Heſperis. 14. The great, blue, African, coronopus-leaved Heſperis.

## RAPHANUS.

THE pod is rounded, toroſe, and, as it were, articulated: there are four melliferous glands in the corolla; two of them between the ſhorter ſtamina and the piſtil, and two between the longer ſtamina and the calyx.

This genus comprehends the Raphanus, Raphaniſtrum, and Cakile of authors.

*Raphanus*

*Raphanus ſiliquis toroſis anguſtioribus glabris.*
*The Raphanus, with knotty, ſmooth, ſlender pods.*

**Jointed-podded Charlock.**

The root is oblong and white: the plant riſes to two feet high: the ſtalk is round, robuſt, and ramoſe: the leaves are three inches long, and two broad, of a figure approaching to oval, dentated at the edges, and of a deep green colour: the flowers are large and yellow; the pods two inches long, ſlender, and jointed, as it were.

It is frequent in our corn-fields. C. Bauhine calls it, Rapiſtrum luteum ſiliqua articulata.

The other ſpecies are, 1. The white-flowered, field Raphanus. 2. The ſtriated-podded, field Raphanus. 3. The rocket-leaved, white-flowered, field Raphanus. 4. The great-podded, white-flowered Raphanus. 5. The common, garden Radiſh. 6. The black-rooted Radiſh.

## DENTARIA.

THE pod burſts open with elaſticity and violence, and the valves turn back: the ſtigma is emarginated.

*Dentaria foliis ſeptenis anguſtioribus.*
*The ſeven-leaved Dentaria.*

**Toothwort.**

The root is oblique, ramoſe, and compoſed of a kind of ſquammoſe tuberoſities: the leaves are placed on long pedicles, and each is compoſed of ſeven oblong, narrow, dentated pinnæ, three in pairs, and an odd one at the end: the ſtalk is tender, and ten inches high: the flowers are large, and of a beautiful pale red, or white, colour; they ſtand on the tops of the ſtalks, in a kind of ſpikes.

It is found in ſome of our woods. C. Bauhine calls it, Dentaria heptaphyllos.

The other ſpecies are, 1. The nine-leaved Dentaria. 2. The five-leaved Dentaria. 3. The narrower-leaved Dentaria. 4. The rough-leaved Dentaria. The number of leaves on a pedicle is not abſolutely determinate in any of the ſame ſpecies, the ſame plant ſhewing variations in this reſpect; but the general number may always be ſeen. Theſe plants frequently produce a kind of bulbs in the alæ of their leaves, as ſome of the lilies, the biſtort, &c. do, which will produce new plants.

## CARDAMINE.

THE pod burſts open with violence and elaſticity, and the valves turn backward: the ſtigma is entire, not emarginated.

*Cardamine foliis pinnatis, foliolis ſubrotundis integris.*
*The pinnated-leaved Cardamine, with the pinnules roundiſh and entire.*

**Ladies Smock.**

The root is compoſed of a cluſter of white fibres: the plant riſes to a foot high: the ſtalk is round, green, and robuſt; the leaves are long, and compoſed of ſeveral pairs of pinnæ; the radical ones have the pinnæ round; thoſe on the ſtalk longer and narrower: the flowers are large, beautiful, and white; they ſtand in cluſters, on the tops of the ſtalks.

It is common in our meadows. C. Bauhine calls it, Cardamine vulgaris.

The other ſpecies are, 1. The ſmaller-flowered Cardamine. 2. The very ſmall-flowered Cardamine. 3. The fumitory-leaved Cardamine. 4. The little, hairy, ſmall-flowered Cardamine. 5. The tall and ſomewhat larger-flowered Cardamine. 6. The little, rocket-leaved Cardamine. 7. The mountain, aſarum-leaved Cardamine. 8. The purple-flowered, hairy, celandine-leaved Cardamine. 9. The trifoliate, Alpine Cardamine. 10. The larger, African, trifoliate Cardamine. Moſt of theſe have been called by authors Naſturtia aquatica.

## BRASSICA.

THE calyx is erect and connivent: the ſeeds are globoſe: there is a melliferous gland between the ſhorter ſtamina and the piſtil, and another between the longer ſtamina and the calyx.

This genus comprehends the Braſſica and Rapa of Tournefort, and the Erucæ of others.

*Braſſica foliis lyratis, caule hirſuto, ſiliquis glabris.* White Rocket.
*The lyrate-leaved, hairy-ſtalked Braſſica, with ſmooth pods.*

The root is oblong, white, and fibrated: the ſtalks are hairy, robuſt, and two feet high: the leaves are oblong and ſinuated, ſmooth, of a duſky green colour, and obtuſely pointed at the ends: the flowers ſtand in a kind of ſpikes, on the tops of the ſtalks; they are moderately large and white, with a tinge of bluiſh, or of yellowiſh, and have often ſtriæ of a deep bluiſh-black, in great numbers.

It is a native of Africa, but is common in our gardens. C. Bauhine calls it, Eruca hortenſis latifolia. It has always been diſtinguiſhed from the Braſſica, indeed, by authors, but not by nature.

The other ſpecies are, 1. The rough-podded Eruca, with yellow flowers. 2. The undivided-leaved Eruca. 3. The narrower-leaved Eruca. 4. The ſhorter-leaved Eruca.

Of thoſe called Braſſicæ by authors we have, 1. The common Cabbage, or Braſſica, whoſe root riſes into a kind of ſtalk in the upper part: there are ſeveral varieties of this, owing to culture, and other accidents, which have the honour to be raiſed to ſpecies by authors, as the common white Cabbage, the red Cabbage, the curled Cabbage, the fringed Cabbage, the laciniated, red Cabbage, the Cauleflower, the turnep Cabbage, the ſmallage-leaved Cabbage. 2. The wild Braſſica. 3. The tall, ramoſe, arboreſcent Braſſica. 4. The perfoliate Braſſica, with white flowers. 5. The Alpine, perennial Braſſica.

Of thoſe called Rapæ we have, 1. The common Rapa, or Turnep. 2. The long-rooted, narrow-leaved Rapa, or Napus ſativa.

## SINAPIS.

THE calyx is patent: the ungues of the corolla are erect, and there is a gland, ſituate between the two ſhorter ſtamina and the piſtil, and another between the longer ſtamina and the calyx.

*Sinapis ſiliquis hiſpidis, roſtro obliquo longiſſimo.* White Muſtard.
*The Sinapis, with rough pods, with a very long, oblique beak.*

The root is oblong, white, and fibrated: the plant riſes to two feet high: the ſtalks are round, robuſt, and ramoſe: the leaves are large, oblong, of a duſky green colour, deeply ſinuated, and hairy, and very rough to the touch: the flowers are moderately large, and yellow; the ſeeds are whitiſh.

It is cultivated in gardens. C. Bauhine calls it, Sinapi apii folio; Dodonæus, Sinapi ſativum alterum.

The other ſpecies are, 1. The common Muſtard plant. 2. The early, black-ſeeded Sinapis. 3. The early Sinapis, with undivided leaves. 4. The eruca-leaved Sinapis. 5. The lobated-leaved Sinapis. 6. The naſturtium-leaved Sinapis. 7. The great, broad, lettuce-leaved Sinapis. 8. The narrower, lettuce-leaved Sinapis.

## ARABIS.

THERE are four nectariferous glands, each of them affixed, in the manner of a reflex ſcale, to the inner part of the baſe of the calyx.

*Arabis foliis amplexicaulibus, ſiliquis decurvis, planis, linearibus.*
*The Arabis, with leaves ſurrounding the ſtalk, and with plane, linear, crooked pods.*

The root is white and oblong; the radical leaves are three inches long, half an inch broad, variouſly ſinuated about the edges, and of a bluiſh-green: the ſtalk is round, ſlender, two feet high, and ramoſe; the leaves are oblong, and ſurround the ſtalks at their baſe: the flowers are numerous, and of a very pale yellow.

It is a native of Germany and Hungary. Tournefort calls it, Leucoium heſperidis folio.

The other ſpecies are, 1. The Ruſſian, broad-leaved Arabis, with pendulous pods. 2. The narrow, rough-leaved Arabis.

## ERYSIMUM.

THE pod is columnar, and exactly ſquare. This genus comprehends ſeveral of the Turritis's and Heſperis's of authors.

*Eryſimum ſiliquis cauli appreſſis.* Hedge Muſtard.
*The Eryſimum, with pods cloſe to the ſtalk.*

The root is oblong, white, hard, and tortuous; the leaves are three inches long, an inch broad, deeply ſinuated, and of a duſky greyiſh-green: the ſtalks are robuſt, rigid, round, and two feet high; the flowers are ſmall and yellow; the pods ſtand halfway down the ſtalks, in form of a thin ſpike; they are ſhort, and are applied cloſe to the ſtalk.

It is common by way-ſides. C. Bauhine calls it, Eryſimum vulgare.

The other ſpecies are, 1. The ſmooth, broad-leaved Eryſimum. 2. The ſhort-podded, hoary-leaved Eryſimum. 3. The Eryſimum, called Alliaria. 4. The ſquare-podded Heſperis of authors. 5. The ſmooth, rocket-leaved Eryſimum. 6. The Eryſimum, called Leucoium-leaved Turritis.

## TURRITIS.

THE pod is extreamly long, and of an angular figure: the calyx and corolla are erect.

*Turritis foliis omnibus dentatis hiſpidis, caulinis amplexicaulibus.*
*The Turritis, with all the leaves dentated and rough, thoſe on the ſtalk ſurrounding it.*

The root is white, oblong, and ſlender; the radical leaves are oblong, narrow, ſinuated, and hairy: the ſtalk is ſlender, but robuſt, round, and a foot high: the leaves ſurround it at their baſes; they are rough, oblong, narrow, and dentated: the flowers are ſmall and white; the pods very long.

It is common in dry places. C. Bauhine calls it, Turritis minor.

The other ſpecies are, 1. The ſimple-ſtalked, lanceolated-leaved Turritis, or common Tower-muſtard. 2. The ſuccory-leaved and perfoliate Turritis. 3. The ramoſe Turritis. 4. The divided-leaved, larger-flowered Turritis.

## SISYMBRIUM.

THE pod is incurvated; the calyx is patent; and the corolla is alſo patent.

*Siſymbrium foliis pinnatis, foliolis ſubcordatis.* **Water Creſs.**
*The pinnated-leaved Siſymbrium, with ſubcordated pinnules.*

The root is fibrous; the ſtalk is ſlender and procumbent: the leaves are three inches long, compoſed of three or four pairs of ſhort and broad pinnæ, with an odd one at the end: the flowers are ſmall and white.

It is common about ditch-ſides. C. Bauhine calls it, Naſturtium aquaticum vulgare.

The other ſpecies are, 1. The radiſh-leaved, ſhort-podded Siſymbrium. 2. The Siſymbrium, with the lower leaves capillaceous, the reſt pinnatifid. 3. The little-flowered Siſymbrium, with ſerrated pinnulæ. 4. The wormwood-leaved Siſymbrium. 5. The Siſymbrium, called by authors five-leaved, yellow Rocket. 6. The leſſer-flowered Rocket of authors. 7. The great, yellow-flowered, rough-ſtalked Rocket of authors. 8. The rough-podded Siſymbrium. 9. The Siſymbrium, called cut-leaved, water Radiſh.

## CRAMBE.

THE four long ſtamina are bifurcated at their tops: the antheræ are only on one of the points. This genus comprehends the Crambe and the Rapiſtrum of Tournefort.

*Crambe foliis cauleque ſcabris.* **Round-leaved Chariock.**
*The Crambe, with the leaves and ſtalk both rough.*

The root is oblong, thick, and white; the leaves are ſix inches long, rounded at the extremity, and ſinuated about the edges: the ſtalk is round, robuſt, and firm; it riſes to five feet high; the flowers are very numerous, large, and white: the pod contains but one ſeed.

It is a native of Spain. Moriſon calls it, Rapiſtrum maximum rotundifolium monoſpermon.

The other ſpecies are, 1. The auriculated, acute-leaved Crambe. 2. The longer-leaved Crambe. 3. The ſea cabbage, or cabbage-leaved Crambe. 4. The rocket-leaved, cuſpidated, podded Crambe. 5. The narrower-leaved, ſea Crambe.

## ISATIS.

THE pod is of a lanceolated figure, and contains only one cell, in which is a ſingle ſeed: the valves forming the pod are two, and are navicular in ſhape.

*Iſatis foliis latioribus glaucis.* **Woad.**
*The broad, glaucous-leaved Iſatis.*

The root is oblong and very thick; the plant riſes to three feet high: the ſtalk is round, rigid, thick, and branched: the leaves are broad, oblong, and very numerous; on the ſtalk the flowers are very numerous, ſmall, and yellow.

It is cultivated in our fields for the uſe of dyers. C. Bauhine calls it, Iſatis ſativa ſive latifolia.

The other ſpecies are, 1. The narrow-leaved, or wild Iſatis. 2. The dwarf, Portugal, narrow-leaved Iſatis.

## CLEOME.

THERE are three nectariferous glands in the flower, one at every ſinus of the cup, the loweſt only excepted: all the petals are aſcendent.

This genus comprehends the Sinapiſtrum of Tournefort and Rivinus.

*Cleome*

*Cleome pentaphyllea floribus gynandris.* Cinquefoil, Baſtard Muſtard.
*The five-leaved Cleome, with gynandrous flowers.*

The root is oblong and white; the ſtalk is round, ſmooth, and two feet, or more, in height: the leaves ſtand on long pedicles, five on each; they are oblong, narrow, and pointed at the ends; thoſe toward the upper parts of the ſtalk are often only three on each pedicle: the flowers are moderately large and white; they ſtand in cluſters at the tops of the branches: the pods are an inch long.

It is a native of Africa, and the Eaſt and Weſt Indies. C. Bauhine calls it, Quinquefolium lupini folio.

The other ſpecies are, 1. The trifoliate Cleome, with crooked pods. 2. The narrower-leaved, reddiſh-flowered, cinquefoil Cleome. 3. The ſhrubby, trifoliate Cleome; and 4. The trifoliate, Portugal Cleome, with corniculated pods.

## *Claſs the Sixteenth.*

## MONADELPHIA.

*Plants which have uniform ſtamina growing together at their baſe.*

IN this, as in the two former claſſes, it will be moſt convenient to give the general claſſical character here, and to refer to it from every genus, only mentioning, as generical characters, the eſſential and diſtinctive ones.

### *Claſſical characters of the Monadelphia.*

The calyx is a perianthium, it is never wanting; it is permanent, and in many genera double.

The corolla conſiſts of five petals, vertically cordated, and one of their ſides always embraces that of the next petal, the contrary way to the ſun's motion.

The ſtamina are filaments cohering at the baſe, and diſtinct at their tops: if numerous, the exterior ones are the ſhorter.

The receptacle of the fructifications is prominent in the center of the corolla: the germina are erect, and rotato-articulately ſurround the top of the receptacle: the ſtyles all cohere together at the bottom and form one body with the receptacle; in their upper part they are diſtinct, and are as numerous as the germina, forming ſo many filaments; the ſtigmata are patent and ſlender.

The pericarpium is a capſule, divided into as many cells as there were piſtils; theſe are of various figures in the different genera: the ſeeds are kidney-ſhaped.

Of the Monadelphia, ſome have five ſtamina, others ten, others a great number, according to this obvious diſtinction; they are to be arranged into three orders.

## *Claſs the Sixteenth. Order the Firſt.*

## MONADELPHIA PENTANDRIA.

*Plants, with the ſtamina, five in number, and cohering together, at their baſe, into one body.*

### WALTHERIA.

THE ſtyle is ſingle; the capſule is formed of two valves, and contains a ſingle cell, with one ſeed. It approaches to the althæa in appearance, but the characters ſufficiently diſtinguiſh it.

### HERMANNIA.

THE ſtyle is ſingle; the capſule contains five cells: the petals are ſemitubular at the baſe.

*Hermannia*

*Hermannia foliis lanceolatis obtusis serratis.*
*The Hermannia, with lanceolated, obtuse, serrated leaves.*

African Marsh Mallows.

The root is long, thick, white, and fibrated; the plant grows up to the form of a little shrub; the stalks are brown; the leaves large, obtusely pointed, oblong, of a pale greyish-green, and serrated at the edges: the flowers are small, yellow, and pendulous.

It is a native of the Cape of Good Hope. Tournefort calls it, Hermannia frutescens folio oblongo serrato.

## MELOCHIA.

THE styles are five in number, and the capsule contains five cells.

*Melochia floribus umbellatis, capsulis pyramidatis pentagonis.*
*The Melochia, with umbellated flowers, and pyramidal, pentagonal capsules.*

The root is very thick, oblong, and white,; the plant rises to six feet high; the stalk is round, green, and not very thick; the leaves are of an oval figure, lanceolated and serrated, and stand on pedicles: the flowers stand four or five together, in a kind of umbel, on pedicles arising opposite to the leaves; they are large and red.

It is a native of the Brasils, but is preserved in our gardens.

*Class the Sixteenth. Order the Second.*

## MONADELPHIA DECANDRIA.

*Plants with stamina ten in number, and cohering together at their base.*

## HUGONIA.

THE styles are three in number: the fruit is a berry containing only one seed. Of this genus there is but one known species.

### HUGONIA.

The Hugonia is a shrub of eight or ten feet in height; the root is brachiated, and it's bark yellowish: the bark of the branches is greyish, and they are armed with robust thorns: the leaves are obversely oval, two inches long, and even at the edges: the flowers are yellow, moderately large, and stand three or four together at the tops of the branches.

It is a native of the East Indies. Van Rheede calls it, Modera Canni.

## CANNARUS.

THE style is single; the stigma is simple; the capsule is formed of two valves, but it contains only one cell, and in that but one seed.

These characters sufficiently distinguish the Cannarus, without any farther description.

## GERANIUM.

THE style is simple, but it has five stigmata: the capsule is of the form of a bird's beak. It contains five cells, and in each of them a single seed.

1. *Geranium pedunculis ſimplicibus uniflоris.* Bloody
*The Geranium, with ſimple, ſingle-flowered pedicles.* Crane's-bill.

The root is oblong and ſlender; the plant grows to five or ſix inches high; the ſtalks are ſlender, weak-jointed, and often, in part, procumbent: the leaves are an inch in diameter, roundiſh in their circumference, but deeply divided into a multitude of narrow, oblong ſegments: the flowers are very large, and of a blood-red.

It is a native of England, but is not common. C. Bauhine calls it, Geranium ſanguineum maximo flore.

2. *Geranium calycibus monophyllis foliis cordato-orbiculatis, inciſis, zona notatis.*
*The Geranium, with one-leaved cups, and with cordato-orbiculated, edged leaves.*

This ſpecies grows to a kind of ſhrubby form; the ſtem is thick, brown, and woody: the plant five feet high: the leaves are two inches and a half in diameter, roundiſh, cordated at the baſe, hairy, ſoft to the touch, of a pale green, ſurrounded with a zone or rim of reddiſh, of white, or of a dark colour at their edges, and ſinuated: the flowers are large, and of a beautiful red; they ſtand in a kind of umbels, on long pedicles.

It is a native of Africa. Commelin calls it, Geranium Africanum arboreſcens alchemillæ foliis, floribus rubris.

The other ſpecies of this genus are very numerous; they are, 1. The batrachoide, or aconite-leaved Geranium. 2. The ſmall-flowered, aconite-leaved Geranium. 3. The great, broad, aconite-leaved Geranium. 4. The little, purple-flowered, aconite-leaved Geranium. 5. The variegated-flowered Geranium. 6. The black-flowered Geranium. 7. The grumous-rooted Geranium. 8. The great, tuberous Geranium. 9. The ſilvery, Alpine Geranium. 10. The grey-leaved, thick-rooted Geranium. 11. The ſhining, round-leaved Geranium. 12. The ſhining, divided-leaved Geranium. 13. The mallow-leaved Geranium, or dove's foot. 14. The ſmall-flowered, dove's foot Geranium. 15. The divided-leaved, dove's foot Geranium. 16. The great, divided-leaved, dove's foot Geranium. 17. The divided-leaved, dove's foot Geranium, with long pedicles. 18. The marſhmallow-leaved Geranium. 19. The thick, rugoſe-leaved Geranium. 20. The little, betony-leaved Geranium. 21. The herb Robert, or divided-leaved Geranium. 22. The tall, hemloc-leaved Geranium. 23. The hemloc-leaved muſk Geranium. 24. The ſcentleſs, hemloc-leaved Geranium. 25. The chryſanthemum-leaved Geranium. 26. The Cretic Geranium, with long beaks. 27. The botrys-leaved Geranium. 28. The woolly, thin-leaved Geranium. 29. The chamædrys-leaved Geranium. 30. The thick-rooted, ſtinking Geranium. 31. The fine-leaved Geranium.

Theſe are the European Gerania: the African ſhrubby ones wear quite a different face; they are, 1. The mallow-leaved, ſweet Geranium. 2. The marſhmallow-leaved Geranium. 3. The mallow-leaved, ſoft, hairy, ſcentleſs Geranium. 4. The deeply, ſinuated, mallow-leaved Geranium. 5. The alchemilla-leaved, hoary Geranium. 6. The betony-leaved Geranium. 7. The larger-leaved, hairy Geranium. 8. The ſmooth, large-leaved Geranium.

The African Gerania, with diſſected leaves, make another ſeries yet quite different from the former. Of theſe are, 1. The columbine-leaved, tuberous, and knotty Geranium. 2. The ſmaller, columbine-leaved, red Geranium. 3. The anemone-leaved Geranium. 4. The narrower, anemone-leaved Geranium. 5. The little red flowered, gooſeberry-leaved Geranium. 6. The coriander-leaved Geranium. 7. The larger-flowered, coriander-leaved Geranium. 8. The night-ſcented, or duſky Geranium. 9. The myrrhis-leaved, African Geranium. 10. The narrower, myrrhis-leaved, African Geranium. 11. The fine, divided-leaved, African Geranium.

*Claſs*

*Claſs the Sixteenth. Order the Third.*

## MONADELPHIA POLYANDRIA.

*Plants with very numerous ſtamina connected into one body at the baſe.*

### PENTAPETES.

THE calyx is ſimple: the ſtamina are twenty in number; five of them are very long and ſteril: the cups all contain five cells, and in each a number of membranaceous ſeeds.

Theſe characters ſufficiently diſtinguiſh the Pentapetes, without any farther deſcription.

### STEWARTIA.

THE calyx is ſimple; the ſtyle is ſingle, and it's ſtigma is quinquifid: the fruit is a dry apple, conſiſting of five lobes, and having in each a ſingle ſeed.

The characters ſufficiently diſtinguiſh this alſo, without a farther deſcription.

### SIDA.

THE calyx is ſimple, angulated, and plicated: the ſtyle is divided into ſeveral parts: the capſules are numerous.

This genus comprehends the Malvinda and Abutilon of authors.

*Sida foliis ſubrotundo-cordatis acuminatis.*
*The roundiſh, cordated-leaved Sida.* Yellow Mallow.

The root is ſmall, white, oblong, and fibrated; the ſtalks are round, thick, robuſt, and covered with a thick, woolly down, feeling unctuous and fattiſh: the leaves are large, roundiſh but pointed, and hoary, very ſoft and whitiſh; the flowers are moderately large, and of a beautiful yellow.

It is a native of Ceylon, and alſo of North America. C. Bauhine calls it, Althæa Theophraſti flore luteo; others, Abutilon.

The other ſpecies of Sida are, 1. The maple-leaved, white Sida. 2. The haſtated-leaved Sida. 3. The carpinus-leaved, ſhrubby Sida. 4. The yellow, ſmall-flowered, carpinus-leaved Sida. 5. The ſtellated, alder-leaved Sida. 6. The vine-leaved Sida. 7. The rough-ſtalked Sida. 8. The hoary-podded Sida. 9. The prickly-fruited, ſhrubby Sida. 10. The pyramidal-ſpiked Sida.

### NAPÆA.

THE calyx is ſimple, and of an urceolated figure; the ſtyle is divided into ſeveral parts: the fruit is compoſed of five capſules. The characters ſufficiently diſtinguiſh the Napæa from all the other plants of this claſs, without a farther deſcription.

### LAVATERA.

THE calyx is double; the exterior one is divided into three ſegments; the fruit is compoſed of numerous capſules.

*Lavatera foliis glabris, caule ſcabro, fructibus orbiculo tectis.*
*The ſmooth-leaved, rough-ſtalked Lavatera, with fruits covered with an orbiculum.*

The root is white and long; the ſtalks are hardly erect, ramoſe, rough, and thick: the lower leaves are roundiſh and cordated; the upper ones ſomewhat haſtated or angulated;

gulated; all of them are crenated at the edges: the flowers are very large, and of a fine blood red at the ungues, and of a paler red elſewhere.

It is a native of Syria. C. Bauhine calls it, Malva trimeſtris flore cum unguibus purpureis.

The other ſpecies are, 1. The tree Mallow. 2. The tree Marſhmallow, with acute leaves, and ſmall flowers. 3. The ſmall-flowered, umbellated, Cretic Mallow. 4. The large-leaved Lavatera.

## MALVA.

THE calyx is double; the exterior one is compoſed of three leaves: the capſules are numerous, and each contains a ſingle ſeed.

This genus contains the Malva of authors in general, and the Abutilon of Dillenius.

*Malva foliis rotundo-angulatis.*
*The roundiſh, but angulated-leaved, mallow.*

**Ivy-leaved Mallow.**

The root is oblong and white; the ſtalk is round, ſmooth, firm, and grows to five feet high: the leaves are ſmooth, large, and ſomewhat reſemble the larger and leſs angulated leaves of ivy: the flowers are very numerous, large, and of a beautiful red.

It is a native of Italy. C. Bauhine calls it, Malva hederaceo folio.

The other ſpecies are, 1. The common, field Mallow. 2. The erect Mallow, with ſmall, white flowers. 3. The common, procumbent, white-flowered Mallow. 4. The curled-leaved Mallow, with cluſtered flowers. 5. The creeping, alcea-leaved Mallow, with deep purple flowers. 6. The red-flowered, African, ſhrubby Mallow. 7. The tricuſpidated-fruited, oriental Mallow. 8. The common, vervain Mallow, or Alcea. 9. The hairy-fruited, vervain mallow. 10. The five-leaved, or hemp-leaved Mallow. 11. The hairy, broad-leaved Mallow. 12. The geranium-leaved, ſea Mallow. 13. The ſmooth, great-flowered Mallow. 14. The elm-leaved Mallow. 15. The roundiſh-leaved, oriental Mallow. 16. The ground-ivy-leaved Mallow.

## GOSSYPIUM.

THE calyx is double; the exterior one is compoſed of three leaves: the capſule contains four cells: the ſeeds are ſurrounded with a fine downy matter.

This genus comprehends the Xylon of Tournefort.

*Goſſypium foliis quinquelobis.*
*The Goſſypium, with quinquelobate leaves.*

**The Cotton Plant.**

The root is long and fibrated; the ſtalk is hard, woody, and ten feet high: the leaves are large, and are divided more or leſs deeply into five portions or ſegments; they are hairy, and ſtand on long pedicles: the flowers are large, and of a pale yellow, edged with purple.

It is a native of Greece. C. Bauhine calls it, Goſſypium fruteſcens ſemine albo.

The other ſpecies are, 1. The trilobate-leaved Goſſypium. 2. The ſmooth, tree Goſſypium. 3. The prickly, tree Goſſypium. 4. The yellow-flowered, tree Goſſypium. 5. The green-ſeeded, tree Goſſypium. 6. The long-fruited, tree Goſſypium.

## MALOPE.

THE calyx is double; the exterior one is formed of three leaves: the fruit is compoſed of a number of conglomerated capſules, each containing a ſingle ſeed.

This genus comprehends the Malacoides of Tournefort.

*Malope foliis ovatis crenatis glabris.* **Betony-leaved Mallow.**
*The ſmooth, oval, crenated-leaved Malope.*

The root is oblong, white, and divaricated; the ſtalks are numerous, procumbent, or oblique, and about ſix inches long: the leaves are few, they ſtand on long pedicles, and are oblong, of a pale green, and like the leaves of betony in figure, but ſmaller: the flowers ſtand on moderately long pedicles, ariſing from the alæ of the leaves; they are like thoſe of the common mallow, and of a pale red.

It is a native of Tuſcany; Moriſon calls it, Malva betonicæ folio; Tournefort, Malacoides betonicæ folio.

The other ſpecies are, 1. The ſmall, blue-flowered, angulated-leaved Malope. 2. The larger-flowered Malope.

## URENA.

THE calyx is double: the exterior one is divided into five ſegments; the capſule contains five cells, each holding a ſingle ſeed, and is echinated on the ſurface.

*Urena foliis angulatis.*
*The angulated-leaved Urena.*

The root is brachiated and fibrated; the ſhrub is robuſt and ramoſe; the bark brown; the woody part whitiſh, and moderately firm: the leaves are large, and deeply ſinuated; the flowers are moderately large and beautiful.

It is a native of China. Breynius calls it, Trifolio affinis Indiæ orientalis xanthii facie.

## ALCEA.

THE calyx is double: the exterior one is divided into ſix ſegments; the fruit is compoſed of numerous capſules, each containing a ſingle ſeed.

*Alcea foliis ſinuato-anguloſis.* **The Holly-hock, or Holy-oak.**
*The ſinuated and angulated-leaved Alcea.*

The root is long, thick, and white; the ſtalk is round, hairy, robuſt, and grows to ſix, eight, or more, feet in height: the leaves ſtand ſingly on long pedicles; they are large, hairy, roundiſh, and angulated: the flowers are very large and numerous; they ſtand on ſhort pedicles, and are naturally of a pale red colour.

It is a native of the Eaſt. C. Bauhine calls it, Malva roſea folio ſubrotundo.

Culture produces almoſt infinite varieties of it, ſuch as double-flowered, ſingle-flowered, deep red, pale red, white, &c. Holly-hocks. Tournefort, and too many others, have given theſe as ſo many ſpecies, but they are truly all but varieties of this.

The other really diſtinct ſpecies of Alcea are, 1. The fig-leaved, or palmato-digitated-leaved Alcea. 2. The ſmoother and ſmaller-leaved Alcea. 3. The deeply, ſinuated-leaved Alcea. The plants, called by the generality of authors Alceæ, are properly Malvæ or Mallows.

## ALTHÆA.

THE calyx is double: the exterior one is divided into nine ſegments: the capſules are numerous, and each contains a ſingle ſeed.

*Althæa foliis ſimplicibus tomentoſis.* **Common Marſh-mallow.**
*The ſimple and downy-leaved Althæa.*

The root is long, thick, and white; the ſtalk is round, robuſt, and four feet high: the leaves are large, broad, dentated at the edges, and downy, of a whitiſh colour, and ſoft, like velvet, to the touch; the flowers are large and white.

It is common on our ſea-coaſts, and on the banks of rivers, toward their openings into the ſea. A decoction of the root is an excellent diuretic and emollient.

The other ſpecies are, 1. The hemp-leaved Althæa, commonly called hemp-leaved Alcea. 2. The deeply ſinuated, leaved Althæa. 3. The large-flowered, trifid, hairy-leaved Althæa, the Alcea hirſuta of Bauhine.

## HIBISCUS.

THE calyx is double: the exterior one is compoſed of a great number of leaves; the capſule contains five cells, and in each of them ſeveral ſeeds.

This genus comprehends the Hibiſcus and Trioccum of Linnæus's Genera Plantarum, the Malvaviſcus of Dillenius, the Ketmia of Tournefort, and the Bammia of Ruppus.

1. *Hibiſcus foliis cordato-quinquangularibus obſolete ſerratis.*
*The Hibiſcus, with cordato-quinquangular, ſerrated leaves.* **The Chineſe Roſe.**

The root is very large and divaricated; the plant grows to the ſtature of a ſmall tree: the ſtem is woody; the leaves are divided ſomewhat like thoſe of the vine, cordated at the baſe, and ſerrated; they ſtand on long reddiſh pedicles, and are of a pale green on the upper ſurface, and hoary below: the flowers are of the ſize of a large roſe, and of a beautiful red colour.

It is a native of China. Moriſon calls it, Althæa arborea roſa Chinenſis; Ferrarius, Roſa Sinenſis.

2. *Hibiſcus foliis cordato-peltatis ſeptemangularibus ſerratis hiſpidis.*
*The Hibiſcus, with rough, ſerrated, cordato-peltated, and ſeptangular leaves.* **Abelmoſch.**

The root is long and white; the ſtalk is robuſt, hairy, and green; the leaves are rough to the touch, ſerrated, and deeply angulated: the flowers are not very large; they are yellow, and of a perfumed ſcent: the ſeed is much ſweeter.

It is a native of Egypt, the Eaſt Indies, and America. C. Bauhine calls it, Alcea Ægyptiaca villoſa. The ſeeds of it were once kept in our ſhops as a provocative and cordial, but they are now out of uſe.

3. *Hibiſcus foliis tripartitis inciſis, calycibus inflatis.*
*The tripartite-leaved Hibiſcus, with inflated cups.* **Bladder Alcea.**

The root is oblong and white; the ſtalks are numerous, round, and weak; the leaves are ſmooth, and deeply divided into ſegments, which are ſerrated on their edges: the flowers are large and yellow, with a black bottom: the fruit is compoſed in an inflated, open cup.

It is a native of Italy. C. Bauhine calls it, Alcea veſicaria; Linnæus, Trioccum.

4. *Hibiſcus foliis ovatis acuminatis ſerratis, caule ſimpliciſſimo.*
*The oval, acuminated, ſerrated-leaved, ſimple-ſtalked Hibiſcus.* **Elm-leaved Ketmia.**

The root is very long, tough, and white; the ſtalk is erect, ſimple, round, hollow, and of a pale green; the leaves are ſomewhat like thoſe of the mulberry-tree, of a bright green on the upper ſide, and whitiſh and hoary underneath: the flowers are very large, and of a pale red, and ſtand at the tops of the ſtalks.

It is a native of Africa and America. Tournefort calls it, Ketmia populi folio.

The other ſpecies of Hibiſcus are, 1. The common, ſmooth-leaved Ketmia of authors. 2. The ſmooth-leaved, yellow Ketmia. 3. The poplar-leaved Ketmia. 4. The lime-leaved Ketmia. 5. The hemp-leaved Ketmia. 6. The rough-ſtalked Ketmia. 7. The haſtated-leaved Ketmia. 8. The vine-leaved Ketmia. 9. The fig-leaved Hibiſcus.

Hibiſcus. 10. The great, white-flowered, prickly Hibiſcus. 11. The cordated-leaved Hibiſcus.

## CAMELLIA.

THE calyx is imbricated, and compoſed of ſeveral leaves, the interior of which are the larger.

It is an oriental, deſcribed by Kœmpfer, in his Japan, p. 850. The characters ſufficiently diſtinguiſh it, without a farther deſcription.

### *Claſs the Seventeenth.*

## DIADELPHIA.

### *Plants which have their antheræ placed on two ſeparate ſtands.*

*This Claſs comprehends the Papilionaceæ of Tournefort, the Leguminoſæ of Ray.*

*The claſſical characters are theſe:*

THE calyx is a perianthium, formed of a ſingle leaf, decaying very ſoon, and of a campanulated figure: it's baſe is gibbous, and is affixed to the pedicle by it's under ſurface; above, it is obtuſe, and contains a honey-juice: the rim is divided into five parts, acute, erect, oblique, and unequal: the lower ſegment, which has no fellow, is longer than the others; the upper pairs are ſhort and ramoſe: the baſe, which is always wet with a honey-dew, contains the receptacle. The corolla is papilionaceous, or of the figure of a butterfly, and is unequal in it's parts: the ſeveral petals, which are four in number, are diſtinguiſhed each by it's peculiar name. The vexillum is a petal, which covers the others; it is large, incumbent, and of a plano-horizontal figure; it's unguis is inſerted into the upper edge of the receptacle; when out of the cup, it approaches to a roundiſh figure; it is nearly entire, and has a line elevated above the reſt of the ſurface, running all along it, and moſt viſible near it's apex, giving an appearance of this petal's being compreſſed downwards; the part of this petal that comes neareſt the baſe approaches to a ſemicylindric figure, and, in ſome degree, embraces the petals that are under it; the diſk of this petal is depreſſed on each ſide, but the two ſides, near their edges, turn upwards; where the half of the tube terminates at the explication of half of the limb, there are, behind, two hollow impreſſions, prominent below; theſe compaſs the alæ, which are ſubulated under them. The alæ are a pair of petals, one placed at each ſide of the corolla; they are placed under the vexillum; the margin is incumbent, and the ſides perpendicular; they are of a roundiſh, oblong figure, broadeſt externally, and have their upper edge nearly ſtrait, their lower ſwelling into a kind of roundneſs; the baſe of each is bifid: the lower portion of this bifurcation is extended into an unguis, which is inſerted into the ſide of the receptacle, and is of about the length of the cup: the upper portion is ſhorter, and is bent. The carina is the loweſt petal, it is often divided into two portions; it is ſituated between the alæ, under the vexillum; it is of the ſhape of a boat, hollowed, and it's ſides compreſſed: it's baſe is mutilated, and it's lower part is extended into an unguis, of the length of the cup, and inſerted into the receptacle; it's lateral and upper ſegments are ſhorter, and are implicated with the like parts of the alæ: the ſides of the carina, in figure, much reſemble the alæ, and their ſituation is alſo like, except that it is lower, and more inward. The linea carinalis, or line of the carina, is continued nearly ſtrait to about the middle of the petal, and, from this part to it's extremity, it riſes into a ſegment of a circle: the linea marginalis is continued ſtrait to the very extremity, where it terminates, after joining obtuſely with the carinal line. The ſtamina, called diadelphous, are two filaments, unlike to one another; the one of them is ſituated below, and involves the piſtil; the other is ſituated above, and lies upon the piſtil. The lower filament ſurrounds the germen; it's loweſt half is membranaceous, cylindric, and opens longitudinally upwards; from hence it terminates in nine ſubulated parts, which, in their length and flexure, reſemble the ſhape of the carina; the intermediate radii are in pairs,

pairs, alternately longer. The upper filament is of a ſubulato-ſetaceous form, and covers the fiſſure of the cylindric part of the former filament; it is ſimple, incumbent, and anſwers to the ſituation of the former, and is ſhorter than it; it opens from the other at it's baſe, and, by this means, gives paſſage to a honey-like juice. The antheræ, in the whole, are uſually ten: there is only one on the upper filament, but the lower one has nine, an anthera ſtanding on every one of it's radii; they are ſmall, equal in ſize, and terminate the filaments. The piſtil is ſingle; it ariſes from the receptacle, within the calyx. The germen is oblong, nearly cylindric, but ſomewhat compreſſed, ſtrait, and of the length of the cylindric part of the lower filament, which incloſes it. The ſtyle is filiform, but ſomewhat ſubulated; it is aſcendent, and is of the ſame length and ſituation with the radii of the filament, among which it is placed; it endures but a ſhort time, periſhing with the corolla, or ſoon after. The ſtigma is hoary, of the length of the ſtyle, and is turned upwards, and placed immediately underneath the antheræ. The fruit is an oblong, compreſſed, obtuſe pod, or legumen, formed of two valves, with two longitudinal ſutures, an upper and an under one, both ſtrait, but the upper one deſcending at the baſe, and the lower one aſcending at the apex: the pod opens at it's upper ſuture. The ſeeds are uſually ſeveral, ſometimes ſmall, roundiſh, ſmooth, and pulpy; they are pendulous in the pod, and have a prominent embryo near their place of inſertion: when the ovular are excluded, the cotyledons preſerve the figure of halves of the ſeed. The peculiar, or proper, receptacles of the ſeeds are very ſmall, ſhort, and attenuated at the baſe, obtuſe at the diſk, oblong, and are inſerted longitudinally and alternately along the upper upper ſuture of the pod; the two valves being ſeparated, one half of the ſeeds therefore adheres to one, the other half to the other.

The carina in many of the flowers of the plants of this claſs is, in reality, compoſed of two petals, with their edges approximated, but not joined; but theſe carry all the appearance of it's being formed of a ſingle petal, as in the others, till carefully ſeparated.

Of the Diadelphia ſome have ſix, ſome eight, ſome ten antheræ in each flower; they may be, therefore, arranged into three orders.

*Claſs the Seventeenth. Order the Firſt.*

## DIADELPHIA HEXANDRIA.

*Plants with ſix antheræ and two kinds of ſtamina.*

### FUMARIA.

THE ſtamina are two, of a membranaceous ſtructure, and trifid.

This genus comprehends the Fumaria, Capnoides, Cyſticapnos, Corydalis, Pſeudo-fumaria, and Cucularia of authors.

*Fumaria ſiliquis paniculatis linearibus, caule erecto.*

*The erect Fumaria, with paniculated, linear pods.*

Evergreen, podded Fumitory.

The root is fibrous: the plant riſes to a foot high: the ſtalk is round, erect, ſlender, hollow, and covered with a greyiſh powder, which eaſily falls off, on rubbing; the leaves are divided into a number of ſhort, obtuſe ſegments, and are of a bluiſh colour: the flowers are ſmall, of a variegated red and yellow colour, and ſtand in cluſters, at the tops of the branches.

It is a native of America. Tournefort calls it, Capnoides; Cornutus and others, Fumaria ſiliquoſa ſemper virens.

The other ſpecies are, 1. The common Fumitory. 2. The fine-leaved Fumitory. 3. The climbing Fumitory. 4. The great, fine-leaved Fumitory. 5. The Fumitory, with leaves divided into very long ſegments. 6. The little, ſophia-leaved Fumitory. 7. The broad-leaved, climbing Fumitory. 8. The cordated-leaved Fumitory. 9. The red-flowered, hollow-rooted Fumitory. 10. The yellow-flowered, hollow-rooted Fumitory.

Fumitory. 11. The green-flowered, hollow-rooted Fumitory. 12. The ſolid, tuberous-rooted Fumitory. 13. The large-leaved Fumitory. 14. The great-flowered, obtuſe-ſegmented Fumitory. 15. The ſmaller-flowered Fumitory.

*Claſs the Seventeenth. Order the Second.*

## DIADELPHIA OCTANDRIA.

*Plants with eight antheræ on two kinds of filaments.*

### POLYGALA.

THE calyx is compoſed of five leaves, two of which reſemble the alæ, and are coloured.

This genus comprehends the Polygaloides, Chamæbuxus, and Penæa of authors.

*Polygala foliis lineari-lanceolatis, caulibus diffuſis.* Common Milkwort.
*The diffuſe-ſtalked Polygala, with lineari-lanceolate leaves.*

The root is oblong, ſlender, and white: the ſtalks are numerous, procumbent, round, hard, and ſlender, and grow to four, ſix, or eight inches long: the leaves are about a third of an inch long, broader at the lower part of the ſtalk, and narrower towards the top of it; they are ſmooth, and of a bright green colour: the flowers form a kind of ſpikes, at the tops of the branches; they are moderately large, and naturally blue, but often red or white: the plant alſo is, ſometimes, larger, and more erect, ſometimes ſmaller, and more procumbent; and, under theſe ſeveral appearances, authors have made ſix or eight different ſpecies of it, as the red-flowered, the white-flowered, the myrtle-leaved, &c. Polygala.

It is common in our paſtures. C. Bauhine calls it, Polygala vulgaris.

The other really diſtinct ſpecies are, 1. The pointed-leaved, taller Polygala. 2. The variegated-flowered, very narrow, and long-leaved Polygala. 3. The little-leaved, large flowered Polygala. 4. The great, ſhrubby, African Polygala. 5. The graſſy-leaved, ſhrubby Polygala. 6. The great-flowered, flax-leaved, African Polygala. 7. The yellow, box-leaved, ſhrubby Polygala. 8. The American, long-leaved, white Polygala.

### HEISTERIA.

THE calyx is compoſed of five leaves, and thoſe nearly equal, and regularly arranged. This ſingular ſtructure of the calyx diſtinguiſhes the Heiſteria ſufficiently from all the other genera of this claſs, without a farther deſcription.

*Claſs the Seventeenth. Order the Third.*

## DIADELPHIA DECANDRIA.

*Plants which have ten antheræ on two kinds of ſtyles.*

OF the Diadelphia Decandria there are many more genera than of either of the former ſeries; and of theſe ſome have the filaments connected at their baſes; others have the ſtigmata hoary, and the filaments not connected at their baſes; others have the cups bilabiate, and the ſtigmata not hoary, nor the filaments connected; and, finally, others have the ſtigmata ſimple, not hoary, the filaments not connected, and the cups not bilabiate: they may hence be arranged into four ſeparate diviſions.

*Diviſion the Firſt.*

## DIADELPHIA DECANDRIA.

*Which have their filaments connected at their baſes.*

### ERYTHRINA.

THE calyx is divided into two lips: the vexillum of the corolla is very long and lanceolated.

This genus comprehends the Corallodendron and Coral of authors.

*Erythrina foliis ternatis, caule ſpinoſo.* The Co-
*The Erythrina, with ternate leaves, and thorny branches.* ral-tree.

The root is brachiated: the tree grows to twenty-five feet high: the branches are armed with ſharp thorns, eſpecially on the younger trees: the leaves are broad, ſhort, and ſomewhat cordated; they grow three on each pedicle, and ſeveral of theſe aggregations from the whole compound leaf: the flowers are very large, and of a fine ſcarlet colour.

It is a native both of the Eaſt and Weſt Indies. Tournefort calls it, Corallodendron triphyllum Americanum ſpinoſum, flore ruberrimo.

The other ſpecies are, 1. The black-ſeeded, trifoliate Erythrina. 2. The large-leaved Erythrina. 3. The aſh-leaved Erythrina. 4. The ſingle, oblong-leaved, and flat-podded Erythrina. 5. The yellow-flowered, pſeudo-acacia-leaved Erythrina. 6. The ſmaller-leaved Erythrina.

### SECURIDACA.

THE calyx is bilabiated: the pod is of a roundiſh figure, containing only a ſingle ſeed, and terminating in a large ala, of an oval figure.

Theſe characters ſufficiently diſtinguiſh the Securidaca, without a farther deſcription.

### LUPINUS.

THE calyx is bilabiated; five of the antheræ are roundiſh, and the other five oblong; the pod is coriaceous.

*Lupinus calycibus verticillatis, labio inferiore trifido.* Yellow
*The Lupine, with verticillate cups, and the lower lip trifid.* Lupine.

The root is fibrous: the ſtalk is round, hairy, ramoſe, and two feet high: the leaves are digitated, oblong, narrow, hoary on both ſides, and terminate in a point: the flowers are large, yellow, and ſweet; they ſtand at the tops of the ſtalks, in form of a long ſpike.

It is a native of Italy. C. Bauhine calls it, Lupinus ſylveſtris flore luteo.

The other ſpecies are, 1. The common, blue Lupine, with it's varieties. 2. The great, very hairy, blue Lupine. 3. The broad-leaved Lupine. 4. The narrow-leaved, purple Lupine. 5. The tall, narrow-leaved, blue Lupine. 6. The blue, perennial, creeping Lupine. 7. The little, Eaſt Indian Lupine. 8. The compoſite-ſtalked, white-flowered, garden Lupine, the ſeeds of which are kept in the ſhops.

### CROTALARIA.

THE calyx is divided into three parts: the pod is turgid, inflated, and has a pedicle.

*Crotalaria*

*Crotalaria foliis ternatis, petiolis nudis.*
*The ternate-leaved Crotalaria, with naked petioles.*

The root is oblong, ſmall, and fibrated: the ſtalk is round, ſmooth, four feet high, and ramoſe: the leaves are an inch long, of a roundiſh figure, and of a yellowiſh-green colour; they ſtand three on every pedicle, and are hoary: the flowers are moderately large, and of a yellowiſh-green; they ſtand in a kind of ſpikes, at the tops of the ſtalks.

