

Indian Botanic Garden Library
BOTANICAL SURVEY OF INDIA
CLASS No. 520.15
BOOK No. 111-4.42
ASC. NO. B.1182



11 1/2 inches high

I G U R E S

v. 66.

Of the moft BEAUTIFUL, USEFUL, and UNCOMMON

L A N T S

Stephan DESCRIBED IN *Methodus*

The GARDENERS DICTIONARY,

EXHIBITED ON *Blumenig*

Three Hundred COPPER PLATES,

'Accurately ENGRAVEN after DRAWINGS taken from NATURE'

WITH

V

he CHARACTERS of their FLOWERS and SEED-VESSELS,

Drawn when they were in their greattft Perfection,

i •

To which are added,

heir DESCRIPTIONS, and an ACCOUNT of the CLASSES to which they belong,
according to jRtly's, *Tourneforti's*, and *Linnaus's* Method of Clafling them.

By PHILIP MILLER, F. R. S.

MEMBER of the BOTANIC ACADEMY at FLORENCE, and GARDENER to the Wotflipful
Company of APOTHECARIES at their Botanic Garden at *Chelfia*.

In T W O V O L U M E S .

VOL. II.

L O N D O N :

Printed for the A U T H O R ;

And sold by JOHN Rivington in *St. Paul's Church-Yard* A. MILLAR,
tl. V. OODFALL, J. WHISTON and B. WHITE, J. HINTON, G. HAWKINS,
R. BALDWIN, J. RICHARDSON, W. v KN-TON, S. CROWDER,
P. DAVE Y and B. LAW, T. CASLON, and R. and J. Does LEY.

M.DCC.LX.

25/6/64





Fig. 1

Fig. 2

Fig. 1. Aster agerifolius Purshiana. Torr. N.Y. 1817.
 Fig. 2. Aster agerifolius Purshiana. Torr. N.Y. 1817. *Aster agerifolius* Purshiana. Torr. N.Y. 1817.

Painted according to a bot. of Purshiana by L. Miller. April 28. 1817.



Fig. 1. *HYPERICUM*, floris trippis, calycibus rotatis, lobis ovatis, lobis perianthii, calice frangente. Linn. 1753.
 Fig. 2. *HYPERICUM*, floris aurantiaceo, calycibus ovatis, lobis ovatis, lobis perianthii, calice frangente.

Delin. auct. et sculp. J. G. Schumacher, 1794.



P L A T E . C L I .

HYPERICUM, *Tourn. Inft. R. H. ° 54. Tab. 131. Lin. Gen. Plant. 808.* St. John's-wurt; in * > nch, *Millepertuis.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Sixth Clafs, which includes the Herbs with a Rofe Flower, whose Pointal becomes a Fruit with many Capfules. *Linnaus* ranges it in the Third Section of his Eighteenth Clafs, intituled, *Polyadelphia Polyandria*, from the Flow, -s having many Stamina and Styles *, and to tiis Geil'is he has joined the *Andromeda* and *Afcyrum* of *TournefoH**

The Species here reprinted are

Fig. 1. HYPERICUM floribustrigynis, calycibusacutis, staminibus corolla brevioribus, caule fruticoso, Lin. Hort. Cliff. 380. St. John's-wort with Three Styles in each Flower, acute Empalements, the Stamina shorter than ihs Petals, and a shrubby Stalk. This is the *Hypericum orientale fioremagno* ^ *Tour n. Cor. 19. Eastern St.* John s-wort with a large Flower; and the *Hypericum inontis Olympic Wheel. Itin. 222.* St. John's-wort of *Mount Olympus.*

This Plant grows naturally on *Mount Olympus*, where it was difcov'v-d by Sir *George Wheeler*, in his Journey through the East *, who fent the Seeds to the Botanic Garden at *Oxford*, where the Plants were raifed. It was afterwards found by *Tournefort*, who fent the Seeds to the Royal Garden at *Paris*, where they fucceeded; and from thence moft of the Gardens in *Europe* have been furnifhed with this Plant.