It is a native of America. Ray calls it, Crotalaria fruticoſa fructu pubeſcente.

The other ſpecies are, 1. The lanceolate-leaved Crotalaria. 2. The ſmall-flowered Crotalaria. 3. The dwarf Crotalaria.

## GENISTA.

THE calyx is formed into two lips: the vexillum of the corolla is oblong, and is totally reflected from the carina.

This genus comprehends the Spartium and Geniſtella of Tournefort, but not the Geniſta of Tournefort and others, that being the Spartium.

*Geniſta foliis lanceolatis, ramis teretibus ſtriatis.*
*The lanceolate-leaved Geniſta, with round, ſtriated branches.*

**Green-Weed, or Dyers-Weed.**

The root is woody, divaricated, and ſpreading: the ſtalks are numerous, tough, round, ſtriated, and two feet high: the leaves are oblong and narrow, of a deep green colour, and ſmooth: the flowers are large and yellow, and ſtand in large tufts, at the tops of the branches.

It is common in our paſtures. C. Bauhine calls it, Geniſta tinctoria: the dyers uſe it for a green and a yellow.

The other ſpecies are, 1. The ramoſe, hypericum-leaved Geniſta. 2. The prickly, lanceolate-leaved Geniſta. 3. The herbaceous Geniſta, or Chamæſpartium of authors. 4. The larger, prickly Geniſta. 5. The hairy and prickly Geniſta. 6. The woolly-headed, very prickly Geniſta. 7. The Geniſta, with very long and ſlender, tridentated points. 8. The ſhorter, tridentated-ſpined Geniſta. 9. The crooked, tridentated, prickled Geniſta. 10. The cluſter-flowered Geniſta. 11. The very ſhort, bluiſh-ſpined Geniſta. 12. The ſmall-flowered Geniſta. 13. The little-ſpiked Geniſta. 14. The broad-leaved Dyers-weed. 15. The ſhrubby, narrow-leaved Dyers-weed. 16. The ſhrubby, broad leaved Dyers-weed.

## SPARTIUM.

THE ſtigma is longitudinal and hairy in it's upper part: the filaments adhere to the carina: the calyx ſtands oblique downwards.

This genus comprehends the Geniſta of authors.

*Spartium ramis oppoſitis teretibus, verſus apicem floriferis, foliis lanceolatis.*
*The oppoſite, round-branched Spartium, with lanceolate leaves.*

**Spaniſh Broom.**

The root is brachiated: the ſhrub riſes to ſix or eight feet high: the ſtem is brown, the twigs green, round, and tough: the leaves are oblong, and quickly fall off: the flowers are large and yellow, and ſtand in cluſters, at the tops of the branches.

It is a native of Spain, Italy, and France. J. Bauhine calls it, Geniſta juncea.

The other ſpecies are, 1. The dwarf, ſweet Spartium. 2. The ſmall-flowered Spartium. 3. The butchers-broom-leaved Spartium. 4. The lavender-leaved Spartium. 5. The roſemary-leaved Spartium. 6. The little, blue-flowered Spartium. 7. The ſilvery-branched Spartium. 8. The purple, narrow-leaved Spartium. 9. The larix-leaved Spartium. 10. The hairy, larix-leaved Spartium. 11. The ſhrubby, ſpiked, larix-leaved Spartium. 12. The ſhrubby, capitated, larix-leaved Spartium. 13. The yellow,

yellow, ſpiked, larix-leaved Spartium. 14. The ſhort, larix-leaved Spartium, with downy heads. 15. The camphorata-leaved Spartium, with very ſmall, yellow flowers. 16. The gallium-leaved Spartium.

## BORBONIA.

THE ſtigma is emarginated: the calyx is acuminato-ſpinoſe: the pod is pointed at the extremity. Theſe characters ſufficiently diſtinguiſh the Borbonia, without a farther deſcription.

## ACHYRONIA.

THE ſtigma is acute; the pod is turgid and hairy: the vexillum is obtuſe, but pointed. The characters, alſo, ſufficiently diſtinguiſh this genus, without a farther deſcription.

## ONONIS.

THE calyx is divided into five linear ſegments; the pod is turgid and ſeſſile. This genus comprehends the Ononis of Tournefort, and the Natrix of Rivinus.

*Ononis pedunculis uniflori ſeta terminatis.* Yellow
*The ſingle-flowered Ononis, with hairy peduncles.* Reſtharrow.

The root is long, tough, and creeping: the ſtalks are numerous, round, a foot and a half high, very ramoſe, and without thorns: the leaves are ſmall, oblong, pointed, and of a pale green colour: the flowers are large and yellow, and ſtand one on each peduncle.

It is a native of France and Italy. C. Bauhine calls it, Ononis viſcoſa ſpinis carens lutea major.

The other ſpecies are, 1. The common, prickly Ononis. 2. The common Ononis, without prickles. 3. The little, procumbent Ononis, without ſpines. 4. The roundiſh-leaved, perennial Ononis. 5. The early-flowering, purple, ſhrubby Ononis. 6. The tridentate, fleſhy-leaved, ſhrubby Ononis. 7. The dwarf, great-rooted Ononis. 8. The little, ſmooth, purple Ononis. 9. The long-ſpiked, alopecuroide Ononis. 10. The hairy, procumbent, ſea Ononis. 11. The purple, ſhrubby, American Ononis. 12. The broad-leaved, yellow Ononis. 13. The narrow-leaved, variegated, ſea Ononis. 14. The large, yellow-flowered, ſhrub Ononis. 15. The little, yellow-flowered Ononis. 16. The Aſiatic, ſhrub Ononis, with great yellow flowers. 17. The broader, or roundiſh-leaved Ononis. 18. The climbing, yellow-flowered Ononis.

## GALEGA.

THE calyx is divided into five ſetaceous ſegments: the pod is cylindric, and very long.

Of this genus there is but but one known ſpecies.

### Galega. Goat's-rue.

The root is oblong, white, and fibrated: the plant riſes to three feet high: the ſtalks are ſtriated and hollow: the leaves are compoſed each of a great many pairs of oblong pinnæ: the flowers are moderately large, and of a bluiſh-white colour; they ſtand in long ſpikes, on pedicles ariſing from the alæ of the leaves.

It is a native of Italy. C. Bauhine calls it, Galega vulgaris.

The flowers are ſometimes altogether white, and ſometimes larger than ordinary: Tournefort has made two new ſpecies from theſe varieties.

It has been eſteemed a great ſudorific, but at preſent is little uſed.

ANTHYLLIS.

## ANTHYLLIS.

THE calyx is inflated, and divided into five ſhort ſegments at the extremity, and covers the pod.

This genus comprehends the Vulneraria of Tournefort and others.

*Anthyllis herbacea foliis quaterno-pinnatis floribus, lateralibus* Bladder Lotus.
*The lateral-flowered, quaterno-pinnate-leaved Anthyllis.*

The root is fibrous; the ſtalks are numerous, procumbent, and grow to a foot in length: the leaves ſtand at ſmall diſtances; they are compoſed each of two pairs of little pinnæ, and a large oval terminatory one; the flowers ſtand on ſhort pedicles, ariſing from the alæ of the leaves; they are little and yellow, but their cups large and inflated like bladders.

It is a native of Italy. C. Bauhine calls it, Lotus pentaphyllus veſicarius.

The other ſpecies are, 1. The common, yellow Anthyllis. 2. The purple-flowered Anthyllis. 3. The broader-leaved Anthyllis. 4. The Anthyllis, called yellow, hoary, Barba Jovis. 5. The Anthyllis, called common Barba Jovis.

## AMORPHA.

THE vexillum of the corolla is of an oval figure, and hollow. There are no alæ nor carina in this ſingular genus. There is but one known ſpecies.

### AMORPHA.

The root is brachiated and fibrated; the ſhrub riſes to four or five feet high: the branches are ſlender; the leaves large and pinnated; they ſomewhat reſemble thoſe of the common acacia: the flowers are very ſmall and purple.

It is a native of South America. Miller calls it, Barba Jovis pſeudo-acaciæ foliis, floſculis purpureis minimis.

*Claſs the Seventeenth. Order the Third.*

*Diviſion the Second.*

*Diadelphia Decandria, with hoary ſtigmata, and filaments not connected at the baſe.*

## ANAGYRIS.

THE vexillum of the flower is ſhorter than the alæ, and the alæ are ſhorter than the carina.

*Anagyris floribus lateralibus.* Stinking Bean Trefoil.
*The Anagyris, with lateral flowers.*

The root is brachiated and fibrated; the trunk is thick, woody, and covered with a brown bark; it grows to twenty feet high, and ſometimes forms a regular tree, though more uſually it is a ſhrub: the leaves are oblong and hoary; on the under ſide they ſtand three on each pedicle: the flowers are numerous, and of a beautiful yellow.

It is a native of Italy. C. Bauhine calls it, Anagyris fœtida.

There is but one other known ſpecies of this genus, the narrower-leaved Anagyris.

## ROBINIA.

THE vexillum of the corolla is patent, reflex, and roundiſh; the calyx is divided at the extremity into four ſhort ſegments; the upper one is emarginated.

This genus comprehends the Pſeudo-acacia of Tournefort and Rivinus.

*Robinia pedunculis racemoſis, foliis pinnatis.*
*The pinnated-leaved Robinia, with racemous peduncles.*

The root is large and ſpreading; the tree grows to forty feet high; the branches are covered with a ſmooth bark, and have very robuſt and ſharp ſpines: the leaves are pinnated; the pinnæ are ſhort and broad, and there are eight or ten pairs of them in each leaf: the flowers are large and white.

It is a native of Virginia. Boerhaave calls it, Pſeudo-acacia ſiliquis glabris; Linnæus, Robinia aculeis geminatis.

The other ſpecies are, 1. The Robinia, with oblong pinnæ. 2. The Robinia, with quaternate pinnæ. 3. The yellow-barked, quaternate-leaved Robinia.

## OROBUS.

THE ſtyle is of a linear figure; the calyx is obtuſe at the baſe; the upper ſegments are ſhort.

*Orobus caule ſimpliciſſimo, foliolis pluribus lanceolatis oblongis.*
*The ſimple-ſtalked Orobus, with numerous, oblong, lanceolate foliola.*

The root is fibrous; the ſtalks are weak, ſlender, ſtriated, and of a pale green: the leaves are pinnated; the pinnæ are numerous, ſmooth, oblong, and pointed: the flowers are moderately large and purple.

It is common in moſt parts of Europe. C. Bauhine calls it, Aſtragalus ſylvaticus foliis oblongis glabris.

The other ſpecies are, 1. The common, purple, ſpring Orobus. 2. The narrower-leaved, pale red Orobus. 3. The broad-leaved, purple Orobus. 4. The narrow-leaved, tuberous-rooted Orobus. 5. The vetch-leaved Orobus. 6. The common hedge Orobus. 7. The nervous-leaved Orobus. 8. The ſcarlet and black ſeeded, American Orobus. 9. The narrow-leaved, pale-flowered Orobus.

## LATHYRUS.

THE ſtyle is plane, and broadeſt in the upper part; the two upper ſegments of the cup are ſhorter than the others.

This genus comprehends the Clymenum and Aphaca of Tournefort, as well as his Lathyrus.

*Lathyrus pedunculis multifloris, cirris diphyllis, foliolis ovalibus, radice tuberoſa.*
*The tuberous rooted, many-flowered Lathyrus, with oval leaves.*

**Peaſe Earth-nut.**

The root conſiſts of a number of long filaments, to which, in ſeveral parts, are annexed large tuberoſities of an oblong or roundiſh figure, and white, tender ſubſtance: the ſtalks are weak and procumbent, unleſs ſupported; they grow to two feet long: the leaves are placed two on a pedicle, which terminates in a tendril; they are an inch long, oval, and obtuſe: the flowers are numerous, large, and purple.

It is a native of moſt parts of Europe. C. Bauhine calls it, Lathyrus arvenſis repens tuberoſus.

The other ſpecies are, 1. The large, garden Lathyrus. 2. The great, wild Lathyrus. 3. The broad-leaved, great-flowered Lathyrus. 4. The great, narrow-leaved Lathyrus. 5. The orobus-podded, ſcarlet-flowered Lathyrus. 6. The very narrow-leaved, American Lathyrus. 7. The purple and yellow Lathyrus. 8. The blue-flowered, annual Lathyrus. 9. The broad-leaved, yellow Lathyrus. 10. The narrow-leaved Lathyrus, with a jointed hairy pod. 11. The very narrow-leaved, red-flowered, round-ſeeded Lathyrus. 12. The angular-ſeeded, narrow-leaved Lathyrus. 13. The capillaceous-leaved Lathyrus. 14. The ſcarlet-flowered, graſſy Lathyrus.

Of

Of thoſe called Clymena there are, 1. The flat-podded Clymenum. 2. The articulated-podded Clymenum. 3. The blue-flowered Clymenum.

Of the Aphaca of authors, there is but one ſpecies, viz. the yellow-flowered, bindweed-leaved Lathyrus.

## PISUM.

THE ſtyle is triangular, and carinated in it's upper part: the two upper ſegments of the cup are the ſhorter.

This genus is very nearly allied to the former; it contains the Piſum and the Ochrus of authors.

*Piſum petiolis decurrentibus membranaceis diphyllis.*
*The Piſum, with membranaceous, decurrent petioles, with two leaves on each.*

The root is fibrous; the plant grows to three feet high, if ſupported; the ſtalks are green, angular, and ſlender; the leaves are oblong, broad, and of a pale green: the flowers are large, and of a pale yellow; they ſtand on ſhort pedicles, ſingly, in the alæ of the leaves.

It is a native of Italy. C. Bauhine calls it, Ochrus folio integro.

The other ſpecies are, 1. The common Pea, from the ſeveral varieties of which Tournefort and others have made ſeveral imaginary ſpecies; as the green pea, the umbellated pea, the dwarf Pea, the ſquare Pea, and the like. 2. The angulated-leaved Pea. 3. The broader-leaved Pea. 4. The yellow, woolly, American Ochrus.

## VICIA.

THE ſtigma is barbated on the lower ſide.

This genus comprehends the Cracca of Rivinus, and the Faba of Tournefort, &c.

*Vicia pedunculis multifloris, foliolis ovatis, infimo pari caulino.*
*The many-flowered Vicia, with oval leaves, the loweſt pair cauline.*

The root is oblong, black, and woody; the plant much reſembles the common pea: the ſtalks are numerous, angulated, ſtriated, and tough: the leaves ſtand pretty cloſe; two broad ones, of an inch in length, ſurround the ſtalk, and from theſe a pedicle runs to three inches in length, with about three pairs of pinnæ on it, and terminating in a tendril: the flowers are ſmall and white, and ſtand in large cluſters on long peduncles.

It is a native of Italy. C. Bauhine calls it, Piſum perenne.

The other ſpecies are, 1. The common Vicia or Tare. 2. The great, buſh Vetch. 3. The rounder-leaved, buſh Vetch. 4. The pointed-leaved Vetch. 5. The many-flowered Vetch. 6. The hoary, many-flowered Vetch. 7. The white-flowered, hairy Vetch. 8. The early, red-flowered Vetch. 9. The many-podded, hairy Vetch. 10. The ſingle and ſmooth-podded Vetch. 11. The long-leaved and long-podded Vetch. 12. The broad-podded, purple-flowered Vetch. 13. The Vetch, which buries it's pods under-ground. 14. The little, early-flowering Vetch. 15. The broad-leaved, procumbent Vetch. 16. The broad and ſerrated-leaved, procumbent Vetch. 17. The pea-leaved Vetch. 18. The yellow-flowered Vetch, with hairy pods. 19. The yellow, ſmooth-podded Vetch. 20. The two-podded Vetch.

Of thoſe called Fabæ Beans there are, 1. The common, garden Bean. 2. The ſmaller-fruited Bean, with ſerrated leaves, called the Narbon Vetch.

Authors have made many other imaginary ſpecies, out of the varieties of the common Bean: the leſſer Bean, called the Horſe-bean, is evidently but a variety of it.

## COLUTEA.

THE pod is inflated, and opens at the upper part of the baſe; the calyx is bilabiate.

*Colutea foliis obverſe cordatis, caule arboreo.*
*The tree Colutea, with obverſely, cordated leaves.*

The root is brachiated; the trunk is woody and hollow: the branches are numerous; the leaves are long, pinnated, and of a bright green: the pinnæ ſhort and hairy underneath: the flowers are very numerous; they hang on long pedicles in cluſters, and are moderately large and yellow; the pods are inflated in manner of a bladder.

It is a native of Italy. It grows on the top of Veſuvius, where there is no other vegetable. C. Bauhine calls it, Colutea veſicaria.

The other ſpecies are, 1. The ſhrubby, purple-flowered Colutea. 2. The dwarf, Syrian, purple Colutea.

## DOLICHOS.

THE baſe of the vexillum has two oblong, parallel, callous bodies, preſſing the alæ.

This genus is nearly allied to the Phaſeolus; but in that the Carina is ſpiral, and it is not ſo in this.

*Dolichos leguminibus ovato-acinaciformibus, ſeminibus ovatis, hilo arcuato verſus altam extremitatem.*
*The ovato-acinaciform, podded Dolichos, with oval ſeeds, ridged toward one end.*

The root is ſpreading; the ſtalk is firm and woody, but climbs upon trees, and any thing that is near it: the leaves are large, broad, and pointed, and reſemble thoſe of the common Phaſeolus: the flowers are large and white; the pods are long; the ſeeds are like thoſe of our kidney-beans, but have a ridge near one end.

It is a native of Egypt, where it is uſed in food. J. Bauhine calls it, Phaſeolus lablab Alpini.

The other ſpecies of Dolichos are, 1. The purple-flowered, ſlender-podded Dolichos. 2. The dwarf, yellow Dolichos.

## PHASEOLUS.

THE carina of the flower, as alſo of the ſtamina and ſtyle, are twiſted ſpirally.

*Phaſeolus corollis coccineis.*
*The ſcarlet-flowered Phaſeolus.*

The root is fibrous; the ſtalk is weak, climbing, and four or five feet long; the leaves ſtand three on each pedicle; they are broad at the baſe, and terminate in a point; the flowers are large, and of a bright ſcarlet.

It is a native of America. Cornutus calls it, Phaſeolus puniceo flore; Moriſon, Phaſeolus Indicus flore coccineo.

The other ſpecies are, 1. The common, garden Phaſeolus, or Kidney-bean, with it's ſeveral varieties in the colour of the ſeeds, from which Tournefort and others have made ſeveral ſpecies. 2. The dwarf, black, Italian Phaſeolus. 3. The Ceylon Phaſeolus, with radiated pods. 4. The ivy-leaved, woolly-ſeeded Phaſeolus. 5. The broad-fruited Phaſeolus. 6. The yellow-flowered, Egyptian Phaſeolus. 7. The narrow-leaved Phaſeolus. 8. The little-leaved Phaſeolus. 9. The yellow-podded Phaſeolus. 10. The cochleated-flowered Phaſeolus. 11. The vetch-leaved, oval-podded Phaſeolus. 12. The very long-podded Phaſeolus. 13. The dwarf, red-flowered, African Phaſeolus. 14. The purple-flowered, tuberous-rooted, American Phaſeolus.

ſeolus. 15. The yellow, ſtrumous-rooted Phaſeolus. 16. The great-podded, American Phaſeolus. 17. The great-flowered, American Phaſeolus. 18. The hairy Phaſeolus, with jointed pods. 19. The falcated-podded Phaſeolus. 20. The pyramidal-ſpiked Phaſeolus, with red and black ſeeds. 21. The round-leaved, purple, ſea Phaſeolus. 22. The hairy-podded, American Phaſeolus.

*Claſs the Seventeenth. Order the Third.*

*Diviſion the Third.*

*Diadelphia Decandria, with bilabiated cups; the ſtigmata not hoary, and the ſtamina not growing together at the baſe.*

## ULEX.

THE calyx is compoſed of two leaves; the pod is ſcarce longer than the cup. The plants of this genus have been confounded with the Geniſta and Geniſta Spartia by authors.

*Ulex folio ſub ſingulis ſpinis ſubulato-plano acuto.*
*The Ulex, with a plano-ſubulated, acute leaf under every ſpine.*

The Furze-Buſh.

The root is long and divided; the trunk is firm, woody, and covered with a brown bark; the young branches are green, flexible, and beſet with numerous thorns: the ſhrub grows to three, four, or more, feet high; the leaves are ſmall, and fall off very ſoon; the flowers are large, yellow, numerous, and beautiful.

It is common on our heaths. C. Bauhine calls it, Geniſta ſpinoſa major longioribus aculeis.

The other ſpecies are, 1. The arboreſcent, larger-leaved, African Ulex. 2. The red-flowered Ulex. 3. The ſhorter-ſpined, common Ulex. 4. The ſlender-ſpined Ulex. 5. The ſmall-flowered Ulex.

## CITYSUS.

THE calyx is bilabiate; the pod is attenuated at the baſe.

This genus comprehends the Cytiſus of Tournefort, and the Laburnum of Rivinus.

*Cytiſus foliis ovato-oblongis, racemis ſimplicibus pendulis.*
*The ovato-oblong-leaved Cytiſus, with ſimple, pendulous cluſters.*

The not ſtinking Bean Trefoil.

The root is ſpreading; the tree grows to five and twenty feet high, and is very ramoſe: the wood is firm and hard; the bark of the young branches is green: the leaves ſtand on hairy pedicles; they are two inches long, and more than an inch broad, obtuſe at the end, and hoary underneath: the flowers are moderately large and yellow; they hang in cluſters, on long pendulous peduncles.

It is a native of Italy. C. Bauhine calls it, Anagyris non fœtida major ſive Alpina; Tournefort, Cytiſus flore racemoſo pendulo.

The other ſpecies are, 1. The reddiſh, hoary Cytiſus. 2. The long-podded, hoary Cytiſus. 3. The great, hoary, yellow Cytiſus. 4. The ſmall-leaved, hoary Cytiſus. 5. The roundiſh-leaved, ſhort-pedicled Cytiſus. 6. The ſmooth, green Cytiſus. 7. The narrow, complicated, hoary Cytiſus. 8. The ſhort, pendulous-flowered Cytiſus. 9. The purple-ſpiked Cytiſus. 10. The ſilvery, African Cytiſus. 11. The prickly Cytiſus, called trifoliate acacia. 12. The dwarf, narrow-leaved, ſilvery

ſilvery Cytiſus. 13. The dwarf, viſcous Cytiſus. 14. The flax-leaved Cytiſus. 15. The cluſtered-podded Cytiſus. 16. The tall, anagyris-leaved, cluſter-flowered Cytiſus. 17. The ſilvery-leaved, white-flowered Cytiſus. 18. The narrow-leaved, hairy, African Cytiſus. 19. The yellow, prickly, American Cytiſus. 20. The ſilky-ſhrub American Cytiſus.

## GLYCINE.

THE calyx is bilabiated; the carina of the flower bends back the vexillum at it's top: the pod contains two cells.

This genus comprehends the Apios of Boerhaave.

*Glycine foliis pinnatis conjugatis, foliolis ovato-oblongis obtuſis.* Scarlet Pea.
*The conjugate, pinnated-leaved Glycine, with obtuſe foliola.*

The root is fibrous: the ſtalks are weak and procumbent, unleſs ſupported; they grow to two feet, or more, in length: the leaves conſiſt of eight or nine, or more, pairs of oblong, obtuſe pinnæ, ſet on a middle rib, with no odd leaf at the end: the flowers are large, and ſtand ſeveral on the ſame pedicle: the fruit is a ſhort pod, in which are ſeveral hard, ſcarlet ſeeds, ſpotted with black.

It is a native of Egypt, and the Eaſt Indies. Veſlingius calls it, Abrus; Van Rheede, Konni; C. Bauhine, Piſum minus coccineum.

The other ſpecies are, 1. The tuberous-rooted, aſh-leaved Glycine. 2. The larger-flowered Glycine.

## ARACHIS.

THE calyx is divided into two parts; the pod is cylindric, coriaceous, knotty, and contains two ſeeds.

This genus comprehends the Arachidna and the Arachidnoides of authors.

*Arachis quadrifolia.*
*The four-leaved Arachis.*

The root is oblong, thick, and fibrated: the plant riſes to a foot and a half high; the ſtalks are ſquare, ſtriated, hairy, and ramoſe; the leaves ſtand four together, in two pairs; they are an inch long, and three quarters of an inch broad, and ſomewhat hoary underneath: the flowers are moderately large and yellow; they ſtand on ſhort pedicles, ariſing from the alæ of the leaves.

It is a native of Peru and the Braſils; it's pods are uſually buried in the ground.

## GLYCYRRHIZA.

THE calyx is bilabiate; the pod is of an oval figure, and compreſſed.

1. *Glycyrrhiza leguminibus echinatis.* Rough-headed Liquorice.
*The echinated-podded Glycyrrhiza.*

The root is long, and often an inch and a half in diameter: the plant grows to ſix feet high; the leaves are pinnated and long; the pinnules are ſhort and obtuſe, and viſcous to the touch: the flowers are ſmall and blue; they ſtand in cluſters on ſhort pedicles, ariſing from the alæ of the leaves; the pods are ſhort and echinated, and ſtand in cluſters, ſo as to form a compact head.

It is a native of Tartary. C. Bauhine calls it, Glycyrrhiza capite echinato.

This was the true Glycyrrhiza or Liquorice of the Greeks.

2. *Glycyrrhiza*

2. *Glycyrrhiza leguminibus glabris.* **Common Liquorice.**
*The ſmooth-podded Liquorice.*

The root is a yard long, and as thick as a man's thumb: the plant grows to four feet high: the ſtalk is round, firm, hairy, and viſcous; the leaves are pinnated, and the foliola obtuſe: the flowers are ſmall and purpliſh, or bluiſh; they ſtand in cluſters: the pods are ſhort and ſmooth.

It is a native of Germany. C. Bauhine calls it, Glycyrrhiza ſiliquoſa ſive Germanica. It's root is a famous pectoral, uſed in the ſhops, in decoctions, in the inſpiſſated juice, &c.

## ÆSCHYNOMENE.

THE calyx is bilabiate: the pod is articulated, ſtrait, and compreſſed.

*Æſchynomene caule ſcabro, folio infimo quadripinni.*
*The rough-ſtalked Æſchynomene, with the lower leaf quadripinnate.*

The root is oblong, divaricated, and fibrated, woody, and of a yellowiſh colour: the ſtalk is robuſt, round, hairy, and four feet high: the leaves are compoſed of ſhort, obtuſe pinnules: the flowers are ſmall; the pods rough and articulated.

It is a native of Ceylon. Tournefort calls it, Hedyſarum annuum majus mimoſæ foliis. Breynius, Mimoſa non ſpinoſa major Zeylonica.

The other ſpecies are, 1. The ſmaller, ſhort-leaved Æſchynomene. 2. The larger-flowered Æſchynomene.

## CORONILLA.

THE calyx is bilabiate; the upper denticulations grow together: the vexillum of the corolla is ſcarce longer than the alæ.

This genus comprehends the Coronilla, Emerus, and Securidaca of authors.

1. *Coronilla fruticoſa leguminibus teretibus, pedunculis multifloris.*
*The many-flowered, ſhrubby Coronilla, with cylindric pods.*

The root is long, hard, and woody; the plant is ſhrubby, but very low; the twigs are green and tough: the leaves ſtand four or five pairs on a rib; they are of a bluiſh green, and ſhort: the flowers are moderately large and yellow, and ſtand in cluſters at the tops of the branches.

Cluſius calls it, Polygala Valentina; C. Bauhine, Polygala altera.

It is a native of Italy.

2. *Coronilla herbacea leguminibus falcato-gladiatis.* **Yellow hatchet Vetch.**
*The herbaceous Coronilla, with falcato-gladiated pods.*

The root is long and tough; the ſtalks are numerous, procumbent, and grow to two feet long: the leaves are pinnated: the pinnæ are ſix or eight pairs on each; they are broad, ſmooth, and ſhort: the flowers ſtand in cluſters like umbels; they are ſmall and yellow.

It is a native of Spain. C. Bauhine calls it, Securidaca lutea major.

The other ſpecies are, 1. The fungous-ſtalked Coronilla. 2. The bluiſh-leaved, maritime Coronilla. 3. The thick-podded Coronilla. 4. The Cretic, ſilvery Coronilla 5. The leaſt Coronilla, with cluſtered pods.

Of thoſe called Emerus are, 1. The great Emerus. 2. The leſſer ſcorpioide Emerus. 3. The crooked-podded Emerus.

*Claſs the Seventeenth. Order the Third.*

*Diviſion the Fourth.*

*Diadelphia Decandria, with the ſtigma ſimple; the filaments not connected at the baſe, the cup not bilabiate, and the ſtigma itſelf not hoary.*

## CICER.

THE calyx is divided into five parts, and is of the length of the corolla: the pod is of a rhombic ſhape.

This genus comprehends the Cicer and Lens of Tournefort, and ſome of the Craccæ of Rivinus.

1. *Cicer foliis ſerratis.* Chiches, or Chich Peaſe.
*The ſerrated-leaved Cicer.*

The root is oblong, white, and fibrated; the ſtalks are erect, firm, hairy, and ramoſe: the leaves are pinnated; the pinnæ numerous, broad, and ſerrated: the flowers ſtand on pedicles ariſing from the alæ of the leaves; they are ſmall and purpliſh, or white: the pod is ſhort and inflated; the ſeeds are two or three in each, and are of the ſize of peas.

It is a native of Spain. C. Bauhine and others call it, Cicer ſativum. The ſeeds were once kept in the ſhops, to be uſed in cataplaſms, &c. but they are now diſregarded.

2. *Cicer pedunculis biſloris, foliolis integerrimis, ſtipulis indiviſis.* The Lentil.
*The two-flowered Cicer, with undivided leaves and ſtipulæ.*

The root is white, oblong, fibrated, and tough; the ſtalks are ten inches high, ramoſe and procumbent: the leaves are pinnated; the pinnæ oblong, hairy, narrow, and pointed: the flowers are ſmall and white; they grow two together on ſtalks, ariſing from the alæ of the leaves: the pods are ſhort, broad, compreſſed, and ſmooth; the ſeeds are flatted.

It is a native of the South of France. C. Bauhine calls it, Lens major; others, Lens vulgaris.

The other ſpecies of Cicer are, 1. The Cicer, with pendulous pods, called by ſome Ervum and Orobus. 2. The larger and darker-ſeeded Cicer. 3. The great, perennial Cicer.

## ERVUM.

THE calyx is divided into five parts, and is of the length of the corolla: the germen is tranſverſely plicated.

*Orobus leguminibus articulatis, ſemine majore.*
*The articulated-podded, large-ſeeded Orobus.*

The root is oblong, tough, and fibrated; the ſtalks are numerous, angular, weak, and about a foot and half high: the leaves are pinnated; the pinnæ are ſmall, obtuſe, and ten or twelve pairs ſtand on each rib, with no odd leaf at the extremity: the flowers are ſmall, of a bluiſh white, and ſtand one or two together on pedicles, ariſing from the alæ of the leaves: the pods are an inch long, ſlender and jointed.

It is a native of Italy. J. Bauhine calls it, Orobus ſive Ervum multis.

The other ſpecies are, 1. The pale, purple-flowered Ervum. 2. The ſmall-ſeeded Ervum. 3. The triangular-ſeeded Ervum.

ASTRAGALUS.

## ASTRAGALUS.

THE legumen, or pod, is gibbous, and contains two cells.

This genus contains the Aſtragalus of Tournefort and others, and the Glaux of Rivinus.

*Aſtragalus cauleſcens procumbens, leguminibus ſcrotiformibus inflatis piloſis.*
*The cauleſcent, procumbent Aſtragalus, with hairy, inflated pods, reſembling a ſcrotum.*

The root is oblong and woody: the ſtalks are numerous: the leaves are pinnated; the pinnæ are ſhort, broad, and hairy: the flowers ſtand in little cluſters, on pedicles, riſing from the alæ of the leaves; they are of a pale yellow colour: the pods are ſhort, inflated, blackiſh, and contain each two ſeries of ſeeds, in two cells.

It is a native of Switzerland. Camerarius calls it, Cicer ſylveſtre; others, Aſtragalus perennis veſiculoſus.

The other ſpecies are, 1. The tuberous, climbing, aſh-leaved Aſtragalus. 2. The ſpicated, purple Aſtragalus. 3. The pale blue, vetch-flowered Aſtragalus. 4. The pale-flowered Aſtragalus, called ſpiked Onobrychis. 5. The yellow, procumbent Aſtragalus, called wild Liquorice, and wild Fœnugreek. 6. The crooked-podded, yellow Aſtragalus. 7. The broad-leaved, procumbent Aſtragalus. 8. The procumbent, ſea Aſtragalus. 9. The narrow-leaved, blue Aſtragalus. 10. The narrow-leaved Aſtragalus, with flowers on long pedicles. 11. The ſweet, yellow, African Aſtragalus. 12. The greeniſh, yellow-flowered Aſtragalus. 13. The tall, white Aſtragalus. 14. The hoary Aſtragalus, with crooked pods. 15. The purple, mountain Aſtragalus, or Glaux. 16. The procumbent, vetch-leaved Aſtragalus. 17. The tragacanth-leaved Aſtragalus. 18. The glomerated-flowered, tragacanth-leaved Aſtragalus. 19. The yellow-flowered, vetch-leaved, Alpine Aſtragalus. 20. The barba Jovis-leaved, ſimple-ſtalked, yellow Aſtragalus. 21. The Siberian Aſtragalus, with crooked, pointed pods. 22. The very ſhort-ſtalked, Ruſſian Aſtragalus.

## BISERRULA.

THE legumen, or pod, is plane, and has two cells, ſeparated by a tranſverſe diſſipimentum.

This genus comprehends the Pelecinus of Tournefort, and the Utrinque ſerrata of Rivinus.

*Biſerrula leguminibus recurvis utrinque dentatis.*
*The Biſerrula, with crooked pods, dentated on each ſide.*

The root is oblong and ſlender: the ſtalks are numerous, ſlender, and ramoſe: the leaves are pinnated; the pinnæ very numerous, ſmall, and cordated: the flowers are ſmall and reddiſh, and ſtand in cluſters, on long pedicles: the pods are an inch long, crooked, and ſerrated.

It is a native of Italy. C. Bauhine calls it, Securidaca ſiliquis planis utrinque dentatis; Tournefort, Pelecinus vulgaris.

## TRAGACANTHA.

THE legumen, or pod, is of a roundiſh figure, and contains two cells.

*Tragacantha ſpinis longioribus.*
*The long-ſpined Tragacantha.*

**The Gum Tragacanth-ſhrub.**

The root is white, woody, tough, and ſpreading: the ſhrub grows to four feet high: the ſtem is robuſt and firm; the branches numerous; the ſpines very frequent, long, white,

white, and ſharp: the leaves are ſhort, pinnated, and of a whitiſh colour; the pinnæ are ſmall: the flowers are white, and moderately large.

It is a native of many parts of France. C. Bauhine calls it, Tragacantha vulgaris.

The Gum Tragacanth of the ſhops is obtained by wounding the ſtem of this ſhrub.

The other ſpecies are, 1. The purple-flowered, ever-green, Alpine Tragacanth. 2. The woolly Tragacanth, called Poterium. 3. The larger-leaved Tragacanth.

## PHACA.

THE legumen, or pod, is but imperfectly divided into two cells within.

This genus comprehends the Aſtragaloides of Tournefort.

*Phaca incana leguminibus brevibus.*

*The ſhort-podded, hoary-leaved Phaca.*

The root is remarkably thick, black on the outſide, and fibrated: the ſtalks are numerous, angular, as thick as a man's figure, and hoary: the leaves are pinnated; the pinnæ ſhort and hoary: the flowers ſtand in a kind of ſpikes, on pedicles, riſing from the alæ of the leaves; they are large and white.

It is a native of Italy. C. Bauhine calls it, Aſtragalus lanuginoſus radice ampliſſima.

The other ſpecies are, 1. The yellow-flowered Siberian Phaca. 2. The narrow-leaved Phaca.

## HEDYSARUM.

THE carina of the corolla is tranſverſely obtuſe: the articulations of the legumen, or pod, contain each a ſingle ſeed.

This genus comprehends the Hedyſarum, Onobrychis, and Alcagi of Tournefort.

*Hedyſarum foliis pinnatis, leguminibus articulatis, aculeatis, nudis, caule diffuſo.*

*The diffuſe-ſtalked, pinnated-leaved Hedyſarum, with naked, aculeated, and articulated pods.* French Honeyſuckle.

The root is long, thick, and divaricated: the ſtalks are procumbent, four or five feet long, hollow, ſmooth, and thick: the leaves are pinnated; the pinnæ large, broad, obtuſe, and hairy at their edges: the flowers are large and beautiful; they ſtand on long pedicles, in cluſters, and are of a fine red colour.

It is a native of Italy. C. Bauhine calls it, Onobrychis ſemine clypeato aſpero major; others, Hedyſarum clypeatum.

The other ſpecies are, 1. The undulated, crooked-podded Hedyſarum. 2. The purple Hedyſarum, with prickly pods. 3. The roundiſh-podded Hedyſarum. 4. The ſmooth-podded, blue, Siberian Hedyſarum. 5. The ternate-leaved, American Hedyſarum. 6. The ternate-leaved, ſhrubby, procumbent Hedyſarum. 7. The capers-leaved, dwarf Hedyſarum. 8. The little, purple Hedyſarum. 9. The ſingle, acuminated-leaved Hedyſarum. 10. The ſingle, roundiſh-leaved Hedyſarum. 11. The two-leaved, yellow-flowered Hedyſarum. 12. The trifoliate Hedyſarum, with diſtorted pods. 13. The procumbent, hairy Hedyſarum. 14. The large-flowered Hedyſarum.

Of thoſe called Onobrychis by authors, beſide the beforementioned, there are, 1. The pale-flowered, common Onobrychis. 2. The vetch-leaved, ſcarlet Onobrychis. 3. The narrow-leaved Onobrychis. 4. The great-fruited Onobrychis.

## ORNITHOPUS.

THE legumen is articulated, cylindric, and ſpirally crooked.

This genus comprehends the Ornithopodium of Tournefort, and the Scorpiurus of Rivinus.

*Ornithopus*

*Ornithopus foliis pinnatis, leguminibus ſubarcuatis.* Bird's-foot.
*The pinnated-leaved Ornithopus, with arcuated pods.*

The root is oblong and white: the ſtalks are numerous, procumbent, ſlender, hairy, and ſix inches long: the leaves are pinnated, and an inch, or more, in length; the pinnæ are numerous, and very ſmall: the flowers are very minute, but of a beautiful mixture of white and red; they ſtand three or four together: the pods are near half an inch long, crooked, and much reſemble the toes of a bird's foot.

It is common in dry paſtures. C. Bauhine calls it, Ornithopodium minus.

The other ſpecies are, 1. The larger, yellow-flowered Ornithopus. 2. The tuberous-rooted Ornithopus. 3. The ſcorpioide Ornithopus, with compreſſed pods. 4. The ſcorpioide Ornithopus, with cylindric pods. 5. The undulated-podded Ornithopus. 6. The purſlane-leaved Ornithopus.

## SCORPIURUS.

THE legumen is intercepted with iſthmi, and is cylindric, bent back, and revolute.

This genus comprehends the Scorpioides of Tournefort, and the Campoides of Rivinus.

There is but one known ſpecies of it.

SCORPIŪRUS. Rough Caterpillars.

The root is oblong, yellow, and tough: the ſtalks are numerous, procumbent, round, hairy, and a foot long: the leaves are oblong and broad, obtuſe at the ends, of a bluiſh-green colour, and a little hairy; they ſtand on long pedicles, and have each two auriculæ at the baſe: the flowers are yellow; they ſtand ſingly on long pedicles, riſing from the alæ of the leaves: the pod is contorted, and reſembles a caterpillar.

It is a native of France. C. Bauhine calls it, Scorpioides beupleuri folio.

The pod varies in the degree of contortion, and other accidents, and hence have been made ſeveral new ſpecies.

## HIPPOCREPIS.

THE pod is crooked and compreſſed, and is emarginated in ſeveral places, along one of the ſutures.

*Hippocrepis leguminibus confertis margine exteriore lobatis.* Common horſe-ſhoe Vetch.
*The cluſter-podded Hippocrepis, with the exterior edge of the pod lobated.*

The root is very long, ſlender, and blackiſh: the ſtalks are numerous, procumbent, and ramoſe, eight inches long, ſlender, and often reddiſh: the leaves are pinnated; the pinnæ are ſmall and irregular: the flowers ſtand in little cluſters, on long, naked pedicles; they are of a deep yellow colour, and pendulous: the pods are arcuated, and, in ſome degree, reſemble the figure of a horſe-ſhoe.

It is a native of England, but not common. C. Bauhine calls it, Ferrum equinum ſiliquis in ſummitate.

The other ſpecies are, 1. The ſingle-podded Hippocrepis. 2. The many-podded, taller Hippocrepis.

## MEDICAGO.

THE pod is compreſſed, and of a cochleated figure: the carina of the corolla bends from the vexillum.

This genus comprehends the Medicago, Medica, Falcata, and Cochleata of authors.

*Medicago*

*Medicago pedunculis racemoſis, leguminibus contortis, caule recto glabro.*
*The racemoſe, contorted-podded Medicago, with an erect, ſmooth ſtalk.*

**Lucerne, or Medic Fodder.**

The root is very long, thick, and perennial: the ſtalks are numerous, round, erect, and two feet high: the leaves ſtand three on a pedicle, as in the trefoils; they are oblong, obtuſe, and crenated: the flowers are numerous, of a purpliſh colour, and arranged in form of a ſpike: the pods are crooked.

It is a native of Spain. Cluſius calls it, Medica legitima; Lobel, Fœnum Burgundicum.

The other ſpecies are, 1. The cochleated Medicago, with black, hiſpid pods. 2. The kidney-ſhaped, podded Medicago. 3. The ſtriated and falcated-podded Medicago. 4. The ſhrubby, hoary Medicago, called by ſome the crooked-podded Cytiſus. 5. The yellow, erect Medicago. 6. The ſmall, yellow-flowered Medicago. 7. The ſea, yellow-flowered Medicago. 8. The ſpotted and cordated-leaved Medicago. 9. The great, turbinated-fruited Medicago. 10. The hairy Medicago, with rigid pods. 11. The dwarf, echinated Medicago. 12. The obtuſe-leaved, coronated Medicago. 13. The obtuſe-leaved, many-podded Medicago. 14. The cut-leaved Medicago. 15. The ciliated-podded Medicago. 16. The perennial, round-podded Medicago. 17. The great-podded Medicago, with reflex ſpines. 18. The oval-fruited Medicago, with rigid ſpines. 19. The great, prickly, ſea Medicago. 20. The thick, hoary, cordated-leaved Medicago. 21. The great-fruited Medicago, with ſpines bent downwards. 22. The trefoil-like Medicago, with falcated pods. 23. The Spaniſh, vulneraria-like Medicago. 24. The Cretic, falcated-podded Medicago. 25. The great, ſmooth-fruited Medicago.

## TRIGONELLA.

THE vexillum and alæ of the corolla are nearly equal, and patent: the flower ſeems tripetalous.

This genus comprehends the Fœnumgræcum of Tournefort and others.

*Trigonella leguminibus ſeſſilibus ſtriatis ſubfalcatis acuminatis.*
*The Trigonella, with ſtriated, acuminated, and ſomewhat falcated pods.*

**Fœnugreek.**

The root is oblong, white, ſlender, tough, and woody: the plant riſes to about eight inches high: the leaves are like thoſe of the common trefoil, three on a pedicle: the flowers ſtand in the alæ of the leaves, and are large and white, with a caſt of bluiſh: the pods are four inches long, and falcated.

It is a native of France, but is ſown in fields in many parts of Europe. C. Bauhine calls it, Fœnumgræcum ſativum.

It's ſeed is the Fœnugreek of the ſhops, an emollient uſed in cataplaſms, and other external applications, and an ingredient in ſome compoſitions.

The other ſpecies are, 1. The ſhorter-podded, wild Trigonella. 2. The little, Arabian Trigonella. 3. The many-podded Trigonella. 4. The great Trigonella, with numerous, long pods. 5. The ornithopodium-podded Trigonella. 6. The procumbent, Siberian Trigonella, with compreſſed, membranaceous pods.

## TRIFOLIUM.

THE flowers are collected together in a kind of heads: the pods are hardly longer than the cups.

This genus comprehends the Trifolium, Melilotus, and Lagopus of authors.

*Trifolium*

*Trifolium erectum floribus racemoſis, leguminibus nudis diſpermis.*
*The erect Trefoil, with cluſtered flowers, and naked, two-ſeeded pods.*

Melilot.

The root is oblong, white, ſlender, and fibrated: the ſtalks are round, green, erect, hollow, and two feet high: the leaves are oblong, ſerrated, and ſtand three on the ſame pedicle: the flowers are yellow, and ſmall, and ſtand in long ſpikes, on pedicles riſing from the alæ of the leaves.

It is common in our paſtures. C. Bauhine calls it, Melilotus officinarum Germaniæ.

It has been much uſed as an emollient.

The other ſpecies of Trifolium are extreamly numerous. Of thoſe called Melilot there are, 1. The great, white Melilot. 2. The narrow-leaved, creeping Melilot. 3. The round-podded, erect Melilot. 4. The ſpotted-leaved Melilot. 5. The many-ſeeded, procumbent Melilot. 6. The narrow-leaved Melilot. 7. The crooked-podded Melilot. 8. The great, ſweet, crooked-podded Melilot. 9. The long, rough-podded, procumbent Melilot. 10. The reflex-podded, Egyptian Melilot. 11. The whole-leaved, oriental Melilot. 12. The little, erect, thick-podded Melilot. 13. The coronated, Syrian Melilot. 14. The bladdery, American Melilot.

Of thoſe called ſimply Trefoils there are, 1. The ſweet-ſcented Trefoil. 2. The common, red Trefoil. 3. The longer-leaved, red Trefoil. 4. The ſhorter-leaved, ſmall-headed, red Trefoil. 5. The common, white Trefoil. 6. The purple, folliculated Trefoil. 7. The greater, hop Trefoil. 8. The leſſer, hop Trefoil. 9. The ſmalleſt, hop Trefoil. 10. The crenated-leaved, red Trefoil. 11. The obtuſe-leaved, crenated, red Trefoil. 12. The round-ſpiked, pale-red Trefoil. 13. The ſtellate and folliculate-headed Trefoil. 14. The purple, ſtellate Trefoil. 15. The dipſacus-headed Trefoil. 16. The erect, globoſe-headed Trefoil. 17. The procumbent, globoſe-headed Trefoil. 18. The ſoft-headed Trefoil. 19. The rounder, ſoft-headed Trefoil. 20. The round and rough-headed Trefoil. 21. The thyme-headed Trefoil. 22. The ſtrawberry Trefoil. 23. The ſubterranean Trefoil. 24. The hairy, ſmall-flowered, red Trefoil. 25. The quadrifoliate, garden Trefoil, improperly ſo called.

Of thoſe called Lagopus there are, 1. The great, rounder-headed Lagopus. 2. The great, long-headed Lagopus. 3. The very long, red-headed Lagopus. 4. The very long and ſlender-headed Lagopus. 5. The narrow-leaved Lagopus. 6. The narrow-leaved, pale, red-headed Lagopus. 7. The common, little, field Lagopus. 8. The yellowiſh-flowered Lagopus.

## LOTUS.

THE pod is cylindric and ſlender: the alæ of the flower are longitudinally connivent upwards: the calyx is tubulous.

*Lotus leguminibus ſolitariis membranaceo-quadrangularibus.*
*The ſingle-podded Lotus, with membranaceo-quadrangular pods.*

Square-podded Vetch.

The root is ſlender, oblong, and white: the ſtalks are numerous, round, hairy, oblique, ramoſe, and a foot long: the leaves are placed three at a joint, the two lower ones ſurrounding the ſtalk: the flowers are ſingle, on pedicles of an inch and a half long, with a leaf at the baſe of the cup; they are moderately large, and of a beautiful crimſon colour: the pods are an inch and a half long.

It is a native of Sicily. C. Bauhine calls it, Lotus ruber ſiliqua angulata.

The other ſpecies are, 1. The little, ſmooth, five-leaved Lotus. 2. The narrower-leaved, little, ſmooth Lotus. 3. The hairy Lotus, with ſlender pods. 4. The larger-flowered, yellow Lotus. 5. The hoary, whitiſh-leaved Lotus. 6. The ſmooth-leaved, ſhrubby Lotus. 7. The ſpotted-leaved Lotus. 8. The hairy, very white Lotus. 9. The ſilvery, Cretic Lotus. 10. The long-podded, yellow, Cretic Lotus. 11. The tall,

tall, hairy, glomerated-flowered Lotus. 12. The ſmooth, fattiſh-leaved, ſea Lotus. 13. The corniculated-podded Lotus. 14. The bird's-foot-podded Lotus. 15. The larger, crooked-podded Lotus. 16. The jointed-podded Lotus. 17. The great, yellow, Portugal Lotus.

## DORYCNIUM.

THE pod is of a roundiſh figure: the vexillum of the flower is obverſely cordated, and reflex.

*Dorycnium fruticoſum foliis anguſtis.*
*The ſhrubby, narrow-leaved Dorycnium.*

The root is oblong, thick, hard, woody, and black: the ſhrub riſes to three feet high, and is all over of a white, hoary colour: the leaves ſtand three, four, or five together, without pedicles, ſurrounding the ſtalk in a radiated manner: the flowers are white, and much reſemble thoſe of the common white trefoil; they ſtand in a kind of heads, at the tops of the branches.

It is a native of France. C. Bauhine calls it, Trifolium album anguſtifolium floribus congeſtis.

There are but two other known ſpecies, 1. The taller, broader-leaved Dorycnium. 2. The larger-flowered Dorycnium.

## PSORALEA.

THE calyx is full of little, ſcabrous protuberances, and is of the length of the pod: the pod contains only one ſeed.

*Pſoralea foliis pinnatis.* The Itch-tree.
*The pinnated-leaved Pſoralea.*

The root is ſpreading: the ſhrub grows to eight feet high: the leaves are pinnated; the pinnæ ſmall, narrow, and linear: the flowers are moderately large, and of a beautiful blue colour: the pods ſhort.

It is a native of Ethiopia. Rivinus calls it, Spartium Africanum; others have made it a dorycnium

The other ſpecies are, 1. The Pſoralea, called the bituminous Trefoil. 2. The digitated, quinate-leaved Pſoralea. 3. The ſingle, oval-leaved Pſoralea.

## CLITORIA.

THE vexillum of the flower is very large, patent, and plicatile.
This genus comprehends the Ternatea of Tournefort, and Clitorius of Dillenius.

*Clitoria foliis pinnatis.* The Clitoris Flower.
*The pinnated-leaved Clitoria.*

The root is oblong and ſlender: the ſtalk is round, green, and moderately thick: the leaves are pinnated; the pinnæ ſhort, broad, and obtuſe: the flowers are very large, and of a beautiful blue colour.

It is a native of the iſland of Ternata. Commelin calls it, Phaſeolus Indicus glycyrrhizæ foliis, flore amplo cæruleo.

There is but one other known ſpecies of it, which is the trifoliate Clitoria.

## INDIGOFERA.

THE calyx is plane: the alæ of the flower are connivent at their upper edges, and are of the ſame figure with the vexillum.

*Indigofera*

Plate 13. P. 555

16

Geranium 23

17

Coronilla 3

Hermannia

Fumaria

Galega

Hippocrepis

Sida

Polygala

Lupinus

Phaseolus

Lotus

Ornithopus

Cytisus

Lathyrus

Astragalus

Gossypium

Erythrina

Scorpiurus

Orobus

Alcea

Sparlium

Robinia

Dorycnium

Biserrula

Medicago

B. Cole Sculp.

*Indigofera leguminibus arcuatis incanis, racemis folio brevioribus.*

*The Indigofera, with arcuated, hoary pods, and with the cluſters ſhorter than the leaves.*

The Indigo Plant.

The root is oblong and divaricated: the ſtalks are numerous, woody, and three feet high; they are round, of the thickneſs of one's little finger, and of a greyiſh colour: the leaves are pinnated; the pinnæ are numerous and ſmall: the flowers are ſmall, and ſtand in cluſters at the tops of the ſtalks; they are often reddiſh, and often merely white.

It is a native of both the Eaſt and Weſt Indies. Moriſon calls it, Anil, ſive Indigo Indica.

The preparation, called Indigo blue, is made from the juice of this herb.

## DALEA.

THE corolla conſiſts of five petals, four of which are equal and ſtrait; the fifth, or upper one, is very ſmall: the pod contains a ſingle ſeed.

Theſe characters ſufficiently diſtinguiſh it from all other genera of this claſs, without a farther deſcription.

## *Claſs the Eighteenth.*

## POLYADELPHIA.

*Plants which have the ſtamina connected together at their baſes into ſeveral ſeries.*

OF theſe, as there can be no claſſical character eſtabliſhed, the generical ones muſt be given at large.

Of the Polyadelphia ſome have only five ſtamina, ſome have twenty, and others a much larger and indeterminate number: they may, therefore, be conveniently arranged, according to theſe differences, into three orders.

## *Claſs the Eighteenth. Order the Firſt.*

## POLYADELPHIA PENTANDRIA.

*Plants which have only five ſtamina, ſeparately connected at their baſes.*

## THEOBROMA.

THE calyx is a perianthium, compoſed of three reflexo-patent leaves; theſe are of an oval figure, hollow, and deciduous: the corolla conſiſts of five erecto-patent, concavo-galeated petals, each of them armed with a bifid ſeta: the nectarium is of a campanulated figure, and erecto-patent; it is ſmaller than the petals, and conſiſts of five ovato-lanceolate, connected leaves: the ſtamina are ſubulated filaments, of the length of the nectarium, on which they grow, in manner of rays; each of theſe is divided into five parts at the top, and on each there are five antheræ, covered with the hollowed petal: the germen is of an oval figure; the ſtyle is ſubulated, and of the length of the nectarium: the ſtigma is ſimple: the fruit is a woody cortex, of an unequal ſurface, with five ridges, and has ſeeds lodged in five ſeries, within it; theſe are numerous, fleſhy, and nearly of an oval figure.

This genus comprehends the Cacao of Tournefort, and the Guazuma of Plumier.

The Cacao has an oblong, quinquangular pod, lengthened at each extremity.

The Guazuma has a globoſe fruit, covered with tubercles, and it's rind is perforated in manner of a ſieve; within it there are five cells.

*Theobroma*

*Theobroma fructu oblongo.*
*The oblong-fruited Theobroma.*

**The Chocolate Nut-tree.**

The root is brachiated and large; the tree is not very tall, but it is of a very elegant form, and, when loaded with it's fruit, is of great beauty: the trunk is as thick as a man's leg, and about five feet high: the branches are numerous; the leaves are ten inches long, and four and a half broad, thin, and of a bright green: the flowers grow on ſeparate hairy pedicles, an inch or two in length from the trunk and branches of the trees; they are ſmall and yelloviſh: the fruit is oblong, hard, ſix inches in length, and contains in it the ſeeds which make our chocolate.

It is a native of America, C. Bauhine calls it, Amygdalis ſimilis Guatimalenſis. There is but one other known ſpecies of Theobroma, that is, the round-fruited Theobroma.

*Claſs the Eighteenth. Order the Second.*

## POLYADELPHIA ICOSANDRIA.

*Plants that have twenty ſtamina connected into ſeveral ſeries at their baſes.*

## CITRUS.

THE calyx is a very ſmall, deciduous perianthium, formed of one leaf, plane at the baſe, and divided into five denticulations at the top: the corolla conſiſts of five, oblong, plane, patent petals: the ſtamina are about twenty ſubulated, compreſſed filaments, erect, and placed in a circular manner, and coaleſcing into ſeveral bodies, compoſed of various numbers of them at the baſe: the antheræ are oblong; the germen is roundiſh: the ſtyle is cylindric, and of the length of the ſtamina: the ſtigma is globoſe, and has nine partitions within it: the fruit is a berry, covered with a thick, fleſhy rind, the pulp being formed into veſicles, and having nine cells: the ſeeds are two in each; they are of a ſuboval figure, and callous ſubſtance.

This genus comprehends the Aurantium, Citrum, and Limon of Tournefort and others. In the Aurantium, the petioles are cordated. In the Citrum, the petioles are naked and ſimple. The Limon, Tournefort ſays, is eaſily diſtinguiſhed from both, by it's figure. But theſe are ſpecific, not generical, diſtinctions.

*Citrus petiolis linearibus.*
*The Citrus, with linear petioles.*

**The Citron-tree.**

The root is brachiated and ſpreading: the tree grows to fifteen feet, or more, in height: the bark is brown; the young ſhoots are tough, and very flexible: the leaves are large, oblong, broadeſt in the middle, and of a beautiful bright green: the flowers are large, white, and extreamly fragrant: the fruit is larger than the lemon, but much reſembles it in ſhape and colour; it's ſurface is uſually uneven, often full of large protuberances.

It is a native of Perſia. C. Bauhine calls it, Malus Medica; others, Citreum vulgare.

The other ſpecies of Citrus are, 1. The Aurantium Vulgare, or Aurantia Mala; and, 2. The Limon Vulgaris, or the common Orange and Lemon. Of both theſe there are many varieties in the ſhape and ſize of the fruit, which authors have made diſtinct ſpecies.

*Claſs the Eighteenth. Order the Third.*

## POLYADELPHIA POLYANDRIA.

*Plants which have very numerous ſtamina connected together, into ſeveral ſeries at their baſes.*

### HYPERICUM.

THE calyx is a permanent perianthium, lightly divided into five oval, hollow ſegments: the corolla conſiſts of five oblong, oval, obtuſe, patent petals: the ſtamina are numerous filaments, nearly of the length of the corolla; they are ſlender, and are connected at their baſes into five diſtinct ſeries: the antheræ are ſmall; the germen is roundiſh; the ſtyles are uſually three, ſometimes but two, ſometimes five; they are diſtant, and of the length of the ſtamina: the ſtigmata are ſimple: the fruit is a roundiſh capſule, having as many cells as there are ſtyles in the flower; the ſeeds are numerous and oblong.

This genus comprehends the Androſæmum and Aſcyrum of Tournefort. The Aſcyrum has five ſtyles, and the ſeeds ſimple: the Hypericum has three ſtyles, and the pericarpium membranaceous: and the Androſæmum has three ſtyles, and the pericarpium ſoft and coloured.

*Hypericum corollis pentagynis, caule tetragono-herbaceo ſimplici, foliis lævibus integerrimis.*

*The ſquare, herbaceous-ſtalked Hypericum, with five ſtyles, and with ſmooth, undivided leaves.*

The root is fibrous and ſpreading; the ſtalks are numerous, oblique, a foot long, ſquare, tough, and firm, and uſually browniſh: the leaves are an inch and half long, near an inch broad, firm, even at the edges, and of a pale green; they ſtand in pairs: the flowers are an inch and a half in diameter, of a beautiful yellow colour, and have a vaſt number of ſtamina in the middle: the fruit is a large, dry capſule, containing five cells.

It is a native of the Eaſt Indies, but is common in our gardens. Moriſon calls it, Androſæmum flore et theca quinquecapſulari omnium maximis.

The other ſpecies are, 1. The great, berry-bearing Androſæmum, or Tutſan. 2. The common St John's-wort. 3. The nummularia-leaved Hypericum. 4. The Syrian, ſhort-leaved Hypericum. 5. The Hypericum, with a curled, triangular leaf. 6. The little, erect Hypericum, called Tragus's pretty Hypericum. 7. The little, procumbent Hypericum. 8. The larger, woolly, procumbent Hypericum. 9. The leſſer, woolly, procumbent Hypericum. 10. The marſh, woolly, procumbent Hypericum, called Marſh St Peter's-wort. 11. The hairy, erect, round-ſtalked Hypericum. 12. The oriental Hypericum, with leaves hairy at their edges. 13. The ſimple-ſtalked, elegant, broad-leaved Hypericum. 14. The large, perfoliate-leaved Hypericum. 15. The ſquare-ſtalked Hypericum, called common St Peter's-wort. 16. The fine, glaucous-leaved, ſtone Hypericum. 17. The ſtinking, ſhrubby Hypericum. 18. The large-flowered, perfoliate Hypericum. 19. The low, Alpine Hypericum, with large flowers. 20. The myrtle-leaved Hypericum. 21. The toad-flax-leaved Hypericum. 22. The leaſt, woolly Hypericum. 23. The ſmall-leaved Hypericum, with very large flowers, or Hypericum of mount Olympus. 24. The erect, willow-leaved Hypericum.

### ASCYRUM.

THE calyx is a permanent perianthium, compoſed of four leaves; the two exterior very ſmall, placed oppoſite and linear; the two interior large, plane, erect, and cordated: the corolla conſiſts of four oval petals; the two exterior ones oppoſite and very large; the interior ſmaller: the ſtamina are numerous, capillary fila-

ments, connected at their baſes into four ſeparate bodies: the antheræ are roundiſh; the germen is oblong; there is ſcarce any ſtyle; the ſtigma is ſimple: the fruit is an oblong, pointed capſule, formed of two valves, and included in the larger leaves of the calyx; the ſeeds are numerous, ſmall, and round.

It is an American deſcribed by Plumier. The characters ſufficiently diſtinguiſh it, without any farther deſcription.

## *Claſs the Nineteenth.*

## SYNGENESIA.

### *Plants, whoſe antheræ coaleſce into a cylinder.*

*This claſs comprehends the Herbæ flore compoſito of Tournefort, Ray, and others.*

*The claſſical characters of the flowers of theſe plants, called Compoſite Flowers, are as follow.*

*The character of the ſingle Floſcule is this:*

THE calyx is a kind of corona of the ſeed, placed on the ſummit of the germen: the corolla is formed of a ſingle petal: the tube is very narrow, very long, and ſituate on the germen, and is either tubulated or ligulated, or wholly without a limb.

In the tubulated corolla, the limb is of a campanulated figure, divided into five reflexo-patent ſegments. In the ligulated corolla, the limb is linear, plane, and turned outwards; and it's extremity is ſometimes entire, ſometimes divided into three, or into five, ſegments, or truncated. Where there is no limb at all, there is often alſo no tube.

The ſtamina are five very ſhort, capillary filaments, inſerted into the neck of the corolla: the antheræ are five, linear and erect, and they coaleſce at their ſides, ſo as to form a kind of tubulated cylinder, with five denticulations at the mouth, and of the length of the limb: the germen is oblong, and ſituated under the receptacle of the floſcule: the ſtyle is filiform, erect, and of the length of the ſtamina, and perforates the cylinder, formed by the antheræ: the ſtigma is divided into two patent, revolute ſegments: there is properly no true pericarpium, though in ſome of the genera there is a kind of cruſt, of a coriaceous ſubſtance.

The ſeed is ſingle, oblong, often of a quadrangular figure, and uſually ſmalleſt toward the baſe, and is either coronated or plane; when coronated, the corona is formed either of a downy matter, or of the cup of the corollula. The down of the ſeed is formed into ſeveral rays, diſpoſed in a circular order, and theſe are ſometimes ſimple, ſometimes radiated at the top, and ſometimes ramoſe. This down ſometimes alſo is ſeſſile, and ſometimes it ſtands on a pedicle: when the corona is formed of the perianthium, it is ſmall, permanent, and uſually divided into five ſhort ſegments or denticulations.

The parts of generation are very variouſly diſpoſed in theſe corollulæ in the ſeveral genera: Hence there are eight ſpecies of them; four of the tubulated, and four of the ligulated, corollulæ.

Of the tubulated ones there are, 1. The hermaphrodite kind, in which the ſtamina and piſtil are both preſent in the ſame corollula. 2. The male, in which there are only the ſtamina, without any ſtyle or ſtigma. 3. The female, in which there is a piſtil, but no ſtamina; and, 4. The neutral, in which there is neither piſtil, ſtyle, nor ſtamina.

The ligulated corollulæ have the ſame variations, under which they are expreſſed by the ſame terms.

The compoſite flower, conſidered in the general, is called Flos floſculoſus. This is formed of an arrangement of a great number of the former corollulæ together. It's parts are properly two, the receptacle of the fructifications, and the calyx.

The common receptacle of the fructifications receives a number of ſeſſile flowers: it's diſk is ſometimes hollow, ſometime plane, convex, pyramidal, or globoſe: it's ſurface either naked or paleaceous. When naked, it is ſometimes covered with ſlight punctures,

punctures, and ſometimes it is covered with erect hairs; when paleaceous, the paleæ are of a ſubulated figure, or linear; compreſſed and erect, and ſerve to ſeparate the floſcules.

The calyx or common cup is a perianthium, containing both the receptacle and the floſcules, which is contracted after the time of flowering; but, when the ſeeds are ripened, is expanded again and thrown back. It is either ſimple, imbricated, or double: the ſimple calyx is that which ſurrounds the floſcules only, with one ſeries of leaves; the imbricated kind is that compoſed of a great number of ſquammæ, the exterior ones of which are gradually ſhorter, and in part cover the interior.

The double kind, called alſo Calyx auctus, is that in which there is a ſingle, long, and equal ſeries of ſegments, ſurrounding the floſcules; and a ſecond ſeries of ſegments, or another cup ſhorter, and ſurrounding the baſe of the inner taller cup: this outer calyx or ſeries of ſegments is uſually very ſmall.

The compound or compoſite flowers are of ſeveral ſpecies. They are compoſed, 1. Of tubular hermaphrodite floſcules in the diſk, and the ſame in the radius. 2. Of tubular hermaphrodite floſcules in the diſk, and of tubular, female ones in the radius. 3. Of tubular, hermaphrodite floſcules in the diſk, and tubular, neutral in the radius. 4. Of tubular hermaphrodite ones in the diſk, and ligulated hermaphrodite ones in the radius. 5. Of tubular hermaphrodite ones in the diſk, and female ligulated ones in the radius. 6. Of tubular hermaphrodite ones in the diſk, and of neutral ligulated ones in the radius. 7. Of tubular hermaphrodite ones in the diſk, and of naked female ones in the radius. 8. Of tubular male flowers in the diſk, and of naked female ones in the radius. 9. Of ligulated hermaphrodite ones in the diſk, and of the ſame in the radius.

According to theſe diſtinctions, the claſs of the Polygamia may be divided into five orders, under the names of, 1. Polygamia Æqualis. 2. Polygamia Superflua. 3. Polygamia Fruſtranea. 4. Polygamia Neceſſaria. 5. Polygamia Monogamia.

The eſſential character of the Flos floſculoſus conſiſts in the coaleſcence of the antheræ into a cylindric body, and in the ſeed being ſingle, and placed under the receptacle. The common calyx is wanting in ſome of the genera, as in the Echinopus; and the common receptacle is wanting in ſome, as in the Milleria. Therefore theſe are not the parts on which to form a claſſical character.

*Claſs the Nineteenth. Order the Firſt.*

## SYNGENESIA POLYGAMIA ÆQUALIS.

*Plants whoſe antheræ coaleſce into a cylinder, and whoſe flowers are compoſed of a number of floſcules, each of which has it's ſtamina and piſtil in itſelf.*

*This order contains what are called the Herbæ flore floſculoſo by others.*

IN ſome of the genera, the corollæ are planipetalous; in others, they are tubipetalous. As they are numerous in the whole, they may be conveniently arranged thus into two diviſions.

*Claſs the Nineteenth. Order the Firſt.*

*Diviſion the Firſt.*

*Syngeneſia Polygamia Æqualis, with the corollulæ planipetalous.*

## TRAGOPOGON.

THE receptacle is naked: the calyx is ſimple, and formed of many leaves; the down is plumoſe.

*Tragopogon*

*Tragopogon calycibus corolla longioribus, foliis acuminatis, pedunculis incraſſatis.* **Purple Goat's-beard, or Artifi.**
*The Tragopogon, with cups longer than the flowers, and incraſſated peduncles.*

The root is oblong, white, as thick as one's finger, and eſculent: the plant riſes to two feet high; the ſtalks are round, hollow, and ramoſe: the leaves are long, narrow, and ſharp-pointed, and much reſemble thoſe of the common leek: the flowers are large, and of a deep purple; they ſtand on the tops of the branches: the cups are much longer than the flowers, and of a bright green.

It is a native of Germany; we have it frequent in our gardens. Authors call it, Tragopogon purpureum, and Artifi.

The other ſpecies are, 1. The common, yellow Tragopogon. 2. The oblong, ſinuated-leaved Tragopogon. 3. The broad-leaved, blue Tragopogon. 4. The graſſy-leaved, ſcarlet Tragopogon. 5. The crocus-leaved, purple Tragopogon. 6. The yellowiſh-flowered, laciniated-leaved Tragopogon. 7. The low, hairy Tragopogon. 8. The ſuccory-leaved, hoary Tragopogon, called by authors, Hierachium magnum, and Chondrilla foliis cichorei.

## PRENANTHES.

THE receptacle is naked; the calyx is calyculated: the down is ſimple, and nearly ſeſſile: the floſcules are placed in a ſimple ſeries.

The characters ſufficiently diſtinguiſh the Prenanthes, without a farther deſcription.

## CHONDRILLA.

THE receptacle is naked; the calyx is calyculated; the down is ſimple and ſtipated: the floſcules are arranged in ſeveral ſeries.

*Chondrilla caule ſpinoſo, ramis junceis.* **Ruſhy Gum Succory.**
*The prickly, ruſhy-branched Chondrilla.*

The root is large, oblong, white, and full of a viſcous juice: the radical leaves are large, broad, and jagged at the edges: the ſtalks are tough, ruſhy toward the top, and prickly in the lower part: the plant riſes to four feet high; the leaves are jagged, and very few; the flowers are yellow, moderately large, and grow from the ſides of the ſtalks toward the tops.

It is common in France and Italy. C. Bauhine calls it, Chondrilla juncea viſcoſa arvenſis quæ prima Dioſcoridis.

The other ſpecies are, 1. The hawkweed-leaved Chondrilla, called Hierachium pulchrum by many. 2. The pale-flowered, ſonchus-leaved Chondrilla. 3. The purple-flowered, ſonchus-leaved Chondrilla. 4. The narrower-leaved, purple Chondrilla.

## CREPIS.

THE receptacle is naked; the calyx is calyculated; the down is plumoſe and ſtipated.

*Crepis foliis amplexicaulibus lanceolatis dentatis, radicalibus ſinuatis.*
*The creeping, amplexicaule-leaved, dentated Crepis, with the radical leaves ſinuated.*

The root is oblong and white; the radical leaves are large, hairy, and ſinuated; the ſtalks are numerous, round, of a foot high, and hairy: the leaves on them are dentated, and ſtand at diſtances, and from the ala of each there riſes a branch: the

the flowers ſtand at the tops of the branches, and, before they open, they bend downwards; they are, when open, very large, and of a fine bright red.

It is a native of Italy. C. Bauhine calls it, Chondrilla purpuraſcens fœtida; others, Hierachium Apulium flore ſuaverubente.

The other ſpecies are, 1. The ſcorzonera-leaved, Alpine Crepis. 2. The Crepis, with oval, dentated leaves. 3. The ſetaceous-cupped Crepis, called by others the falcated, proliferous Hawkweed.

## HYOSERIS.

THE receptacle is naked; the calyx is calyculated: the down is ſimple.

This genus comprehends the Taraxaconaſtrum of Vaillant, and the Leontodontoides of Micheli.

*Hyoſeris caule diviſo nudo.* Swine's Succory.
*The Hyoſeris, with a divided, naked ſtalk.*

The root is white, ſlender, and very long; the leaves are numerous, oblong, and rounded at the ends; they ſomewhat reſemble thoſe of the common, little daiſy; they are a little hairy, ſerrated at the edges, and of a bluiſh-green: the ſtalks are numerous, ſlender at the bottom, but thicker toward the parts where the flowers ſtand; they are naked, except for ſome little rudiments of leaves at the baſes of the ramifications: the flowers are ſmall and yellow.

It is common in ſandy places in moſt parts of Europe. C. Bauhine calls it, Hierachium minus folio ſubrotundo.

## LAPSANA.

THE receptacle is naked; the calyx is calyculated, and every ſquamma uſually incloſes a ſeed.

This genus comprehends the Lampſana, Hedypnois, Zacyntha, Rhagadiolus, and Rhagadioloides of authors. In the Lampſana, the ſeeds are all naked, not ſurrounded by the ſquammæ of the cup. In the Rhagadiolus, every ſquamma of the cup incloſes a ſingle ſeed. In the Zacyntha, the marginal ſeeds are each ſurrounded by a ſquamma of the cup, and the central ones are coronated with a ſhort, ſimple down. In the Hedypnois, the marginal ſeeds are each ſurrounded in a ſquamma of the cup, and the central ones are coronated with a cup divided into five denticles.

*Lapſana calycibus fructus undique radiis ſubulatis patentibus, foliis indiviſis.* Stellated Hawkweed.
*The undivided-leaved Lapſana, with the cups patent and radiated.*

The root is oblong, ſimple, and white; the plant riſes to a foot and a half high; the ſtalks are round, ſlender-branched, and a little hairy: the leaves are two or three inches long, of a lanceolated figure, and undivided at the edges: the flowers are ſmall, yellow, and numerous: the cups of the fruit are radiated; there is a ſingle ſeed immerſed in each of the horns or rays.

It is a native of France. C. Bauhine calls it, Hierachium ſiliqua falcata; J. Bauhine, Hierachium ſtellatum; others, Rhagadiolus.

The other ſpecies are, 1. The common Lampſana, or Nipple-wort. 2. The crooked-ſeeded, drooping-headed Lampſana, called Hedypnois by Tournefort and others. 3. The wart-ſuccory, or Lampſana, called by many Cichoreum verrucoſum; and by Tournefort, Zacyntha.

## LACTUCA.

THE receptacle is naked; the calyx is imbricated; the down is ſimple, and has a ſtalk.

*Lactuca caule et foliis aculeatis.* Prickly-ribbed,
*The Lactuca, with prickly leaves and ſtalks.* Wild Lettuce.

The root is large, oblong, and white: the radical leaves are ten inches long, and four broad, ſinuated, and ſerrated, and the middle rib underneath is armed with ſhort, ſharp ſpines: the plant riſes to five feet high, and is in every part full of a milky juice, of a diſagreeable ſmell: the flowers are ſmall, numerous, and yellow: the leaves on the ſtalk are like the radical ones, only ſmaller.

It is common on our-ditch banks. C. Bauhine calls it, Lactuca ſylveſtris coſta ſpinoſa.

The other ſpecies are, 1. The great, whole-leaved, opium-ſcented Lactuca. 2. The narrow and laciniated-leaved Lettuce. 3. The dwarf, blue-flowered, wild Lettuce. 4. The many-leaved, wild Lettuce. 5. The white-flowered, dwarf, wild Lettuce. 6. The dandelion-leaved, wild Lettuce. 7. The broad-leaved, blue-flowered, wild Lettuce. 8. The tall, broad-leaved, American, wild Lettuce. 9. The purple-flowered, low, ſinuated-leaved, wild Lettuce. 10. The roundiſh-leaved, garden Lettuce. 11. The long-leaved, garden Lettuce. From theſe two laſt ſpecies culture has raiſed a vaſt number of varieties, called alſo ſpecies by many.

## HIERACHIUM.

THE receptacle is naked; the calyx is imbricated; the down is pappous, ſimple, and ſeſſile.

*Hieracium caule ramoſo, foliis radicalibus ovatis dentatis, caulino minore.* French
*The ramoſe Hieracium, with the radical leaves dentated, the cauline ſmaller.* Lungwort.

The root is fibrated: the plant riſes to two feet high: the radical leaves are oblong, oval, very hairy, and dentated: the ſtalk is robuſt, hairy, ramoſe, and, at it's extremities, is ornamented with large, yellow flowers.

It is common on walls. C. Bauhine calls it, Hierachium murorum folio piloſiſſimo.

The other ſpecies are very numerous: there are, 1. The great, narrow-leaved, ſmooth Hierachium. 2. The little, yellow-flowered Hierachium. 3. The yellow, hairy Hierachium, with large flowers. 4. The dandelion-leaved Hierachium. 5. The bulbous, endive-leaved Hierachium. 6. The ſmall-flowered, dandelion-leaved Hierachium. 7. The little, pale red-flowered Hierachium. 8. The rough, ſuccory-leaved Hierachium. 9. The ſmooth, ſuccory-leaved Hierachium. 10. The coronopus-leaved Hierachium. 11. The hairy, dandelion-leaved, taller Hierachium. 12. The broader-leaved Hierachium. 13. The Hierachium, called Sonchus lanatus. 14. The yellow, endive Hierachium. 15. The great, flowered, white, endive Hierachium. 16. The narrower-leaved, hairy Lungwort. 17. The piloſella-leaved, erect Hierachium. 18. The narrow-leaved, umbellated Hierachium. 19. The common Piloſella. 20. The purple Hierachium. 21. The ſtatice-leaved, naked-ſtalked Hierachium. 22. The ſtatice-leaved, leafy-ſtalked Hierachium. 23. The veſicoſe Hierachium. 24. The broad-leaved, ſmooth Hierachium. 25. The turnep-leaved, rough Hierachium. 26. The conyza-leaved Hierachium. 27. The great-flowered, hairy, mountain Hierachium. 28. The dwarf, ſuccory-leaved Hierachium. 29. The broad-leaved, buſh Hierachium. 30. The narrow-leaved, buſh Hierachium. 31. The rigid-ſtalked, erect, narrow-leaved Hierachium. 32. The narrow, hoary-leaved Hierachium. 33. The doronicum-leaved Hierachium. 34. The lampſana-leaved Hierachium. 35. The blattaria-leaved Hierachium. 36. The cernith-leaved Hierachium. 37. The round-leaved, amplexicaule Hierachium. 38. The narrow, amplexicaule-leaved Hierachium. 39. The ſcorzonera-leaved Hierachium.

## PICRIS.

THE receptacle is naked; the calyx is imbricated; the down is plumoſe: the ſeeds are furrowed croſs-wiſe.

This genus comprehends the Helminthotheca of Vaillant.

*Picris*

*Picris perianthiis involucro magno cinctis.* Langue de Beuf.
*The Picris, with the cup ſurrounded by a great involucrum.*

The root is oblong and fibrated: the leaves are three inches long, narrow, ſinuated, and very rough to the touch: the plant riſes to a foot and a half high: the ſtalks are ramoſe, and thick-ſet with leaves: the flowers are moderately large, and yellow, and are ſurrounded by an involucrum, which gives the whole greatly the appearance of the head of the carduus benedictus, but that it is ſmaller.

It is common by ditch-ſides. C. Bauhine calls it, Hierachium echioides capitulis cardui benedicti.

The other ſpecies are, 1. The rough, laciniated, Cretic Picris, called by moſt authors a Sonchus. 2. The rough Picris, with large flowers, common about the edges of corn-fields.

## SCORZONERA.

THE receptacle is naked: the calyx is imbricated; the down is plumoſe: the ſquammæ which form the cup have membranaceous edges.

*Scorzonera caule ramoſo, foliis amplexicaulibus integris undulatis.* Great Viper's-graſs.
*The branched Scorzonera, with undivided, undulated, amplexicaule leaves.*

The root is oblong, white, and large: the plant riſes to three feet high: the ſtalks are round, robuſt, of a bluiſh-green colour, and ramoſe: the leaves are oblong, broad, of a ſtrong green colour, undulated, but not divided at the edges: the flowers are large and yellow; they ſtand at the extremities of very long branches: the root is eſculent.

It is a native of Spain. C. Bauhine calls it, Scorzonera latifolia ſinuata.

The other ſpecies of Scorzonera are, 1. The lower, broad-leaved Scorzonera. 2. The broad and nervous-leaved, low Scorzonera. 3. The tall, narrow-leaved Scorzonera. 4. The low, narrow-leaved Scorzonera. 5. The blue-flowered, narrow-leaved Scorzonera. 6. The thick-leaved Montpelier Scorzonera. 7. The duſty-flowered, marſh Scorzonera. 8. The jagged-leaved Scorzonera. 9. The capillaceous-leaved Scorzonera. 10. The plantain-leaved Scorzonera. 11. The graſſy-leaved, pale yellow-flowered Scorzonera.

## LEONTODON.

THE receptacle is naked; the calyx is imbricated; the down is plumoſe, and the ſquammæ which form the cup are ſolid, not membranaceous, at the edge.

This genus comprehends the Dens Leonis of Tournefort, and Taraxaconoides of Vaillant.

*Leontodon foliis frequentius inciſis.* Jagged Dandelion.
*The laciniated-leaved Leontodon.*

The root is long, brown, thick, and fibrated: the leaves are numerous, four or five inches long, an inch and a half broad, divided into narrow ſegments, and thoſe ſubdivided each into two or three others toward the extremity: the ſtalks are numerous, ſlender, hollow, naked, and of a pale green colour; on the ſummit of each ſtands a ſmall yellow flower.

It is a native of Germany. C. Bauhine calls it, Dens Leonis tenuiſſimo folio.

The other ſpecies are, 1. The common Dandelion. 2. The leafy-ſtalked, great Leontodon. 3. The ſmall, narrow-leaved, reddiſh-ſeeded Leontodon. 4. The roundiſh-leaved Leontodon. 5. The aſphodel-rooted Leontodon. 6. The little, rough Leontodon. 7. The radiated-leaved Leontodon. 8. The bulbous-rooted Leontodon. 9. The hoary-leaved Leontodon. 10. The long-leaved, rough, naked-ſtalked Leontodon. 11. The leſs divided-leaved, ſtone Leontodon. 12. The little, dry-leaved, hairy Leontodon.

ontodon. 13. The ſmall-flowered, downy Leontodon. 14. The piloſella-leaved, mountain Leontodon. 15. The dwarf, ſmooth Leontodon. 16. The dwarf, rough Leontodon. 17. The great-leaved Leontodon.

## SONCHUS.

THE receptacle is naked; the cup is imbricated; the down is plumoſe, and the calyx ventricoſe.

*Sonchus caule erecto, foliis pinnato-haſtatis, floribus congeſtis villoſis.*
*The erect, haſtated-leaved Sonchus, with cluſtered, hairy flowers.*

**Great, marſh Sow-thiſtle.**

The root is long, creeping, perennial, and full of a milky juice: the plant riſes to ten feet high: the leaves are eight inches long, divided at the edges like thoſe of dandelion, and haſtated at the extremity: the flowers ſtand at the tops of the branches; they are large, numerous, of a deep yellow colour, and hairy.

It is common in our ſalt marſhes, and elſewhere. C. Bauhine calls it, Hierachium majus folio Sonchi.

The other ſpecies are, 1. The undivided-leaved, prickly Sonchus. 2. The dandelion-leaved, prickly Sonchus. 3. The dipſacus-leaved, prickly Sonchus. 4. The Cretic, prickly Sonchus. 5. The rough, broad-leaved Sonchus. 6. The broad-leaved, ſmooth Sonchus. 7. The fine divided-leaved, ſmooth Sonchus. 8. The lightly ſinuated-leaved, ſmooth Sonchus. 9. The narrow-leaved, ſmooth Sonchus. 10. The narrow-leaved, ſea Sonchus. 11. The poppy-leaved Sonchus.

## HYPOCHÆRIS.

THE receptacle is paleaceous; the calyx is imbricated; the down is plumoſe. This genus comprehends the Achyrophorus of Vaillant.

*Hypochæris calycibus æqualibus hiſpidis.*
*The rough, equal-cupped Hypochæris.*

The root is oblong, ſlender, and white: the plant grows to ſeven inches high: the ſtalk is round, green, and ſlender: the leaves are of an obverſely oval figure, the narrower extremity terminating in a pedicle: the flowers ſtand ſingly on the tops of the branches; they are moderately large and yellow: the whole plant has a number of long, white, looſe hairs at diſtances upon it.

It is a native of Crete. Ray calls it, Hierachium ramoſum foliis oblongis, obtuſis, &c. Vaillant, Achyrophorus fere glaber, bellidis glauco dentatoque folio.

The other ſpecies are, 1. The ſmooth, dandelion-leaved Hypochæris. 2. The broader-leaved, large-flowered Hypochæris.

## CATANANCE.

THE receptacle is paleaceous; the cup is imbricated; the down ariſes from a little calyx, terminated by five ſetæ, or hairs.

*Catanance ſquammis calycinis inferioribus lanceolatis.*
*The Catanance, with the lower leaves of the cup lanceolated.*

The root is fibrous: the radical leaves are broad and nervous: the ſtalk is round, ramoſe, and ſmooth; the leaves on it are deeply ſinuated at the edges: the flowers ſtand at the extremities of the branches; they are large and yellow, and in ſhape much reſemble thoſe of the cyanus, or blue-bottle.

It is a native of Crete. Boccone calls it, Chondrilla cyanoides lutea coronopi folio.

The

The other ſpecies are, 1. The blue Catanance, with ſinuated leaves. 2. The willow-leaved Catanance. 3. The broad, undivided-leaved Catanance.

## SCOLYMUS.

THE receptacle is paleaceous; the calyx is imbricated; there is no down to the ſeed.

*Scolymus annuus.*
*The annual Scolymus.*

The root is eſculent, large, oblong, and of a yellowiſh-brown colour, and full of a milky juice: the plant riſes to four feet high: the leaves are oblong, ſinuated, prickly, and often blotched with white; the ſtalk alſo is very prickly: the flowers are large, and of a beautiful yellow colour; they ſtand in the alæ of the leaves.

It is a native of France. Vaillant calls it, Scolymus chryſanthemus annuus.

The other ſpecies are, 1. The lower, perennial-rooted Scolymus. 2. The tall, African Scolymus.

## CICHOREUM.

THE receptacle is paleaceous; the calyx is calyculated; the margin of the down is quinquedentated.

*Cichoreum caule ſimplici, foliis dentato-ſinuatis.* Wild Succory.
*The ſimple-ſtalked Cichoreum, with dentato-ſinuated leaves.*

The root is oblong, thick, and full of a milky juice: the ſtalks are numerous, two or three feet high, and ramoſe: the leaves are three inches long, and a little more than an inch broad, variouſly ſinuated at the edges: the flowers are large, and of a beautiful blue colour; they grow without pedicles, from the ſides of the ſtalks.

It is common by way-ſides. C. Bauhine calls it, Cichoreum ſylveſtre, ſive officinarum.

The other ſpecies are, 1. The common, blue-flowered, broad-leaved, garden Cichoreum. 2. The garden Cichoreum, called Endive. 3. The narrow-leaved Endive. 4. The prickly, Cretic Endive. 5. The large and deeply divided-leaved Cichoreum.

## ANDRYALA.

THE receptacle is hairy; the calyx is divided into many parts; the down is ſimple and ſeſſile.

This genus comprehends the Eriophorus of Vaillant.

*Andryala foliis integris.* Woolly Hawkweed.
*The undivided-leaved Andryala.*

The root is large, oblong, and fibrated: the plant riſes to two feet in height: the ſtalk is robuſt, thick, hairy, and ramoſe: the leaves are two inches and a half long, very narrow, like thoſe of the cyanus, and covered with a white, downy matter: the flowers ſtand on the extremities of the branches; they are of a bright yellow colour, but not large.

It is a native of Sicily. C. Bauhine calls it, Sonchus lanatus luteus major.

## ELEPHANTOPUS.

THE receptacle is naked; the corollulæ ſtand in a ſimple ſeries, and are divided into five ſegments.

*Elephantopus foliis ovatis ſerratis.*
*The oval, ſerrated-leaved Elephantopus.*

Baſtard Scabious.

The root is long and thick: the plant riſes to four feet high: the ſtalk is thick, round, ſtriated, and hairy: the leaves are five inches long, and two broad, largeſt in the middle, and terminate in a point; they are dentated at the edges, hairy on the upper ſurface, and corrugated underneath: the flowers are large, round, and white.

It is a native of Jamaica. Ray calls it, Scabioſæ affinis anomala enulæ folio.

*Claſs the Nineteenth. Order the Firſt.*

*Diviſion the Second.*

*Syngeneſia Polygamia Æqualis, the corollulæ tubipetalous.*

## ECHINOPS.

THE proper calyx, containing a ſingle flower, is imbricated and erect; many of theſe ſimple ones are often contained in one common, or general, cup.

This genus comprehends the Echinopus of Tournefort.

*Echinops floribus capitatis, calycibus uniflori.*
*The capitated-flowered Echinops, with uniflorous cups.*

The Globe-thiſtle.

The root is oblong, thick, and blackiſh: the plant grows to two feet high: the ſtalk is thick, ſtriated, and covered with purple hairs: the leaves are long, narrow, ſinuated at the edges, and hairy: the flowers ſtand on the extremities of the branches, in large, round heads; they are ſmall and blue.

It is a native of Italy. C. Bauhine calls it, Echinopus major; others, Carduus globoſus.

The other ſpecies are, 1. The leſſer, blue-flowered Echinops. 2. The little, annual Echinops, with very large heads. 3. The ilex-leaved, ſhrubby, American Echinops, flowering at the alæ.

## GUNDELIA.

THE common receptacle is divided, every diviſion having five flowers: the paleæ are divided at their extremity into three points.

It is an oriental, and is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

## ARCTIUM.

THE calyx is globoſe; the ſquammæ of it are terminated by hooked filaments.

This genus comprehends the Lappa of Tournefort and others.

There is but one known ſpecies of it.

ARCTIUM. The Bur-dock.

The root is very long, and an inch in diameter: the leaves ſtand on long pedicles, and are often a foot and a half long, a foot wide near the baſe, and of a greyiſh-green colour: the ſtalk riſes to five feet high; it is firm, tough, ſtriated, and ramoſe: the flowers are ſmall and whitiſh; the heads roundiſh, and adhering to every thing that touches them.

It is common by way-ſides. C. Bauhine calls it, Arctium, ſive Lappa major. The heads vary greatly in ſize, and are ſometimes more, ſometimes leſs, rough: from theſe, and other variations, owing wholly to accident, authors have raiſed ſeveral imaginary new ſpecies of this plant, though nature made but one.

SERRATULA.

## SERRATULA.

THE calyx is of a nearly cylindric figure, beautifully imbricated, and ſmooth.

*Serratula foliis pinnatifidis, lacinia terminatrice maxima.* Saw-
*The pinnatifid-leaved Serratula, with the extreme ſegment largeſt.* wort.

The root is oblong, firm, tough, and fibrated: the plant riſes to two feet, or more, in height: the ſtalk is ſlender, ſtriated, and ramoſe: the leaves are very irregularly pinnated; the terminating lobe is always the largeſt, ſometimes it is almoſt the whole leaf, the lateral pinnæ ſcarce at all appearing; and ſometimes it appears alone in form of a ſimple, oval leaf: the flowers are naturally red, often white.

It is a native of our woods and thickets. C. Bauhine calls it, Serratula vulgaris. Authors have divided it into ſeveral ſpecies, from the variations in the ſerratures and pinnatures of the leaves, and the colour of the flowers.

The other ſpecies are, 1. The oblong, lanceolated-leaved Serratula, called the Jacea perſicæ folio. 2. The dentated, ſpinoſe Serratula, called the hæmorrhoidal Thiſtle. 3. The great, woolly-headed, Ruſſian Serratula.

## ONOPORDON.

THE receptacle is naked; the ſquammæ of the cup are mucronated.

*Onopordon foliis decurrentibus margine ſpinoſis.* Cotton
*The Onopordon, with decurrent, ſpinoſe leaves.* Thiſtle.

The root is long, white, and tough: the leaves are very large, oblong, ſinuated, and ſerrated at the edges, the ſerratures terminating in ſpines; they are of a white colour, and cottony appearance; the radical ones are often a foot and a half long: the ſtalk is round, ſtriated, firm, white, and four or five feet high: the leaves are alternate, and like the radical ones, and run down the ſtalk at their baſe, forming ridges: the heads are large; the flowers of a beautiful purple colour.

The plant is common with us by way-ſides. C. Bauhine calls it, Spina alba tomentoſa latifolia vulgaris; others, Acanthium vulgare.

The other ſpecies are, 1. The tall, Portugal Onopordon. 2. The narrow-leaved Onopordon. 3. The great-flowered Onopordon. 4. The many-flowered Onopordon. 5. The longer-leaved Onopordon. 6. The more ſpinoſe Onopordon.

## CARDUUS.

THE calyx is of an ovated figure, and imbricated with ſpinoſe ſquammæ.

*Carduus ſquammis calycinis margine et apice ſpinoſis.* Ladies
*The Carduus, with the ſquammæ of the cup ſpinoſe at the ſides and ends.* Thiſtle.

This is one of the moſt beautiful of the Engliſh plants, and wants only to have been a native of a diſtant part of the world to have given it a place in our gardens: the root is long, thick, and white: the radical leaves are two feet long, and more than a foot broad, elegantly ſinuated, and ſerrated at the edges, the ſerratures prickly, and the whole leaf of a fine bright and ſtrong green colour, beautifully variegated with irregular veins of a milk-white: the ſtalk is round, ſtriated, an inch in diameter, and five or ſix feet high: the leaves are like the radical ones: the flowers at the tops of the branches are very numerous and very large; the cups elegantly ſquammoſe and prickly, the corollæ purple.

It is common by way-ſides. C. Bauhine calls it, Carduus albis maculis notatus vulgaris; others, Carduus Mariæ.

The other ſpecies are, 1. The ſpear Thiſtle, or lanceolated pointed-leaved Carduus. 2. The woolly and round-headed Carduus. 3. The Carduus, with a bending head. 4. The decurrent-

decurrent-leaved, very prickly Carduus. 5. The cluſter-headed Carduus. 6. The Carduus, called the great Cirſium, or gentle thiſtle. 7. The common, many-headed, meadow Carduus. 8. The ſtellate-headed Carduus. 9. The broad, laciniated-leaved Carduus. 10. The yellow, narrow-leaved Carduus. 11. The purple, ſtellate Carduus, with undivided leaves. 12. The little-headed Carduus. 13. The yellow, broader-leaved Carduus. 14. The eryngium-leaved Carduus. 15. The yellowiſh, red, hoary Carduus. 16. The round-headed, divided-leaved Carduus. 17. The ſuccory-leaved Carduus. 18. The rocket-leaved Carduus. 19. The conglobate-headed Carduus. 20. The coronopus-leaved Carduus. 21. The turnep-leaved Carduus. 22. The aſphodel-rooted, ſoft Carduus. 23. The laciniated-leaved Cirſium. 24. The Cirſium, with a large head, and large ſquammæ. 25. The hairy, compact-flowered Carduus. 26. The narrow, undivided-leaved Carduus. 27. The finely divided-leaved Cirſium. 28. The ſonchus-leaved Cirſium. 29. The dock-leaved Cirſium. 30. The ſerratula-leaved Cirſium. 31. The dwarf Cirſium. 32. The burdock-leaved Cirſium.