It hath a thick tufted fibrous Root, from which arife many upright Stalks, about One Foot high, which are ligneous, and covered with a brown Bark: Thefe put out Two or Three {hort Branches toward the Top, but rarely have any below. They are garnifhed with fmall tuft Spear-shaped Leaves placed oppofite, fitting clofe to the Stalk: X' y are Three-fourths of an Inch long, and One-fourth broad in the Middle, of a bright green Colour. The Flowers are produced at the Top of the Stalks: Thefe are compofed of Five large yellow Petals, which are concave, and obtufe, included in a five-leaved Empalement, which is pointed, as is reprinted at *a*. The Petals of the Flower are fhewn at *b* and within thefe are fituated many Stamina, reprinted at *c*, which are fhorter than the Petals. From the Middle of thefe arife Three Styles, which are re-

printed at *d* i thefe fit upon the Germen, which after wards becomes a dry Capfule, having Three Cells filled with fmall Seeds.

This Plant begins to flower about the Middle of *June*, and continues flowering till the Middle or latter End of *Auguft*, and in warm Seafons produces ripe Seeds in *England*. As this Plant will live in the open Air in this Country, and requires but little Culture, (O it may be allowed a Place in every good Garden.

Fig. 2. HYPERICUM floribus monogynis ftaminibus corolla longioribus, calycibus coloratis caulefruticofa. St. John's-wort with a Flower having One Style, the Stamina longer than the Corolla, the Empalement coloured; and a shrubby Stalk,

This Plant grows naturally in *China*, from whence the Seeds w're brought to his Grace the Duke of *Northumberland*, which were fown in his Grace's curious Garden at *Stanwick*, where they fucceeded -, and, by his Grace's Generofity, the *Chelfea* Garden was furnifhed with this and many other curious Plants.

The Root of this Plant is compofed of many ligneous Fibres, which ftrike deep in the Ground; from which arife feveral shrubby Stalks, near Two Feet high, covered with a purplifh Bark, and garnifhed with tuft fimbth Leaves, about Two Inches long and a Quarter of an Inch broad, placed by Pairs oppofite, fitting clofe to the Stalk: They are of a lucid green on their upper Side, and grey on their under, having many tranfverfe Veins running from the Midrib to the Border. The Flowers are produced at the Top of the Stalks, growing in fmall Clufters, each (landing upon afhortdiftant Footstalk: Thefe have an Empalement of One-Leaf, divided into Five obtufe Segments, reprinted at *a* > which is of a deep purple Colour. The Flower is compofed of Five large obtufe Petals of a bright yellow Colour, reprinted at *b* and *c* *, thefe are concave; and in the Center is fituated an oval Germen fupporting a fingle Style, reprinted at *d*, which is attended by a great Number of Stamina, fhewn at *e*, which are longer than the Petals and terminated by roundifh Summits.

This Plant continues in Flower great Part of the Year, which renders it the more valuable; and if it is planted in a warm Situation, it will live in the open Art* but thofe Plants which ftand abroad will not flower in Winter, as thofe do which are removed into Shelter in the Autumn.

p L 4 T E C L I I .

JACEA, *Tourn. Inft. R. H. 443. -Tab. 254. Centaurea, Lin. Gen. Plant. 880.* Knapweed \ in French, *Jacée.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Twelfth Clafs, which includes the Herbs with a fofculous Flower, whose Seeds have Down. *Dodtor Linnaus* ranges it in the Third Section of his Nineteenth Clafs, intituled, *Syngenefia Pogamia Frujlranea*. The Plants of this Section have involu'trs whose Difk or Middle is compofed of hermaphrodite Flowers, which are fruitful, and the Border, or Keys, of female Florets, which are abortive. To this NUMB. XXVI.

Genus he has joined the *Centaureum tnajus*, and the *Cyanus* of *Tournefort*.