## CYNARA.

THE calyx is dilated, imbricated, and formed of ſquammæ of a fleſhy ſtructure, emarginated and pointed.

This genus comprehends the Cynara and Scolymus of authors.

*Cynara foliis pinnatis, laciniis ſerratis.* **The Artichoke and Chardon.**
*The Cynara, with pinnated and ſerrated leaves.*

The root is oblong and fibrated; the leaves are a foot and half long, eight inches broad, and of a pale greyiſh-green; they are deeply laciniated or pinnatifid, and the ſegments or pinnæ ſerrated at the edges: the ſtalk riſes to two feet high; it is thick, tough, ſtriated, and hoary: the heads ſtand on the extremity of the branches; they are very large, and the corollæ purple.

This plant varies in the having it's leaves prickly, and divided into narrower ſegments. It is in this ſtate that our gardeners blanch it's ſtalks for the table, under the name of *Chardon*; and ſome have eſteemed theſe two different ſpecies, but experiment ſhews, that they will both riſe from the ſeeds of the ſame head.

The other ſpecies are, 1. The broad-leaved, wild Cynara. 2. The very prickly, blue-flowered, ſmaller-headed Cynara. 3. The ſmaller Cynara of Candy.

## CARLINA.

THE calyx is broad; the marginal ſquammæ are long, coloured, and reſemble the radius of a flower.

*Carlina caule unifloro.* **Carline Thiſtle.**
*The Carlina, with a ſingle flower.*

The root is large, thick, and creeping; the leaves are numerous; they lie on the ground in a radiated manner, and are ſix inches long, an inch and a half broad, deeply divided, and as it were curled at the edges, and very prickly: the flowers are purple; the heads are large and very prickly, but they have no viſible pedicle. Though this ſpecies have no ſtalk in it's common ſtate, the head growing ſeſſile in the center of the leaves; if planted cloſe in pots, it will riſe to a foot high.

It is found on our heaths. C. Bauhine calls it, Carlina acaulos magno flore. It's root was once kept in the ſhops, as an alexipharmic and aſtringent, but it is now out of uſe.

The other ſpecies are, 1. The taller, many-flowered, wild Carlina. 2. The great, gummy Carlina. 3. The tall, deeply, ſerrated-leaved Carlina. 4. The tall, many-headed Carlina. 5. The yellow-flowered, perennial Carlina. 6. The little, yellow, patulous-flowered Carlina. 7. The ſhorter-leaved, patulous-flowered Carlina. 8. The umbellated, Italian Carlina. 9. The great, purple, patulous-flowered Carlina.

## CARTHAMUS.

THE calyx is of an oval figure, and imbricated; the ſquammæ are of an oval figure, and foliaceous at the extremity.

*Carthamus foliis ovatis integris ſerrato-aculeatis.* Baſtard Saffron.
*The Carthamus, with undivided, oval, ſerrato-aculeate leaves.*

The root is oblong and white; the plant riſes to two feet high; the ſtalk is ſlender and round: the leaves are two inches long, more than an inch broad, obtuſe at the end, ſerrated, and prickly round the edges: the heads are large, and ſurrounded with leaves: the flowers are of a reddiſh yellow or ſaffron colour: the ſeeds are large, long, and white.

It is a native of Egypt. C. Bauhine calls it, Cnicus vulgaris, ſive Carthamus officinarum. It's ſeeds were once in uſe as a cathartic, but are now neglected.

The other ſpecies are, 1. The woolly-ſtalked, dentated-leaved Carthamus, the yellow Atractylis of authors. 2. The leſſer, blue Carthamus. 3. The great, blue, prickly Carthamus. 4. The dwarf, purple Carthamus. 5. The long, ſerrated-leaved Carthamus. 6. The broad, ſhorter-leaved Carthamus.

## CNICUS.

THE calyx is of an oval figure and imbricated: the ſquammæ are ramoſe and prickly, and equal the corollæ in length.

This genus comprehends the Acarna of Vaillant.

*Cnicus caule diffuſo foliis dentato-ſinuatis.* Carduus Benedictus.
*The diffuſe-ſtalked Cnicus, with dentated and ſinuated leaves.*

The root is oblong, white, and ſlender: the plant grows to two feet high: the ſtalks are ſtriated, ſlender, ramoſe, and diffuſe: the leaves are numerous, four inches long, an inch and a half broad, ſinuated, and dentated at the edges, and they ſurround the ſtalk at their baſe; the heads are large, prickly, and ſurrounded with leaves: the flowers are yellow: the ſtalks of the plant are often yellowiſh or reddiſh; the leaves of a ſtrong green.

It is a native of the Eaſt, but thrives very well in our gardens. C. Bauhine calls it, Cnicus ſylveſtris hirſutus, ſive Carduus Benedictus. An infuſion of the leaves of this plant is given to work off emetics; it is alſo eſteemed a cardiac and alexipharmic, but is not uſed as ſuch with us.

The other ſpecies are, 1. The cordated-leaved, Siberian Cnicus. 2. The yellow, or purple-flowered, acanthus-leaved Cnicus. 3. The blue, prickly Cnicus. 4. The Cnicus, with leaves variegated with white. 5. The dwarf, purple, prickly Cnicus. 6. The many-headed Cnicus.

## ATRACTYLIS.

THE corollulæ are radiated, and thoſe of the radius are divided into five ſhort ſegments at the mouth.

The characters ſufficiently diſtinguiſh the Atractylis from all the other genera, without a farther deſcription.

## STÆBE.

THE receptacle is paleaceous; the down is plumoſe: there is a peculiar cup formed of five leaves, ſurrounding each flower below the germen.

Theſe characters ſufficiently alſo diſtinguiſh the Stæbe, without a farther deſcription.

## STÆHELINA.

THE receptacle is paleaceous; the down is plumoſe: the calyx is oblong and imbricated; the ſquammæ are membranaceous and reflex at their extremities.

Theſe characters ſufficiently diſtinguiſh the Stæhelina, without a farther deſcription.

## BIDENS.

THE receptacle is paleaceous; and the ſeeds are armed with erect, ſcabrous, or prickly ariſtæ.

This genus comprehends the Bidens of Tournefort, and the Ceratocephalus of Vaillant.

*Bidens corona ſeminum retrorſum aculeata, foliis trifidis.*
*The trifid-leaved Bidens, with the corona of the ſeeds prickly downwards.*

Water Hemp Agrimony.

The root is compoſed of a multitude of large fibres: the plant riſes to three feet high: the ſtalk is round, ramoſe, and uſually reddiſh; the leaves are three or four inches long, and are uſually divided into three parts, ſometimes into five, and ſometimes not divided at all; they are ſmooth, deeply ſerrated at the edges, and have broad pedicles, with which they embrace the ſtalk: the flowers are numerous and yellow; their cups purpliſh: the ſeed is oblong and broad, and has three prickles at it's top, which are bearded with leſſer prickles pointed downwards.

It is common in wet places. C. Bauhine calls it, Cannabina aquatica folio tripartito diviſo. The ſeeds of this ſpecies are figured and deſcribed in the Philoſophical Tranſactions, under the name of ſtrange Aquatic Animals.

The other ſpecies are, 1. The undivided-leaved Bidens. 2. The broad-leaved, yellow, American Bidens. 3. The ſmallage-leaved, American Bidens. 4. The alated-ſtalked Bidens. 5. The daiſy-flowered Bidens. 6. The American Bidens, with round, bullated leaves. 7. The ſhrubby, ilex-leaved Bidens. 8. The ſphondylium-leaved Bidens. 9. The trifoliate, radiated, flowered Bidens. 10. The ſmaller-flowered Bidens.

## SANTOLINA.

THE receptacle is paleaceous; the down is very ſhort: the calyx is of a hemiſpheric figure, and imbricated.

*Santolina foliis quadrifariam dentatis, pedunculis unifloris.*
*The quadrifariouſly dentated-leaved Santolina, with ſingle flowers on the peduncles.*

Lavender Cotton.

The root is long, large, and brachiated, woody and brown: the plant grows to two feet high; the ſtem and branches are tough and woody: the leaves are an inch long, ſlender, and dentated four ways at once; they are of a whitiſh colour, as are alſo the young ſhoots, and of a ſtrong ſmell: the flowers are ſmall and yellow, and ſtand ſingly on the pedicles.

It is a native of France and Spain; it is common in our gardens. C. Bauhine calls it, Abrotanum fœmina foliis teretibus.

The other ſpecies are, 1. The trifid-leaved, African Santolina, called ſhrubby Coma aurea. 2. The hairy Santolina, with larger flowers. 3. The ſavin-leaved Santolina. 4. The cypreſs-leaved Santolina. 5. The hoary, creeping Santolina. 6. The green-leaved, pale, yellow Santolina. 7. The great, roſemary-leaved Santolina. 8. The large, coronopus-leaved Santolina. 9. The chamomile-leaved, Spaniſh Santolina.

TARCHO-

## TARCHONANTHUS.

THE receptacle is hairy; the down is plumoſe: the calyx is formed of a ſingle leaf, lightly divided into ſeven ſegments at the extremity.

Theſe characters ſufficiently diſtinguiſh the Tarchonanthus, without a farther deſcription.

## TANACETUM.

THE receptacle is naked; there is no down to the ſeeds: the calyx is imbricated and hemiſpheric.

This genus comprehends the Tanacetum and the Balſamita of authors.

*Tanacetum foliis ovatis integris ſerratis.*
*The Tanacetum, with oval, undivided, ſerrated leaves.* **Coſtmary.**

The root is oblique and creeping: the plant riſes to two or three feet high; the ſtalks are round, ſtriated, and of a greyiſh-green: the leaves are two inches long, an inch and a half broad, of a greyiſh-green, and ſerrated about the edges; the flowers ſtand in a kind of umbels at the extremities of the branches; they are ſmall and yellow.

It is a native of Tuſcany. C. Bauhine calls it, Mentha hortenſis corymbifera; others, Balſamita mas.

The other ſpecies are, 1. The common Tanzy. 2. The finer-leaved Tanacetum.

## AGERATUM.

THE receptacle is naked; the down has five ariſtæ: the calyx is oblong and ſubequal.

Of this genus there is but one known ſpecies. The Agerata of authors are Achilleæ.

### AGERATUM.

The root is fibrous: the plant grows to a foot high; the ſtalks are round and firm; the leaves are two inches long, broadeſt at the baſe, and ſerrated round the edges: the flowers ſtand on the extremities of the branches, and are white.

It is a native of America. Tournefort calls it, Conyza lamii folio, flore albo.

## CHRYSOCOMA.

THE receptacle is naked; the down is ſimple; the calyx is hemiſpheric and imbricated.

This genus comprehends the Coma aurea of Boerhaave.

*Chryſocoma foliis oblongis anguſtis, floribus congeſtis.*
*The cluſter-flowered Chryſocoma, with oblong, narrow leaves.*

The root is fibrous; the plant riſes to two or three feet high: the ſtalk is round, firm, and erect; the leaves are numerous, oblong, narrow, and of a pale green: the flowers ſtand on the ſummits of the main ſtalk and branches, in form of large umbels; they are ſmall, and of a fine bright yellow.

It is a native of Germany. J. Bauhine calls it, Linaria aurea Trogi, five Linaria tertia; others, Coma aurea Germanica.

The other ſpecies are, 1. The ſhrubby, African, narrow-leaved Chryſocoma. 2. The ſamphire-leaved Chryſocoma. 3. The trifid-leaved, ſhrubby, African Chryſocoma. 4. The multifid-leaved, African Chryſocoma. 5. The very narrow, long, and trifid-leaved, ſhrubby, African Chryſocoma. 6. The ſucculent, digitated-leaved, ſhrubby Chryſocoma. 7. The larger-leaved, ſweet-ſcented, African Chryſocoma.

## KLEINIA.

THE receptacle is naked; the down is ſimple; the calyx is calyculate and cylindric.

*Kleinia caule herbaceo, foliis haſtato-ſagittatis, petiolis ſuperne dilatatis.*
*The Kleinia, with an herbaceous ſtalk, and haſtato-ſagittated leaves, their pedicles dilated upwards.*

The root is fibrated and perennial; the plant riſes to ſix feet high: the ſtalk is ſtriated, erect, and not ramoſe: the leaves are broadeſt at the baſe, and terminate in a point; they are of a ſagittated figure, and dentated round the edges; the pedicles are alated at the upper part: the flowers are moderately large and white; they ſtand in cluſters like umbels at the extremities of the ſtalk and branches.

It is a native of Virginia. Gronovius calls it, Porophyllum foliis deltoidibus angulatis.

The other ſpecies are, 1. The ſhorter-leaved Kleinia. 2. The ſmaller-flowered Kleinia.

## EUPATORIUM.

THE receptacle is naked; the down is plumoſe; the calyx is oblong and imbricated; the ſtyle is ſemibifid.

*Eupatorium foliis digitatis.*
*The digitated-leaved Eupatorium.*

Common Hemp Agrimony.

The root is oblique, creeping, and fibrated: the plant riſes to four or five feet high; the ſtalk is round, erect, woolly, and of a purpliſh green; the leaves are placed three on a pedicle uſually, and are oblong, dentated, and rough, and of a pale green: the flowers are ſmall, and of a pale red; they ſtand in very large cluſters at the tops of the ſtalk and branches.

It is common by waters. C. Bauhine calls it, Eupatorium cannabinum.

The other ſpecies are, 1. The nettle-leaved Eupatorium. 2. The white-flowered, betony-leaved Eupatorium. 3. The ſage-leaved, perfoliate Eupatorium. 4. The mullein-leaved Eupatorium. 5. The woolly, nettle-leaved Eupatorium. 6. The atriplex-leaved ſhrubby Eupatorium. 7. The purple-flowered, Sophia-leaved Eupatorium. 8. The ground-ivy-leaved Eupatorium. 9. The petaſitis-leaved Eupatorium. 10. The long, rugoſe-leaved, purple-ſtalked Eupatorium.

*Claſs the Nineteenth. Order the Second.*

## SYNGENESIA POLYGAMIA SUPERFLUA.

*Plants in which the flowers of the diſk are hermaphrodites, and have ſtigmata, and produce ſeeds; and thoſe of the radius are females, and produce ſeeds alſo.*

THE plants called Herbæ flore floſculoſo, and Flore radiato of Tournefort, are of this order of the Syngeneſia; the genera may therefore be properly arranged, according to that obvious diſtinction, into two diviſions.

*Claſs the Nineteenth. Order the Second.*

*Diviſion the Firſt.*

*Syngeneſia Polygamia Superflua, with floſculous flowers.*

## ARTEMISIA.

THE receptacle is ſomewhat hairy; there is no down to the ſeeds: the calyx is imbricated, and it's ſquammæ are rounded and connivent.
This genus comprehends the Abrotanum and Abſynthium of authors.

*Artemiſia foliis pinnatifidis planis laciniatis, floribus erectis.*
*The Artemiſia, with pinnatifid, plane, laciniated leaves, and erect flowers.*

**Common Mugwort.**

The root is long, thick, and fibrated: the plant grows to four feet high; the ſtalk is round, ſtriated, and often purpliſh: the leaves are divided into a multitude of oblong and narrow ſegments, and are of a dark, blackiſh-green on the upper ſide, and hoary underneath: the flowers grow in long cluſters about the tops of the ſtalks and branches, and are ſmall, and whitiſh, or purpliſh.

It is common by way-ſides. C. Bauhine calls it, Artemiſia vulgaris major caule et flore purpuraſcentibus. It has been eſteemed a deobſtruent and uterine, but is not uſed much at preſent.

The other ſpecies are, 1. The lanceolato-linear-leaved Artemiſia, called Dracunculus and Tarragon. 2. The erect Artemiſia, with ramoſe, ſetaceous leaves, called Abrotonum Mas, or common Southernwood. 3. The five-leaved, hoary Artemiſia, called Pontic Wormwood. 4. The tanzy-leaved, ſtrong-ſcented Artemiſia. 5. The narrower-leaved Abrotanum. 6. The great, hoary Abrotanum. 7. The little, narrow-leaved Abrotanum. 8. The fine-leaved, mugwort, or field Abrotanum. 9. The yellow-flowered, dwarf Abrotanum. 10. The thick, rigid, ſhining-leaved, ſea Abrotanum. 11. The hoary, ſoft Abrotanum. 12. The ſpiked Abrotanum. 13. The common, large Wormwood. 14. The broad-leaved, ſhrubby Wormwood. 15. The narrow-leaved, hoary Wormwood. 16. The Wormwood, with leaves hoary underneath. 17. The very, fine-leaved Wormwood. 18. The lavender-leaved Wormwood. 19. The common, ſea Wormwood. 20. The broader-leaved, ſea Wormwood. 21. The long-leaved Wormwood. 22. The hoary, mountain Wormwood. 23. The dwarf, mountain Wormwood. 24. The Abrotanum-leaved, corymbiferous Wormwood. 25. The long-flowered, Spaniſh Wormwood. 26. The round-flowered, Spaniſh Wormwood. 27. The hoary, arboreſcent, vermiculated-leaved, African Wormwood. The Wormwoods are all ſtomachics, and are uſed in tinctures and infuſions.

## GNAPHALIUM.

THERE is no receptacle; the down is plumoſe: the calyx is imbricated, and the marginal ſquammæ are roundiſh and membranaceous.
This genus comprehends the Gnaphalium, Elychryſum, and Filago of authors.

*Gnaphalium floribus ſparſis per caulem ſimpliciſſimum.*
*The ſimple-ſtalked Gnaphalium, with ſcattered flowers.*

**Engliſh Cudweed.**

The root is compoſed of a few hard, blackiſh fibres: the ſtalk is round, white, ſlender, erect, and a foot, or more, in height; it has no branches: the leaves are an inch and half long, of the breadth of a ſtraw, white, hoary, and ſoft to the touch: the flowers ſtand in the alæ of the leaves, all up the ſtalk, in roundiſh heads of a duſky colour.

It is common in our woods. C. Bauhine calls it, Gnaphalium majus anguſto oblongo folio alterum; others, Gnaphalium Anglicum.

The other ſpecies are, 1. The long-leaved, black-headed Gnaphalium. 2. The round-flowered, mountain Gnaphalium, called Cat's-foot. 3. The common Gnaphalium, called Herba impia. 4. The great, long-leaved Gnaphalium. 5. The little, ſhort-leaved Gnaphalium. 6. The large-flowered, Alpine Gnaphalium. 7. The oblong, folioſe-headed, mountain Gnaphalium. 8. The folioſe-headed, ſea Gnaphalium. 9. The very, fine-leaved, ſmall-headed, erect Gnaphalium. 10. The woolly, ſea Gnaphalium.

Of thoſe called Elychryſa there are, 1. The narrow-leaved Elychryſum, or Stæchas citrina. 2. The five-leaved Elychryſum. 3. The narrow and few-leaved Elychryſum. 4. The umbellated, ſea Elychryſum. 5. The rough, trifid-leaved Elychryſum. 6. The ſingle-flowered, green-leaved Elychryſum. 7. The broad-leaved, ſmall, ſingle-flowered Elychryſum. 8. The broad-leaved Elychryſum, with a larger, ſingle flower. 9. The broad-leaved, wild Elychryſum, with conglobate heads. 10. The ramoſe, broad-leaved Elychryſum. 11. The elegant, oriental Elychryſum. 12. The reddiſh-yellow-cupped Elychryſum. 13. The narrow-leaved Elychryſum, with conglobated heads. 14. The broad-leaved, American Elychryſum. 15. The campion-leaved Elychryſum. 16. The ilex-leaved, ſhrubby Elychryſum. 17. The great, ſilvery-cupped, African Elychryſum. 18. The very narrow-leaved Elychryſum, with great, ſilvery cups. 19. The coris-leaved, ſhrub Elychryſum. 20. The roundiſh-leaved, woolly Elychryſum. 21. The yellow, umbellated Elychryſum. 22. The polium-leaved Elychryſum. 23. The narrow-leaved, red-flowered Elychryſum. 24. The roſemary-leaved Elychryſum. 25. The plantain-leaved Elychryſum. 26. The large-leaved, ſtinking Elychryſum. 27. The broad-leaved, dwarf Elychryſum. 28. The low, capillaceous-leaved Elychryſum.

## XERANTHEMUM.

THE receptacle is ſetaceous; the down has five ſetæ: the calyx is imbricated and longo-radiate.

This genus comprehends the Xeranthemum and Xeranthemoides of authors.

*Xeranthemum receptaculis paleaceis, foliis oblongis.* Auſtrian
*The long-leaved Xeranthemum, with paleaceous receptacles.* Sneezewort.

The root is annual, oblong, blackiſh, woody, and fibrated: the plant riſes to a foot and half high; the ſtalk is ſlender and whitiſh; the leaves are oblong, narrow, ſoft, whitiſh, and hoary: the flowers ſtand at the extremities of the branches, and are large and elegant; they are dry and gloſſy, the cup is ſquammated, and of a ſilvery white; the flower whitiſh, with a caſt of a purpliſh blue.

It is a native of Germany and France. C. Bauhine calls it, Jacca oleæ folio, capitulis ſimplicibus; Cluſius, Ptarmica Auſtriaca. The flowers retain their beauty many years.

The other ſpecies are, 1. The hoary, white-flowered Xeranthemum. 2. The ſmall, purple-flowered Xeranthemum.

## CARPESIUM.

THE receptacle is naked; there is no down to the ſeeds: the calyx is imbricated, and the exterior ſquammæ of it are reflex.

Of this genus there is but one known ſpecies.

### CARPESIUM.

The root is compoſed of a multitude of large fibres: the leaves are four or five inches long, three inches broad, ſerrated, obtuſely pointed, and hairy: the ſtalk is erect and branched; toward the top it grows thick, and the flowers from the bending of this part droop downwards: the flowers are moderately large and yellowiſh.

It is a native of Italy. Ray calls it, Aſter cernuus; C. Bauhine, Aſter Atticus foliis circa florem mollibus.

BACCHARIS.

## BACCHARIS.

THE receptacle is naked; the down is ſimple; the calyx is imbricated and cylindric. Theſe characters ſufficiently diſtinguiſh the Baccharis: the plant commonly known by this name, however, is not of this genus, but is properly a conyza.

## CONYZA.

THE receptacle is naked; the down is ſimple; the cup is imbricated and roundiſh.

*Conyza foliis lanceolatis acutis, caule annuo corymboſo.* Plowman's Spikenard.
*The lanceolate, acute-leaved Conyza, with corymboſe ſtalks.*

The root is oblong, thick, tough, and biennial: the plant riſes to two feet high: the ſtalks are round, robuſt, and ſomewhat hairy: the leaves are numerous, two or three inches long, broad, ſerrated, rough, and ſomewhat hoary: the flowers are ſmall and yellowiſh, or browniſh, and ſtand in umbels.

It is common by way-ſides with us. C. Bauhine calls it, Conyza major vulgaris; others, Baccharis Monſpelienſium.

*Claſs the Nineteenth. Order the Second.*

*Diviſion the Second.*

*Syngeneſia Polygamia Superflua, with radiated flowers; the Herbæ Flore radiato of authors.*

## ERIGERON.

THE receptacle is naked; the down is ſimple; the radii of the corollula are very narrow, and linear.

This genus comprehends the Conyzella, Conyzoides, and ſome of the Senecio's of Dillenius.

*Erigeron pedunculis unifloris lateralibus, calycibus ſquarroſis.* Great, ſweet Fleabane.
*The ſingle, lateral-flowered Erigeron, with ſquarroſe cups.*

The root is large, thick, perennial, and fibrated: the ſtalk is ſhrubby, ramoſe, three feet high, and glutinous to the touch: the leaves are three inches long, and near an inch broad, of a pale green colour, hairy, lightly ſerrated, and viſcous to the touch: the flowers are yellow, and reſemble thoſe of the common ſenecio; they ſtand in a kind of ſpikes, at the tops of the branches.

It is common by way-ſides in Italy. C. Bauhine calls it, Conyza mas Theophraſti, major Dioſcoridis.

The other ſpecies are, 1. The toad-flax-leaved, annual, Canada Erigeron, or Conyza. 2. The coronopus-leaved, American Erigeron. 3. The ovato-lanceolate-leaved, camphorated Erigeron. 4. The ſhort-leaved Erigeron. 5. The ramoſe, longer-leaved, ſmall-flowered Erigeron. 6. The larger-flowered Erigeron.

## SOLIDAGO.

THE receptacle is naked; the down is ſimple; the radii of the corollula are about five; the ſquammæ of the cup are imbricated and cloſed.

This genus comprehends the Virga aurea of Tournefort, and ſome of his Jacobææ, as alſo the Doriæ and Jacobæoides of authors.

*Solidago*

*Solidago caule erecto, racemis alternis erectis.*
*The erect-ſtalked Solidago, with alternate, erect cluſters of flowers.*

**Common Golden-rod.**

The root is oblong, woody, and tough: the plant riſes to two feet high: the ſtalk is round, rigid, and of a purpliſh colour: the leaves are an inch and a half long, an inch broad, ſerrated, and of a duſky green colour: the flowers are very numerous, ſmall, and yellow; they ſtand in little cluſters, toward the top of the ſtalk, forming a kind of ſpike.

It is common on heaths and in woods. C. Bauhine calls it, Virga aurea vulgaris latifolia.

The other ſpecies are, 1. The narrow-leaved, mountain Solidago, with conglobated flowers. 2. The broad-leaved, ſerrated Solidago. 3. The narrow-leaved, not ſerrated Solidago. 4. The broad, ſmooth-leaved Solidago. 5. The rigid, bay-leaved Solidago. 6. The narrow-leaved, beautiful, panicled, American Solidago. 7. The narrow-leaved, American Solidago, with a leſs elegant pod. 8. The limonium-leaved Solidago, with the flowers on one ſide. 9. The very ſmall Solidago. 10. The leſſer, glutinous-leaved Solidago. 11. The long, narrow, and glutinous-leaved Solidago. 12. The aurited-leaved, purple-flowered Solidago. 13. The broad-leaved, purple Solidago, called New England After. 14. The undulated-leaved, purple Solidago. 15. The New England Solidago, with tripolium flowers. 16. The roundiſh, ſmooth, and ſerrated-leaved Solidago. 17. The broad, rigid-leaved, American Solidago. 18. The linaria-leaved, American Solidago. 19. The willow-leaved, American Solidago. 20. The great-flowered, American Solidago.

## ASTER.

THE receptacle is naked; the down is ſimple; the radii of the corollula are more than ten; the lower ſquammæ of the cup are patulous.

This genus comprehends the After of Tournefort, and the Helenium and Afteropterus of Vaillant.

*After foliis rugoſis amplexicaulibus, calycis ſquammis ovatis patulis.*
*The rugoſe, amplexicaule-leaved After, with the ſquammæ of the cup oval and patulous.*

**Elecampane.**

The root is a foot long, and two inches in diameter, brown on the outſide, white within, and of an aromatic taſte: the radical leaves are a foot and a half long, and ſix or ſeven inches broad, rugoſe, crenated, and hoary underneath: the ſtalks are five feet high, very thick, and robuſt; the leaves on them are numerous, and like the radical ones, but ſmaller: the flowers are very large, and yellow; they ſtand at the tops of the branches.

It is wild in ſome places with us, but is cultivated in gardens alſo, for the ſake of it's root, which is in great uſe in the ſhops as a pectoral. C. Bauhine calls it, Helenium vulgare; others, Enula campana.

The other ſpecies of After are, 1. The common, blue After, or After Atticus. 2. The round-leaved, hairy, great, blue-flowered After. 3. The oblong-leaved, great, blue-flowered After. 4. The dwarf, mountain After. 5. The narrow-leaved, tripolium-flowered After. 6. The blue, acrid, field After. 7. The great, blue After Atticus. 8. The little, blue After, or blue Flea-bane. 9. The willow-leaved After, called Tripolium. 10. The early, Pyrenæan, great-flowered After. 11. The ſmall, blue-flowered, tall, autumnal After. 12. The broad-leaved, umbellated After. 13. The tall, ramoſe, daiſy-leaved After. 14. The hyſſop-leaved After. 15. The ramoſe, annual After, called the umbelliferous Daiſy. 16. The great, yellow-flowered, hairy After. 17. The conyza-leaved After, commonly called Conyza media, and middle Fleabane. 18. The yellow, woolly-leaved, Dutch After. 19. The very hoary-leaved After. 20. The mullein-leaved, hairy After. 21. The glutinous, hyſſop-leaved After. 22. The long-leaved, mountain, yellow After. 23. The long, woolly-leaved After. 24. The ſea After, with thick, rounded, tridentated leaves, called Sampire, and

and golden-flowered Sampire. 25. The laciniated-leaved, marſh After. 26. The little, round-flowered After, or little Fleabane. 27. The tuberous-rooted, yellow, ſea After. 28. The ſmooth, willow-leaved After. 29. The primroſe-leaved After. 30. The jacobæa-leaved After.

## INULA.

THE receptacle is naked; the down is ſimple; the antheræ terminate in ſetæ at their baſes.

Theſe characters ſufficiently diſtinguiſh the Inula from all other plants of this claſs, without a farther deſcription.

## SENECIO.

THE receptacle is naked; the down is ſimple; the calyx is cylindric and calyculate, and the ſummit of the baſe ſphacelated.

This genus comprehends the Senecio of Tournefort and others, and many of the ſpecies of Jacobææ of the ſame authors.

*Senecio foliis pinnatis, pinnis linearibus, apice inciſis, ſubtus incanis.*

*The pinnated-leaved Senecio, with linear pinnæ, divided at the extremities.*

**Perennial, groundſel-leaved Ragwort.**

The root is oblong, tough, and fibrated: the plant riſes to three feet high: the ſtalk is robuſt, ſtriated, and ſimple: the leaves are divided into narrow ſegments, of a dark green colour on the upper ſurface, and hoary underneath: the flowers are large, yellow, and beautifully radiated; they ſtand in a kind of umbels, at the tops of the ſtalks.

It is common in paſtures. C. Bauhine calls it, Jacobæa ſenecionis folio perennis.

The other ſpecies are, of thoſe called Seneciones by authors, 1. The common Senecio, or Groundſel. 2. The ragwort-leaved, taller Senecio. 3. The tall, great-leaved, American Senecio. 4. The purple-flowered, American Senecio.

Of thoſe called Jacobææ are, 1. The common Ragwort, or Jacobæa. 2. The laciniated-leaved, ſmaller-flowered Jacobæa. 3. The broad-leaved, water Ragwort. 4. The roundiſh, ſerrated-leaved Jacobæa. 5. The round, undivided-leaved Jacobæa. 6. The oblong, ſerrated-leaved Jacobæa. 7. The long, ſerrated-leaved Jacobæa, called Saracens Conſound. 8. The betony-leaved Jacobæa. 9. The tall, marſh Jacobæa, with ſerrated leaves. 10. The tall, limonium-leaved Jacobæa. 11. The woad-leaved Jacobæa. 12. The blue-green, chryſanthemum-leaved Jacobæa. 13. The large-flowered, finely divided-leaved Jacobæa. 14. The roſemary-leaved Jacobæa. 15. The multifid-leaved, umbellated Jacobæa. 16. The thick, groundſel-leaved, ſea Jacobæa. 17. The leſs jagged Jacobæa, with ſhort petals. 18. The hairy, viſcid, thick-leaved Jacobæa. 19. The woolly, narrow-leaved Jacobæa. 20. The white-leaved, ſea Jacobæa. 21. The wormwood-leaved Jacobæa. 22. The hawkweed-leaved Jacobæa, called hawkweed Doronicum. 23. The peach-leaved Jacobæa. 24. The fernlaceous-leaved, great-flowered Jacobæa. 25. The abrotanum-leaved Jacobæa. 26. The ſhrubby, abrotanum-leaved Jacobæa. 27. The clary-leaved Jacobæa. 28. The ſonchus-leaved Jacobæa. 29. The dandelion-leaved Jacobæa. 30. The undulated-leaved Jacobæa. 31. The purple-flowered, narrow-leaved, laciniated Jacobæa. 32. The tuberous-rooted, African Jacobæa. 33. The procumbent, hypericum-leaved Jacobæa. 34. The willow-leaved, American Senecio.

## TUSSILAGO.

THE receptacle is naked: the down is ſimple: the ſquammæ of the cup are even, and are equal to the diſk in ſize.

This genus comprehends the Tuſſilago, Cacalia, and Petaſites of Tournefort and others.

1. *Tuſſilago ſcapo imbricato unifloro, foliis ſubcordatis.*
*The imbricated-ſtalked, ſingle-flowered Tuſſilago, with ſubcordate leaves.*

**Common Colt's-foot.**

The root is ſlender, very long, creeping, and white: the leaves are of the breadth of a man's hand, ſometimes much larger, of a roundiſh figure, but cordated at the baſe, and angulated, and denticulated in ſeveral parts of the circumference; they ſtand on long, purpliſh pedicles, and are hoary underneath: the flowers appear very early in ſpring, before the leaves; the ſtalks which ſupport them are five or ſix inches high, hollow, tender, and imbricated with a kind of oblong ſquammæ, reſembling leaves; one flower ſtands at the top of each ſtalk, and is large and yellow.

It is common with us about watery places. C. Bauhine calls it, Tuſſilago vulgaris.

It is eſteemed a pectoral, and is frequently uſed in decoctions.

2. *Tuſſilago ſcapo imbricato thyrſifero, floſculis omnibus hermaphroditis.*
*The imbricated-ſtalked, thyrſiferous Tuſſilago, with all the flowers hermaphrodite.*

**Butter-bur.**

This ſpecies agrees with the former, in the ſingularity of the flowers appearing early in the ſpring, before the leaves: the ſtalks on which theſe ſtand are eight or ten inches high, ſtriated, thick, tender, and furniſhed with a number of ſquammæ, reſembling leaves: the flowers are ſmall, and of a fleſh colour; they ſtand in cluſters, and form a kind of ſpike at the top: the leaves are two feet in diameter, roundiſh, and of a pale green colour: the root is large, creeping, and fibrated.

It is frequent in watery places. C. Bauhine calls it, Petaſites major et vulgaris.

The other ſpecies are, 1. The Tuſſilago, with ſhut flowers, called Anandria. 2. The ſmaller Petaſites, with white flowers. 3. The colt's-foot-leaved Petaſites. 4. The thick, angular-leaved Petaſites.

Of thoſe called Cacaliæ there are, 1. The woolly Cacalia. 2. The thick, hairy-leaved Cacalia. 3. The acute, thin, and ſmooth-leaved Cacalia. 4. The alliaria-leaved Cacalia. 5. The Cacalia, with leaves woolly on both ſides.

## DORONICUM.

THE receptacle is naked; the down is ſimple; the ſquammæ of the cup are arranged in two orders, and are equal, and longer than the diſk.

This genus comprehends the Doronicum of Tournefort, the Bellidaſtrum of Micheli, and the Arnica of Ruppius.

*Doronicum foliis ſubrotundis pubeſcentibus.*
*The roundiſh, hoary-leaved Doronicum.*

**Leopard's-bane.**

The root is oblong, white, creeping, and is jointed, and ſuppoſed to repreſent the figure of a ſcorpion: the radical leaves are roundiſh, two or three inches in diameter, ſoft to the touch, hairy, and of a pale green colour: the ſtalk riſes to eight or ten inches high; it is angulated and hairy: the flowers ſtand on the tops of the branches, and are moderately large, and yellow.

It is a native of Italy. C. Bauhine calls it, Doronicum radice ſcorpii; others, Doronicum latifolium, and vulgare.

The other ſpecies are, 1. The brachiated-rooted, ſcorpion Doronicum. 2. The plantain-leaved Doronicum. 3. The round, ſerrated-leaved Doronicum. 4. The hairy, plantain-leaved Doronicum. 5. The rough, long-leaved Doronicum. 6. The broad-leaved, great-flowered Doronicum. 7. The greateſt Doronicum, with amplexicaule leaves. 8. The black-rooted Doronicum. 9. The dandelion-leaved Doronicum. 10. The ſingle-flowered Doronicum.

## GERBERA.

THE receptacle is naked; the down is capillary; the radii of the floſcules have filaments without antheræ annexed to them.

Of this genus there is but one known ſpecies: it is an Æthiopian; the leaves are pinnatifid, and the flowers yellow.

## HELENIA.

THE receptacle is naked; the down has a little cup, with five indentings: the calyx of the flower is ſimple, and formed of a number of leaves.

This genus comprehends the Heleniaſtrum of Vaillant and others.

*Helenia foliis decurrentibus.* Baſtard Elecampane.
*The decurrent-leaved Helenia.*

The root is oblong and white: the plant riſes to two or three feet high: the ſtalk is rigid, erect, ſtriated, and alated, the leaves running down it from their baſes: the leaves ſtand very cloſe; they are oblong, narrow, of a pale green colour, and ſmooth: the flowers ſtand on the tops of the branches, and are large and yellow.

It is a native of North America. Vaillant calls it, Heleniaſtrum folio longiore et anguſtiore; others, Aſter luteus alatus, and Aſter floridanus aureus caule alato.

The other ſpecies are, 1. The broader-leaved Helenia. 2. The hairy, tall Helenia. 3. The ſmall-flowered Helenia.

## TAGETES.

THE receptacle is naked; the down is ariſtated; the calyx is tubulous, and is formed of a ſingle leaf, divided into five ſegments at the end: the radii of the flowers are five.

1. *Tagetes caule ſubdiviſo diffuſo.* French Marygold.
*The diffuſe, ſubdivided-ſtalked Tagetes.*

The root is compoſed of a tuft of fibres: the ſtalk is ſtriated, ſlender, ramoſe, diffuſe, and two or three feet high: the leaves are large, oblong, pinnated, and of a dark green colour: the flowers ſtand on the extremities of the branches; they are moderately large, and yellow toward the center, but of a very dark colour elſewhere.

It is a native of Mexico, but is common in our gardens. C. Bauhine calls it, Tanacetum Africanum, ſive Flos Africanus minor; others, Tagetes minor.

There are ſeveral varieties of this ſpecies from culture, which are deſcribed by ſome authors as diſtinct ſpecies.

2. *Tagetes caule ſimplici erecto, pedunculis nudis uniflori.* African Marygold.
*The ſimple, erect-ſtalked Tagetes, with flowers on long pedicles.*

The root is fibrous: the ſtalk is ſtriated, erect, hollow, and two or three feet high: the leaves are large, oblong, pinnated, and of a pale green colour: the flowers ſtand ſingly, on long, erect pedicles; they are large, and throughout of a pale yellow colour.

Culture makes many varieties in this ſpecies, as the double-flowered, &c. which many authors have deſcribed as ſo many ſpecies.

It is a native of Mexico. C. Bauhine calls it, Tanacetum Africanum majus ſimplici flore; Lobel, Othonna major polyanthos.

COTULA.

## COTULA.

THE receptacle is naked; the down is emarginated; the corollulæ of the disk are divided into four segments at the extremity, and there are no corollulæ of the radius.

This genus comprehends the Ananthocyclus and Lancisia of Vaillant and Pontedera.

*Cotula foliis lanceolato-linearibus pinnatifidis amplexicaulibus.*
*The Cotula, with lanceolato-linear, pinnatifid leaves surrounding the stalk.*

The root is fibrous: the stalks are round and slender: the plant grows to six or eight inches high, the leaves are pinnatifid, oblong, and narrow, and somewhat resemble those of the coronopus: the flowers stand on the tops of the branches, and are small, naked, and whitish.

It is a native of Ethiopia, in wet places. Dillenius calls it, Ananthocyclus coronopi folio; Breynius, Chrysanthemum chamæmeli facie.

The other species are, 1. The Cotula, with inflated cups. 2. The broader-leaved Cotula. 3. The hairy Cotula.

## BELLIS.

THE receptacle is naked; there is no down to the seeds; the cup is of a hemispheric shape, and equal; the seeds are obversely oval in figure; the receptacle is conic.

*Bellis scapo nudo unifloro.* The little Daisy.
*The naked-stalked, single-flowered Bellis.*

The roots are fibrated: the leaves are oblong and obtuse: the stalks naked and simple, and, at the summit of each, stands a moderately large flower, naturally whitish.

It is common every-where in our meadows. C. Bauhine calls it, Bellis minor vulgaris. The plant varies greatly in the height of it's stalk and size of it's leaves in it's wild state; and culture produces yet a greater number of variations in the colour and duplicature of the flower; all these have been described by authors as different species, and hence this single plant has been divided into near fifty.

## CHRYSANTHEMUM.

THE receptacle is naked; there is no down to the seeds; the calyx is of a hemispheric figure, and imbricated, and the edges are membranaceous.

This genus comprehends the Chrysanthemum and Leucanthemum of Tournefort, and the Bellidoides of Vaillant.

*Chrysanthemum foliis pinnatifidis incisis, extrorsum latioribus.* Cretic, corn Marygold.
*The pinnatifid and laciniated-leaved Chrysanthemum.*

The root is fibrous: the plant rises to two feet high: the stalk is round, smooth, and firm: the leaves are finely divided into oblong and laciniated segments: the flowers stand at the tops of the branches, and are large, and of a beautiful yellow colour.

It is a native of Crete. C. Bauhine calls it, Chrysanthemum foliis matricariæ.

The other species are, 1. The bluish-green, laciniated-leaved Chrysanthemum. 2. The broad, roundish-leaved Chrysanthemum. 3. The lesser, oval-leaved Chrysanthemum. 4. The ageratum-leaved Chrysanthemum. 5. The narrow, dentated-leaved Chrysanthemum. 6. The dwarf, ranunculus-leaved Chrysanthemum. The varieties of the first described species are very numerous, and are described as distinct species by many.

Of the Leucanthemæ, or great Daisies, as they are usually called, there are, 1. The common Leucanthema. 2. The great, Alpine, rigid-leaved Leucanthema. 3. The great, acute-leaved Leucanthema. 4. The obtuse, crenated-leaved, mountain Leucanthema.

canthema. 5. The creeping-rooted, broad, ſerrated-leaved Leucanthema. 6. The tanzy-leaved Leucanthema. 7. The graſſy-leaved Leucanthema. 8. The coronopus-leaved Leucanthema. 9. The broad-leaved, great-flowered Leucanthema. 10. The deeply laciniated-leaved Leucanthema. 11. The hoary, multifid-leaved, little Leucanthema. 12. The ſilvery, laciniated-leaved Leucanthema. 13. The pinnatifid-leaved, acrid Leucanthema.

## MATRICARIA.

THE receptacle is naked; there is no down to the ſeeds: the calyx is of a hemiſpheric figure, and imbricated, and the marginal ſquammæ are ſolid, not membranaceous.

*Matricaria foliis compoſitis planis, foliolis ovatis inciſis.* **Common Feverfew.**
*The plane, compound-leaved Matricaria, with oval foliola.*

The root is oblong, ſlender, and fibrated: the plant grows to two or three feet high; the ſtalk is round, hollow, and erect; the leaves are compoſed of a great number of ſhort, broad, and laciniated foliola: the flowers ſtand at the tops of the branches, and are moderately large and white, with a yellow diſk.

It is common in dry places. C. Bauhine calls it, Matricaria vulgaris. It has been eſteemed a good uterine, but is little uſed at preſent. Culture makes the flower double and fiſtulous: ſometimes alſo it is found naked; but theſe are varieties, not diſtinct ſpecies, as too many have made them.

The other ſpecies are, 1. The fine-leaved, ſcented Matricaria. 2. The great-flowered, tawny-leaved Matricaria. 3. The buphthalmum-leaved Matricaria. 4. The ſmall-flowered, ambroſia-leaved Matricaria.

## ANTHEMIS.

THE receptacle is paleaceous; there is no down to the ſeeds: the cup is hemiſpheric and ſubequal: the receptacle is of a conic figure.

This genus comprehends the Chamæmelum of Tournefort and others.

*Anthemis paleis ſetaceis, ſeminibus nudis.* **Stinking Mayweed.**
*The naked-ſeeded Anthemis, with ſetaceous paleæ.*

The root is fibrous and white; the plant riſes to a foot and a half high: the ſtalk is round, green, and ſtriated: the leaves are finely divided into a multitude of oblong, narrow ſegments, and of a dark green: the flowers ſtand on the tops of the branches, and are very large, and of a beautiful white.

It is common in our corn-fields and gardens. C. Bauhine calls it, Chamæmelum fœtidum; others, Cotula fœtida.

The other ſpecies are, 1. The common, ſweet-ſcented Anthemis. 2. The Anthemis, without ſmell. 3. The tall, fine-leaved Athemis. 4. The ſea Chamomile. 5. The abrotanum-leaved, Alpine Anthemis. 6. The very fine-leaved, red-ſtalked Anthemis. 7. The very fine-leaved, large-flowered, ſcentleſs Anthemis. 8. The yarrow-leaved Anthemis. 9. The wormwood-leaved Anthemis. 10. The ſophia-leaved Anthemis.

## ACHILLÆA.

THE receptacle is paleaceous; there is no down to the ſeeds: the calyx is of an oval figure, and imbricated: the receptacle is plane.

This genus comprehends the Millefolium and Ptarmica of Tournefort.

*Achillæa foliis lanceolatis obtuſis acute ſerratis.* Mauds-
*The lanceolate, obtuſe, and acutely ſerrated-leaved Achillæa.* lin.

The root is oblong, ramoſe, creeping, woody, and fibrated: the plant grows to two feet, or more, in height: the ſtalk is round, erect, robuſt, and thick ſet with leaves from the bottom to the top; they are oblong, ſerrated, and blunt at the extremity: the flowers are ſmall and yellow, and ſtand in cluſters at the tops of the ſtalks, in a kind of umbels.

It is a native of France and Italy; we have it in our gardens. C. Bauhine calls it, Ageratum foliis ſerratis; others, Ageratum.

The other ſpecies of Achillæa are, 1. The common Yarrow. 2. The yellow-flowered, hoary-leaved Yarrow. 3. The broader-leaved Yarrow. 4. The little ſweet Yarrow. 5. The common Ptarmica, with ſerrated leaves. 6. The dwarf, hoary, laciniated-leaved Ptarmica. 7. The ſhrubby, Santolina-leaved, Cretic Ptarmica. 8. The purple, tanzy-leaved Ptarmica, called purple, mountain Yarrow. 9. The long-cluſtered Ageratum. 10. The yarrow-leaved Ptarmica. 11. The matricaria-leaved Ptarmica. 12. The tall, yellow, Alpine Ptarmica. 13. The elecampane-leaved Ptarmica.

## BUPHTHALMUM.

THE receptacle is paleaceous; the down of the ſeed is no other than an obſolete margin: the ſides of the ſeeds, eſpecially thoſe of the radius, are emarginated. This genus comprehends the Aſteriſcus and Aſteroides of Tournefort.

1. *Buphthalmum caulibus ſimpliciſſimis unifloris, foliis pinnato-multifidis.* Pellitory of
*The ſingle-flowered, pinnato-multifid-leaved Buphthalmum.* Spain.

The root is oblong, thick, tough, and brown: the plant riſes to five or ſix inches high: the leaves are divided into a multitude of fine, narrow, divaricated ſegments, and are of a deep green: the ſtalk is round and thick, uſually purpliſh, ſometimes green: the flower is large, reddiſh on the back-ſide, but white within; only one flower ſtands on each ſtalk.

It is a native of Syria. C. Bauhine calls it, Pyrethrum bellidis flore. It's root is the Pyrethrum of the ſhops.

2. *Buphthalmum foliis lanceolatis ſubdenticulatis glabris.* Willow-leaved
*The ſmooth, lanceolated, ſubdenticulated-leaved Buphthalmum.* After.

The root is oblong and white; the plant grows to two feet and a half high: the ſtalk is round, erect, and ſmooth; the leaves are very long, narrow, lanceolated, dentated at the edges, and of a bright green: the flowers ſtand on the tops of the branches, and are large and yellow.

It is a native of Germany. C. Bauhine calls it, After luteus anguſtifolius; others, After ſalicis folio glabro.

The other ſpecies are, 1. The tanzy-leaved Buphthalmum. 2. The annual Buphthalmum, with rigid leaves about the flower. 3. The taller, ſmall-flowered Buphthalmum. 4. The dwarf, ſmall flowered Buphthalmum. 5. The annual, patulous, ſea Buphthalmum. 6. The perennial, patulous, maritime Buphthalmum. 7. The petaſitis-leaved Buphthalmum.

## ANACYCLUS.

THE receptacle is paleaceous; the down is emarginated: the ſides of the ſeeds are membranaceous.

This genus comprehends the Santolinoides of Vaillant and Micheli.

*Anacyclus foliis pinnatifidis laciniatis.*
*The Anacyclus, with pinnatifid-laciniated leaves.*

The root is oblong, white, and fibrated: the leaves are three inches long, and half an inch broad, and reſemble thoſe of the Coronopus: the ſtalks are numerous, and ſix or eight inches high; each has two or three little leaves on it, and at it's top ſupports a ſingle, globoſe, yellow flower.

It is a native of Italy. Barrilier calls it, Pyrethrum ceſpitoſa radice anthonidis flore; Micheli, Santolinoides Alpina.

The other ſpecies are, 1. The oriental, pinnated-leaved Anacyclus. 2. The ſmaller-flowered Anacyclus.

## VERBESINA.

THE receptacle is paleaceous; the down is ariſtated: the calyx is compoſed of a double ſeries of ſquammæ: the floſcules of the radius are about five.

This genus comprehends the Eupatorio-phalacron, and Cerato-cephaloides of Vaillant.

*Verbeſina foliis decurrentibus undatis obtuſis.*
*The undated, obtuſe, decurrent-leaved Verbeſina.*

The root is fibrous: the plant riſes to two feet high: the ſtalk is round and robuſt, erect, ramoſe, and often purpliſh: the leaves are oblong, of a pale green, undulated at the edges, obtuſely pointed, and run down the ſtalk at their baſes, ſo as to give it an alated appearance: the flowers are large and yellow; they ſtand at the extremities of the branches.

It is a native of North America. Commelin calls it, Chryſanthemum Americanum alato caule.

The other ſpecies are, 1. The ſmaller-flowered Verbeſina. 2. The tall Verbeſina, with divided leaves. 3. The dwarf Verbeſina. 4. The many-flowered Verbeſina.

## SIGESBECKIA.

THE receptacle is paleaceous; there is no down to the ſeeds: the involucrum conſiſts of five leaves, and is proper and patent: the radius is dimidiated.

Of this genus there is but one known ſpecies, which is ſufficiently diſtinguiſhed by theſe characters. It's leaves are turned back always at night; the cups of the flowers are hairy.

## TETRAGONOTHECA.

THE receptacle is paleaceous; there is no down to the ſeeds: the calyx conſiſts of a ſingle leaf, and is plane, and divided into four parts.

Theſe characters ſufficiently diſtinguiſh the Tetragonotheca from all the other plants of this claſs, without a farther deſcription.

## TRIDAX.

THE receptacle is paleaceous; the down of the ſeeds is ſimple: the calyx is of a cylindric figure, and imbricated ſtructure: the radii of the corolla are tripartite.

Theſe characters ſufficiently diſtinguiſh the Tridax, without a farther deſcription.

*Claſs*

*Claſs the Nineteenth. Order the Third.*

## SYNGENESIA POLYGAMIA FRUSTRANEA.

*Syngeneſia, which have the flowers of the diſk hermaphrodite, furniſhed with a ſtigma, and producing ſeeds; and the flowers compoſing the radius without ſtigmata, and conſequently incapable of producing ſeeds.*

### HELIANTHUS.

THE receptacle is paleaceous and plane: the pappus of the ſeeds is compoſed of two leaves: the calyx is imbricated.
This genus comprehends the Corona ſolis of Tournefort.

*Helianthus radice annua.*
*The annual-rooted Helianthus.*

The great Sun-flower.

The root is oblong, white, tender, and fibrated: the plant riſes to ſix feet, or more, in height: the ſtalk is round, robuſt, thick, green, and hairy: the leaves are very large, broad at the baſe, ſerrated, and terminate in a point: the flowers are yellow, and often more than a foot in diameter.

It is a native of Mexico, but is common in our gardens. C. Bauhine calls it, Helenium Indicum maximum; others, Corona ſolis, and Herba maxima.

The other ſpecies are, 1. The ſmaller-flowered, ramoſe, perennial Helianthus. 2. The tuberous-rooted Helianthus, called Jeruſalem Artichoak. 3. The great, flowered, perennial Helianthus. 4. The long-rooted, ſmall-flowered Helianthus. 5. The broad-leaved, tall Helianthus. 6. The tall, alated-ſtalked Helianthus. 7. The tall, ſtrumous-rooted Helianthus. 8. The great-leaved, ſmall-flowered Helianthus. 9. The trachelium-leaved, creeping-rooted Helianthus. 10. The tall, Virga aurea-leaved Helianthus. 11. The pale, yellow-flowered, creeping-rooted Helianthus. 12. The willow-leaved Helianthus, with alated ſtalks. 13. The ſhrubby, lychnis-leaved Helianthus. 14. The laureola-leaved, ſhrubby Helianthus. 15. The tricuſpidated-leaved Helianthus. 16. The Helianthus, with deeply divided leaves. 17. The narrow, laciniated-leaved Helianthus. 18. The great, trifid-leaved Helianthus.

### RUDBECKIA.

THE receptacle is paleaceous and conic: the pappus is divided by four indentings: the calyx has two ſeries of ſquammæ.
This genus comprehends the Obeliſcotheca of Dillenius and Vaillant.

*Rudbeckia foliis inferioribus trilobis ſuperioribus indiviſis.*
*The Rudbeckia, with the lower leaves trilobous, the upper undivided.*

The root is biennial; the plant grows to two feet high: the ſtalk is round, rigid, hairy, and very full of branches: the leaves are ſcabrous, and ſerrated: the lower ones are divided into three ſegments each; the others are ſimple, of a lanceolated figure, and have no pedicles: the flowers ſtand at the extremities of the branches; they are large and yellow, the diſk ſomewhat browniſh.

It is a native of Virginia. Vaillant calls it, Obeliſcotheca trifido folio.

The other ſpecies are, 1. The compoſite, laciniated-leaved Rudbeckia. 2. The oblong, hairy-leaved Rudbeckia. 3. The great, ſcabrous Rudbeckia. 4. The broad-leaved, many-flowered Rudbeckia. 5. The tall, red-ſtalked Rudbeckia. 6. The ſmall, ſhort-leaved Rudbeckia. 7. The great-flowered, hairy Rudbeckia.

## COREOPSIS.

THE receptacle is paleaceous and conic; the pappus is bicornate: the calyx is erect, and formed of ſeveral leaves, and ſurrounded with patent radii at the baſe.

*Coreopſis folis ternatis.*

*The ternate-leaved Coreopſis.*

The root is oblong, fibrated, and perennial: the plant grows to five feet high: the ſtalk is rigid, firm, round, ſmooth, and jointed: the leaves ſtand three on a pedicle; they are moderately large, ſmooth, of a deep green, and of a firm texture: the flowers are large and yellow, and ſtand at the extremities of the branches.

It is a native of Virginia. Van Royen calls it, Rudbeckia foliis compoſitis integris.

The other ſpecies are, 1. The ſerrated-leaved Coreopſis. 2. The broad-leaved, hairy Coreopſis. 3. The ſmooth, dwarf Coreopſis.

## CENTAUREA.

THE receptacle is ſetoſe: the corollulæ of the radius are infundibuliform, long, and irregular.

This genus comprehends the Centaureum majus, Jacea, and Cyanus of Tournefort; and the Calcitrapa, Calcitrapoides, Rhaponticum, Rhaponticoides, Jacea, Amberboi, Cyanus, and Crocodilium of Vaillant.

Vaillant's diſtinctions of theſe ſeveral genera, as he calls them, are theſe: The Calcitrapa has the calyx armed with ſingle ſpines, which are large and erect; and the ſeeds are either naked or coronated. In the Calcitrapoides, the calyx has ſmall cluſtered ſpines. In the Rhaponticum, the calyx is formed of lax, undivided membranes. In the Rhaponticoides, it is formed of lanceolated and acuminated ſquammæ. In the Amberboi, the ſquammæ of the calyx are obtuſe and ſimple. In the Jacea, the ſquammæ of the calyx are ciliated. In the Cyanus alſo, the ſquammæ are ciliated, but ſhorter; and, in the Crocodilium, the ſquammæ of the calyx are aculeated, and the ſeed is downy and plumoſe.

*Centaurea calycibus ciliatis, ciliis ſetaceis reflexis.*

*The Centaurea, with ciliated calyces; the ciliæ ſetaceous and reflex.*

The root is fibrous; the plant riſes to two feet and a half high: the ſtalks are ſtriated, angular, hairy, and ramoſe: the leaves are large, oblong, broad, and whitiſh, an inch and a half long, and half an inch broad: the flowers are large and purple: the heads uſually ſtand three together, and are ſurrounded with a beautiful reticulation, formed of the ciliæ, or hairs of the ſquammæ of the cup.

It is a native of Germany. C. Bauhine calls it, Jacea latifolia capite hirſuto.

The other ſpecies are: Of the Jacea kind, 1. The common, black Jacea. 2. The jagged-leaved Jacea. 3. The narrow-leaved Jacea. 4. The dwarf, undivided-leaved Jacea. 5. The great, ſquammoſe-headed Jacea. 6. The narrow-leaved, hairy-headed Jacea. 7. The larger, ſcabious-like, laciniated-leaved Jacea. 8. The Cretic, ſquammated Jacea. 9. The hoary, hiſpid-headed Jacea. 10. The white, ſtœbe-leaved Jacea. 11. The tall, ſuccory-leaved Jacea. 12. The hairy, rocket-leaved Jacea. 13. The jagged-leaved, ſilvery-cupped Jacea. 14. The great, undivided-leaved, ſilvery-cupped Jacea, or Stœbe. 15. The ſmaller Stœbe. 16. The purple, ſerrated-leaved Jacea. 17. The blue, calcitrapa-leaved Jacea. 18. The evergreen, Portugal Jacea. 19. The cerinthe-leaved Jacea. 20. The broad-leaved, Spaniſh Jacea, with hairy fibres. 21. The white, woolly Jacea. 22. The ſtyrax-leaved, tree Jacea. 23. The prickly, hoary, Cretic Jacea. 24. The undulated-leaved, woolly Jacea. 25. The linaria-leaved Jacea. 26. The roſemary-leaved Jacea. 27. The long, narrow, and hoary-leaved, Cretic Jacea.

Of thoſe called Cyani are, 1. The common, great Cyanus. 2. The long-leaved Cyanus. 3. The pinnated-headed Cyanus. 4. The great, ſweet, oriental Cyanus. 5. The

5. The oblong-headed Cyanus. 6. The fiſtulous-flowered, oriental Cyanus. 7. The exotic Cyanus, called Amberboi. 8. The hierachium-leaved Cyanus. 9. The long-leaved, ſhrub Cyanus. 10. The common, blue-corn Cyanus. The varieties of this laſt ſpecies are very numerous; authors make near twenty ſpecies of them.

Of thoſe called Centaureum there are, 1. The common, laciniated-leaved Centaureum. 2. The undivided-leaved Centaureum. 3. The artichoke-leaved Centaureum. 4. The yellow, Alpine Centaureum. 5. The jagged-leaved, African Centaureum. 6. The hoary, elecampane-leaved Centaureum. 7. The narrow-leaved, great Centaureum; theſe two laſt are called Rhapontics. 8. The low, hoary Centaureum. 9. The great, mullein-leaved, ſhort-ſtalked Centaureum. 10. The laciniated, woolly-leaved Centaureum. 11. The coronopus-leaved Centaureum.

*Claſs the Nineteenth. Order the Fourth.*

## SYNGENESIA POLYGAMIA NECESSARIA.

*Syngeneſia, in which the flowers of the diſk are hermaphrodites but want the ſtigma, and therefore produce no ſeeds; and the flowers of the radius are female, and produce ſeeds.*

### SILPHIUM.

THE receptacle is paleaceous; the pappus of the ſeeds is emarginated or bicornate: the calyx is imbricated and ſquammoſe.

This genus comprehends the Aſteriſcus of Dillenius. The characters ſufficiently diſtinguiſh it, without a farther deſcription.

### CHRYSOGONUM.

THE receptacle is paleaceous; the pappus of the ſeeds is compoſed of a ſingle leaf, and is tridentated: the calyx conſiſts of five leaves; the ſeeds are incloſed in a little cup, formed of four leaves.

Theſe characters ſufficiently diſtinguiſh the Chryſogonum, without a farther deſcription.

### MELAMPODIUM.

THE receptacle is paleaceous; the pappus of the ſeeds is compoſed of a ſingle leaf, hollowed with an oblong furrow: the calyx conſiſts of five leaves; the receptacle is conic.

Theſe characters ſufficiently diſtinguiſh the Melampodium.

### MICROPUS.

THE receptacle is paleaceous: there is no pappus to the ſeeds: the calyx is calyculated; and the corolla is of the naked kind, or has no radius.

This genus comprehends the Gnaphalodes of Tournefort. Of this genus there is but one known ſpecies.

#### MICROPUS.

The root is oblong, ſlender, white, and tough: the plant is procumbent, and the ſtalks round, white, and woolly: the leaves are oblong, ſoft to the touch, and of a whitiſh colour: the flowers are ſmall, and ſtand at the extremities of the branches.

It is a native of the ſea-coaſts of Portugal. Tournefort and others call it, Gnaphalodes Luſitanica.

## ERIOCEPHALUS.

THE receptacle is ſomewhat hairy; there is no down to the ſeeds: the calyx is compoſed of ten equal leaves: the radii of the flower are five.

Theſe characters ſufficiently diſtinguiſh the Eriocaphalus, without a farther deſcription.

## ARCTOTIS.

THE receptacle is ſetoſe; the pappus is of an ovated figure: the calyx is imbricated, and the ſquammæ it is compoſed of are lax and gloſſy at the baſe.

This genus comprehends the Arctotheca of Vaillant, and the Anemonoſpermos of Commelin.

*Arctotis foliis pinnatifido-laciniatis.*
*The Arctotis, with pinnatifido-laciniated leaves.*

The root is fibrous and white: the plant grows to two feet high; the ſtalk is round, ſtriated, and weak; the leaves are three inches long, an inch, or more, in breadth, deeply divided into ſegments to the middle rib, and thoſe ſegments laciniated: the flowers ſtand at the extremities of the branches; they are large, and of a fleſh colour.

It is a native of Africa. Commelin calls it, Anemonoſpermos Jacobææ folio.

The other ſpecies are, 1. The large-leaved Arctotis. 2. The procumbent, divided-leaved Arctotis. 3. The great-flowered, laciniated-leaved Arctotis. 4. The rigid-ſtalked, ſmaller-flowered Arctotis.

## OSTEOSPERMUM.

THE receptacle is naked; there is no pappus to the ſeeds: the calyx is compoſed of many leaves: the ſeeds are globoſe, coloured, and of a bony hardneſs.

This genus comprehends the Chryſanthemoides of Tournefort, and the Monilifera of Vaillant. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CALENDULA.

THE receptacle is naked; there is no pappus to the ſeeds: the calyx is compoſed of numerous leaves, and is equal: the ſeeds of the diſk are membranaceous.

This genus comprehends the Caltha of Tournefort, and the Demorphotheca of Vaillant.

*Calendula foliis ovatis obtuſis dentatis.*
*The oval, obtuſe-leaved Calendula.*

The root is white and fibrous: the plant is procumbent or oblique, very rarely quite erect: the ſtalk is round and ſtriated, of a pale green, and tender: the leaves are oblong, broad, dentated, and obtuſe: the flowers ſtand on the tops of the branches; they are moderately large, and are of a violet colour on the outſide, and white within.

It is a native of Africa. Tournefort calls it, Caltha Africana flore intus albo.

The other ſpecies are, 1. The common garden Marygold. 2. The larger, many-flowered Calendula. 3. The dwarf, field Calendula. 4. The woolly, Portugal Calendula. 5. The little-flowered, erect, African Calendula.

## OTHONNA.

THE receptacle is naked: the pappus of the ſeeds is plumoſe: the calyx is of a ſubcylindric figure, and is compoſed of one leaf, divided into many ſegments.

This genus comprehends the Jacobæaſtrum of Vaillant.

*Othonna foliis ſubcordatis, caule ſubnudo ſimpliciſſimo.*
*The ſubcordated-leaved Othonna, with a ſimple, almoſt naked ſtalk.*

The root is large, tuberous, and yellowiſh: the radical leaves are numerous, large, roundiſh, but ſomewhat cordated and angulated, and have pedicles a foot long: the ſtalk is round, thick, hoary, and three feet high: the leaves on it are few; they are roundiſh and ſinuated a little: the flowers are large and yellow; they ſtand in a kind of ſpike at the top of the ſtalk.

It is a native of Ruſſia. Amman calls it, Jacobæaſtrum cacaliæ folio.

The common, hoary, ſea Jacobæ, has ſome right to be of this genus. It's calyx is indeed compoſed of ſeveral leaves, but it is not calyculated at the baſe, as in the Jacobææ.

## SPHÆRANTHUS.

THE receptacle is naked: there is no pappus to the ſeeds: the calyx is imbricated, and contains ſeveral calyculi, each compoſed of five leaves, and containing a ſingle flower.

Theſe characters ſufficiently diſtinguiſh the Sphæranthus, without a farther deſcription.

## MILLERIA.

THERE is ſcarce any viſible receptacle; the ſeeds have no pappus: the calyx is compoſed of three valves: the radius of the corolla is dimidiated.

Theſe characters ſufficiently diſtinguiſh the Milleria, without a farther deſcription.

*Claſs the Nineteenth. Order the Fifth.*

# SYNGENESIA POLYGAMIA MONOGAMIA.

## CORYMBIUM.

THE calyx is of a priſmatic form; it is compoſed of two leaves, and contains a ſingle flower: the corolla of the floſcule is of an infundibuliform ſhape, and divided into five ſegments at the edge: the ſeed is ſingle, and is placed under the receptacle.

It is a North American, and is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

## JASIONE.

THE common calyx is formed of ten leaves: the corolla is regular, and conſiſts of five petals: the fruit is a capſule placed under the corolla, and contains two cells.

Theſe characters ſufficiently diſtinguiſh the Jaſione, without a farther deſcription.

## LOBELIA.

THE calyx is divided into five ſegments: the corolla is irregular, and conſiſts of a ſingle petal: the fruit is a capſule placed under the flower, and contains three cells.

This genus comprehends the Dortmanna of Rudbeck, the Laurentia of Micheli, the Rapuntium of Tournefort, and the Flos Cardinalis of Rivinus.

18

Hypericum. 13

19

Othonna

Chrysanthemum

Chandrilla

Tragopogon

Echinopus

Buphthalmum

Hierachium

Gundelia

Xeranthemum

Anacyclus

Citrus

Leontodon

Bidens

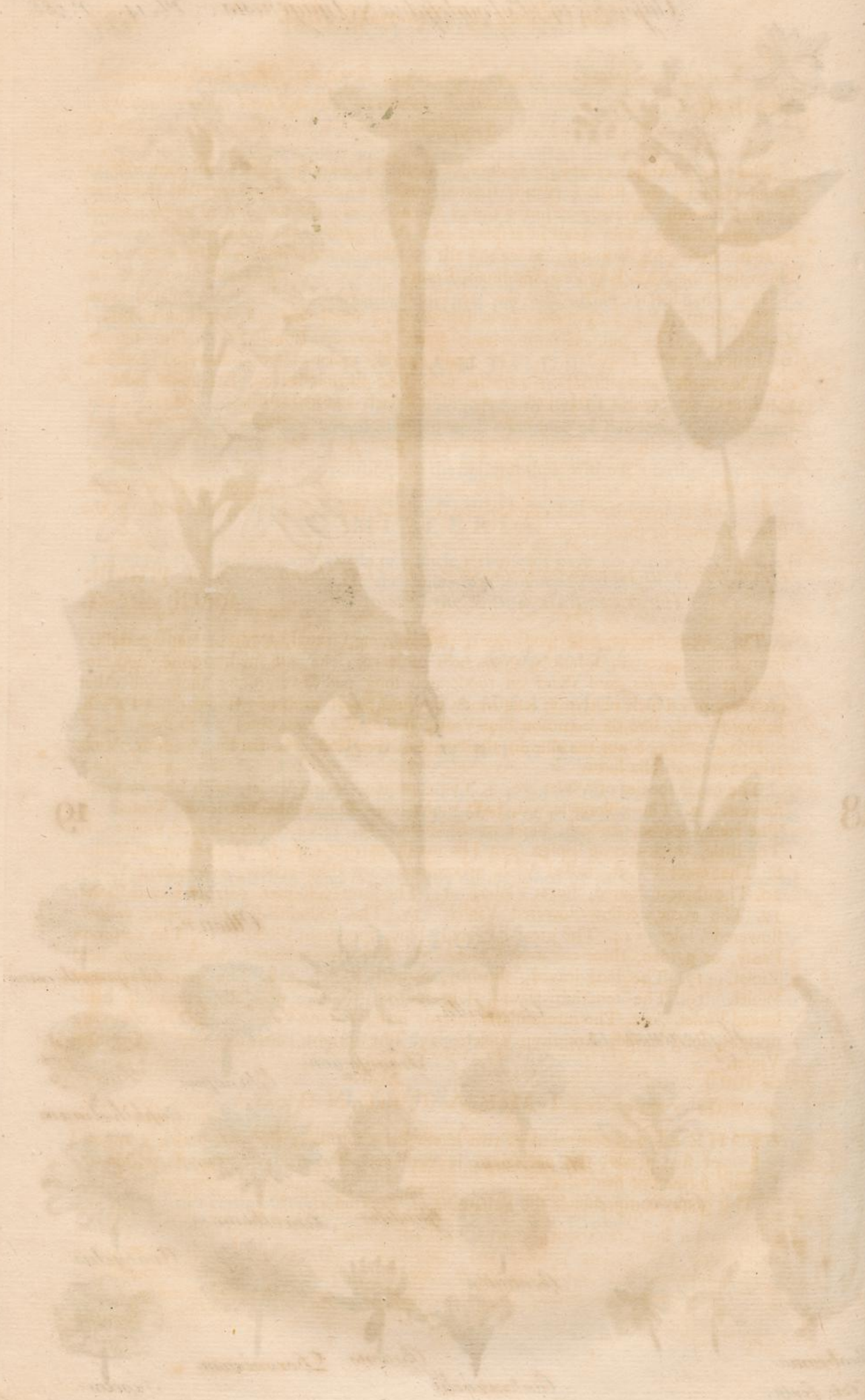
Doronicum

Tagetes

Theobroma

Cantananche

B. Cole Sculp.



*Lobelia caule erecto, foliis lanceolatis ſerratis, ſpica terminali.*
*The erect Lobelia, with lanceolated, ſerrated leaves, and a terminatory ſpike.*

The root is white, creeping, fibrated, and full of a milky juice: the plant riſes to two feet high: the ſtalk is round, ſtriated, and of a pale green colour: the leaves are oblong, ſmooth, ſerrated, and of a duſky green colour: the flowers are large, and of a beautiful ſcarlet; they ſtand in a ſpike, half the length of the ſtalk.

It is a native of Virginia. Moriſon calls it, Rapuntium galeatum Virginianum coccineo flore majore; Ruppius, Cardinalis Rivini.

The other ſpecies of Lobelia are, 1. The oval-leaved Lobelia, with inflated cups. 2. The great, blue, long-ſpiked Lobelia. 3. The ſmall-flowered, virga aurea-leaved Lobelia. 4. The tall, cirſium-leaved, green-flowered Lobelia. 5. The purple, trachelium-leaved Lobelia. 6. The ſmall, acrid, violet-coloured-flowered Lobelia. 7. The narrow-leaved, African Lobelia. 8. The pinaſter-leaved, Ethiopian Lobelia. 9. The coronopus-leaved Lobelia. 10. The linaria-leaved Lobelia.

## VIOLA.

THE calyx is compoſed of five leaves; the corolla is compoſed of five petals, and is irregular, and corniculated behind: the fruit is a capſule within; the flower formed of three valves.

*Viola ſtolonibus teretibus reptantibus, foliis ſubrotundis.*
*The round-leaved, creeping Viola.*

The yellow, marſh Violet.

The root is fibrous, and ſends out ſeveral oblong, round, tender, creeping ſtalks: from theſe, at certain diſtances, grow tufts of leaves; they are ſmall, round, and crenated at the edges, and ſtand on moderately long pedicles: among theſe riſe other pedicles, of an inch or two in length, on the ſummit of each of which ſtands a ſmall, yellow flower, like the common blue Violet in ſhape.

It is a native of our marſhes in the north of England. C. Bauhine calls it, Viola Alpina rotundifolia lutea.

The other ſpecies of Violet are, 1. The common, ſpring Violet, with blue or white flowers. 2. The oblong-leaved, blue Violet. 3. The trachelium-leaved Violet. 4. The round-leaved, ſmooth, blue, marſh Violet. 5. The laciniated-leaved Violet. 6. The little, thick-leaved Violet. 7. The ſmall, narrow-leaved, white-flowered Violet. 8. The erect Violet, called Viola arboreſcens. 9. The yellow, arboreſcent Violet. 10. The three-coloured, ſweet Violet. 11. The three-coloured, narrow-leaved Violet. 12. The great, yellow-flowered Violet. 13. The roundiſh-leaved, great, yellow-flowered Violet. 14. The great-flowered, blue, mountain Violet. 15. The common Panſy, or garden, three-coloured Violet. 16. The two-coloured, weak-ſtalked, field Violet. 17. The long-leaved, ſhrubby, Spaniſh Violet. 18. The granadilla-leaved Violet. 19. The teucrium-leaved, long-ſpurred Violet. 20. The crenated, baſil-leaved Violet. 21. The nummularia-leaved, little, Alpine Violet. 22. The common, upright, long-leaved, American Violet. 23. The upright, cucumber-leaved, Virginian Violet.

## IMPATIENS.

THE calyx is compoſed of two leaves; the corolla is irregular, and is compoſed of five petals; the nectarium is cucullated; the fruit is a capſule within the flower, formed of five valves.

This genus comprehends the Balſamina of Tournefort.

*Impatiens pedunculis unifloris aggregatis, foliis lanceolatis, nectariis flore brevioribus.* Balſam.

*The aggregate, pedunculed Impatiens, with lanceolated leaves.*

The root is compoſed of a tuft of fibres: the plant riſes to two feet high: the ſtalk is round, hollow, tender, ſucculent, and remarkably thick: the leaves are three inches long, and an inch broad, ſerrated, and of a pale green colour: the flowers ſtand on ſlender, drooping pedicles, ariſing from the alæ of the leaves; they are numerous and large, of a pale red, or whitiſh, colour: the fruit is a large, rough, pointed capſule, which, on the leaſt touch, when ripe, burſts, and throws out it's ſeed to a great diſtance.

It is a native of Ceylon, but is frequent in our gardens. C. Bauhine calls it, Balſamina fœmina. It's flowers are very different in colour, variegation, and ſize; and hence authors have made ſeveral ſpecies from this one.

The other really diſtinct ſpecies of the Impatiens are, 1. The ſmall-flowered, narrow, crenated-leaved Impatiens. 2. The narrow, undivided-leaved, ſmall-flowered Impatiens. 3. The yellow-flowered Impatiens, called podded Arſmart, and Noli-me-tangere. 4. The broader-leaved, purple-flowered Impatiens. 5. The great, narrow-leaved, Virginian Impatiens, with variegated red and yellow flowers.

## *Claſs the Twentieth.*

## GYNANDRIA.

*Plants whoſe ſtamina are placed either on the ſtyle, or on the receptacle, which is elongated into the form of a ſtyle, and carries on it both the piſtil and ſtamina.*

OF the ſeveral genera of this claſs ſome have two ſtamina to each flower, ſome have three, ſome four, ſome five, ſome ſix, ſome ten, ſome an indeterminate larger number. They may hence, therefore, be naturally arranged into ſeveral diſtinct orders.

### *Claſs the Twentieth. Order the Firſt.*

## GYNANDRIA DIANDRIA.

*Plants which have two ſtamina growing on the ſtyle.*

### ORCHIS.

THE nectarium of the corolla is of a corniculated form, and is ſituated at the hinder part of the flower.

*Orchis bulbis indiviſis, nectarii labio quadrifido crenulato, cornu obtuſo.* Fool's-ſtones.

*The undivided, bulbed Orchis, with the lip of the nectarium crenulated and quadrifid.*

The root is compoſed of two oblong, roundiſh bulbs, connected together; they are whitiſh, full of a mucilaginous juice, and fibrated: the leaves are ſix inches long, and two broad, narrow at the baſe, and terminated by an obtuſe point, of a deep green colour, and often ſpotted with black: the ſtalk is round, ſucculent, and a foot high: it has two or three leaves like the radical ones, but ſmaller, and, at it's top, ſtands a ſpike, of two inches long, of purple flowers, moderately large, and beautiful.

It is common in our meadows. C. Bauhine calls it, Orchis morio mas.

This

This ſpecies varies extreamly in the ſize and colour of the flower, in it's height, and in the variegations of the leaves: authors have hence made no leſs than fourteen ſpecies of it, under the names of Orchis morio procerior majore flore, Orchis morio fœmina parva, Orchis morio fœmina vulgaris, Orchis ſerotina anguſto folio, flore niveo, roſeo, carneo, variegato, &c.

The other really diſtinct ſpecies of Orchis are, 1. The open-flowered, or great, military Orchis. 2. The low, military Orchis. 3. The green-flowered, ſtrong-ſmelling Orchis. 4. The white-flowered, bifoliate Orchis. 5. The conglomerated, ſpiked, mountain Orchis. 6. The broad-leaved, palmated Orchis, with long ſpurs. 7. The Orchis, with faſciculated, filiform roots, called purple Bird's-neſt. 8. The broad-leaved, compact-ſpiked Orchis. 9. The ſweet, purple, mountain Orchis. 10. The globoſe-flowered Orchis. 11. The graſſy-leaved Orchis. 12. The man Orchis. 13. The ſmaller-flowered, man Orchis. 14. The ſmall, purple, ſtinking Orchis. 15. The trifoliate, purple Orchis. 16. The fly Orchis. 17. The variegated, larger-flowered, fly Orchis. 18. The ſmall, yellow-flowered, fly Orchis. 19. The broad-leaved, butterfly Orchis. 20. The narrow-leaved, butterfly Orchis. 21. The ſpider Orchis. 22. The long-tongued, Italian Orchis. 23. The common, palmated, pale-flowered Orchis. 24. The tall, galericulate, palmated Orchis. 25. The narrow-leaved, ſweet-ſcented, palmated Orchis. 26. The white, palmated, ſtrong-ſcented Orchis. 27. The black-flowered, narrow-leaved, palmated Orchis.

## SATYRIUM.

THE nectarium is of the form of a ſcrotum, or inflated and didymous, and is ſituated behind the flower.

*Satyrium bulbis indiviſis, nectarii labio trifido, foliis lanceolatis.*
*The undivided-bulbed Satyrium, with lanceolated leaves, and with the lip of the nectarium trifid.*

Goat-ſtones.

The root is compoſed of two large bulbs, each of the ſize of a walnut: the leaves are large, oblong, broad, and obtuſely pointed: the ſtalk grows to three feet high; it is ſucculent, tender, and ſtriated: the flowers are numerous, and form a ſpike at the top; they are variegated with green, purple, and white, and have an extremely long beard hanging from each of them.

It is a native of England, but is very rare. C. Bauhine calls it, Orchis barbata odore hirci breviore latioreque folio; others, Trago-orchis.

The other ſpecies are, 1. The palmated Batrachite, or Frog Orchis. 2. The broader-leaved, ſmall-flowered Satyrium. 3. The duſky-coloured-flowered Satyrium.

## SERAPIAS.

THE nectarium is oval and gibbous, and the labium is of an oval figure.
This genus includes the Helleborine of Tournefort.

*Serapias bulbis fibroſis, nectarii labio obtuſo petalis breviore.*
*The fibrous-bulbed Serapias, with the lip of the nectarium ſhorter than the petals.*

Broad-leaved, baſtard Helleborine.

The root is compoſed of compact cluſters of fibres: the leaves are oblong, broad, obtuſely pointed, and nervous: the ſtalk riſes to a foot and a half, or more, in height, and is ſimple, round, and hoary; the leaves on it are like the radical ones, and have no pedicles; they are three inches long, and two broad: the flowers are ſmall, and of a green and purple colour; they form a kind of lax ſpike, reaching from the middle to the top of the ſtalk.

It is not uncommon with us in woods. C. Bauhine calls it, Helleborine latifolia montana.

The other ſpecies are, 1. The ſmaller-flowered, broad-leaved Serapias. 2. The long and narrow-leaved, purple-flowered Serapias. 3. The long-leaved, marſh Serapias.

pias. 4. The large, green-flowered, long-leaved Serapias. 5. The ſmaller, ſhort-leaved Serapias.

## HERMINIUM.

THE nectarium is hollowed and carinated, and it's lip is trifid or bifid.
This genus comprehends the Monorchis of Micheli.

*Herminium bulbo ſupra radicato, caule folioſo.* Musk Orchis.
*The leafy-ſtalked Herminium, with fibres above the bulb.*

The root is a ſingle bulb, of the bigneſs of a nut: the plant riſes to eight inches high: the ſtalk is round, ſlender, and green: the leaves are an inch and a half long, and half an inch broad: the flowers are ſmall and yellowiſh, and have a very ſweet ſcent; they ſtand in form of a ſlender ſpike, at the top of the ſtalk.

It is a native of moſt parts of Europe, but is no where very frequent. Authors call it, Orchis odorata moſchata, ſive Monorchis.

The other ſpecies are, 1. The trifoliate, naked-ſtalked Herminium. 2. The larger-flowered Herminium.

## NEOTIA.

THE lip of the nectarium is pendent, and uſually undivided, and has a denticulation on each ſide.
This genus comprehends the Nidus avis of Tournefort, and the Corallorhiza of Ruppius.

*Neotia bulbis faſciculatis, nectarii labio bifido.* Bird's-neſt.
*The faſciculated-bulbed Neotia, with the lip of the nectarium bifid.*

The root is compoſed of compact bundles of fibres: the plant riſes to a foot, or more, in height: the ſtalk is whitiſh, round, and ſucculent: the leaves are numerous, ſhort, membranaceous, thin, ſtriated, obtuſe, and uſually ſomewhat emarginated, or cordated, at the top: the flowers are of a duſky colour, and moderately large; they ſtand in form of a thick, ſhort ſpike, at the tops of the ſtalk, and in ſhape and ſize reſemble thoſe of the orchis's.

It is a native of our woods, but is not common. C. Bauhine calls it, Orchis abortiva fuſca: when decaying, it is throughout of a duſky brown colour.

The other ſpecies are, 1. The double-bulbed Neotia, or female Monorchis of C. Bauhine. 2. The Triorchis of authors, or triple Ladies Traces.

## OPHRYS.

THE nectarium is a dependent lip, bifid, and marked with a denticulation on each ſide.

*Ophrys foliis ovatis.* Common Twyblade.
*The ovated-leaved Ophrys.*

The root is compoſed of a multitude of thick, compact fibres: the plant riſes to ten inches, or more, in height: the ſtalk is round, thick, ſucculent, and green: at about three inches from the ground it has two leaves, placed oppoſite; they are three inches long, two inches broad, obtuſe, nervous, and of a pale green colour; the ſtalk is everywhere elſe naked, and, at it's top, ſtand a number of ſmall, greeniſh flowers, like thoſe of the orchis's, forming a kind of ſpike.

It is common in wet places. C. Bauhine calls it, Ophris bifolia; others, Bifolium vulgare: there are ſometimes three leaves inſtead of two, but very rarely.

The other ſpecies are, 1. The bulbous-rooted Ophrys. 2. The creeping-rooted, marſh Ophrys. 3. The leaſt, or triangular-leaved Ophrys.

## LIMODORUM.

THE nectarium is hollow, and formed of a ſingle leaf; it is ſupported on a pedicle, and is ſituated within the lower petal of the corolla.

Theſe characters ſufficiently diſtinguiſh the Limodorum of Linnæus, without a farther deſcription; the Limodorum Auſtriacum of Cluſius and others is not of this genus, but is an orchis, mentioned in it's place under that genus.

## CYPRIPEDIUM.

THE nectarium is ventricoſe, inflated, and hollow.

This genus comprehends the Calceolus of Tournefort, and the Calceolus Mariæ of others.

*Cypripedium foliis latioribus.* Ladies Slipper.
*The broad-leaved Cypripedium.*

The root is oblong, oblique, divaricated, and fibrated: the plant riſes to a foot, or more, in height: the leaves are large, broad, obtuſe, and ſomewhat hairy: the flower is purpliſh, large, and ſtands on a long pedicle: from it's center grows the part which is called the Slipper; this is of the bigneſs of a pigeon's egg, thin, membranaceous, and inflated, and it's colour is yellowiſh.

It is a native of the north of England. C. Bauhine calls it, Helleborine flore rotundo, ſive Calceolus; others, Calceolus Mariæ.

The other ſpecies are, 1. The narrower-leaved, large-flowered Cypripedium. 2. The American, tall Cypripedium. 3. The ſmaller, yellow-flowered Cypripedium. 4. The ſmooth, broad-leaved Cypripedium. 5. The double bulbous-rooted Cypripedium, called the Bee Orchis. 6. The ſmaller-flowered, double, bulb-rooted Cypripedium.

## EPIDENDRUM.

THE nectarium is turbinated, oblique, and reflex.

This genus comprehends the Augureek of Kœmpfer, and the Vanilla of Plumier, 28.

*Epidendrum fructu nigreſcente inodoro.* Baſtard Vanilla.
*The Epidendrum, with a blackiſh, ſcentleſs fruit.*

The root is divaricated and creeping: the plant climbs up the trees that are neareſt it, and uſually exceeds them in height: the leaves are ten inches long, lanceolated, and four inches broad: the ſtem is firm, jointed, and of the thickneſs of a man's finger: the flowers ſtand in a kind of ſpikes; they are large, green on the outſide, and white within: the fruit is a long, black pod.

It is a native of St Domingo. Plumier calls it, Vanilla flore viridi et albo.

The other ſpecies are, 1. The ſhort-leaved Epidendrum. 2. The black-flowered, ſweet-podded Epidendrum, or common Vanilla.

*Claſs the Twentieth. Order the Second.*

## GYNANDRIA TRIANDRIA.

*Plants which have three ſtamina growing on the ſtyle.*

## SISYRINCHIUM.

THE Siſyrinchium has but a ſingle ſtigma: the ſpatha is compoſed of two leaves: the corolla conſiſts of ſix petals: the capſule has three cells, and is ſituate under the corolla.

This genus comprehends the Bermudiana of Tournefort.

*Siſyrinchium caule et foliis ancipitibus.*
*The Siſyrinchium, with edged ſtalks and leaves.*

The root is fibrated and creeping: the leaves are long, narrow, graſſy, of a deep green colour, and edged both ways: the ſtalk is of the ſame ſhape with the leaves, and edged in the ſame manner, like a ſword: the flowers are ſmall and blue.

It is a native of Virginia. Dillenius calls it, Bermudiana graminea flore minore.

*Claſs the Twentieth. Order the Third.*

## GYNANDRIA TETRANDRIA.

*Plants which have four ſtamina growing upon the ſtyle.*

### NEPENTHES.

THE ſtigma is ſingle; the calyx is divided into four parts; there is no corolla; the fruit is a capſule, containing four cells.

Theſe characters ſufficiently diſtinguiſh the Nepenthes from all the other genera of this claſs, without a farther deſcription.

*Claſs the Twentieth. Order the Fourth.*

## GYNANDRIA PENTANDRIA.

*Plants which have four ſtamina growing upon the ſtyle.*

### PASSIFLORA.

THE ſtyles carrying the ſtigmata are three: the calyx is formed of five leaves: the corolla conſiſts of five petals: the nectarium is a corona, ſurrounding the ſtyle within the petals: the fruit is a berry, ſupported on a pedicle.

This genus comprehends the Granadilla, Murucuia, and Clematis of authors.

*Paſſiflora foliis integerrimis ovato lanceolatis.* **Long-leaved**
*The Paſſiflora, with undivided, oval leaves.* **Paſſion-flower.**

The root is brachiated and ſpreading: the ſtem is ſlender, tough, woody, and brown: the leaves ſtand alternately, at ſix inches diſtance; they are three or four inches long, half as much in breadth, and pointed at the end; they are ſoft to the touch, and of a fine bright green: the tendrils are numerous, long, and of a bright green: the flowers ſtand ſingly on long pedicles, ariſing from the alæ of the leaves; they are of a mixt white, purple, and blue colour, in the ſeveral parts, and are two inches in diameter, and very beautiful.

It is a native of America. Plumier calls it, Clematitis Indica flore clavato, foliis oblongis, fructu citriformi: we have it in our ſtoves.

The other ſpecies are, 1. The common Paſſion-flower. 2. The tricuſpidate-leaved, blackiſh-flowered Paſſion-flower. 3. The tricuſpidate-leaved Paſſion-flower, with ſmall, yellow flowers. 4. The large, tricuſpidate-leaved Paſſion-flower, with olive-ſhaped fruits. 5. The olive-fruited, narrower, tricuſpidate-leaved Paſſion-flower. 6. The narrow, tricuſpidate-leaved Paſſion-flower, with little, green flowers. 7. The little-flowered, ivy-leaved Paſſion-flower. 8. The ſtinking, tricuſpidate, hairy-leaved, white-flowered Paſſion-flower. 9. The oval-fruited, many-leaved Paſſion-flower. 10. The colocynth-fruited, many-leaved Paſſion-flower. 11. The curled-flowered, many-leaved Paſſion-flower. 12. The round, hairy-fruited, ivy-leaved Paſſion-flower. 13. The elm-leaved Paſſion-flower. 14. The oblong, ſerrated-leaved Paſſion-flower. 15. The bicornate-leaved, bright red flowered Paſſion-flower. 16. The broad-leaved, apple-like-fruited Paſſion-flower. 17. The ſweet-ſcented, many-flowered Paſſion-flower. 18. The androſæmum-leaved Paſſion-flower. 19. The lunated-leaved, ſcarlet Paſſion-flower, called Murucuia.

*Claſs the Twentieth. Order the Fifth.*

## GYNANDRIA HEXANDRIA.

*Plant that have ſix ſtamina ſtanding on the ſtyle.*

### ARISTOLOCHIA.

THE ſtigma is divided into ſix parts: there is no calyx: the corolla conſiſts of a ſingle petal, and is entire, and of a ligulated form: the capſule contains ſix cells, and is ſituated under the corolla.

*Ariſtolochia foliis cordatis, caule erecto, floribus axillaribus confertis.* **Clematite Birthwort.**

*The erect, cordated-leaved Ariſtolochia, with cluſtered, axillary flowers.*

The root is compoſed of a great number of thick fibres, which ſpread every way: the plant riſes to two or three feet high: the ſtalk is ſtriated, firm, and jointed, and ſupports itſelf tolerably well erect: the leaves are three inches long, two and a half broad, cordated at the baſe, and fixed on long pedicles; they ſtand alternately, one at a joint: the flowers are oblong, and of a pale colour; there ſtand ſeveral of them together, at the alæ of the leaves: the fruit is large and round, as big as a ſmall apple.

It is a native of England, but not common; I have met with it in ſome woods in Kent. C. Bauhine calls it, Ariſtolochia clematitis recta; others, Ariſtolochia clematitis.

The other ſpecies are, 1. The blackiſh-flowered, round-rooted Ariſtolochia. 2. The pale-flowered, narrow-leaved Ariſtolochia. 3. The true, long-rooted Ariſtolochia. 4. The larger-leaved, Spaniſh, long Ariſtolochia. 5. The ſmaller-leaved, clematite Ariſtolochia. 6. The many-rooted Ariſtolochia, called Piſtolochia. 7. The little, hoary Ariſtolochia. 8. The auriculated-leaved, Virginian Ariſtolochia, or Virginian Snakeroot. 9. The knotty-ſtalked, many-rooted Ariſtolochia. 10. The lanceolated-leaved, oriental Ariſtolochia. 11. The ſmall-leaved, ever-green Ariſtolochia. 12. The white-flowered, clematite Ariſtolochia. 13. The horſe-ſhoe-leaved Ariſtolochia. 14. The oblong-leaved, creeping-rooted, clematite Ariſtolochia. 15. The very long-flowered, cordated-leaved Ariſtolochia. 16. The trifid, or ivy-leaved Ariſtolochia. 17. The great-flowered, trifid-leaved Ariſtolochia. 18. The aſarum-leaved Ariſtolochia.

### PISTIA.

THE ſtigma is marked with ſix depreſſions, and ſeems divided into ſo many parts: there is no calyx: the corolla is formed of a ſingle petal, ligulated, and undivided: the fruit is a capſule, with five cells, placed in the bottom of the corolla.

This genus comprehends the Kadda Pail of the Hortus Malabaricus.

There is but one known ſpecies of it, which, in many things, agrees with the ariſtolochiæ.

#### PISTIA.

The root is compoſed of a number of oblong, ſlender, fibrated tuberoſities: it has no ſtalk: the leaves are ten inches long, and five broad; they have no pedicles, but are gradually broader from the baſe to the top, and are there deeply ſinuated and undulated: the flowers grow without pedicles, in the midſt of the leaves; they are oblong, whitiſh, moderately large, and hairy in the lower part.

It is a native of the Eaſt and Weſt Indies. Van Rheede calls it, Kadda Pail.

*Claſs the Twentieth. Order the Sixth.*

## GYNANDRIA DECANDRIA.

*Plants which have ten ſtamina growing on the ſtyle.*

### HELICTERES.

THE ſtigma is divided into five parts: the calyx is oblique, and is compoſed of a ſingle leaf: the corolla conſiſts of five petals: the nectarium is compoſed of five leaves: the fruit is compoſed of five intorted capſules.

This genus comprehends the Iſora of Plumier. There is but one known ſpecies of it.

HELICTERES. **The Skrew-tree.**

The root is brachiated; the tree grows to twenty feet high: the leaves are oval and pointed, ſerrated, and of a duſky green, and ſomewhat hairy; they are four inches long, three broad, and grow ſometimes ſingly, ſometimes ſeveral together: the flowers are large, yellow, and ſpotted with black; they ſtand on pedicles, and grow two or three together from the knots on the ſtalk; they are two inches long, and, when expanded, an inch wide at the top: the fruit is compoſed of five ſlender, long capſules, twiſted ſpirally about one another, and reſembles a ſkrew.

The tree is a native of the Eaſt and Weſt Indies. Plumier calls it, Iſora; Van Rheede, Iſora Murri.