The Species here reprinted are,

Fig. 1. JACEA arborea, argentea Ragufwa, Zan. Hift. 107. Silvery Tree Knapweed of *Ragufa*. This is the *Jacea Epidaurica* > *candidiffima & tomentofa* > *Teurn. Inft. R. H. 445.* Knapweed of *Mauritania* with hoary woolly Leaves. *Dodtor Linnxu* titles it *Centaurea calycibus ciliatis, foliis tomentofis pinnatifidis, foliolis obtufis ovaus integerrimij, exterioribus majoribus, Hort. Cliff. 422.*
D d Centaurea

Centaury with luiry Empalements, woolly Leaves with winged Points, and the Lobes oval, obtufe, and larger on che outer Part of the Leaf.

This Plant grows naturally on the Borders of the *Mediterranean Sea*, both on the *African* and *European* Shores ; but hath been long cultivated in the curious Gardens in every Part of *Europe*, for the remarkable Whiteness of its Leaves. This seldom rifes more than Three Feet high in *England*, with a shrubby perennial Stalk, which divides upward into several Branches : These have each One Head or Clufter of Leaves, having long Footstalks arising from One Center, which are divided into several obtufe Parts quite to the Midrib, so as to have the Resemblance of a winged Leaf, as is represented at *d*, and are very hoary, and soft to the Touch. From these Heads or Clusters of Leaves arise the Footstalks of the Flowers, which are garnished with a few white Spear-shaped Leaves, which are intire, as is represented at *r*, and is terminated by One Head of Flowers, inclosed in a hairy scaly Empalement, as shewn at *b* which is composed of many Florets, as is represented at *d* the Border or Rays being composed of female Florets, represented at ***, which are barren \ but the Difcor Middle is composed of hermaphrodite Florets which have Tubes, as is shewn at *l*, which are cut into Five Parts at the Top, out of which the Style arises, which is bifid and ri-flexed as is represented at *t* ; these fit on the Germen *£*, which afterwards becomes an oblong Seed f, crowned with Down. It flowers in *June*, but rarely : Seeds in *England*. The Flowers are of a bright yellow, and the Leaves being as it were candied, the Plants make a pretty Appearance.

Fig. 2. JACE *Acalycihus capillaribusrecurvatis, verticillatoyoliosifolius radicalibus ovato-oblongis, caulinisdentatis.*

Knapweed with hairy Empalements, which are recurved, and have a Whorl of Leaves under the Head, the lower Leaves at the Root being of an oblong oval, and those on the Stalks are indented.

This Plant grows naturally in *Portugal*, from whence the Seeds were sent me by *Robert Moore*, Esq, with several other curious Sorts of Seeds and Roots. This Ploij is biennial, the Root always perishing soon after the Seeds are ripe. The Leaves which first arise are of an oblong oval Shape ; but those which come out afterwards are divided. The Stalks rise upwards of Two Feet high, and are garnished with long narrow pointed Leaves, which are indented on their Edges, and frequently grow in Clusters, as is represented at *a* : These Stalks divide into several Branches, which are garnished with Leaves of the same Shape, but smaller ; and are terminated by Heads of purple Flowers, the Borders of which are composed of female barren Flowers, represented at *d* which are deeply cut at the Top into Five Rays of the Flower, and (and on short Footstalks, without the Empalement of the Flower, represented at *d*, which is composed of many Scales, edged about with long Hairs which turn downward ; under which is situated a Whorl of long Leaves of the same Form with the e which grow on the Stalks. The Center or Disk of the Flower is composed of many hermaphrodite Florets, represented at *e*, which are tubulous, and cut into Five Parts at the Top ; these fit on an oblong Germen marked *g*, having Five Stamina, which are shorter than the Tube, surrounding a bifid Style, marked *h*, which rises above the Tube : The Germen afterwards becomes an oval Seed crowned with Down, represented at *h*. This Plant flowers in *June* and *July*, and the Seeds ripen in the Autumn.