*Claſs the Twentieth. Order the Seventh.*

## GYNANDRIA POLYANDRIA.

*Plants which have very numerous ſtamina growing on the ſtyle.*

### GREWIA.

THE ſtigma is ſingle; the calyx is compoſed of five leaves: the corolla conſiſts of five petals, and has a nectariferous ſquamma at the baſe: the fruit is a berry containing four cells.

Of this genus there is only one known ſpecies.

GREWIA.

The root is brachiated and fibrated: the ſhrub grows to ſix feet high: the leaves are of an oval figure, and pointed; three inches long, near two broad, crenated, and of a ſhining green: the flowers ſtand four or five in a cluſter; they are ſmall, greeniſh on the outſide, and white within, and the petals are reflex: the fruit is a ſmall, hairy berry.

It is a native of the Eaſt Indies.

### CALLA.

THE ſpatha is plane: the ſpadix is covered with floſcules: there is no calyx, nor are there any petals: the fruits are berries, each containing many ſeeds.

Theſe characters ſufficiently diſtinguiſh the Calla, without a farther deſcription.

### ARUM.

THE ſpatha is formed of a ſingle leaf, and is of a cucullated form: the ſpadix is naked in the upper part, but on the lower it has female flowers, and in the middle ſtamineous ones.

This genus comprehends the Arum, Ariſarum, Colocaſia, and Dracunculus of authors.

*Arum*

*Arum acaule foliis haſtatis, ſpadice clavato.* **Common Cuckow-pint.**
*The haſtated-leaved Arum, with a clavated ſpadix.*

The root is a roundiſh tuberoſity, of the ſize of a walnut, brown on the outſide, and white within, and lies at ſome depth in the earth: the leaves are four inches long, two and a half broad, haſtated, undivided at the edges, and of a ſtrong green, often ſpotted with black: the ſtem riſes to ſix or eight inches high, and at it's top carries a ſingle ſpatha, which is large and green, often purple within; in this are contained a number of male and female fructifications, with a long, red, or white body riſing above them; when this is fallen, and the ſpatha withered, there appear a number of red berries on the top of the ſtalk.

It is common under our hedges. C. Bauhine calls it, Arum vulgare.

The other ſpecies are, 1. Of thoſe called Arums: 1. The great, white-veined, Italian Arum. 2. The ſpotted-flowered, Arabian Arum. 3. The dwarf, broad-leaved, Ceyloneſe Arum. 4. The many-flowered, Egyptian Arum or Colocaſia. 5. The great, black-ſtalked Arum. 6. The great, nervous-leaved, long-rooted Arum. 7. The white, ſweet-flowered, African Arum. 8. The tall, great-flowered, Indian Arum. 9. The water-lily-leaved, eſculent Arum. 10. The leſſer eſculent Arum, with ſagittated leaves. 11. The white-flowered, great-leaved, climbing Arum. 12. The narrower-leaved, climbing Arum. 13. The Arum, with great ivy-like, perforated leaves. 14. The ſagittated-leaved, arboreſcent Arum. 15. The canna-leaved, cauleſcent Arum. 16. The rigid, narrow, and acuminated-leaved Arum. 17. The great, cordated-leaved, red-rooted Arum. 18. The great, climbing, yellow-flowered Arum. 19. The bifoliate-ſpotted, Arabian Arum, called Ardabar. 20. The ſcorzonera-leaved Arum. 21. The ſhort and narrow-leaved Arum. 22. The very, narrow-leaved Arum.

Of thoſe called Ariſarums are, 1. The great, broad-leaved Ariſarum. 2. The ſhorter-leaved Ariſarum. 3. The great, beaked-flowered Ariſarum. 4. The large, trifoliate Ariſarum. 5. The ſmaller trifoliate Ariſarum. 6. The narrower-leaved Ariſarum.

Of thoſe called Dracunculi are, 1. The common, great garden Dragons. 2. The greater, late-flowering Dragons. 3. The rough-ſtalked, Indian Dragons. 4. The cyclamen-rooted Dragons. 5. The creeping-rooted, polypody-leaved, prickly Dragons. 6. The many-leaved, ſmooth-ſtalked Dragons. 7. The trifid-ſtalked, many-leaved Dragons. 8. The climbing, American Dragons. 9. The climbing, trifoliate Dragons. 10. The dwarf, trifoliate Dragons. 11. The American, colocaſia-leaved Dragons. 12. The long, green, piſtilled Dragons. 13. The quinquifid-leaved, Indian Dragons. 14. The trilobate-leaved, Indian Dragons.

## DRACONTIUM.

THE ſpatha is of the form of a boat; the ſpadix is covered: there is no calyx: the corolla conſiſts of five petals: the berries contain each ſeveral ſeeds.

Theſe characters ſufficiently diſtinguiſh the Dracontium, without a farther deſcription.

## POTHOS.

THE ſpatha is globoſe; the ſpadix is globoſe and covered; there is no calyx: the corolla conſiſts of four petals: the fruit is a berry containing ſeveral ſeeds.

Theſe characters ſufficiently alſo diſtinguiſh the Pothos, without a farther deſcription.

## ZOSTERA.

THE ſpadix is linear, and produces the fructifications only on one ſide; there is no calyx, nor any corolla: the ſtamina ſtand alternately, and the ſeeds are ſolitary.

Theſe characters ſufficiently alſo diſtinguiſh the Zoſtera, without a farther deſcription.

*Claſs the Twenty Firſt.*

## MONÆCIA.

*Plants in which the male and female flowers are placed ſeparately on the ſame plant.*

OF the Monæcia ſome have only one ſtamen, ſome have three, ſome four, ſome five, ſome ſix, and ſome very numerous ones; ſome alſo are monadelphous, or have their ſtamina connected into one body at their baſes; others are Syngeneſious, and others Gynandrous. They may therefore be conveniently arranged, from theſe diſtinctions, into eight ſeparate orders.

*Claſs the Twenty Firſt. Order the Firſt.*

## MONÆCIA MONANDRIA.

*Plants which have the male and female flowers ſeparate, but on the ſame plant; and have only a ſingle ſtamen in the male flowers.*

### CERATOCARPUS.

IN the male flower, the calyx is divided into two parts; there is no corolla: the ſtamen is ſingle, and of a very great length.

In the female flower, the calyx is compoſed of two leaves, and grows to the germen; there is no corolla: the ſtyles are two: the ſeeds are compreſſed and bicornate.

Of this genus there is only one known ſpecies.

#### CERATOCARPUS.

The root is fibrous; the ſtalk is ſlender, erect, ramoſe, and green: the leaves are long, narrow, and graſſy; they are of a pale green, and ſharp-pointed: the male flowers grow three together, in the divarications of the branches; the female flowers ſtand ſingly in the alæ of the leaves, and are each ſucceeded by a ſingle hard ſeed, ſomewhat like that of the bidens.

It is a native of Ruſſia. Buxbaum calls it, Ceratocarpus.

### ZANICHELLIA.

THE male flower conſiſts only of a ſingle ſtamen; it has neither calyx nor corolla: in the female flower, the calyx is compoſed of a ſingle leaf; there is no corolla: the germina are about four, and the ſeeds are as many.

This genus comprehends the Alyoides of Vaillant, the Aponogeton of Pontedera, and the Graminifolia of Dillenius.

*Zonichellia foliis longioribus.*
*The longer-leaved Zonichellia.*

The root is compoſed of a great cluſter of whitiſh, ſlender, long fibres: the plant grows to eight or ten inches high: the ſtalk is round, ſlender, jointed, and weak: the leaves ſtand alternately, one at each joint; they are three or four inches long, very narrow, of a duſky green colour, and tender: toward the tops of the ramifications they are ſhorter and more numerous: the flowers are ſmall and whitiſh.

It is an inhabitant of the freſh water rivers and ditches in moſt parts of Europe; we have it in Lincolnſhire in many places. Dillenius calls it, Graminifolia; C. Bauhine, Potamogeiton capillaceum capitulis ad alas trifidis. There is but one other known ſpecies of this genus, which is the ſhorter, graſſy-leaved Zonichellia.

### CYNOMORIUM.

IN the male flower, the calyx is an amentum, of an imbricated form; there is no corolla: in the female flower, the calyx is in the ſame amentum with the male; there is no corolla: the ſtyle is ſimple, and the ſeed is ſingle and roundiſh.

20

Cypripedium

Passiflora

Bermudiana

Orchis

Pistia 21

Coix

Jatropha

Cucurbita

Helicteres

Ricinus

Bryonia

Sparganium

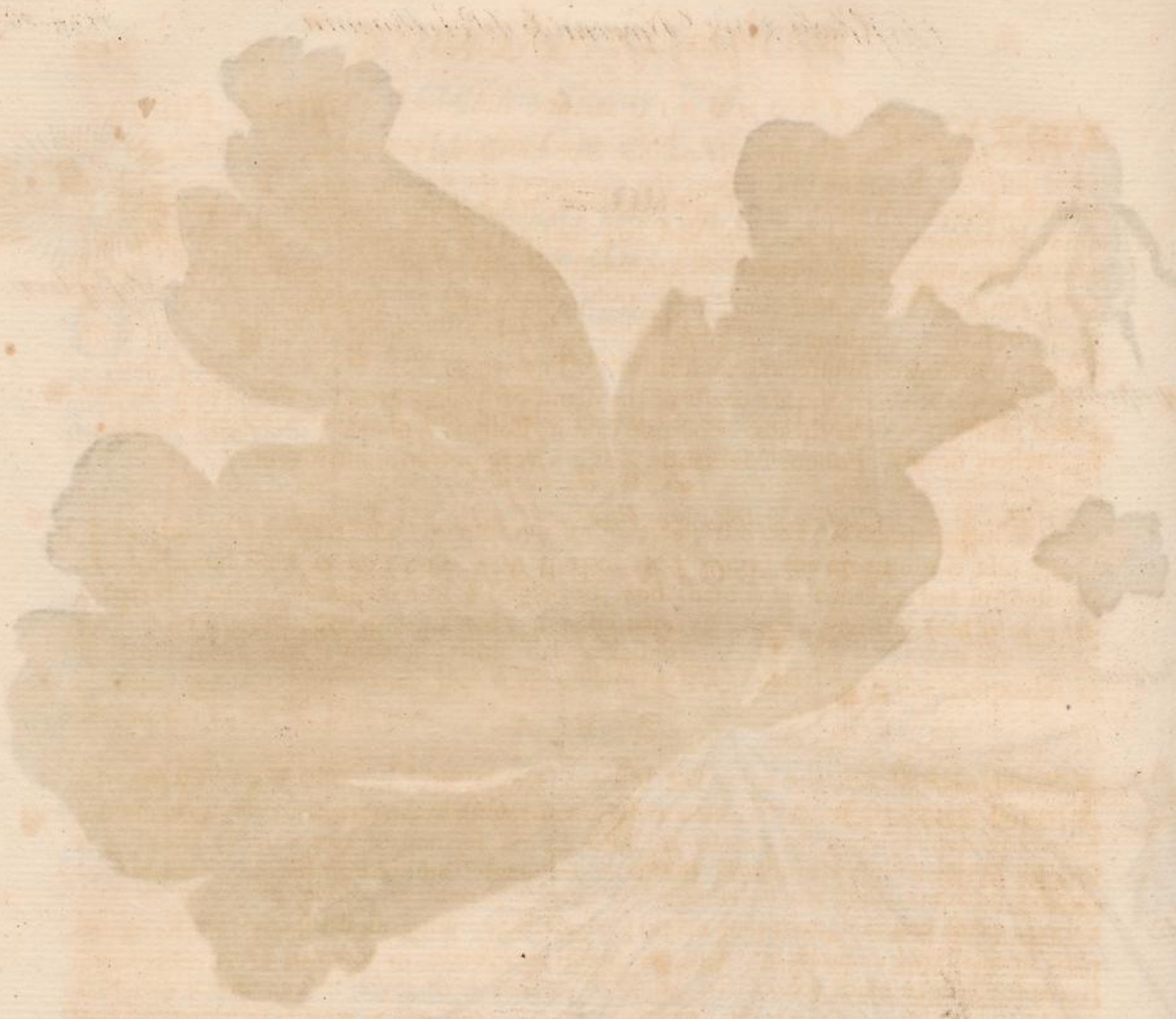
Phyllanthus

Cynomorion

Sicyos

Momordica

B. Cole Sculp.



## CYNOMORIUM. Malteſe Fungus.

The Cynomorium has properly neither root nor leaves: it grows to the roots of ſeveral different ſhrubs and plants, in the manner of the broom-rape. It affixes itſelf to theſe by a roundiſh thick baſe, and leaves a hollow on the root, when taken off. It grows to ſeven or eight inches high, and is often three quarters of an inch in diameter, uſually bent two or three times, very rarely quite ſtrait: it's lower part is thick, covered with ſhort, oval, pointed ſquammæ; it's upper part, for two thirds of the whole plant, has theſe ſquammæ leſs numerous, and often emarginated, and is loaded with flowers which are minute, and ſoon fall off. The whole plant is a fine ſcarlet colour.

It is frequent about the ſea-coaſts of the iſland of Malta, growing to the roots of different plants as well as ſhrubs. Boccone calls it, Fungus typhoides, coccineus, Melitenſis; others ſimply, Fungus Melitenſis. It is a very powerful aſtringent.

*Claſs the Twenty Firſt. Order the Second.*

# MONÆCIA TRIANDRIA.

*Plants which have ſeparate male and female flowers on the ſame plant, and have in each of the male flowers three ſtamina.*

## ZEA

IN the male flower, the calyx is a biflorous glume, and has no ariſtæ or awns: the corolla is alſo a glume without awns. In the female flower, the calyx is a glume, formed of two valves; the corolla is alſo a glume, formed of two valves: the ſtyle is ſimple, filiform, and pendulous: the ſeeds are ſingle, and are immerſed in a long receptacle.

The male flowers are arranged in lax and looſe ſpikes, and ſtand on the upper parts of the plants: the female flowers ſtand in thick, compact ſpikes, covered with leaves below the others.

This genus comprehends the Mays of Tournefort, the Indian wheat of authors. There is but one known ſpecies of it, though authors, from it's varieties, have made ſeveral imaginary ones.

### ZEA. Indian Corn.

The root is fibrous; the plant grows to eight or ten feet high: the ſtalk is an inch, or more, in diameter, erect, robuſt, and ſucculent: the leaves are very numerous, two feet, or more, in length, of a bright graſſy green, narrow, and pointed at the extremities: on the upper part of the ſtalk ſtand long, looſe ſpikes, or light ears, of a whitiſh colour, containing the male flowers; and in different parts, lower down, ſtand the ſpikes of female flowers, which are ſucceeded by the ſeeds; theſe are large and preſſed cloſely together, forming a very long and thick ear or ſpike: the moſt natural colour of the ſeeds is yellowiſh, but they vary extreamly in this, and are ſometimes violet-coloured, ſometimes bright red, ſometimes black, ſometimes quite white: the ſpikes of male flowers are alſo ſometimes yellow, ſometimes red, ſometimes blue, and ſometimes variegated with two, or more, of theſe colours: the plant is evidently the ſame under all theſe variations, which are no more than the change of colour in our garden-beans, ſome of which will be purple, others white, on the ſame plant; yet have all theſe been made diſtinct ſpecies by authors, under the names of Mays granis violaceis, Mays ſpica cærulea, &c.

## COIX.

THE male flowers are formed into a lax ſpike; the female ones are few in number, and are ſituated at the baſe of the male ſpike.

In the male flowers, the calyx is a glume, containing two flowers, and has no awns: the corolla alſo is a glume, without any ariſtæ or awns. In the female, the calyx is alſo a glume, containing two flowers; and the corolla is a glume without any ariſtæ: the ſtyle is divided into two parts; and the ſeed is covered by the indurated calyx. This genus comprehends the Lachryma Job of Tournefort and others.

*Coix*

*Coix ſeminibus ovatis.*
*The oval-ſeeded Coix.* **Job's Tears.**

The root is fibrous: the plant grows to three feet high: the ſtalk is round, ſlender, and jointed; the leaves are graſſy, a foot and half long, and two inches wide: the flowers ſtand in the alæ of the leaves; the ſpikes are ſlender and ſtamineous, and at their bottom there are ſometimes two ſeeds, more frequently only one; they are large, beautiful, hard, of a fine poliſh, and of a purpliſh colour.

It is a native of North America. C. Bauhine calls it, Lithoſpermum arundinaceum; others, Lachryma Job.

The other ſpecies are, 1. The broader-leaved Coix. 2. The tall, red-leaved Coix.

## CAREX.

IN the male flowers, the amentum is imbricated; the calyx is compoſed of a ſingle leaf, and there is no corolla. In the female flowers, the amentum is alſo imbricated; the calyx is compoſed of a ſingle leaf, and there is no corolla; but in theſe the nectarium is tridentated and inflated: the ſtigmata are three; and the ſeed is of a triquetrous form, and is ſituated within the nectarium.

This genus comprehends the Cyperoides of Tournefort, and the Scirpoides of Mont. the carex of Dillenius.

*Carex ſpicis fœmineis pendulis brevioribus.*
*The Carex, with the female ſpikes pendulous and ſhort.* **Short-ſpiked Cyperus Graſs.**

The root is compoſed of a great cluſter of black, tough fibres: the leaves are two feet, or more, in length, carinated, edged, and pointed at the ends, and of a yellowiſh-green colour: the ſtalk is two or three feet high; it is triangular and ſharp: on it's top it produces a number of pendulous ſpikes, an inch and a half in length, and conſiderably thick, and of a yellowiſh colour, with a ſteril, duſky ſpike of male flowers, and hermaphrodite ones at the top.

It is common about the ſides of ponds. C. Bauhine calls it, Gramen cyperoides ſpica pendula breviore, to diſtinguiſh it from another ſpecies, which has much longer pendulous ſpikes.

The other ſpecies of Carex are, 1. The broad-leaved, brown-ſpiked Carex. 2. The great, broad-leaved, greeniſh brown-ſpiked Carex. 3. The little, narrow-leaved, greeniſh-ſpiked Carex. 4. The Carex, with very long and ſlender pendulous ſpikes. 5. The ſhort-headed, aculeated Carex. 6. The ſhort-headed, not aculeated Carex. 7. The many-ſpiked, woolly Carex. 8. The rounded, oblong, erect-ſpiked Carex. 9. The great, black, and yellow-headed, vernal Carex. 10. The leſſer, black, and yellow-headed Carex. 11. The Carex, with numerous, yellow ſpikes on the top of the ſtalk. 12. The Carex, with ſhort ſpikes very diſtant from one another. 13. The ſlender-ſpiked, wood Carex. 14. The little, white, many-ſpiked Carex. 15. The narrow-leaved Carex, with ſeſſile ſpikes in the alæ of the leaves. 16. The ſmall, thick-ſpiked Carex. 17. The veſicated-ſpiked, larger Carex. 18. The veſicated-ſpiked, ſmaller Carex. 19. The long-ſpiked Carex, with long, nutant pedicles. 20. The long, yellow ſpiked Carex.

## SPARGANIUM.

THE male flowers have a roundiſh amentum; the calyx is formed of two leaves, and there is no corolla. In the female flowers, the amentum is alſo roundiſh; the calyx is compoſed of three leaves, and there is no corolla: the ſtigma is bifid; and the fruit is a dry drupe, containing two ſeeds.

*Sparganium foliis adſurgentibus triangularibus.*
*The Sparganium, with aſſurgent, triangular leaves.* **Common Burreed.**

The root is compoſed of a number of long and thick fibres: the leaves are numerous, two feet long, half an inch broad, triangular, and of a bright green: the ſtalk is round, thick, tender, and two feet, or more, in height; at it's top ſtand a number of

of round clusters of flowers; they are white and small: the fruit, when ripe, is round, of the bigness of a large nutmeg, and echinated.

The plant is common with us about waters. The stalk is sometimes simple, sometimes ramose; and authors have hence erroneously divided it into two species, under the names of Sparganium ramosum, and Sparganium non ramosum.

## TYPHA.

THE male flowers are arranged into a cylindric amentum: the calyx is composed of three leaves, and there is no corolla. The female flowers form also a cylindric amentum, below the male ones: the calyx has a hairy capillament; there is no corolla: the seed is single; the seta stands on capillary pappus.

Of this genus there is but one known species.

### TYPHA.

The root is oblong, creeping, and fibrated: the plant grows to six or eight feet high: the stalk is round, thick, smooth, glossy, firm, and solid, and is jointed at considerable distances: the leaves are grassy, two feet, or more, in length, and not more than an inch broad, triangular, and edged in such a manner, that they will cut the hands on drawing through them; they are thick and spungy, and surround the stalk a great way at their base: the top of the stalk is ornamented with an oblong, reddish, compact, cylindric spike, containing the seeds, with a large quantity of down: the spike, containing the male flowers, stands above this, and is light and slender.

It is common in our ditches. C. Bauhine calls it, Typha palustris major. It varies in it's size, and in the thickness of the spike; and authors have hence made two other imaginary species.

## PHYLLANTHUS.

IN the male flowers, the calyx is divided into three parts, and is of a campanulated figure, and there is no corolla. In the female flowers, the calyx is also divided into three parts, and there is no corolla; the styles are three and bifid: the fruit is a capsule containing three cells; the seeds are single.

*Phyllanthus foliis ovatis, caudice arboreo.*
*The oval-leaved, shrubby Phyllanthus.*

The root is brachiated: the shrub grows to five or six feet high, and it's trunk to the thickness of a man's thumb: the branches are numerous, and very slender; the leaves are oval, and placed alternately; they are three quarters of an inch long, near half an inch broad, obtuse, even at the edges, and of a pale green: the flowers are small and white; they stand separately on slender, reddish pedicles, half an inch, or more, in length: the fruit is a little roundish capsule, with six seeds.

It is common in the East Indies in watery places. Van Rheed calls it, Niruri.

The other species are, 1. The herbaceous-stalked, pinnated-leaved Phyllanthus. 2. The larger-flowered Phyllanthus.

## TRAGIA.

IN the male flowers, the calyx is divided into three parts, and there is no corolla. In the female flowers also, the calyx is divided into three parts, and there is no corolla: the style is divided into three parts; and the fruit is a capsule of a tricoccous form, containing three cells, and in each a single seed.

It is an American, described by Plumier, 12. These characters sufficiently distinguish it, without a farther description.

## AXYRIS.

IN the male flowers, the calyx is composed of four leaves, and there is no corolla. In the female flowers, the calyx is composed of four leaves, and obtuse; there is no corolla: the styles are two, and the seed is single and roundish.

These characters sufficiently distinguish the Axyris, without a farther description.

*Claſs the Twenty Firſt. Order the Third.*

## MONÆCIA TETRANDRIA.

*Plants which have ſeparate male and female flowers on the ſame plant, and have in each of the male flowers four ſtamina.*

### URTICA.

IN the male flowers, the calyx is compoſed of four leaves, and there is no corolla: the nectarium is ſituated in the center, and is of the figure of a cup. In the female flowers, the calyx is formed of two valves: there is no corolla, and the ſeed is ſingle.

*Urtica foliis oppoſitis, amentis fructiferis globoſis.*
*The oppoſite-leaved Urtica, with the fructiferous amenta globoſe.*

**The Roman Nettle.**

The root is creeping and fibrated: the plant grows to three feet in height: the ſtalk is erect, thick, firm, of a deep green colour, and hairy: the leaves ſtand in pairs, oppoſite to one another; they are two inches and a half long, two inches broad, pointed at the extremity, and deeply ſerrated about the edges: the male flowers are ſmall and greeniſh, or yellowiſh: the fruit is large, rounded, and reſembles little balls: the plant is all over hairy, and ſtings on the touch, in the manner of the common Nettle, only more violently.

It is a native of ſome parts of England, and is kept in our gardens. C. Bauhine calls it, Urtica urens pilulas ferens; Lobel and others, Urtica Romana.

The other ſpecies are, 1. The tripartite-leaved, tall, Siberian Urtica. 2. The common, tall Urtica. 3. The little, annual Urtica. 4. The great, racemous, Canada Urtica. 5. The myrrhis-leaved, Canada Urtica. 6. The great, hazel-leaved Urtica. The leſſer, Roman Nettle, called Urtica pilulifera parietariæ foliis, is only a variety of the other.

### BUXUS.

IN the male flowers, the calyx is formed of two leaves: the corolla conſiſts of two petals, and there are in it the rudiments of a germen.

In the female flowers, the calyx conſiſts of four leaves; the corolla of three petals: the ſtyles are three; the fruit is a capſule, with three beaks, and contains three cells, with two ſeeds in each.

Of this genus there is but one known ſpecies, though authors have divided it, from it's varieties, into ſeveral.

BUXUS. **The Box-ſhrub.**

The root is brachiated: the ſhrub retains it's leaves all the winter: it grows to two feet in height, ſometimes to a great deal more: it's trunk is thick and robuſt; it's branches numerous: it's bark is rough and whitiſh; it's wood is yellow, and very firm: the leaves are ſhort, obtuſe, and of a deep green colour: the flowers are ſmall and yellow: the fruit is a dry capſule, of the bigneſs of a ſmall pea.

It is wild in many parts of England. C. Bauhine calls it, Buxus arboreſcens.

### ALNUS.

IN the male flowers, the calyx conſiſts of a ſingle leaf, divided into four ſegments at the extremity, and contains three flowers: the corolla is compoſed of a ſingle petal, divided into four parts. In the female flowers, the calyx is formed of a ſingle leaf, and divided into five ſegments; it contains two flowers: the fruit is a roundiſh cone, and the ſeeds are angulated.

Of this genus there is but one known ſpecies.

## ALNUS. The Alder-tree.

The root is brachiated and ſpreading: the tree riſes to twenty-five feet high, or more, ſometimes with a ſingle trunk, but more uſually with a number of ſhoots together: the bark is ſmooth and purpliſh; the leaves are roundiſh, of a duſky green colour, two inches, or more, in diameter, and glutinous to the touch: the flowers are ſmall and greeniſh: the fruit is a little cone, ſcarce ſo large as a nutmeg.

The ſhrub is common with us by waters. C. Bauhine calls it, Alnus rotundifolia glutinoſa viridis. It's leaves are uſually even at the edges, but ſometimes they are curled, or undulated, ſometimes ſerrated a little, and ſometimes they are rather oblong than roundiſh: authors who have obſerved theſe ſeveral varieties have raiſed them to ſpecies, and made eight or ten Alni out of one.

## BETULA.

IN the male flower, the calyx is formed of a ſingle leaf, and is divided into three ſegments, and contains three flowers: the corolla is formed of a ſingle petal, divided into four parts. In the female flower, the calyx is alſo formed of a ſingle leaf, and is lightly divided into three ſegments, but it contains only two flowers: the fruit is a cylindric cone: the ſeeds are on each ſide edged with a membrane.

*Betula foliis acuminatis ſerratis.* The Birch-tree.
*The Betula, with pointed, ſerrated leaves.*

The root is large and ſpreading: the tree uſually grows with a regular trunk, to a conſiderable height: the branches are numerous; the young ſhoots ſlender, tough, and depending; the bark of theſe is purpliſh; that of the trunk whitiſh: the leaves ſtand on long pedicles; they are of a roundiſh figure, but terminate in a point, ſerrated, of a deep green colour, and about two inches in diameter: the male flowers hang in iuli, or katkins: the fruit is a cone, of a cylindric figure, and ſmall.

It is common in our woods. C. Bauhine and others call it, ſimply, Betula.

*Claſs the Twenty Firſt. Order the Fourth.*

## MONÆCIA PENTANDRIA.

*Plants with male and female flowers ſeparate on the ſame plant, and with five ſtamina.*

## XANTHIUM.

IN the male flower, the common calyx is imbricated; the corolla is compoſed of a ſingle petal, divided into five ſegments, and of an infundibuliform ſhape: the receptacle is paleaceous. In the female flower, the calyx is an involucrum, formed of two leaves, and containing two flowers: there is no corolla: the fruit is a dry, muricated drupe, divided into two parts, containing two cells, and in each a ſingle ſeed.

*Xanthium caule inermi.* The leſſer Bur-dock.
*The not prickly ſtalked Xanthium.*

The root is oblong, ſmall, white, and fibrated: the plant riſes to two feet high: the ſtalk is thick, hairy, but not prickly, and is uſually ſpotted: the leaves ſtand on long pedicles; they are large, roundiſh, crenated, and uſually reddiſh; they are ſoft to the touch, and hairy: the male flowers are ſmall and whitiſh; they ſtand in cluſters in the alæ of the leaves: the fruit is oblong and echinated, and ſticks to any thing it touches, in the manner of the common burs of the Bur-dock, whence the Engliſh name.

It is wild in ſome parts of England, but is not common; I met with it this laſt ſummer in Lincolnſhire. C. Bauhine calls it, Lappa minor, Xanthium Dioſcoridis.

The other ſpecies are, 1. The great, crooked-ſpined, American Xanthium. 2. The prickly, jagged-leaved Xanthium.

## AMBROSIA.

IN the male flower, the common calyx is formed of a ſingle leaf: the corollæ are each formed of a ſingle petal, of an infundibuliform ſhape, and divided into five ſegments: the receptacle is naked. In the female corolla, the calyx is formed of a ſingle leaf, and has five indentings on the belly; it contains only a ſingle flower: there is no corolla: the fruit is a nut, formed of the indurated calyx, and containing only one ſeed.

*Ambroſia foliis trilobis ſerratis.*
*The trilobate, ſerrated-leaved Ambroſia.*

**Plane-tree-leaved Ambroſia.**

The root is oblong, white, and fibrated: the ſtalk is robuſt, hairy, and firm: the plant grows to five feet high: the leaves are large and palmated, or deeply divided into three long, lanceolated ſegments; theſe are ſerrated, and the whole leaf is hairy: the flowers are greeniſh and ſmall; they ſtand in long, ſlender ſeries.

It is a native of Virginia. Ray calls it, Ambroſia inodora foliis aſperis trifidis.

The other ſpecies are, 1. The common Ambroſia. 2. The tall, mugwort-leaved, ſcentleſs Ambroſia.

## PARTHENIUM.

IN the male flower, the common calyx conſiſts of five leaves, and the corollulæ of the diſk are formed each of a ſingle petal. In the female flower, the corollulæ of the radius are five, two on each ſide, and a female one in the middle, ſituated on a ſingle, naked ſeed.

This genus comprehends the Partheniaſtrum of Niſſole, the Hyſterophorus of Vaillant, and the Tarchonanthus of the ſame and ſome other authors.

*Parthenium foliis compoſito-multifidis.*
*The compoſito-multifid-leaved Parthenium.*

**American Feverfew.**

The root is fibrous and white: the plant grows to two feet high: the ſtalk is erect, robuſt, and ramoſe: the leaves are large, finely divided, and ſomewhat reſemble thoſe of the common wormwood: the flowers are ſmall and white.

It is a native of Jamaica. Vaillant calls it, Hyſterophorus ambroſiæ folio.

The other ſpecies are, 1. The broad-leaved Parthenium; and, 2. The larger-flowered Parthenium.

## IVA.

IN the male flower, the common calyx is formed of three leaves: the corollulæ of the diſk are formed each of a ſingle petal, divided into five ſegments: the receptacle is hairy. In the female flower, the floſcules of the radius are five: there is no corolla: the ſtyles are two, and long: the ſeed is naked and obtuſe.

*Iva foliis lanceolato-ovatis ſerratis caule annuo.*
*The annual-ſtalked Iva, with lanceolato-ovate, ſerrated leaves.*

The root is oblong, annual, and white: the plant riſes to five feet high: the ſtalk is erect, robuſt, ſtriated, and hairy: the leaves ſtand on long pedicles; they are placed oppoſite, toward the bottom, and alternately toward the top of the ſtalk, and are ſerrated, and of a deep green colour: the top of the plant is terminated by a cluſter of flowers, which ſtand alternate, with floral leaves under them.

It is a native of America. Juſſieu makes it a Tarchonanthus; and Van Royen calls it, Tarchonanthus foliis cordatis ſerratis trinerviis; B. Juſſieu.

The other ſpecies are, 1. The perennial, large-flowered Iva. 2. The divided-leaved Iva.

AMARANTHUS.

## AMARANTHUS.

IN the male flower, the calyx is formed of three, or of five, leaves: there is no corolla: the ſtamina are equal in number to the leaves of the cup; they are three or five. In the female flower, the calyx is compoſed of three, or of five, leaves: there is no corolla: the ſtyles are three: the fruit is a capſule, containing only one cell, and opening horizontally.

*Amaranthus racemis cylindraceis pendulis longiſſimis.*
*The Amaranthus, with very long, pendulous, cylindric cluſters.* **Great Amaranth.**

The root is white and fibrated: the plant grows to five feet high: the ſtalk is thick, furrowed, ramoſe, and uſually reddiſh: the leaves are very large, oblong, ſcabrous, pointed at the extremity, and uſually variegated with green and red: the flowers ſtand in long cluſters, five or ſix inches, ſometimes a foot, in length, growing from the alæ of the leaves; they are purpliſh, and the ſtamina yellow.

It is a native of Perſia and of South America. C. Bauhine calls it, Amaranthus maximus. It varies extremely by culture, and has hence been divided by authors into a number of imaginary ſpecies.

The more certainly diſtinct are, 1. The green-ſpiked, North American Amaranthus, 2. The narrower-leaved, ſhorter-cluſtered Amaranthus. 3. The prickly, Eaſt-Indian Amaranthus. 4. The broad-leaved Amaranthus.

*Claſs the Twenty Firſt. Order the Fifth.*

## MONÆCIA HEXANDRIA.

*Plants with male and female flowers on the ſame plant, and with ſix ſtamina in the male flower.*

## ZIZANIA.

IN the male flower, there is no calyx: the corolla is a glume, formed of two valves; theſe have no ariſtæ, or awns, and are mixed among the female flowers. In the female flower, there is no calyx: the corolla is a glume, formed of a ſingle valve, of a cucullated form, and terminated by an ariſta, or awn: the ſtyle is divided into two parts: the ſeed is ſingle, and is placed in the bottom of the corolla, which opens horizontally to let it out.

It is a native of Virginia, Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

*Claſs the Twenty Firſt. Order the Sixth.*

## MONÆCIA POLYANDRIA.

*Plants with male and female flowers on ſeparate parts of the ſame plant, and with numerous ſtamina.*

## POTERIUM.

IN the male flower, the calyx is compoſed of four leaves: the corolla is formed of a ſingle petal, divided into four ſegments: the ſtamina are from thirty to forty: the calyx of the female flower is compoſed of four leaves: the corolla is formed of a ſingle petal, and divided into four ſegments: the piſtils are two: the fruit is a berry, the outer cruſt of which is formed of the indurated tube of the corolla.

This genus comprehends the Pimpinella of Tournefort and others.

*Poterium inerme filamentis longissimis.*
*The smooth Poterium, with very long filaments.* **Burnet.**

The root is oblong, slender, and brown: the stalks are angular, brown, and a foot, or more, in height: the leaves are pinnated; the pinnæ are numerous, short, and serrated round the edges: the flowers are purplish; the antheræ yellow: the flowers are collected into little, roundish, or oval, heads, and the filaments sometimes hang down to an inch in length from them.

It is frequent in dry pastures. C. Bauhine calls it, Pimpinella, sive Sanguisorba minor.

The other species are, 1. The greater Burnet. 2. The tall, auriculated-leaved Poterium. 3. The long-spiked, American Poterium. 4. The agrimony-leaved, scented Poterium. 5. The larger, short-spiked, white-flowered Poterium. 6. The evergreen, prickly Poterium.

## SAGITTARIA.

THE calyx of the male flower is formed of three leaves: the corolla is formed of three petals, and the stamina are about four-and-twenty: the calyx of the female flower is formed of three leaves, and the corolla of three petals: there are no pistils: the seeds are numerous and naked.

*Sagittaria foliis sagittatis.*
*The arrow-headed-leaved Sagittaria.* **Water Arrow-head.**

The root is oblong, divaricated, oblique, white, fungous, and fibrated; from this rise stolones, of the thickness of a rush, and of two or three feet long, taking root in several places: the leaves are three or four inches long, sagittated at the base, pointed at the extremity; they float on the surface of the water, and are affixed to long pedicles: the stalks are little taller than the leaves; they are nearly round, striated, thick, and fungous: the flowers are beautiful and white; they stand usually three together, and are ornamented in the center with a number of purple antheræ.

It is common in shallow waters. C. Bauhine calls it, Sagitta aquatica latifolia. It varies greatly in size, and in the shape of the leaves; and authors have hence distinguished it into several species, under the names of Sagitta latifolia, and anguſtifolia; Sagitta major, Sagitta minor, and the like.

## MYRIOPHYLLUM.

THE male flower has the calyx formed of four leaves: there is no corolla: the stamina are eight: the calyx of the female flower is composed of four leaves: there is no corolla: the pistils are four; there are no styles: the fruit is composed of four naked seeds.

*Myriophyllum floribus omnibus verticillatis.*
*The Myriophyllum, with all the flowers verticillate.* **Small, water Milfoil.**

The root is fibrous: the branches spread upon the surface of the mud, and take root in different places: the stalks that are erect rise to two or three inches above the surface of the water: the leaves are pinnated, and the pinnæ very fine and slender; five leaves usually stand at a joint; they are largest at the bottom, and smaller all the way up, so that they give the whole plant a pyramidal form: the flowers stand principally on that part of the stalk that is out of the water; they are small and whitish, and stand in round clusters, at distances, above one another.

It is common in shallow waters. C. Bauhine calls it, Millefolium aquaticum flosculis ad nodos.

The other species are, 1. The larger, water Milfoil. 2. The broad-leaved, water Milfoil.

CERATO-

## CERATOPHYLLUM.

THE calyx of the male flower is divided into ſeveral ſegments: there is no corolla: the ſtamina are from ſixteen to twenty in number. The calyx of the female flower is divided alſo into ſeveral ſegments: there is no ſtyle: the ſeed is ſingle and naked.

This genus comprehends the Hydroceratophyllon and Dichotophyllum of authors.

Of this genus there is but one known ſpecies.

### CERATOPHYLLUM.

The root is fibrous: the plant grows to a foot, or more, in length, and is uſually wholly immerſed in the water: the leaves are numerous, and are each divided into four, or into eight, ſegments; they are harſh to the touch, and of a duſky green colour: the tops of the plant look larger than any other part, and the flowers, which are ſmall and greeniſh, ſtand there in the alæ of the leaves.

It is common in ſhallow waters. Tournefort calls it, Hydroceratophyllon folio aſpero quatuor cornibus armato; and a variety of it, Hydroceratophyllum folio lævi octo cornubus.

## QUERCUS.

THE calyx of the male flower is divided into five ſegments at the the top: there is no corolla: the ſtamina are from five to ten in number. The calyx of the female flower is formed of a ſingle leaf, undivided at the edge, and rough: there is no corolla: the ſtyles are from two to five: the ſeed is ſingle, large, and oval.

*Quercus foliis anguſtis acutis.* **The Willow-leaved Oak.**
*The narrow-leaved Oak.*

The root is large and brachiated: the tree grows to a vaſt height and ſize: the bark is brown and rough; the wood extremely firm and ſolid: the leaves ſtand very thick on the branches; they are four or five inches long, not more than half an inch broad, undivided, and pointed at the ends, and very much reſemble thoſe of the common, long-leaved willow: the flowers are ſmall and browniſh: the fruit is a large acorn.

It is a native of America. Plukenet calls it, Quercus ſalicis folio.

The other ſpecies are, 1. The common Oak. 2. The broad-leaved, ever-green Oak. 3. The cheſnut-leaved Oak. 4. The broad and ſhort-leaved, Oak, called the black Oak. 5. The deeply-ſinuated, or Spaniſh, Oak. 6. The prickly-leaved, American Oak. 7. The more ſlightly-ſinuated, prickly, American Oak. 8. The dwarf Oak, the Fagus and Eſculus of the antients. 9. The echinated-cupped Oak. 10. The African Oak, with long acorns. 11. The little, ſhort-leaved Oak.

Theſe are all called Quercus and Oaks by authors, but the Ilex and Suber are alſo of this genus.

Of the Ilex kind there are, 1. The oblong and ſerrated-leaved Ilex. 2. The narrow, undivided-leaved Ilex. 3. The roundiſh, ſoft-leaved Ilex. 4. The holly-leaved Ilex. 5. The woolly-leaved Ilex. 6. The narrower-leaved, ſerrated Ilex. 7. The broad-leaved, ſpungy, barked Ilex, or Cork-tree. 8. The narrow-leaved Cork-tree.

## JUGLANS.

THE calyx of the male flower is formed of a ſingle leaf, and is of the ſhape of of a ſquamma, or ſcale: the corolla is divided into ſix parts, and the ſquammæ are eighteen in number. In the female flower, the calyx is divided into four ſegments, and ſituated upon the germen: the corolla is divided into four parts: the ſtyles are two: the fruit is a drupe, with a ſulcated kernel.

*Juglans*

*Juglans foliis ovalibus, glabris, obſolete ſerratis, omnibus ſubæqualibus.*
*The oval, ſmooth, obſoletely ſerrated-leaved Juglans, with all the leaves nearly equal.*

Common Walnut.

The root is brachiated and ſpreading: the tree grows to a conſiderable height, and is very ramoſe and diffuſe, from a third of it's height upwards: the leaves are pinnated; the pinnæ are large, oval, of a faint green colour, and obſcurely ſerrated: the male flowers hang down in long catkins: the fruit is large, and covered with a fleſhy rind, of a very diſagreeable taſte.

It is a native of Germany; we have it every-where in gardens. C. Bauhine calls it, Nux Juglans, ſive Regia vulgaris.

The other ſpecies are, 1. The laciniated-leaved Juglans. 2. The ſerrated-leaved Juglans. 3. The lanceolato-leaved, ſerrated Juglans, or Virginian, black Walnut. 4. The broader and ſhorter-leaved Juglans. 5. The long, narrow, and undivided-leaved Juglans. 6. The narrow, ſerrated-leaved Juglans.

## FAGUS.

THE calyx of the male flower is of a campanulated figure, and divided into five ſegments: there is no corolla: the ſtamina are twelve in number. The calyx of the female flower is indented in four places at the rim: there is no corolla: the ſtyles are three: the fruit is a muricated capſule, formed of what was the calyx; it is compoſed of four valves, and contains two ſeeds.

This genus comprehends the Fagus and the Caſtanea of authors.

*Fagus foliis lanceolatis acuminate ſerratis.*
*The lanceolate and acuminately ſerrated-leaved Fagus.*

The common Cheſnut-tree.

The root is brachiated, large, and ſpreading: the tree is moderately tall, ramoſe, and diffuſe: the leaves are oblong, pointed at the ends, of a bright green colour, and deeply and ſharply ſerrated: the male flowers hang in a kind of catkins; the female flowers ſtand in the gemmæ, and are ſucceeded by large, echinated fruits, within which are contained the cheſnuts that we eat.

It is a native of Italy, France, and Germany. C. Bauhine calls it, Caſtanea ſativa.

The other ſpecies are, 1. The dwarf, racemous Fagus. 2, The large-leaved, American Fagus. 3. The common Fagus, or Beech-tree.

## CORYLUS.

THE calyx of the male flower is compoſed of a ſingle leaf, divided into three ſegments, and of a ſquammoſe figure; the flower contained in it is but one: there is no corolla: the ſtamina are eight. In the female flower, the calyx is formed of two leaves, and lacerated: there is no corolla: the ſtyles are two, and the fruit is an oval nut: the male flowers are diſpoſed in form of a long catkin; the female ones are ſeſſile, and included in a gemma, on a different part of the ſhrub.

*Corylus ſtipulis ovatis obtuſis.*
*The Corylus, with obtuſe, oval ſtipulæ.*

The Hazel.

The root is brachiated, fibrated, and diffuſe: the ſhrub grows to ten or fifteen feet high: the leaves are of a roundiſh figure, rugoſe, and ſerrated at the edges: the fruit is a nut of an obtuſe, oval figure, included at it's baſe in a cloſe huſk.

It is common in our hedges. C. Bauhine and others call it, Corylus ſylveſtris.

Culture produces from this the ſeveral kinds of filbert, or Corylus ſativa, which, though no more than varieties, are deſcribed as ſpecies by too many authors. The really diſtinct ſpecies are, 1. The dwarf Corylus; and, 2. The cluſter-fruited Corylus,

## CARPINUS.

THE calyx of the male flower conſiſts of a ſingle leaf, and is a ciliated ſquamma or ſcale; there is no corolla: the ſtamina are twenty in number. The calyx of the female flower conſiſts of a ſingle leaf, and is alſo a ciliated ſquamma; there is no corolla: the germina are two: the ſtyles of each are two; the fruit is an oval nut.

The male flowers are arranged into a cylindric amentum; the female into an oblong one.

*Carpinus ſquammis ſtrobilorum planis.* **The Horn-beam-tree.**
*The Carpinus, with the ſquammæ of the ſtrobili plane.*

The root is ſpreading; the tree grows to a very conſiderable height and ſize; the bark is whitiſh and ſmooth; the wood white and firm: the leaves are two inches and a half long, and near two inches broad, ſharply ſerrated, and terminate in a point; they are of a bright green and ſmooth: early in ſpring there are catkins hanging from the branches: the fruit is oblong, and ſomewhat pyramidal.

It is a native of moſt parts of Europe. C. Bauhine calls it, Oſtrya ulmo ſimilis.

The other ſpecies are, 1. The broader-leaved Carpinus. 2. The large, ſhort-fruited Carpinus.

## PLATANUS.

THE calyx of the male flowers is a catkin of a roundiſh figure; the corolla is ſcarce viſible: the antheræ grow round a filament. In the female flowers, the calyx is alſo a globoſe amentum: the corolla conſiſts of ſeveral petals; the ſtyles have reflex ſtigmata: the ſeeds are numerous, and are mucronated with the ſtyle, and pappous at the baſe.

*Platanus foliis palmatis.* **The Oriental Plane-tree.**
*The palmated-leaved Platanus.*

The root is brachiated; the tree grows to a very conſiderable ſize, and is ramoſe and ſpreading: the bark is ſmooth; the wood firm and pale-coloured: the leaves are very large, of a palmated figure, and divided into ſix or ſeven parts at the edge; they ſtand on moderately long pedicles: the fruit is a round, rough ball, of the bigneſs of a large nutmeg.

It is a native of the Eaſt. C. Bauhine and others call it, Platanus orientalis.

The other ſpecies are, 1. The ſmaller and more deeply divided-leaved Platanus. 2. The lobated-leaved Platanus.

## LIQUID AMBAR.

THE common calyx of the male flowers is formed of four leaves; there is no corolla: the ſtamina are very numerous, ſlender filaments. The calyces of the female flower are collected into a kind of globe; each of them conſiſts of four leaves; there is no corolla: the ſtyles are two; the fruit is compoſed of a number of bivalve capſules, formed into a globular body, and each containing ſeveral ſeeds.

There is but one known ſpecies of this genus.

### LIQUID AMBAR.

The root is brachiated and ſpreading; the tree grows to a vaſt ſize; the leaves are of a very regular and beautiful figure, of the breadth of a man's hand, and divided into ſeveral lobes at the end, in the manner of thoſe of the maple: the flowers are ſmall; the fruit is an echinated, globular body.

It is a native of America, where a very fragant reſin is obtained from it in great abundance. Ray calls it, Styrax aceris folio.

*Claſs the Twenty Firſt. Order the Seventh.*

## MONOÆCIA MONADELPHIA.

*Plants, with the male and female flowers ſeparate on the ſame individual, with the ſtamina in the male ones, connected into one body at their baſe.*

### PINUS.

THE calyx of the male flower is compoſed of four leaves; there is no corolla: the ſtamina are numerous, and the antheræ are naked. In the female flower, the calyx is a ſquamma of a ſtrobilus, and contains two flowers; there is no corolla: the piſtil is ſingle, and the ſeed is received into a membranaceous ala.

*Pinus foliis geminis primordialibus ſolitariis ciliatis.*
*The Pinus, with two leaves together; the primordial ones ſingle and ciliated.*

**The manured Pine.**

The tree grows to a very conſiderable height: the trunk is ſtrait; the bark rough and reddiſh; the wood yellowiſh, and ſtrongly ſcented of turpentine: the leaves grow from little tubercles on the bark of the branches, two together; they are united cloſe at the baſe, but ſeparate afterwards, hollowed inwards, pointed at the ends, very narrow, like ruſhes, and eight inches long: the cones or fruit are large, of a turbinated figure, and compoſed of a very beautiful arrangement of ſquammæ.

It is a native of Italy. C. Bauhine calls it, Pinus ſativa. The kernels of this fruit are eſculent and ſweet as an almond; they uſed to be kept in the ſhops as reſtoratives, but they are neglected at this time.

The other ſpecies are, 1. The great, long-leaved, ſwamp Pine of America. 2. The common, wild Pine. 3. The ſlender-fruited, wild Pine. 4. The ſea Pine. 5. The leſſer ſea Pine. 6. The low Pine, with green iuli. 7. The very ſlender-leaved Pine, with purple iuli. 8. The Pine, with erect cones.

### ABIES.

THE calyx of the male flowers is a gemma; there is no corolla: the ſtamina are numerous, and the antheræ are furniſhed with a ſquammula in the upper part. In the female flowers, the ſquammulæ of the ſtrobilus each contain two flowers; there is no corolla: the piſtil is ſingle, and the ſeed is lodged in a membranaceous ala.

*Abies foliis ſolitariis apice acuminatis.*
*The Abies, with ſolitary leaves acuminated at the point.*

**The Common Fir.**

The tree is tall; the bark reddiſh or browniſh, and the wood yellowiſh and reſinous: the branches grow regularly; the leaves are of a pale green, narrow, and pungent at the ends: the fruit is a cylindric cone of ſix inches, or more, in length; theſe grow on the extremities of the branches, and hang downwards.

It is common in France and Italy. C. Bauhine calls it, Abies conis deorſum ſpectantibus; others, Picea.

The other ſpecies of Abies are are, 1. The yew-leaved Abies, with the cones ſtanding upwards. 2. The long-leaved Abies. 3. The ſmaller, pectinated, Virginian Abies. 4. The leſſer coned Abies. 5. The yew-leaved Abies, with the leaves white underneath. 6. The ſhort-leaved Abies.

## CUPRESSUS.

THE calyx of the male flowers is a ſquamma of an amentum; there is no corolla: the antheræ are four, and ſeſſile, and have no filaments. In the female flowers, the calyx contains two, and is a ſquamma of a ſtrobilus; there is no corolla: there are hollowed points in the place of ſtyles; the ſeed is angular.

*Cupreſſus foliis imbricatis erectis.* The Cypreſs-tree.
*The Cupreſſus, with imbricated, erect leaves.*

The root is ſpreading; the tree grows to a conſiderable height; the trunk is thick and ſtrait, the bark brown, the wood firm and ſcented; from the middle to the top it is full of branches: the leaves are of a duſky green, and of an imbricated ſtructure: the fruit is of the ſize of a ſmall walnut, of an oval figure, and full of cracks on the ſurface: it's colour is a duſky brown; it's taſte reſinous.

It is a native of the Iſlands of the Archipelago. C. Bauhine calls it, ſimply, Cupreſſus.

The other ſpecies are, 1. The thicker-leaved Cupreſſus. 2. The ſmaller-fruited Cupreſſus. 3. The acacia-leaved Cypreſs.

## THUYA.

THE calyx of the male flower is a ſquamma of an amentum; there is no corolla: the ſtamina are four. In the female flower, the calyx is ſquamma of a ſtrobilus, and contains two flowers; there is no corolla: the piſtil is ſingle, and the ſeed is ſurrounded with a membranaceous ala.

*Thuya ſtrobilis lævibus, ſquammis obtuſis.* The Arbor Vitæ.
*The Thuya, with ſmooth ſtrobili, and obtuſe ſquammæ.*

The root is ſpreading; the tree grows to a moderate height: the trunk is erect and knotty; the bark is of a reddiſh grey; the wood reddiſh, firm, and reſinous: the branches ſpread horizontally: the leaves are divided into many parts, oblong, compreſſed, and ſquammoſe; they are of a bright green, and of a ſtrong and diſagreeable ſmell: the flowers are ſmall and yellowiſh; the fruit is a ſmall, oblong cone.

It is a native of North America. C. Bauhine calls it, Thuya Theophraſti; others, Arbor vitæ.

There is but one other known ſpecies of this genus, that is, the Chineſe Arbor vitæ.

## THELIGONIUM.

THE calyx of the male flower is bifid; there is no corolla: the ſtamina are twelve. There is no corolla to the female flower: the calyx is bifid, and the piſtil ſingle: the fruit is a coriaceous capſule, containing only a ſingle cell, and in it only one ſeed.

This genus comprehends the Cynocrambe of Tournefort. There is but one known ſpecies of it.

### THELIGONIUM.

The root is compoſed of a cluſter of white fibres: the ſtalks are numerous, and a foot and a half long; they are round-jointed and procumbent, ſmooth on the ſurface, hollow and brittle: the leaves grow two or three at a joint, but not oppoſite, but all on one ſide; they are oblong, of a deep green, flattiſh, ſtinking, when bruiſed, and one of them at each joint uſually ſtands on a longer pedicle than the others: the flowers are numerous, very ſmall; they ſtand in cluſters at the joints of the ſtalk.

It is a native of France. C. Bauhine calls it, Cynocrambe Dioſcoridis; others, Alſine parietariæ foliis.

ACALYPHA.

## ACALYPHA.

THE calyx of the male flower conſiſts of three, or of four, leaves; there is no corolla: the ſtamina are from eight to ſixteen in number. In the female flower, the calyx is compoſed of three leaves; there is no corolla: the ſtyles are three; the fruit is a trioccous capſule, containing three cells, with a ſingle ſeed in each. The iuli of the male flowers, as alſo the female ones, which are ſucceeded by tricocous fruits, both ſtand in the alæ of the leaves.

Theſe characters ſufficiently diſtinguiſh the Acalypha, without a farther deſcription.

## CROTON.

THE calyx of the male flower is cylindric, and indented in five places at the edge: the corolla conſiſts of five petals; and the ſtamina are from ten to fifteen. The calyx of the female flower is formed of ſeveral leaves; there is no corolla: the ſtyles are three, and bifid; the fruit is a capſule, containing three cells, and in each a ſingle ſeed.

This genus contains the Ricinoides and Heliotropium tricoccum of authors.

*Croton foliis rhombeis repandis, capſulis pendulis, caule herbaceo.*

*The herbaceous Croton, with rhombic leaves, and pendulous capſules.*

**The Turnſole Plant.**

The root is oblong and ſlender; the plant riſes to ten or twelve inches: the ſtalk is round and green, but ſomewhat hoary and ramoſe: the leaves ſtand on oblong, hollowed pedicles; they are oblong, and bend backwards; they are rugoſe, of a duſky green, and ſomewhat hoary, ſoft to the touch, and ſinuated: the male flowers are ſmall and yellow, and ſtand in cluſters on ſhort pedicles: the fruit, which ſucceeds the female flowers in the alæ of the leaves, is affixed to an oblong pedicle; it is tricoccous, of a greyiſh colour, and ſomewhat rough ſurface. Theſe fruits, while freſh, rubbed on cloth, give it a green colour, which almoſt inſtantly turns to a fine blue.

The plant is a native of France. C. Bauhine calls it, Heliotropium tricoccum. The Succus Lacmus, or Turnſole, uſed in dying and painting, is prepared from this plant.

## RICINUS.

THE calyx of the male flower is divided into five parts; there is no corolla: the ſtamina are numerous. In the female flower, the calyx is divided into three parts; there is no corolla: the ſtyles are three, and are bifid: the fruit is a capſule, containing three cells, and in each of them one ſeed.

*Ricinus foliis peltatis, ſerratis, petiolis glanduliferis.*

*The peltated, ſerrated-leaved Ricinus, with glanduliferous pedicles.*

**The Common Ricinus, or Palma Chriſti.**

The root is long, thick, white, and fibrated: the plant grows to five or ſix feet high; the ſtalk is round, thick, hollow, ſtriated, jointed, and of a bluiſh-green on the lower part, and a purpliſh colour toward the top: the leaves are very large, palmated, and divided at the edge into ſix or ſeven parts: the flowers are ſmall and ſtamineous, but they ſtand in a long beautiful ſpike, on a peculiar peduncle: the capſules are rough on the ſurface; the ſeeds oblong.

It is a native of the Eaſt. C. Bauhine calls it, Ricinus vulgaris; others, Palma Chriſti.

The

The other ſpecies are, 1. The ſmaller, American Ricinus. 2. The deeply, divided-leaved, Ceylon Ricinus. 3. The larger-fruited Ricinus. 4. The rounder-leaved Ricinus.

## JATROPHA.

THE male flower has no calyx: the corolla is of an infundibuliform ſhape, and is formed of a ſingle petal: the ſtamina are ten in number, and are alternately ſhorter. The female flower has no calyx: the corolla is of the roſaceous form, and conſiſts of five petals: the ſtyles are three in number, and are bifid: the capſule contains three cells, and in each a ſingle ſeed.

This genus comprehends the Manihot of Tournefort, and the Juſſievia of Houſton.

*Jatropha foliis digitatis.*
*The digitated-leaved Jatropha.* **The Caſſada Plant.**

The root is oblong and very thick; the plant grows to ſix or eight feet high: the ſtem is firm, but hollow, and full of pith: the leaves are digitated, or compoſed each of five or ſeven oblong narrow portions, uniting only at the baſe, where they are affixed to a long rib; they are ſmooth, and of a deep green: the flowers are ſmall and yellow.

It is a native of many parts of America, where the natives make a kind of bread from the root, which is very nouriſhing. C. Bauhine calls it, Manihot Indorum foliis Cannabinis; others, Yucca and Caſſavi.

The other ſpecies of Jatropha are, 1. The prickly, vine-leaved Jatropha. 2. The large, elm-leaved Jatropha. 3. The narrower, elm-leaved Jatropha. 4. The climbing, betony-leaved Jatropha. 5. The little, germander-leaved, American Jatropha.

## STERCULIA.

THE calyx of the male flowers is divided into five parts; there is no corolla: the ſtamina are fifteen. The calyx of the female flower is alſo divided into five parts; there is no corolla: the germen ſtands upon a column: the fruit is a capſule, containing ſeveral cells, and in each of theſe are ſeveral ſeeds.

Theſe characters ſufficiently diſtinguiſh the Sterculia, without a farther deſcription.

## HURA.

THE male flowers are arranged into an imbricated amentum: the antheræ are ſeſſile, and adhere to the amentum. The female flower has no calyx, nor any corolla: the ſtyle is of an infundibuliform ſhape: the ſtigma is divided into twelve parts: the fruit is a capſule formed of twelve ſeparate cells, in each of which is a ſingle ſeed.

Of this genus there is but one known ſpecies.

HURA. **The Sand Box-tree.**

The root is ſpreading; the tree grows to a moderate height; the trunk is thick; the bark ſmooth and brown, and the wood whitiſh: the leaves are ſeven or eight inches long, five broad, and placed on long pedicles; they are of a beautiful green, and finely ſerrated: the fruit is two inches in diameter, and burſts into twelve lunulated parts, in each of which is a ſingle ſeed.

It is a native of America. Authors call it Hura, and Arbor crepitans.

*Claſs the Twenty Firſt. Order the Eighth.*

## MONÆCIA SYNGENESIA.

*Plants having ſeparate male and female flowers on the ſame plant, and thoſe Syngeneſious.*

## TRICHOSANTHES.

THE calyx of the male flower has five indentings at the edge: the corolla is divided into five ſegments, and is ciliated; the ſtamina are three. The calyx of the female flower is indented in five places: the corolla is alſo formed of a ſingle petal, and divided into five ſegments, and ciliated: the ſtyle is divided into three parts; the fruit is an oblong apple.

This genus comprehends the Anguina of Micheli.

*Trichoſanthes foliis cordato-ſagittatis ſerratis.*
*The cordato-ſagittated, ſerrated-leaved Trichoſanthes.*

The root is creeping; the plant riſes to a conſiderable height, if there are things near to ſupport it: the ſtalk is ſlender and angular: the tendrils are long, ſpirally contorted, and green; the leaves are large, cordated at the baſe, oblong, and terminate in a ſharp point; they are ſerrated, and of a duſky brown: the flowers are moderately large, white, and edged with a vaſt number of long hairs or filaments: the fruit is oblong, and pointed at the end.

It is a native of the Eaſt Indies. Van Rheede calls it, Toti pira.

The other ſpecies are, 1. The great, roundiſh-leaved Trichoſanthes. 2. The angulated-leaved Trichoſanthes.

## MOMORDICA.

THE calyx of the male flower is divided into five ſegments: the corolla conſiſts of a ſingle petal, and is divided into five ſegments; the ſtamina are three. The calyx of the female flower is divided into five parts: the corolla is formed of a ſingle petal, and divided into five ſegments; the ſtyle is divided alſo into three parts: the fruit is an apple, burſting open with great elaſticity.

This genus comprehends the Momordica and Luffa of Tournefort, and the Elaterium of Boerhaave.

*Momordica foliis cordatis integris plicato-dentatis.* **Wild Cucumber.**
*The cordated, plicato-dentated-leaved Momordica.*

The root is a foot long, and two or three inches in diameter, white, fleſhy, bitter, and nauſeous: the ſtalks are numerous and procumbent; they are angulated, rough, and thick: the leaves are roundiſh, but ſomewhat oblong, and pointed, aurited at the baſe, and three inches, or more, in length: the flowers are large, yellow, with greeniſh veins, and ſtand at the alæ of the leaves; the fruit is of a cylindric form and rough ſurface, about two inches long, and, when ripe, it burſts with violence on the lighteſt touch, ſending out every way, ſometimes to five feet high, a corroſive liquor.

It is common in France. Authors call it, Cucumis ſylveſtris, and Cucumis aſininus; but very improperly, as it is not at all of the cucumber kind. The fæculæ of the juice of the fruit of this plant is the Elaterium of the ſhops, a violent purge.

The other ſpecies are, 1. The angular-fruited Momordica, with ſmooth, roundiſh leaves, called the round-leaved, male, creeping Balſam. 2. The divided-leaved Momordica, called the reticulated, Egyptian Cucumber or Luffa. 3. The ſhort-fruited, vine-leaved Momordica. 4. The long, yellow-fruited, vine-leaved Momordica.

## CUCUMIS.

THE calyx of the male flower is divided into five ſegments: the corolla is formed of a ſingle petal, and divided into five ſegments alſo; the ſtamina are three. The calyx of the female flower is divided into five parts: the corolla is formed of a ſingle petal, and divided into five ſegments; the piſtil is trifid: the ſeeds have no tumid edge.

This genus comprehends the Melo, Colocynthus, and Anguria of authors.

*Cucumis foliis multifidis, pomis globoſis glabris.* **Colocynth.**
*The multifid-leaved Cucumber, with ſmooth, globoſe fruit.*

The root is fibrous: the ſtalks are ſtriated, rough, and procumbent, but they grow to a conſiderable length: the leaves ſtand ſingly at the joints; they are placed on long pedicles, and are large, rough, hairy, and divided into a number of ſegments: the flowers are large and yellow; the fruit is round, and of the bigneſs of a man's fiſt, green at firſt, but, when ripe, of a pale, yellowiſh colour: the pulp of this fruit is the Colocynth or Coloquintida of the ſhops, a violent cathartic.

It is a native of the Eaſt. C. Bauhine calls it, Colocynthis fructu rotundo minore.

The other ſpecies of Cucumis are, 1. The common Cucumber. 2. The round-leaved, Egyptian Cucumber. 3. The common Melon. 4. The ſmall-fruited, trifoliate, American Citrul. 5. The American Citrul, with echinated, eſculent fruit. 6. The ſmall, round-fruited, cordated-leaved Citrul. The varieties of the Melon-kind are almoſt endleſs, but they are not to be accounted as ſpecies by the botaniſt. They are all owing to accident or culture.

## CUCURBITA.

THE calyx of the male flower is divided into five parts: the corolla is compoſed of a ſingle leaf, divided into five ſegments; the ſtamina are three. The calyx of the female flower has alſo five indentings at the edge: the corolla is compoſed of a ſingle petal, and is divided into five ſegments; the piſtil is trifid: the fruit is an apple, and the ſeeds have a tumid edge.

This genus comprehends the Pepo, and the Melopepo of Tournefort.

*Cucurbita ſeminibus obſolete bicornibus.*
*The Cucurbita, with obſoletely bicornate ſeeds.*

The root is fibrous: the plant, if ſupported, grows to a conſiderable height: the ſtalks are moderately thick, angulated, and rough; the leaves are very large, often meaſuring a foot and a half in diameter; they are of a roundiſh figure, ſoft to the touch, downy, ſomewhat divided at the edges, and placed on long furrowed pedicles: the flowers are large, ſnow-white, and hairy within, and ſomewhat hairy alſo on the outſide; the fruit is very large and long.

It is a native of many parts of America. C. Bauhine calls it, Cucurbita oblonga flore albo.

The other ſpecies are, 1. The great-fruited, rough-leaved Cucurbita. 2. The little, rough-leaved Cucurbita. 3. The common Pompion or Pumpkin. 4. The little, yellow-fruited Pompion. 5. The compreſſed Melopepo. 6. The great, rough-leaved Melopepo. 7. The clypeiform Melopepo. 8. The common Citrul, or divided-leaved Cucurbita.

## SICYOS.

THE calyx of the male flower has five indentings at the edge: the corolla is formed of a ſingle petal, divided into five ſegments; the ſtamina are three. The calyx of the female flowers is divided by five indentings at the edge: the corolla is formed of a ſingle petal, divided into five ſegments; the ſtyle is trifid: the fruit is a berry, containing only a ſingle ſeed.

The

This genus comprehends the Sicyoides of Tournefort, and Bryonoides of Dillenius.

*Sicyos foliis angulatis.*
*The angulated-leaved Sicyos.*

The root is compoſed of a multitude of white fibres: the ſtalks are ſlender, angulated, and climbing; the leaves are large and angulated, of a deep green, and placed on moderately long pedicles: the flower is ſmall; the fruit is rough, or echinated on the ſurface, and contains only a ſingle ſeed.

It is a native of America. Dillenius calls it, Bryonoides flore et fructu minore.

The other ſpecies are, 1. The laciniated-leaved Sicyos. 2. The larger-fruited Sicyos.

## BRYONIA.

THE calyx of the male flower is divided by five indentings at the rim: the corolla is formed of a ſingle petal, and divided into five ſegments; the ſtamina are three. The calyx of the female flower is alſo dentated: the corolla is formed of a ſingle petal, divided into five ſegments: the ſtyle is trifid; the fruit is a roundiſh berry.

*Bryonia foliis palmatis, utrinque calloſe ſcabris.* White Bryony.
*The Bryonia, with palmated leaves, ſcabrous on both ſides.*

The root is of an enormous ſize, often two feet long, and ſix or eight inches in diameter, of a whitiſh colour, and diſagreeable ſmell: the ſtalks are ſlender, angulated, and, when ſupported, grow to a great height: the leaves are broad and palmated, of a pale green colour, and very rough to the touch: the flowers are very ſmall and green; the fruit is a round berry, red, when ripe.

It is common in our hedges. The root is uſed in ſome compoſitions as an antihyſteric. Authors call the plant Bryonia alba, and Bryonia alba baccis rubris.

The other ſpecies are, 1. The larger-fruited, deeply, divided-leaved Bryony of Ceylon. 2. The ſmaller-fruited, laciniated-leaved Briony. 3. The ſmooth-leaved, yellow-flowered, African Bryony. 4. The fig-leaved Bryony. 5. The olive-fruited Bryony. 6. The ſmooth, angulated leaved, American Bryony. 7. The rough, angulated-leaved, American Bryony. 8. The angulated-leaved Bryony, with very ſmall, black fruit.

## TREVILLEA.

THE calyx of the male flower is divided into five ſegments: the corolla is formed of a ſingle petal, divided alſo into five ſegments: the ſtamina are three. The calyx of the female flower is divided into five ſegments: the corolla is formed of a ſingle petal, and divided alſo into five ſegments: the ſtyle is trifid; the fruit is a berry, ſurrounded with a cortical ſubſtance.

This genus comprehends the Nhandirolea of Plumier. It's characters ſufficiently diſtinguiſh it, without a farther deſcription.

*Claſs the Twenty Second. Order the Tenth.*

## MONÆCIA GYNANDRIA.

*Plants with ſeveral male and female flowers on the ſame plant, and with the ſtamina in the male flowers ſituated upon the rudiments of a ſtyle.*

## ANDRACHNE.

THE calyx of the male flower is compoſed of five leaves: the corolla is formed of five petals: the ſtamina are five, and grow upon the rudiments of a ſtyle. The calyx of the female flower is formed of five leaves; there is no corolla: the ſtyles are three:

three: the fruit is a capsule containing three cells; with two seeds in each. This genus comprehends the Telphoides of Tournefort and Dillenius.

Of this genus there is but one species, and that is too fully distinguished by it's characters, to need any farther description. It is a procumbent, oriental plant.

## *Class the Twenty Second.*

## DIOECIA.

*Plants which have the male and female flowers on separate plants of the same species.*

OF these some have only a single stamen, some two, some three, and so on to ten; others have twenty, others very numerous stamina, and others are monadelphous, syngenesious, and gynandrious, according to the before established distinctions. They are therefore, according to these obvious characters, to be arranged into several orders.

## *Class the Twenty Second. Order the First.*

## DIOECIA MONANDRIA.

*Plants that have the male and female flowers on separate plants, and only one anthera.*

### NAIAS.

THE calyx of the male flower is cylindric, and divided into two parts: the corolla is divided into four segments; there is no stamen: the anthera is single, oblong, and erect. The female flower has no calyx nor corolla; the pistil is single, and the fruit is an oval capsule.

This genus comprehends the Fluvialis of Vaillant and Micheli.

*Naias foliis latioribus serratis.*
*The broader and serrated-leaved Naias.*

The root is fibrous and whitish; the plant grows to a foot and a half long; it floats obliquely in the water, seldom standing quite erect: the stalk is round, jointed, ramose, and has some short, robust spines placed at distances on it: the leaves stand usually three at a joint; they are more than an inch long, about a sixth of an inch broad, of a shining surface, and deeply serrated at the edges: the flowers are moderately large, and stand singly on pedicles of half an inch long, arising from the alæ of the leaves.

It is common in fresh waters in many parts of Europe. Ray calls it, Potamogeton sargazo simile, lucens, foliis margine dentatis.

There is but one other known species, which is the narrow-leaved Naias.

## *Class the Twenty Second. Order the Second.*

## DIOECIA DIANDRIA.

*Plants which have the male and female flowers on separate plants, and have two stamina.*

### VALLISNERIA.

THE calyx of the male flower is a spatha, divided into two parts: the spadix is covered with floscules; the corollæ are tripetalous. The calyx of the female flower is a spatha, divided into two parts, and containing only a single flower: the

perianthium is divided into three ſegments, and ſtands above the germen: the ſtyles are three; the fruit is a capſule containing a ſingle cell, in which are ſeveral ſeeds.

This genus comprehends the Valliſneria and Valliſneroides of Micheli.

### VALLISNERIA.

The root is oblong, white, creeping, and fibrated: the leaves are numerous, very long, narrow, and obtuſely pointed; they riſe in cluſters, eight or ten together from the root: the ſtalk which ſupports the flower riſes from amidſt theſe; it is naked, ſlender, very long, and ſpirally contorted in a beautiful manner like a cork-ſkrew: the flower is ſingle, and it's tube very long; it is of a beautiful purple: by the untwiſting of the ſtalk, the flower gets to the top of the water, almoſt from any depth.

## SALIX.

THE male flowers are arranged into an amentum or catkin, and their calyx is the ſquamma of that amentum; there is no corolla, but there is a nectariferous gland at the baſe. The calyx of the female flower is alſo a ſquamma of the amentum; there is no corolla: the ſtyle is bifid: the fruit is a capſule formed of two valves, and containing only one cell, in which there are ſeveral ſeeds furniſhed with down.

*Salix foliis ſerratis ovatis acutis glabris.*
*The ſerrated, oval, and acute-leaved Salix.*

**The Bay-leaved Willow.**

The root is large and ſpreading; the leaves are the broadeſt of all the willow-kind; they are two inches long, and near an inch and a half broad, ſmooth, very like thoſe of the common bay in ſhape, and ſerrated at the edges; of a bright ſtrong green on the upper ſurface, and of a paler colour below: the tree grows to a moderate ſize: the bark of the trunk is rough, and full of cracks; that of the young ſhoots is ſmooth, and of a pale yellowiſh-green: the flowers hang from the branches, in long, whitiſh, green catkins.

It is a native of England, but is not frequent. Ray calls it, Salix folio laureo ſeu lato glabro odorato.

The other ſpecies of Salix are, 1. The common, white-leaved, tree Willow. 2. The red-twigged Salix, with dark green, not ſerrated leaves. 3. The long, crenated-leaved, yellow Willow. 4. The almond-leaved, aurited Salix. 5. The very long and narrow, whitiſh-leaved Salix. 6. The low, narrow-leaved Salix. 7. The oblong, hoary, acute-leaved Salix. 8. The brittle-ſtalked, long-leaved Salix. 9. The roundiſh, ſilvery-leaved Salix. 10. The low, erect, broad-leaved Salix. 11. The broad-leaved, dwarf, creeping Salix. 12. The round-leaved, dwarf, mountain Salix, with the leaves grey underneath. 13. The dwarf, alder-leaved Salix. 14. The dwarf Salix, with leaves hoary on both ſides. 15. The dwarf Salix, with leaves ſmooth on both ſides. 16. The dwarf, hoary, flax-leaved Salix. 17. The dwarf Salix, with ſhort leaves. 18. The narrow and ſmooth-leaved, dwarf Salix. 19. The ſerpyllum-leaved, gloſſy, dwarf Salix. 20. The roundiſh-leaved Salix, called the common Sallow. 21. The oblong, pointed-leaved Sallow. 22. The very broad-leaved, water Sallow. 23. The ſage-leaved, auriculated, Portugal Salix. 23. The Babylonian or drooping-branched Salix. 24. The common Oſier. 25. The long and broad-leaved Salix. 26. The long, narrow, deep green-leaved Salix. 27. The firm and ſcarce ſerrated-leaved Salix. 28. The ſmooth, lanceolated-leaved, ſerrated Salix. 29. The round, ſilvery-leaved Salix.

*Claſs the Twenty-ſecond. Order the Third.*

## DIOECIA TRIANDRIA.

*Plants that have the male and female flowers on ſeparate plants, and have three ſtamina.*

### OSYRIS.

THE calyx of the male flower is divided into ſeveral ſegments: there is no corolla. The calyx of the female flower is divided into three ſegments: there is no corolla, nor any ſtyle: the ſtigma is roundiſh, and the fruit is a drupe, containing only one cell.

This genus comprehends the Caſia of Tournefort.

*Oſyris foliis oblongis acutis.*
*The oblong, acute-leaved Oſyris.*

The root is divaricated, tough, and fibrated: the ſhrub grows to three feet high, and is very ramoſe: the bark of the trunk is brown; the young ſhoots are greeniſh, ſtriated, and tough: the leaves are oblong, narrow, and pointed at the ends; they ſomewhat reſemble thoſe of the linaria: the flowers are ſmall, and of a greeniſh-yellow colour: the fruit is a large, red berry.

It is a native of Italy. C. Bauhine calls it, Oſyris fruteſcens baccifera; others, Caſia poetica.

The other ſpecies are, 1. The tall, myrtle-leaved, Spaniſh Oſyris. 2. The obtuſe-leaved, Siberian Oſyris.

*Claſs the Twenty-ſecond. Order the Fourth.*

## DIOECIA TETRANDRIA.

*Plants which have the male and female flowers on ſeparate plants, and have four antheræ.*

### VISCUM.

THE calyx of the male flower is divided into four ſegments: there is no corolla, nor any ſtamina: the antheræ are four in number, and grow to the calyx. The calyx of the female flower is compoſed of four leaves, and is ſituated above the germen: there is no corolla, nor any ſtyle: the fruit is a round berry, containing a ſingle ſeed, which is of a cordated form.

Of this genus there is but one known ſpecies.

VISCUM. **Miſletoe.**

The ſtem is round, robuſt, half an inch in diameter, and covered with a yellowiſh bark: the whole plant grows to a foot and a half, or more, in height, and ſpreads to nearly as much in diameter, uſually affecting a roundiſh form in the whole: the ſtem divaricates, at a ſmall height from it's baſe, into ſeveral branches, and theſe again into others, very numerous, and, in general, dichotomouſly: the leaves are oblong, obtuſe, thick, and of a yellowiſh-green colour; they are about an inch and a half in length, and near half an inch in breadth: the flowers are minute and yellowiſh; the berries large, and full of a viſcous juice; they are naturally of a ſnow-white colour, but ſometimes are red.

It grows on the trunks and branches of trees, as the apple, plum, white thorn, &c. in our gardens and hedges. C. Bauhine calls it, Viſcum baccis albis.

It is eſteemed a good medicine in epilepſies and other nervous diſorders.

## HIPPOPHAE.

THE calyx of the male flower is divided into two parts, and there is no corolla. The calyx of the female flower is alſo divided into two parts: there is no corolla: the ſtyle is ſimple: the fruit is a berry, containing a ſingle ſeed.

This genus comprehends the Rhamnoides of Tournefort and others.

*Hippophae foliis integerrimis.*
*The undivided-leaved Hippophae.*

**Sallow Thorn, or ſea Buck-thorn.**

The root is ſpreading and fibrated: the ſhrub riſes to ten feet high: the trunk is covered with a brown bark; the branches with a paler, or greeniſh, one: the leaves are very numerous, oblong, narrow, undivided at the edges, of a duſky green colour on the upper ſide, and of a ſilvery white underneath: the flowers are ſmall and greeniſh; the berries large, round, and yellow.

It is frequent in the Iſle of Ely, and on ſome of the Eſſex ſhores. C. Bauhine calls it, Rhamnus ſalicis folio anguſto, fructu flaveſcente.

The other ſpecies are, 1. The larger-leaved Hippophae. 2. The ſerrated-leaved Hippophae.

## MYRICA.

THE male flowers are arranged into an amentum: the calyx is a ſquamma of a lunated figure: there is no corolla. The female flowers are alſo arranged into an amentum: the calyx is a ſquamma of a lunated figure: there is no corolla: the ſtyles are two: the fruit is a berry, containing only a ſingle ſeed.

This genus comprehends the Gale of Tournefort and others.

*Myrica foliis lanceolatis, fructu ſicco.*
*The lanceolated-leaved Myrica, with a dry fruit.*

The root is ſpreading, brown, and fibrated: the ſhrub grows to three feet high: the branches are tough, ſlender, and brown: the leaves are ſmall, lanceolate, and of a duſky green colour: the flowers are of a pale whitiſh colour.

It is a native of moſt parts of Europe. Van Royen calls it, Myrica mas et fœmina.

The other ſpecies is the Myrica of America, with ſucculent fruit, or the berry-bearing Myrica.

## MORUS.

THE calyx of the male flower is divided into four parts, and there is no corolla. The calyx of the female flower is compoſed of four leaves: there is no corolla: the ſtyles are two: the calyces become ſucculent and baccated, and each contains a ſingle ſeed.

*Morus foliis cordatis hiſpidis.*
*The cordated, hiſpid-leaved Morus.*

**The common Mulberry-tree.**

The root is ſpreading and fibrated: the tree grows to a very conſiderable ſize: it's trunk is thick, and uſually ſomewhat tortuous; it's head diffuſe, and the branches thick and irregular: the leaves are numerous, moderately large, of a bright green colour, broadeſt at the baſe, where they are ſomewhat cordated, and ſerrated at the edges; they terminate in a ſharp point, and are ſomewhat hairy: the flowers are ſmall and greeniſh: the fruit oblong, large, and green at firſt, afterwards red, but black, when ripe.

It is a native of China, and of ſome parts of Italy. C. Bauhine calls it, Morus fructu nigro.

The other ſpecies are, 1. The obliquely-cordated, ſmooth-leaved Mulberry, with white fruit. 2. The leſſer-fruited, ſmoother-leaved Mulberry; and, 3. The laciniated-leaved Mulberry.

*Claſs*

*Claſs the Twenty Second. Order the Fifth.*

## DIOECIA PENTANDRIA.

*Plants with the male and female flowers on ſeparate plants, and with five ſtamina in the flower.*

### ANTIDESMA.

THE calyx of the male flower is compoſed of five leaves: there is no corolla: the antheræ are bifid. The calyx of the female flower is alſo compoſed of five leaves: there is no corolla: the ſtigmata are five: the fruit is a cylindric berry, containing only one ſeed.

Theſe characters ſufficiently diſtinguiſh the Antideſma, without a farther deſcription.

### PISONIA.

THE calyx of the male flower is formed of a ſingle leaf, divided into five ſegments: the corolla is of an infundibuliform ſhape, and is divided alſo into five ſegments at the rim. The calyx of the female flower is formed alſo of a ſingle leaf, divided into five ſegments, and is ſituated on the germen: the corolla is of an infundibuliform ſhape, and divided into five ſegments: the ſtyle is ſimple: the fruit is a capſule, formed of three valves, containing only one cell, and in it a ſingle ſeed.

Theſe characters ſufficiently alſo diſtinguiſh the Piſonia, without a farther deſcription.

### PISTACHIA.

THE male flowers are arranged into an amentum: the calyx is divided into five ſegments: there is no corolla. The female flowers are diſtinct: the calyx is divided into three ſegments: there is no corolla: the ſtyles are three, and the fruit is a drupe, containing a ſingle kernel.

This genus comprehends the Terebinthus and Lentiſcus of Tournefort and others.

1. *Piſtachia foliis impari-pinnatis, foliolis ovato-lanceolatis.*
*The pinnated-leaved Piſtachia, with ovato-lanceolate pinnæ.*

**The Turpentine-tree.**

The root is brachiated: the tree is an ever-green, and grows to the ſize of our pear-trees: the bark is brown, thick, and full of cracks: the branches are numerous: the leaves ſtand alternately, and are pinnated; the pinnæ ſtand oppoſite, on the rib, and are rigid, firm, of a ſtrong green colour, and not unlike the bay-leaf, but more obtuſe: the male flowers are ſmall, and purpliſh; the female flowers are very ſmall, and greeniſh: the fruit is roundiſh, and contains, within a membranaceous ſhell, a ſingle kernel.

It is a native of Cyprus and Chios, and of ſome parts of Europe. The Chio Turpentine of the ſhops flows naturally from it's trunk. C. Bauhine calls it, Terebinthus vulgaris.

2. *Piſtachia foliis impari-pinnatis, foliolis ſubrotundis.*
*The pinnated-leaved Piſtachia, with roundiſh pinnæ.*

**The Piſtachia-nut-tree.**

The root is ſpreading: the tree grows to a conſiderable ſize: the trunk is thick, and covered with a brown, cracked bark: the branches are numerous and ſpreading: the leaves are pinnated, and terminated by an odd pinna; the pinnæ are large, roundiſh, nervous, and not placed exactly overagainſt one another on the rib: the male flowers are arranged into looſe catkins; the female are very ſmall, and are ſucceeded by the Piſtachia-nuts we eat.

It is a native of Perſia, Arabia, and Syria. C. Bauhine calls it, Terebinthus Indica Theophraſti.

The other ſpecies are, 1. The ſhorter-leaved Turpentine-tree. 2. The ſmall, blue, eſculent-fruited Piſtachia. 3. The trifoliate Piſtachia. 4. The American Turpentine-tree. 5. The Piſtachia, called the common Lentiſk-tree. 6. The narrow-leaved Lentiſk-tree.

## CERATONIA.

THE calyx of the male flower is divided into five parts: there is no corolla: the antheræ are didymous. The calyx of the female flower has five tubercles: there is no corolla: the ſtyle is ſingle: the fruit is a legumen, or pod, divided by ſeveral ſepta.

This genus comprehends the Siliqua of Tournefort and others.

There is but one known ſpecies of it.

### CERATONIA. The Carob-tree.

The root is brachiated, ſpreading, and fibrated: the tree grows to a very conſiderable ſize: the trunk is thick; the branches numerous and diffuſe: the leaves are very long, and pinnated; the pinnæ, or foliola, ſtand on pedicles, and are two inches and a half long, near as much in breadth, and of a duſky green colour, thick, firm, and venous: the flowers are ſmall and purpliſh: the fruit is a long, flatted, and crooked pod, containing an eſculent pulp round about the ſeeds.

It is a native of Italy, and of many parts of the Eaſt. C. Bauhine calls it, Siliqua edulis; others, Siliqua dulcis, and Carob.

## SPINACHIA. Spinage.

THE calyx of the male flower is divided into five parts: there is no corolla. The calyx of the female flower is divided into four parts: there is no corolla: the ſtyles are four: the ſeed is ſingle, and is incloſed within the cup, which becomes indurated.

There is but one ſpecies of this genus, which is the common Spinach, or Spinage, of our gardens, too well known to need a deſcription. Authors have, however, divided this into two, under the name of male and female, though they have generally called the ſteril, or male plants, the female, and thoſe which bear ſeeds the male.

## CANNABIS.

THE calyx of the male flower is divided into five parts: there is no corolla. The calyx of the female flower is compoſed of a ſingle leaf, undivided, and opening ſideways: there is no corolla: the ſtyles are two: the fruit is a nut, formed of two valves, and contained within the cup, which ſhuts upon it.

### *Cannabis foliis digitatis.* *The digitated-leaved Cannabis.* Hemp.

The root is fibrous and white: the plant grows to five or ſix feet high: the ſtalk is robuſt, thick, ſtriated, and compoſed of tough fibres: the leaves ſtand on long pedicles, and are compoſed of five or ſix parts, or divided to the baſe into ſo many ſegments; theſe are three inches long, narrow, of a duſky green colour, ſerrated at the edges, and terminate in a point: the flowers are ſmall and greeniſh: the fruit is the Hemp-ſeed we feed birds with.

It is a native of the Eaſt Indies, but it thrives very well in fields with us, where it is ſown for the ſake of it's ſtalks, from which, macerated and looſened into their fibres, Hemp is made. C. Bauhine calls it, Cannabis erratica and ſativa; others, Cannabis mas et fœmina, or Sterilis et ſeminifera.

## HUMULUS.

THE calyx of the male flower is compoſed of five leaves: there is no corolla. The calyx of the female flower is compoſed of a ſingle leaf, obliquely patent and entire: there is no corolla: the ſtyles are two: the ſeed is ſingle, and is contained within the calyx, which becomes plane.

This genus comprehends the Lupulus of Tournefort and others.

There is but one known ſpecies of it.

### HUMULUS. The Hop plant.

The root is fibrous: the plant, when properly ſupported, grows to a great height: the ſtalk is round, contorted, ſlender, purpliſh, and very tough: the leaves ſtand on pedicles, and are large, palmated, and divided into ſeveral ſegments at the edges; they are of a dark green colour, hiſpid, rough to the touch, and are often ſix inches in diameter: the male flowers are collected into looſe cluſters; the female ones are the Hops we uſe in brewing.

The plant is common wild in our hedges; but the value of it's female flowers dried makes it worth our people's while to cultivate it carefully for them. C. Bauhine calls it, Lupulus mas et fœmina. The young ſhoots are eſculent, and like aſparagus.

## ZANONIA.

THE calyx of the male flower is compoſed of three leaves: the corolla is formed of a ſingle petal, and divided into five parts. The calyx of the female flower is alſo compoſed of three leaves, and the corolla formed of a ſingle petal, divided into five ſegments: the ſtyles are three: the fruit is a berry, containing three cells, and placed under the receptacle: there are two ſeeds in each cell.

Of this genus there is but one known ſpecies.

### ZANONIA.

The root is fibrous: the plant climbs on any thing that is near it, and runs up to a vaſt height: the ſtalk is ſlender, but woody and firm: the leaves ſtand alternately, and on pedicles; they are five inches long, and three broad, of a bright green colour, and not divided at the edges; they terminate in a point: the flowers ſtand in long ſeries, at a diſtance from one another; they are moderately large, and of a greeniſh-white colour: the fruit is oblong, broadeſt at the extremity, conſiderably large, and red, when ripe.

It is a native of the Eaſt Indies. Van Rheede calls it, Penar-valli.

*Claſs the Twenty Second. Order the Sixth.*

## DIOECIA HEXANDRIA.

*Plants which have the male and female flowers on ſeparate plants, and ſix ſtamina in the male flowers.*

## GLEDISTIA.

THE male flowers are collected into an amentum, or catkin: the calyx is divided into four parts: the corolla conſiſts of four petals, and the antheræ are incumbent. The female flowers are alſo arranged in form of an amentum: the calyx is divided into four parts, and the corolla compoſed of four petals: the fruit is a legumen, or pod, with a pulpy matter in it, ſeparated by partitions.

Of this genus there is but one known ſpecies, which is eaſily diſtinguiſhed by theſe characters, without a farther deſcription. Linnæus, in his Hort. Cliffort. has called it, Cæſalpinoides foliis pinnatis et duplicato-pinnatis; others, Acacia abruæ foliis triacanthos, ſeu triplici ſpina ad foliorum axillas.

## SMILAX.

THE calyx of the male flower is compoſed of ſix leaves: there is no corolla. The ſtyles are three: the fruit is a berry, containing three cells, in each of which are two ſeeds.

*Smilax caule ſpinoſo, baccis rubentibus.* **Prickly**
*The red-berried, prickly-ſtalked Smilax.* **Bindweed.**

The root is long, creeping, and white: the plant, if it meets with trees or buſhes to climb upon, grows to a great height: the ſtalk is ſlender, rigid, ſtriated, and contorted, and is armed all the way with ſtrong and ſharp ſpines: the leaves ſtand on moderately long pedicles, which are alſo prickly; they are large, oblong, and prickly, not only at the edges, but often along the ribs underneath: the flowers are ſmall and white; the berries round and red.

It is common in the hedges in Italy, and ſome parts of France. C. Bauhine calls it, Smilax aſpera fructu rubente; J. Bauhine, Smilax aſpera.

The other ſpecies are, 1. The leſs prickly, black-fruited Smilax. 2. The broad-leaved, prickly Smilax. 3. The oblong and nervous-leaved Smilax.

## TAMUS.

THE calyx of the male flower is divided into ſix parts: there is no corolla. The calyx of the female flower is alſo divided into ſix parts, and there is no corolla: the ſtyle is trifid: the fruit is a berry, containing three cells, ſituated below the calyx, and in each cell containing two ſeeds.

This genus comprehends the Tamus of Tournefort, and the Bryonia nigra of other authors.

*Tamus foliis cordatis.* **Black**
*The cordated-leaved Tamus.* **Bryony.**

The root is large and tuberous, often ſix inches long, and three in diameter, black, on the outſide, white within, and full of a viſcous, acrid juice: the plant climbs up among buſhes to ten or fifteen feet high: it's ſtalk is green, tough, firm, and contorted: the leaves ſtand alternately; they are four inches long, and more than three broad near the baſe, whence they go off gradually to an obtuſe point, reſembling in the whole the ſhape of a heart, as uſually figured; they are of a ſhining ſtrong green colour, and perfectly ſmooth: the flowers are ſmall and greeniſh; the fruit a black berry.

The plant is common in our hedges. C. Bauhine calls it, Bryonia nigra racemoſa.

The other ſpecies are, 1. The larger-flowered Tamus. 2. The American Tamus, with palmated leaves.

## RAIANA.

THE calyx of the male flower is divided into ſix ſegments: there is no corolla. the calyx of the female flower is divided alſo into ſix ſegments: there is no corolla: the ſtyles are three: the fruit is roundiſh, and has an oblique ala below the calyx.

This genus comprehends the Jan Raia of Plumier, and is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

## DIOSCOREA.

THE calyx of the male flower is divided into ſix ſegments: there is no corolla. The calyx of the female flower is alſo divided into ſix ſegments, and there is no corolla: the ſtyles are three: the fruit is a compreſſed capſule, divided into three cells, in each of which there are two membranaceous ſeeds.

*Dioſcorea foliis cordatis alternis, caule lævi.*
*The ſmooth-ſtalked Dioſcorea, with cordated, alternate leaves.*

The root is tuberous, very large, divided into ſeveral parts, of a farinaceous ſubſtance, and eſculent: the ſtalk is woody, ſlender, weak, and ſupports itſelf by climbing upon any thing that is near it: the leaves ſtand ſingly at the joints; they are oblong, obtuſe at the point, cordated at the baſe, of a duſky green, and nervous: the flowers are ſmall and greeniſh; the fruit is a flatted capſule.

It is a native of Jamaica and other parts of America. Plumier calls it, Dioſcorea ſcandens folio tamni, fructu racemoſo.

*Claſs the Twenty Second. Order the Seventh.*

## DIOECIA OCTANDRIA.

*Plants which have the male and female flowers on ſeparate plants, and eight ſtamina in the male flower.*

## POPULUS.

THE male flowers are arranged into an amentum; the calyx is a lacerated lamina: the corolla is of a turbinated figure, oblique and undivided. The female flowers are arranged in an amentum, in the manner of the male ones, and the calyx and corolla are of the ſame ſtructure: the ſtigma is divided into four parts, and the fruit is a capſule, containing four cells, in each of which are ſeveral pappoſe ſeeds.

*Populus foliis ſubrotundis, dentato-angulatis, ſubtus tomentoſis.* **The white Poplar.**
*The Populus, with roundiſh, angulated leaves, woolly underneath.*

The root is ſpreading; the tree grows to a great height: it's trunk is thick, tolerably erect, and covered with a ſmooth, pale, whitiſh bark: the branches are not very numerous; the leaves are three inches long, and near as much in diameter; they are deeply dentated or angulated at the edges, and are of a dark green on the upper ſurface, and white and woolly underneath: the flowers are ſmall, and ſtand in long, looſe catkins: the fruit is a ſmall capſule.

It is common about watery places in moſt parts of Europe. C. Bauhine calls it, Populus alba.

The other ſpecies are, 1. The black Poplar. 2. The trembling-leaved Poplar, or Aſpin. The ſmaller-leaved white Poplar, and the American, great-leaved Poplar, are only varieties of the firſt ſpecies.

*Claſs the Twenty Second. Order the Eighth.*

## DIOECIA ENNEANDRIA.

*Plants which have the male and female flowers on ſeparate plants, and nine ſtamina in the male flower.*

## MERCURIALIS.

THE calyx of the male flower is divided into three parts; there is no corolla: the ſtamina are from nine to twelve: the antheræ are globoſe and didymous. In the female flower, the calyx is alſo divided into three parts, and there is no corolla: the ſtyles are two; the fruit is a dicoccous capſule, having two cells, and in each one ſeed.

*Mercurialis caule brachiato, foliis glabris.*
*The Mercurialis, with a brachiated ſtalk, and ſmooth leaves.*

The root is fibrous and white: the plant riſes to ten inches high: the ſtalk is thick, round, green, and jointed: the branches are numerous; the leaves are oblong, of a bright green, ſerrated, and terminate in a point: the male flowers are arranged in lax ſpikes: the female ones are ſucceeded ſingly by a teſticulated fruit.