P L A T E C L I I I .

JACEA, C 5. P. 272. *Centaurium majus* Tournefort. *Inf. R.H.* 449. *Centaura*, *Lin. Gen. Plant.* 808.

The Characters of this Plant are the same as those of the former Plate ; and it is ranged by *Doctour Linnaeus* under the same general Title, but *Turnefort* separated those Species with large Flowers from the *Jacea*, and constituted a Genus, by the old Title of *Centaurium majus*.

The Sort here represented is,

JACEA *montana* *intana, capite Pini*, C. B. P. 272. Hoary Mountain Knapweed with the Head like a Pine-cone. This is the *Jacea montana* *capite magnojtroblyli* J. B. 3. p. 30. Mountain Knapweed with a large Head like a Cone. *Turnefort* titles it *Centaurium majus incanum, burnile, enpite Pini* Inji, R. H. 449. Hoary Dwarf Grasser Centaury with the Head like a Pine-cone. *Van Roy* en titles it *Centaur ea calycibus fquamojis* joins *mentofis* *radicalibus lanceolatis* *caulinis finnatidis, caulesimplici*, *Prod. Leyd.* 142. Centaury with a scaly Empalement, woolly Leaves, those at the Bottom being Spear-shaped, and those on the Stalks having many winged Points, and a single Stalk,

This Plant grows naturally on the Mountains in the South of *France* and in *Italy*. The Seeds of it were sent me from *Verona*, near which Place it grows in Plenty. It hath a perennial Tap-root, which runs deep into the Ground like a Carrot, but becomes woody by Age, sending out many Fibres from every Side, which annually decay, and new ones are produced every Spring. These put

out several long Spear-shaped Leaves, represented at *a*, which are of a pale green on their upper Side, and are covered with a little soft Down, but their under Sides are very white and downy : These are Five Inches long, and almost Two broad toward their Base, ending in acute Points. The Stalks are single, and rise about Fifteen Inches high, which are garnished with long Spear-shaped Leaves, regularly indented on both Sides, somewhat like a winged Leaf, and the Indentures end in acute Points as is shewn at *b*. The Stalks are stiff, and channelled, and are terminated by one large pyramidal Head, marked *c*, having a broad scaly Empalement, the Scales being convex, and disposed imbricately, like the Scales of Fish, or the Tiles of a Houfe, lapping over each other : At the Top of this scaly Empalement the Florets just peep out, as is represented at *d* the Empalement is cut into five Parts at the Top, and being very long, the upper of the Florets only appear : These Florets fit into the Embryo, as is represented at *e*, rising with a flendri tube, which enlarge above, and is deeply cut into Five Segments represented at *t* ; within the Tube are situated Five Stamina, and out of the Middle arises a long Style, marked *g*. The Germen which is situated at the Bottom of the Empalement, afterwards becomes an oblong angular Seed crowned with a Down, as represented at *t* ; But these Seeds rarely ripen in *England* ; for unless the Season is very dry in the Months of *July* and *August*, which is the Time of their flowering, and the Formation of the Seed, there can be no Expectation of any good Seeds ; for the which gets in at the Top of the Empalement, being retained by the Down on the Top of the Germen, causes them to rot.



LAPPA, *serotina*, *serotina*, *Cappi*, *Pina*, *C.B.P.*, *1792*

From a drawing in the collection of P. de la Roche, 1792.



tins. *Heracleum peruvianum* trigonum, foliis confertissimis longissimis, caule foliis longiore bifloro.

Descent in myriophyllum of Robinson by J. R. Sims - April 20, 1817.



Fig. 1 MA folia glaberrima nervosis hirsuta, floribus spicatis terminalibus.
 Fig. 2 LXI \ folia linear-glaberrima, floribus albis, wu i* tarmmsi* cus.

P L A T E GUV.