It is common in many parts of England in dry places. C. Bauhine and others call it, Mercurialis mas et fœmina.

The other ſpecies are, 1. The common dog's Mercury, called Cynoerambe. 2. The hoary-leaved, ſhrubby Mercurialis. 3. The almond-leaved, ſhrubby Mercurialis. 4. The roundiſh-leaved Mercurialis.

## HYDROCHARIS.

THE male flower has a ſpatha compoſed of two leaves: the calyx is divided into three parts: the corolla conſiſts of three petals, and the three interior ſtamina are ſtyliferous. The calyx of the female flower is divided into three parts, and the corolla conſiſts of three petals: the ſtyles are ſix: the capſule contains ſix cells, and in each of them a number of ſeeds; it's ſituation is under the receptacle of the corolla.

This genus comprehends the Stratiotes of Dillenius, the Morſus ranæ of Tournefort, and the Microleuco-nymphæa of Boerhaave. There is but one ſpecies of it.

HYDROCHARIS. **Little Water-Lily.**

The root is compoſed of a number of brown, thick, and long filaments: the leaves float on the ſurface of the water, and are of a round figure, thick, fleſhy, and of a duſky browniſh-green colour; they are about an inch and a half broad: the flowers ſtand ſingly on their pedicles, and are moderately large and white.

It is common in ditches. C. Bauhine calls it, Nymphæa alba minima.

*Claſs the Twenty Second. Order the Ninth.*

## DIOECIA DECANDRIA.

*Plants which have the male and female flowers on ſeparate plants, and ten ſtamina in the male flower.*

## CORIARIA.

THE calyx of the male flower is compoſed of five leaves: the corolla conſiſts of five petals, and is very like the cup: the antheræ are bipartite. In the female flower, the calyx is compoſed of five leaves: the corolla is like that of the male flower; the ſtyles are five: the fruit conſiſts of five ſeeds, incloſed in the petals, which become ſucculento-baccated.

*Coriaria foliis ovato-oblongis.* **Myrtle Sumach.**
*The ovato-oblong-leaved Coriaria.*

The root is divided, ſpreading, and fibrated: the ſhrub grows to four or five feet high: the trunk is half an inch in diameter, hollow, brittle, and filled with a light pith: the bark is greyiſh and ſpotted; the young ſhoots are ſquare: the leaves ſtand in pairs; they are oblong, and of a bright green: the flowers are ſmall and green; the antheræ blackiſh: the fruit is of the bigneſs of a pear.

It is a native of France. C. Bauhine calls it, Rhus myrtifolia Monſpeliana. It is ſaid to be a very great medicine in epilepſies. It's bark contains it's greateſt virtue.

## NYSSA.

THE calyx of the male flower is divided into five ſegments; the corolla is alſo divided into five ſegments. The calyx and corolla in the female flower are alſo each divided into five ſegments: the ſtyle is ſingle; the fruit is a drupe, containing only one cell, and is placed under the receptacle.

It is a native of Virginia. Theſe characters ſufficiently diſtinguiſh it, without a farther deſcription.

## CARICA.

THE male flower has ſcarce any calyx; the corolla is formed of a ſingle petal, and is of an infundibuliform ſhape, and divided into five ſegments at the edge: the filaments or ſtamina are ſituated within the tube of the corolla, and are alternately ſhorter. The calyx of the female flower has five indentings: the corolla conſiſts of five petals: the ſtigmata are five; the fruit is a berry, containing only one cell, in which are ſeveral ſeeds.

This genus comprehends the Papaya of Tournefort. There is but one ſpecies of it.

### CARICA. The Papaw-tree.

The root is ſpreading: the tree, if it may be ſo called, grows to thirty feet, or more, in height; it's trunk is green, thick, naked, tender, and ſucculent, and, though often of the thickneſs of a man's thigh, may be cut down with a knife at one ſtroke: the leaves ſtand on long pedicles at the top, forming a very beautiful head; they are two feet, or more, in breadth, and are deeply divided into five or ſeven ſegments, ſo as to appear digitated: they are of a deep green on the upper ſurface, and of a paler green underneath; the flowers are yellow, moderately large, and hang in cluſters: the fruit is large, and, when ripe, yellow.

It is a native of America. C. Bauhine calls it, Papaya.

The male and female flowers in this ſometimes grow on the ſame plant, not on different ones, as is the uſual cuſtom; an inſtance of this we had in Lord Petre's ſtove.

## KIGELLARIA.

THE calyx of the male flower is divided into five ſegments: the corolla conſiſts of five petals; there are five trilobous glandules: the antheræ are perforated. The calyx and corolla in the female flower are the ſame with thoſe of the male: the ſtyles are five: the fruit is a capſule formed of five valves, containing only one cell, and in it ſeveral ſeeds.

Theſe characters ſufficiently diſtinguiſh the Kigellaria, without any farther deſcription.

## DATISCA.

THE calyx of the male flower is compoſed of five leaves; there is no corolla: the antheræ are long and ſeſſile. The calyx of the female flower is compoſed of five leaves; there is no corolla: the ſtyles are three: the fruit is a triangular, tricuſpidated capſule, containing only one cell, but in that a number of ſeeds, and it is pervious.

Theſe characters ſufficiently diſtinguiſh the Datiſca, without a farther deſcription.

*Claſs the Twenty Second. Order the Tenth.*

## DIOECIA IGOSANDRIA.

### ARUNCUS.

THE calyx of the male flower is divided into five ſegments at the extremity: the corolla is compoſed of five petals, and inſerted into the calyx. The calyx of the female flower is divided into five ſegments: the corolla is compoſed of five petals: the germina are three, and the ſeeds three.

This genus comprehends the Barba capræ of Tournefort. There is but one known ſpecies of it.

#### ARUNCUS.

The root is oblong, thick, brown, and woody: the plant grows to four or five feet high: the ſtalks are ſtriated, hollow, and ſmooth: the leaves are oblong, ſerrated at the edges, pointed at the end, and ſomewhat reſemble thoſe of the cheſnut, and are placed ſeveral on the ſame rib: the flowers are ſmall and white, and hang in long, ſlender ſpikes.

It is a native of many parts of Europe, but we have it not wild in England. C. Bauhine calls it, Barba capræ.

*Claſs the Twenty Second. Order the Eleventh.*

## DIOECIA POLYANDRIA.

### CLIFFORTIA.

THE calyx of the male flower is compoſed of three leaves; there is no corolla: the ſtamina are about thirty. The calyx of the male flower is compoſed of three leaves, and is ſituated upon the germen; there is no corolla: the ſtyles are two; the fruit is a capſule, containing two cells, and in each a ſingle ſeed.

Theſe characters ſufficiently diſtinguiſh the Cliffortia, without a farther deſcription.

*Claſs the Twenty Second Order the Twelfth.*

## DIOECIA MONADELPHIA.

### JUNIPERUS.

THE male flowers are arranged into an amentum, and it's ſquammæ make the calyces; there is no corolla: the ſtamina are three. The calyx of the female flower is divided into three parts; the corolla is compoſed of three petals; the ſtyles are three: the fruit is a berry, containing three ſeeds.

This genus comprehends the Juniperus and Cedrus of Tournefort, and the Sabina of Boerhaave.

*Juniperus foliis baſi adnatis, junioribus imbricatis, ſenioribus patulis.* Bermudas Cedar.

*The Juniperus, with the young leaves imbricated, the elder patulous.*

The root is ſpreading; the tree grows to a conſiderable ſize in ſome places, though in others it is only a ſhrub: the leaves are ſmall, ſhort, of a lively green, and very numerous: thoſe on the young ſhoots lie cloſe and imbricated, thoſe on the older ſtand open; this gives the appearance of two perfectly different kinds of leaves on the ſame plant: the fruit is a ſmall, bluiſh-black berry, like that of our Juniper.

It is a native of moſt parts of America. Ray calls it, Juniperus major Americana.

The

The other ſpecies are, 1. The common Juniper. 2. The broader-leaved, mountain Juniper, with oblong berries. 3. The great, blue-berried Juniper. 4. The great, red-berried, ſhort-leaved Juniper. 5. The great, yellow-berried, cypreſs-leaved Juniper. 6. The great-berried, cypreſs-leaved Juniper. 7. The tall, Spaniſh Juniper, with large, black fruit. 8. The common Savin.

## TAXUS.

THE calyx of the male flowers is compoſed of three leaves; there is no corolla: the ſtamina are numerous: the antheræ are peltated, and divided into eight ſegments. The calyx of the female flower is compoſed of three leaves, and there is no corolla; there is no ſtyle: the ſeed is ſingle, and is ſurrounded by an undivided, baccated calyx.

Of this genus there is but one known ſpecies.

### TAXUS. The Yew-tree.

The root is brachiated and ſpreading; the tree grows to thirty feet, or more, in height: the trunk is uſually tortuous and irregular; the branches are numerous and ſpreading: the bark is of a pale reddiſh-brown; the wood firm, and of a beautiful reddiſh colour: the leaves are long, narrow, and arranged cloſely in form of pinnæ; the flowers are inconſiderable and yellowiſh; the fruit is a large, green ſeed, ſurrounded by a fine bright red calyx, ſucculent, and of the nature of a berry.

The yew is a native of moſt parts of Europe. C. Bauhine calls it, Taxus vulgaris.

## EPHEDRA.

THE calyx of the amentum is divided into two parts; there is no corolla: the ſtamina are ſeven: four of the antheræ are inferior. The calyx of the female flower is quintuple, and divided into two parts; there is no corolla: the piſtils are two; the ſeeds are two, and are covered by a baccated calyx.

### *Ephedra caule nudo fruticoſo, floribus confertis.* The great Sea Grape.
### *The naked, ſhrubby Ephedra, with cluſtered flowers.*

The root is divaricated and ſpreading: the ſhrub grows to four, five, or ſix feet high; the ſtem is an inch or two in diameter; the branches are numerous, and the bark of a duſky blackiſh colour: the ſhoots that produce the flowers are a foot long, ſlender, and ſcarce ſupport themſelves erect: they are naked, or wholly without leaves, as is alſo the whole plant; but they are frequently jointed, and at the joints ſtand the flowers in cluſters; they are ſmall and moſſy: the fruit is red, ſucculent, and of an acid and auſtere taſte.

It is a native of the coaſts of Italy and Sicily. C. Bauhine calls it, Polygonum bacciferum maritimum majus.

The other ſpecies are, 1. The leſſer Sea-grape, or ſhrub Horſe-tail; and, 2. The climbing, bacciferous Ephedra, or climbing Sea Horſe-tail.

*Claſs the Twenty Second. Order the Thirteenth.*

## DIOECIA SYNGENESIA.

## RUSCUS.

THE calyx of the male flower is compoſed of ſix leaves; there is no corolla: the nectarium is ſituated in the center, and is of an oval figure, and perforated at the top. The calyx, corolla, and nectarium are in the female flowers exactly as in the male; the ſtyle is ſingle: the fruit is a berry, containing three cells; the ſeeds are two.

*Ruſcus foliis ſupine floriferis nudis.*
*The Ruſcus, with naked leaves flowering on the upper part.*

**Butcher's Broom.**

The root is creeping, white, and tender: the plant grows to two feet high; the ſtalk is tough, woody, firm, ſtriated, and ramoſe; the leaves are of an oblong ſhape, and pointed at the extremity ſo ſharply, as to prick the fingers; they are about half an inch long, and of a deep green colour: the flowers ſtand on the middle of the leaves, and are ſmall and greeniſh; the berry is large and red.

It is common in our woods and on heaths. C. Bauhine calls it, Ruſcus; others, Ruſcus vulgaris.

The other ſpecies are, 1. The Ruſcus, called the Alexandrian laurel, with the fruit on the leaf. 2. The Uvularia of the ſhops, or Hippogloſſum, with a little leaf on the larger. 3. The narrow-leaved Ruſcus, with the berries on the tops of the ſtalks.

*Claſs the Twenty Second. Order the Fourteenth.*

## DIOECIA. GYNANDRIA.

### CLUTIA.

THE calyx of the male flower is compoſed of five leaves; the corolla is formed of five petals. The calyx of the female flower is compoſed of five leaves, and the corolla of five petals: the ſtyles are three; the capſule contains three cells, and in each a ſingle ſeed.

Of this genus there is but one known ſpecies.

CLUTIA.

The root is brachiated and ſpreading: the ſhrub riſes to eight feet high; the ſtem or trunk is covered with a brown, unequal bark: the branches are numerous and ſlender; the leaves are of an oblong figure, obtuſe, and about an inch in length, fleſhy, and of a duſky green: the flowers are ſmall, and of a greeniſh white.

It is a native of Æthiopia.

*Claſs the Twenty Third.*

## POLYGAMIA.

*Plants which have hermaphrodite flowers, and others which are either ſimply male, or ſimply female.*

OF theſe ſome have the ſeparate flowers on different parts of the ſame plant; others have them on two different plants, and others have the three kinds, and thoſe on three different plants, all of the ſame ſpecies.

The Polygamia may hence be conveniently arranged into three orders, according to theſe diſtinctions.

*Claſs the Twenty Third. Order the Firſt.*

## POLYGAMIA MONOECIA.

*Plants which have ſeparate hermaphrodite flowers, and either male or female ones, or different hermaphrodite ones, on the different parts of the ſame plant.*

### MUSA.

IN the male hermaphrodite flower, the calyx is a ſpatha: the corolla conſiſts of two petals, one of which is erect, and divided by five indentings at the edge, and the other

other is hollow, ſhorter, and nectariferous: the ſtamina are ſix; five of them are fertile, or have antheræ on them: the ſtyle is ſingle: the germen under the flower is abortive, or produces no fruit. In the female hermaphrodite flowers, the calyx, the corolla, the ſtamina, and the piſtil are the ſame in number, figure, and ſituation as in the others; but, of the ſix ſtamina, only one is fertile, or produces an anthera: theſe flowers are ſucceeded by the fruit, which is an oblong, triquetrous berry.

*Muſa racemo ſimpliciſſimo.*
*The ſimple-cluſtered Muſa.*

**The Plantain-tree.**

The root is oblong and thick, blackiſh on the outſide, white within, and fibrated: the plant grows to ſix, eight, or more feet in height, and has the appearance of a tree: the ſtem is as thick as a man's leg, but it is tender, and may be cut through with one ſtroke of a knife; it is green, and ſeems compoſed of ſeveral ſeries of leaves, rolled over one another: the leaves grow from the top; they are eight or ten in number; theſe are each ſix or ſeven feet long, about a foot and a half broad, of a fine green colour, and of a firm and ſomewhat harſh texture, eaſily ſplitting, and cracking tranſverſely on each ſide to the middle rib: from the center of theſe leaves riſe the pedicles of the flowers; they are oblong, thick, and robuſt, and at their tops ſtands, at firſt, a large, oblong body, formed of a ſeries of broad and ſhort leaves; theſe daily expand, and then curl up, and, at length, ſhew the flowers they had incloſed, which are in each ſeven or eight in number, large, oblong, and of a whitiſh-yellow colour: the fruit is large, and of the ſize of a cucumber: there are a great many of theſe on the ſame pedicle, placed in ſeveral cluſters round it, at ſmall diſtances; they are of an oblong and triquetrous form: there are from ten to twenty of theſe fruits uſually on the whole pedicle, which lengthens and increaſes every way, as they appear ſucceſſively upon it: the fruit is eſculent.

It is a native of the Eaſt Indies. Cluſius calls it, Muſa; C. Bauhine, Palma humilis longis latiſque foliis, and Ficus Indica fructu racemoſo, folio oblongo.

The other ſpecies are, 1. The cluſter-fruited, racemous Muſa. 2. The ſmaller-fruited Muſa.

## OPHIOXYLON.

IN the hermaphrodite flower, the calyx is divided into five ſegments: the corolla is alſo divided into five ſegments, and is of an infundibuliform ſhape: the ſtamina are five: the piſtil is ſingle. In the male flowers, the calyx is divided into two parts: the corolla is of an infundibuliform ſhape, and divided into five ſegments at the mouth: the nectarium is of a cylindric form: the ſtamina are only two.

Theſe characters ſufficiently diſtinguiſh the Ophioxylon, without a farther deſcription.

## VERATRUM.

THE hermaphrodite flowers have no calyx: the corolla is formed of ſix petals: the ſtamina are ſix: the piſtils are three, and the fruit is compoſed of three capſules, each containing a great number of ſeeds. The male flowers have no calyx: the corolla is divided into ſix parts: the ſtamina are ſix in number, and there appears a rudiment of a piſtil.

*Veratrum foliis latioribus.*
*Broad-leaved Veratrum.*

**White Hellebore.**

The root is compoſed of a cluſter of thick, whitiſh fibres: the plant riſes to three feet high: the ſtalk is round and robuſt: the leaves are numerous; they ſurround the ſtalk at the baſe, and are ten inches long, and eight broad, nervous, ſomewhat hairy, and ſoft to the touch: the flowers are ſmall, and of a greeniſh-white colour; they ſtand in cluſters, and form a kind of ſpike from the middle to the top of the plant.

It is a native of Germany, and many other parts of Europe. C. Bauhine calls it, Helleborus albus flore ſubviridi.

It's root dried is the white Hellebore of the ſhops, a powerful ſternutatory.

There is but one other known ſpecies, which is the early-flowering, narrow-leaved, purple Veratrum.

## CELTIS.

THE calyx of the hermaphrodite flower is divided into five ſegments: there is no corolla: the ſtamina are five: the ſtyles are two: the fruit is a drupe, containing a ſingle kernel. The calyx of the male flower is divided into ſix parts: there is no corolla, and but one ſtamen.

*Celtis foliis majoribus ſerratis.*
*The larger, ſerrated-leaved Celtis.*

The Nettle-tree.

The root is brachiated: the tree grows to a conſiderable ſize: the trunk is thick: the branches numerous and diffuſe: the bark is of a greyiſh colour: the leaves are three or four inches long, and three fourths of their length in breadth near the baſe; they are ſomewhat like thoſe of the common ſtinging Nettle; they are deeply ſerrated, and terminate in a long, narrow point: the flowers are ſmall: the fruit is black, and of the bigneſs of a Cherry.

It is a native of Italy. C. Bauhine calls it, Lotus fructu ceraſi.

The other ſpecies are, 1. The Virginian, red-fruited Lotus. 2. The citron-leaved, American Lotus.

## HOLCUS.

THE calyx of the hermaphrodite flower is a glume, containing two flowers: the corolla is a glume, furniſhed with a triple ariſta, or awn: the ſtamina are three; the ſtyles are two; the ſeed is ſingle. The calyx of the male flower is a bivalve glume: there is no corolla: the ſtamina are ſix.

Theſe characters ſufficiently diſtinguiſh the Holcus from all the graſs kind without a farther deſcription.

This genus comprehends the Sorghum of Micheli.

## ÆGILOPS.

THE calyx of the hermaphrodite flower is a glume, containing three flowers: the corolla is a glume, terminated by a ſimple ariſta, or awn: the ſtamina are three; the ſtyles are two; and the ſeed is ſingle. The calyx of the male flowers is a glume, containing three flowers: the corolla is an ariſtated glume: the ſtamina are three.

*Ægilops ſpica ovata, ariſtis breviore.*
*The Ægilops, with an oval ſpike ſhorter than the ariſtæ.*

The root is compoſed of a few ſhort, white fibres: the plant grows to about a foot high: the ſtalk is round, hollow, jointed, and has two or three long, narrow, graſſy leaves on it, hairy at the edges: at the top of the ſtalk ſtands a ſhort ſpike, compoſed of two or three little rigid cluſters of flowers: the ſeeds are large, and ſomewhat like barley, but flatter: the ariſtæ are long, white, and acute.

It is a native of Italy, and ſome other parts of Europe. C. Bauhine calls it, Feſtuca altera capitulis duris; others, Ægilops.

The ſpike is ſometimes longer than uſual, in which ſtate Tournefort has mentioned it as another ſpecies, under the name of Gramen ſpicatum durioribus locuſtis ſpica longiſſima.

## CENCHRUS.

THE involucrum is laciniated, echinated, and contains two flowers: the calyx is a glume, containing two flowers, the one of them male, the other hermaphrodite: the corolla of the hermaphrodite flower is a muricous glume: the ſtamina are three: the ſtyle is divided into two parts, and the ſeed is ſingle. In the male flower, the corolla is alſo a glume, without any awn: the ſtamina are three.

This genus comprehends the Paniſcaſtrella of Micheli.

*Cenchrus*

*Cenchrus panicula ſpicata.* Rough-tared, ſea
*The ſpiked-panicled Cenchrus.* Dog's-graſs.

The root is compoſed of a great number of white fibres: the plant riſes to about ſix inches high: the ſtalks are numerous, hard, rigid, reddiſh, and full of knots, or joints: the leaves are numerous and ſhort; they cover the ſtalk, in great part, by ſurrounding it at their baſes; they are hairy at the edges, and of a bluiſh-green colour: the flowers form a kind of ſpike, of about an inch long, and muricated.

It is common about the ſea-coaſts, in many parts of Europe. C. Bauhine calls it, Gramen caninum maritimum ſpica echinata; but it is often found far from the ſea.

The other ſpecies are, 1. The long, purple-ſpiked, American Cenchrus. 2. The white-ſpiked, American Cenchrus. 3. The broader-leaved Cenchrus. 4. The tall, narrow-leaved Cenchrus.

## VALANTIA.

IN the hermaphrodite flower, there is no calyx: the corolla is divided into four parts: the ſtamina are four: the ſtyle is bifid, and the ſeed is ſingle. In the male flower, there is no calyx: the corolla is divided into three or four ſegments: the ſtamina are either three or four: the piſtil is obſolete.

This genus comprehends the Cruciata of authors.

*Valantia floribus maſculis quadrifidis, pedunculis diphyllis.* Creſs-
*The Valantia, with quadrifid male flowers, and diphyllous peduncles.* wort.

The root is compoſed of a cluſter of yellow fibres: the ſtalks are numerous, a foot long, and hairy, ſquare, infirm, and often in part procumbent: the leaves ſtand four at every joint; they are broad, ſhort, obtuſe, hairy, and diſpoſed in a radiated manner: the flowers are ſmall and yellow, and ſtand in the alæ of the leaves.

It is common under hedges, in many parts of England. C. Bauhine calls it, Cruciata hirſuta; others, Cruciata.

The other ſpecies are, 1. The four-leaved, echinated, ſaxatile Valantia. 2. The narrow and ſmooth-leaved Valantia. 3. The ſmall, broad-leaved, ſmooth, Alpine Valantia. 4. The paniculated-flowered Valantia. 5. The ſmooth, fine-leaved Valantia. 6. The hairy, round-leaved, Pyrenean Valantia. 7. The broad-leaved, ſmooth, white-flowered Valantia. 8. The narrower-leaved, white-flowered Valantia. 9. The little, procumbent, wall Valantia. 10. The rough-fruited Aparine of authors. 11. The ſmooth, broad-leaved, oriental Valantia.

## PARIETARIA.

THE calyx of the hermaphrodite flower is divided into four ſegments: there is no corolla: the ſtamina are four: the ſtyle is ſingle; the ſeed is ſingle, and is contained in the calyx, which becomes elongated for it's reception. The calyx of the female flower is divided into four ſegments: there is no corolla: there are no ſtamina: the ſtyle is ſingle, and the ſeed is ſingle, and is contained in the ſame manner in the elongated cup.

*Parietaria foliis lanceolato-ovatis alternis.* Pellitory of
*The Parietaria, with lanceolato-ovate, alternate leaves.* the Wall.

The root is compoſed of a multitude of fibres, of a reddiſh colour: the ſtalks are numerous, round, hairy, browniſh, brittle, and not very thick; they grow to a foot, or more, in length: the leaves are oblong, broadeſt in the middle, and pointed at the ends, of a duſky green colour, and ſomewhat hairy: the flowers are ſmall and greeniſh; they ſtand in cluſters, at the alæ of the leaves.

It is common on old walls. C. Bauhine calls it, Parietaria officinarum et Dioſcoridis.

The other ſpecies are, 1. The baſil-leaved Parietaria. 2. The dwarf, Portugal Parietaria.

## ATRIPLEX.

THE calyx of the hermaphrodite flower is formed of five leaves: there is no corolla: the ſtamina are five: the ſtyle is divided into two parts: the ſeed is ſingle and depreſſed. The calyx of the female flower is compoſed of two leaves: there is no corolla; there are no ſtamina: the ſtyle is divided into two parts: the ſeed is ſingle and compreſſed.

*Atriplex valvulis fœmineis ſeminum diſco dentatis.*
*The Atriplex, with the female valves of the ſeeds dentated at the diſk.*

**Long-leaved Wild Orach.**

The root is oblong, ſlender, and white: the ſtalk is round, ſtriated, green, and two feet high: the leaves ſtand alternately on it; they are three inches long, three quarters of an inch broad, and of a pale green colour, not ſerrated at the edges, but ſometimes ſagittated at the baſe: the flowers are of a greeniſh-white colour; they ſtand in long cluſters, at the tops of the branches.

It is common by way-ſides. C. Bauhine calls it, Atriplex anguſto oblongo folio.

It's leaves vary greatly in form. Sometimes they are not ſagittated at all at the baſe; ſometimes they are very much ſo; ſometimes they are very narrow, and at others broader, and ſometimes lanceolate, and not very long: all theſe varieties will ſometimes take place, in ſome degree, on the ſame plant.

The other ſpecies of Atriplex are, 1. The garden Atriplex, diſtinguiſhed into the white and red kind by authors, as if of two ſpecies. 2. The broad-leaved, ſhrubby, ſea Atriplex. 3. The procumbent, Spaniſh, ſhrubby, ſea Atriplex. 4. The ſilvery, polygonum-leaved, ſea Atriplex. 5. The very narrow-leaved ſea Atriplex. 6. The laciniated-leaved, ſea Atriplex. 7. The narrow-leaved, dentated, ſea Atriplex. 8. The halimus-leaved, herbaceous, ſea Atriplex. 9. The deltoide-leaved, perennial, ſea Atriplex. 10. The oblong, narrow-leaved, ſea Atriplex. 11. The very narrow and very long-leaved Atriplex.

*Claſs the Twenty Third. Order the Second.*

## POLYGAMIA DIOECIA.

*Plants which have flowers of different ſtructure, hermaphrodites and others, on different plants of the ſame ſpecies.*

## CHAMÆROPS.

THE calyx of the hermaphrodite flower is divided into three parts: the corolla is alſo divided into three parts: the ſtamina are ſix: the germina are three: the fruit is compoſed of three drupes, each of which contains a ſingle kernel. The calyx of the male flower is divided into three parts: the corolla is divided alſo into three parts: the ſtamina are ſix, and cohere together.

Theſe characters ſufficiently diſtinguiſh the Chamærops, without a farther deſcription. Pontedera gives it the name of Chamæriphes, 10.

## FRAXINUS.

IN the hermaphrodite flower, there is, in ſome ſpecies, no calyx; in others there is a ſmall one, divided into four parts: in ſome ſpecies there is no corolla, in others there is a ſmall one, formed of four petals: the ſtamina are two; the piſtil is ſingle, and the ſeed ſingle. In the female flower, the piſtil is ſingle, and the ſeed is ſingle, and, as in the other, of a lanceolated figure.

*Fraxinus*

22

Osyris

Hippophae

Vallisneria

Terebinthus

Mercurialis

Ceratonia

Carica

Juniperus

Ruscus

Ephedra

Populus

23

Valantia

Veratrum

Celtis

Parietaria

Atriplex

Fraxinus

Empetrum

B. Cole Sculp.

*Fraxinus floribus nudis.*
*The naked-flowered Fraxinus.*

The common Aſh-tree.

The root is brachiated and ſpreading: the tree grows to a very conſiderable height and ſize: the bark of the branches is of a pale bluiſh-green colour: the leaves are large and pinnated; the pinnæ are of an oblong figure, and ſerrated: the flowers are ſmall and inconſiderable: the fruit is what we call the Aſhen-key; great cluſters of them are affixed to the ſame common pedicle.

It is common in our woods and hedges. C. Bauhine calls it, Fraxinus excelſior; others, Fraxinus vulgaris.

The other ſpecies are, 1. The complete-flowered Fraxinus, called the manna Aſh. 2. The rounder-leaved Fraxinus. 3. The narrower-leaved, American Fraxinus.

## RHODIOLA.

THE calyx of the hermaphrodite flower is divided into four parts: the corolla conſiſts of four petals: the nectarium conſiſts alſo of four petals: the ſtamina are eight; the piſtils are four, and abortient. The calyx of the female flower is divided into eight parts: there is no corolla: the nectarium is compoſed of four petals: the piſtils are four: the capſules are alſo four, and each of them contains a number of ſeeds.

Theſe characters ſufficiently diſtinguiſh the Rhadiola, without a farther deſcription.

## ANTHOSPERMUM.

THE calyx of the androgynous flower is divided into four ſegments: there is no corolla; the ſtamina are four; the piſtils are two, and the germen ſtands below the flower. The male flowers are the ſame with theſe, but that they want the piſtils and germen. The female flowers have the piſtils and germen, but they want the ſtamina. Theſe ſeveral flowers are ſometimes ſituated on the ſame plant, but more frequently on different ones of the ſame ſpecies.

Theſe characters ſufficiently diſtinguiſh the Anthoſpermum, without a farther deſcription. Pontedera gives this genus the name of Tournefortia.

## ARETOPUS.

THE umbel of the male plant is compoſite: the involucra conſiſt of five leaves; the corolla of five petals: the ſtamina are five; the piſtils are two, and abortient. The umbel of the androgynous plant is ſimple: the involucrum is divided into four parts, and is very large, prickly, and contains a number of male flowers in the diſk, and four female ones in the radius. The male flowers have five petals and five ſtamina: the female flowers have five petals and two ſtyles: the fruit is ſingle and bilocular, and ſtands under the receptacle of the floſcule.

This genus comprehends the Valerianoides of Plukenet. It is ſufficiently diſtinguiſhed by theſe characters, without a farther deſcription.

*Claſs the Twenty Third. Order the Third.*

## POLGAMIA TRIOECIA.

*Plants which have diſtinct male, female, and hermaphrodite flowers, on as many ſeparate plants of the ſame ſpecies.*

### EMPETRUM.

THE calyx of the hermaphrodite flower is divided into three parts: the corolla conſiſts of three petals: the ſtamina are three, and very long: the ſtigmata are nine: the fruit is a berry, containing nine ſeeds. The calyx of the male flower is divided into three parts: the corolla is compoſed of three petals: the ſtamina are nine, and very long. The calyx of the female flower is divided into three parts: the corolla is compoſed of three petals: the ſtigmata are nine, and the fruit is a berry with nine ſeeds.

*Empetrum procumbens foliis longioribus.*
*The procumbent Empetrum, with long leaves.*

**Berry-bearing Heath, or Crake Berries.**

The root is oblong and ſpreading: the ſhrub is ſmall, and in great part procumbent: the branches are woody, tough, and reddiſh: the leaves are numerous and ſmall, narrow, firm, and of a deep green colour, and placed in a ternate, or quaternate, order: the flowers are ſmall: the fruit is a round, black berry.

It is a native of moſt of the mountainous parts of Europe; we have it on the hills in Lancaſhire and Weſtmoreland. C. Bauhine calls it, Erica baccifera procumbens nigra.

There is but one other known ſpecies of this genus; this is the white-berried, erect Empetrum.

*Some Genera, the Characters of which are not yet ſo perfectly known or aſcertained as were to be wiſhed.*

## PHOENIX.

THE male and female flowers are on diſtinct plants, or on the ſame ſpadix. In the male flowers, the general ſpatha is compoſite: the ſpadix is ramoſe: the corolla is deeply divided into three hollow, oval ſegments: the ſtamina are three ſlender filaments: the antheræ are ſhort. In the female flowers, the calyx is the ſame as in the male: the corolla is divided into three principal ſegments, with as many very ſmall laciniæ, externally and internally: the germen is roundiſh; the ſtyle is ſubulated and ſhort; the ſtigma is acute: the fruit is an oval berry, having only one cell, and in that a ſingle, oſſeous ſeed, of a ſuboval figure, with a longitudinal furrow.

*Phœnix frondibus pinnatis, foliolis alternis enſiformibus, baſi complanatis, petiolis compreſſis dorſo rotundatis.*

*The pinnated-leaved Phœnix, with alternate, enſiform foliola, complanated at the baſe, and their pedicles compreſſed, and rounded at the back.*

**The great Palm, or Date-tree.**

The root conſiſts of a long and thick body, penetrating deep into the earth, and of a multitude of ramifications, running juſt under the ſurface: the trunk is ſtrait, ſimple, and undivided: the tree grows to a conſiderable height: the leaves all grow in a kind of cluſter at the top; they are from ſixty to eighty in number, and are beautifully diſpoſed in a circular manner; in the midſt there ſtands a conic body, formed of a cluſter of yet unexpanded leaves; around this ſtand numbers of leaves, not yet perfectly ſeparated; below theſe, others more perfectly diſingaged, and ſo on to the loweſt; the whole head, formed by all theſe, is very large and very beautiful, the loweſt of them ſtanding not parallel, but making a kind of arch with their pedicles; they are very large, and pinnated; the pinnæ are very long, narrow, and of a deep green colour, reſembling in figure the leaves of reeds; and the rib appears ſpinoſe, but the ſpines are no other than the rudiments of leaves: the male ſpadix is large, ramoſe, and contains a vaſt number of flowers; they are ſmall, and of a yellowiſh-white colour: the female flowers are ſmall, and alſo very numerous; they are ſucceeded by the fruit, which is the Date of the ſhops.

It is a native of both the Eaſt and Weſt Indies. C. Bauhine calls it, Palma major; others, Palma dactylifera major.

## CORYPHA.

THE general ſpatha is compoſite: the ſpadix is ramoſe: the corolla is divided into three oval, obtuſe, patent ſegments: the ſtamina are ſix ſubulated filaments, longer than the corolla: the antheræ are adnate: the germen is roundiſh: the ſtyle is ſubulated and ſhort: the ſtigma is ſimple: the fruit is a large, globoſe, unilocular berry: the ſeed is ſingle, oſſeous, large, and globoſe.

The Codda Panni of the Hortus Malabaricus is of this genus.

## COCCUS.

THERE are male, hermaphrodite flowers, and female ones, diſtinct on the ſeveral parts of the ſame ſpadix: the general ſpatha is compoſite, and the ſpadix ramoſe. In the hermaphrodite flowers, the corolla is divided into three oval, acute ſegments: the ſtamina are ſix ſimple filaments, of the length of the corolla: the antheræ are oblong and incumbent: the germen is ſcarce viſible: the ſtyle is ſhort, thick, and obtuſely

obtuſely trifid: the ſtigma is obſolete, and the rudiment of the fruit is abortient. The female flower has the corolla very minute, but divided alſo into three ſegments: the germen is oval, and terminates in a ſubulated ſtyle: the ſtigma is tripartite: the fruit is large, coriaceous, round, and obtuſely trigonal: the ſeed is a large nut, of an oval figure, acuminated, formed of three valves, obtuſely trigonal, and marked with three holes at the baſe.

This genus comprehends the Teuga of the Hortus Malabaricus.

## BORASSUS.

THE male and female flowers are on diſtinct plants. The male flowers have the general ſpatha compoſite: the ſpadix is amentaceous and imbricated: the corolla is divided into three oval, hollow ſegments, reſembling petals: the ſtamina are ſix thick filaments: the antheræ are thick and ſtriated. The female flowers have the ſpatha and ſpadix like the male: the corolla is divided into three round, ſmall, permanent ſegments: the germen is roundiſh: the ſtyles are three, and ſmall: the ſtigmata are ſimple: the fruit is a roundiſh, obtuſe, rigid, unilocular berry: the ſeeds are three, oval, compreſſed, diſtinct, and filamentoſe.

This genus comprehends the Ampana and Carimpana of the Hortus Malabaricus: the Ampana is the male, the Carimpana the female.

## CARYOTA.

THE male and female flowers are produced in ſeparate parts of the ſame ſpadix. The general ſpatha is compoſite: the ſpadix is ramoſe: the corolla is divided into three hollow, lanceolated ſegments: the ſtamina are numerous filaments, longer than the corolla: the antheræ are linear. The corolla in the female flower is divided into two very ſmall, acuminated ſegments: the germen is roundiſh: the ſtyle is acuminated: the ſtigma is ſimple: the fruit is a round berry, containing a ſingle cell: the ſeeds are two, large, oblong, rounded on one ſide, and flatted on the other.

## BEGONIA.

THERE are diſtinct male and hermaphrodite flowers on the ſame plant. The male flower has no calyx: the corolla is formed of four petals, patent and regular; two of the petals are placed oppoſite, and are lanceolated; the other two are oval, emarginated, and broader: the ſtamina are numerous capillary filaments, ſhorter than the corolla: the antheræ are roundiſh: the piſtil is deciduous. The hermaphrodite flower has no calyx; the germen anſwers the purpoſe of one: the corolla is compoſed of five oblong, patent, and cordated petals: the ſtamina are numerous capillary filaments, ſhorter than the corolla: the antheræ are roundiſh: the germen is triangular, with membranaceous angles, and is three-pointed and erect: the ſtyles are three, bifid, and of the length of the ſtamina: the ſtigmata are globoſe: the fruit is triangular, and contains three cells: the ſeeds are numerous and ſmall.

## *Genera mentioned by* Plumier.

THE corolla of the male flower is divided into ſix ſegments: the corolla of the female flower is alſo divided into ſix ſegments; there is no pericarpium: the calyx becomes large, round, and inflated, and it's rim is undivided: the ſeed is a nut of an oval figure, ſulcated, and containing only one cell: the ſeed is globoſe.

## HIPPOMANES.

THE male and female flowers are produced diſtinct on the ſame plant. The male flower has no corolla: the fruit is a large, globoſe berry, ſomewhat umbilicated, and containing only one cell: the ſeed is round and woody.

This genus comprehends the Mancanella of Plumier.

## CISSAMPELOS.

THE male and female flowers are produced ſeparate on the ſame plant. The male flower conſiſts of four oval, plane, patent petals: the fruit ſucceeding the female flower is a round berry, containing a ſingle cell, and in it a ſingle, rugoſe ſeed.

This genus comprehends the Coapeba and Clematis ſpecies 93. of Plumier.

## PLUKNETIA.

THE male and female flowers are produced ſeparately on the ſame plants. The male flower has no calyx: the corolla is compoſed of four oval, patent petals; the ſtamina form a ſhort, pyramidal body. The female flower has no calyx; the corolla is the ſame as in the male: the germen is quadrangular; the ſtyle is filiform, and very long, and declinate: the ſtigma is peltated and quadrifid; the ſegments are obtuſe and plane, and each is marked in it's middle with a ſpot.

The fruit is a depreſſed, quadrangular capſule; the angles carinated. It contains four cells, each of them bivalve: the ſeeds are ſingle, roundiſh, compreſſed, and ſomewhat acuminated at one end.

## HIPPOCRATEA.

THE calyx is a perianthium formed of a ſingle leaf, patent, and lightly divided into five obtuſe ſegments, larger than the corolla: the corolla is monopetalous, oval, truncated at the top, and undivided at the edges: the fruit is a capſule of a depreſſo-plane figure, patent, ſemitrifid, with trifid ſegments, and contains three cells, each of them bivalve; and the valves carinato-compreſſed: the ſeeds are oblong, and have a membranaceous ala.

This comprehends the Coa of Plumier; the parts ſeem ill deſcribed.

## MATHIOLA.

THE calyx is an erect, cylindric, undivided perianthium, ſhort and permanent: the corolla conſiſts of a ſingle, very long petal: the tube is ſlender, and gradually opens into a limb which is undivided, but it's edge is bent back: the ſtamina are five ſubulated filaments, ſhorter than the corolla: the antheræ are ſimple; the germen is globoſe, and ſtands under the receptacle: the ſtyle is filiform, and of the length of the corolla; the ſtigma is thick and obtuſe: the fruit is a globoſe drupe, coronated with the cup, and unilocular: the ſeed is a globoſe nut; the kernel is globoſe.

## ACHRAS.

THE calyx is a perianthium, compoſed of five leaves; they are oval, acuminated, erect, and permanent: the corolla is compoſed of five oblong, erect, and obverſely cordated petals; the germen is oval: the fruit is an oval, quinquelocular berry: the ſeeds are ſingle, ſuboval, compreſſed, ſmooth, and have a prominent denticle on one ſide.

This genus comprehends the Sapota of Plumier, who ſays, that the Sapota has the ſame characteriſtics as the Anona; but this deviates greatly from his more particular account of it.

BROSSÆA.

## BROSSÆA.

THE calyx is a perianthium, formed of a ſingle leaf, divided into five ſegments, which terminate in acute, erect points, of the length of the corolla: the corolla is formed of a ſingle petal; it is of a conic figure, the top truncated and undivided: the germen is pentacoccous; the ſtyle is ſubulated, and ſhorter than the corolla; the ſtigma is ſimple: the fruit is a round capſule, divided by five furrows; it contains five cells, and is covered with a large, fleſhy, ſucculent, connivent cup, which afterwards ſplits at the ſides: the ſeeds are numerous and ſmall.

## DURANTA.

THE calyx is a perianthium, formed of a ſingle leaf, divided by five indentings at the extremity; it is erect, acute, permanent, and pregnant with the germen: the corolla is formed of a ſingle petal, and is of the ringent kind: the tube is cylindric and long; the limb is bilabiated: the upper lip is oval, erect, and hollow; the lower is divided into three parts: the lateral ſegments are roundiſh and patent; the lower is again divided into two roundiſh ſegments: the fruit is a roundiſh berry, covered with the cup; it's mouth is obliquely connivent, and it contains one cell: the ſeeds are four, and of an angular figure.

This genus comprehends the Caſtorea of Plumier.

## HYMENÆA.

THE calyx is a perianthium, formed of a ſingle leaf, unequally divided by five indentings at the edge: the corolla is papilionaceous; the vexillum is large and reflex; the alæ are lanceolated and ſmall; the carina is ſubulated, longer than the alæ, and aſcendent: the germen is oblong; the fruit is a large legumen, of an ovato-oblong figure, obtuſe, and unilocular: the ſeeds are numerous, oval, and ſurrounded with fibres, and a farinaceous matter.

There is but one known ſpecies of this genus, which is deſcribed by Plumier, under the name of Cour baril.

## XIMENIA.

THE calyx is a perianthium, compoſed of three leaves, ſmall, cordated in figure, and deciduous: the corolla is formed of a ſingle petal, of a campanulated figure, divided at the edge into three erect, oblong, obtuſe ſegments: the germen is ſmall, and of a ſuboval figure: the fruit is an oval drupe, containing one cell: the ſeed is oval, unilocular, and ſmooth.

## FUCHSIA.

THE calyx is an undivided margin, coronating the germen: the corolla conſiſts of a ſingle petal: the tube is clavated; the limb is divided into eight ſegments, and plane; the ſegments are acuminated, and alternately lower: the ſtamina are four filaments, of the length of the tube: the antheræ are didymous and roundiſh: the germen is oval, and ſtands under the receptacle; the ſtyle is ſimple, and of the length of the ſtamina: the ſtigma is obtuſe: the fruit is a roundiſh berry, marked with four furrows, and containing four cells: the ſeeds are numerous, oval, and placed in a double ſeries.

## THALIA.

THE calyx is an ovato-ſubulated, univalve ſpatha: the corolla conſiſts of five ovato-oblong petals, hollowed and undulated at the edge; the two which are neareſt the ſpatha are ſmall and involute, the others are nearly equal, erect, and concave: the germen is oval; the fruit is an oval, unilocular berry: the ſeed is ſingle, oſſeous, and bilocular: the nucleus is ſlender.

This is the Cortuſa of Plumier. It ſeems allied to the Monandria, the Canna, Maranta, and the reſt.

## RHÆDEA.

THERE is no calyx: the corolla conſiſts of four vertically ovated petals; they are hollow and patent: the ſtamina are numerous; the germen is globoſe: the fruit is oval, ſmall, ſucculent, and contains only one cell: the ſeeds are three, of an ovato-oblong figure, large, and odly furrowed.

## BUCEPHALON.

THERE is no calyx, nor any corolla: the fruit is an oval, but ſomewhat quadrangular, berry, containing one cell: the ſeed is brittle.

## RANDIA.

THE corolla is monopetalous, and of the hypocrateriform kind: the limb is divided into five ſegments: the germen is oval; the ſtyle is ſimple: the fruit is an oval, unilocular capſule: the ſeeds are numerous, cartilaginous, compreſſed, and ſurrounded with pulp.

Houſton calls this Randia; Plukenet has figured it, under the name of a ſpecies of Jaſmine.

## MYRISTICA.

THE male and female flowers are ſeparate. The calyx of the female is a perianthium, of an ovato-campanulated figure, and indented in four places at the edge; there is no corolla: the piſtil is of a clavated form, and of the length of the calyx: the fruit is a drupe, of a roundiſh figure: the ſeed is ſingle, of a roundiſh figure, lightly ſulcated, and ſurrounded with a compreſſed, reticulated matter.

This is all we know of the characters of the Nutmeg-tree; it were much to be wiſhed that ſome perſons of knowledge would examine them more carefully on the ſpot.

### MYRISTICA. The Nutmeg-tree.

The root is brachiated and ſpreading: the trunk thick, and covered with a greyiſh bark: the tree grows to the ſize of one of our pear-trees: the leaves are ſomewhat like thoſe of the bay-tree, but larger, and terminated by a longer point; they have no pedicles, and are of a deep green on the upper ſide, and of a pale or whitiſh green below; they are very fragrant, when bruiſed: the flowers are yellowiſh; the fruit is ſomewhat like a peach.

It is a native of the Molucca's. The nutmeg is the ſeed of this fruit, and the mace ſurrounds it in a reticular manner.

## ISCHÆMUM.

THE male and female flowers are ſeparate, but ſtand near one another. The male is very ſmall, and placed on the glume of the calyx of the female: the calyx of the male-flower is a bivalve, muticous glume, containing only one flower: the corolla is a bivalve, muticous glume, of the ſize of the proper cup: the ſtamina are three ſhort, capillary filaments: the antheræ are ſimple. The female flower is larger: it's calyx is a bivalve glume, contained within a common glume, with an intorted ariſta within one of the valves: the corolla is a ſmall, biflorous glume: the germen is oblong; the ſtyles are two, and reflex: the ſeed is ſingle, and involved in the calyces and corollæ.

Theſe are the characters of the Iſchæmum, or Schænanthus, as Scheukzer deſcribes it; but they are obſcure, and ſome of them improbable: this is one of the plants, in which there wants much nicer examination.

Of this genus there is but one known ſpecies.

### ISCHÆMUM. Schænanth.

The roots are ſmall, white, oblong, hard, woody, and fibrated: the radical leaves are numerous, four inches long, narrow, graſſy, convoluted, and terminate in a ſharp, robuſt point; theſe are of a pale green, and ſurround one another, and the ſtalk at the baſe: the ſtalk riſes to a foot high; it is round, jointed, but that at conſiderable diſtances, and is not hollow, but full of pith, like a ruſh: the flowers are of a reddiſh colour, and ſtand in a ſpiked form on the top of the ſtalk, arranged in two ſeries, in the manner of thoſe of darnel: the whole plant is of a fragrant, aromatic ſmell.

It is a native of Arabia. It has been in ſome eſteem in medicine as a cephalic and deobſtruent, but it is not much uſed at preſent.

*FINIS.*