IRIS, 7W*. *Injl. R. H. 338. Tab. 186, 187, 188. Lin. Gen. "Plant. 57. Flower-de-luce; in Freffech, Flambe.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Ninth Clafs, which includes the Herbs with a Liiy-Flower of One Leaf cut into Six Parts, whose Empalement becomes the Fruit. Oo&or *Linnaus* ranges it in the Firft Sattion of his Third Clafs, intituled, *Triandria Monogynia*, from the lower having Three Stamina and One Style. To this Genus he has joined the *Xiphion*, *Sifyrinchium*, and *Heruodattylusi oiTournefort*. The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

¹ The Species here represented is,

IRIS *corollis barbatis, ger minibus trigonis^foliis enffor mibus Umgijjimis^caulefoliis longiore bifloro** Flower-de-luce with bearded Petals, three-cornered Germen, very long Sword-shaped Leaves, and a longer Stalk, with Two Flowers.

The Seeds of this Plant were brought from *CamieJa* by the R. Right Reverend Dr. *Fccock*. Bifhop of *OJfory*^ who found the Plants growing there naturally : Thefe were found in the *Cheljea* Garden, where they fucceeded very well ; and the Plants have been fince communicated to many curious Gardens in *Europe*.

This Plant hath a thick flefliy Root, divided into many Knots or Tubers, which fpread and multiply in the Ground : Thefe fend out many ftrong thick flefliy Fibres, which ftrike deep in the Earth, putting out feveral fmaller Fibres from their Sides. From thefe Roots arife Clusters of flat Sword-shaped Leaves of a deep green Colour,

which are more than Three Feet long, and little more than One Inch broad in the broadest Part, ending in Points : Thefe Leaves are connected together at their Bafe, into feveral Heads or Bundles, wrapping over each other ; and between thefe arife the Flower-ftalks, which grow Four Feet high, and are jointed, having very long Spathse or Sheaths at each of the upper Joints, which include the Flowers. Thefe Stalks do generally fustain Two Flowers, One coming out of each Sheath or, Spatha ; thefe ar\$; permanent, and, when the Flowers are past, do clofely cover the Seed veffel. The Flowers are divided into Nine Leaves; Three of thefe (land erect, which are white, and Six turn down : Three are joined together at their Bafe, the lower fpreading out into a broad, obtufe, reflexed Fall, having a Beard, represented at £, which is of a bright yellow Colour : The upper Segment is arched over the lower, fo as to form a fort of Lip, which is reflexed backward, as is (hewn at a : Between thefe is fituated an oblong three-cornered Germen, represented at f, which afterwards becomes an oblong, fwoln, three-cornered Seed-veffel, ending in a long Point, as represented at d, which opens into Three longitudinal Cells, in which the Seeds are ranged, as represented at e\ thefe are angular and compressed, as is (hewn at /. This Plant flowers the latter End of *June*, or the Beginning of *July*, and the Seeds ripen in the Autumn. It is very hardy, and thrives well in the open Air without any Protection. The Leaves decay to the Root in the Autumn, and new ones arife in the Spring. The Roots alfo propagate very fast, when they are in a light moist Soil *, fo that it may soon be had in Plenty, without waiting for Plants from Seeds.

P L A T E CLV.

IXIA, *Lin. Gen. Plant. 54, Sifyrinchium, Com. Hort. Amft.* The Species here represented are,

WE have no *Englilh* Title to this Genus.

The Characters are,

The Flowers are included in Sheaths or Covers^ jlanding at a Diflance, which are permanent. The Flowers have Six equal Petals^ which are oblong and concave: They have each Three Stamina, which are Jfrfter than the Petals, terminated by oblong Summits. At the Bottom of the Flower is fituated a three cornered Germen, fupporting a Jingle Style, divided into Three Parts at the Top, which are crowned by Three roundish Stigmas. The Germen afterwards becomes an oval three-cornered Seed-veffel, having Three Cells, which are filled with roundish Seeds.*

This Genus of Plants is ranged in the Firft Section of *Linnaus*'s Third Clafs, intituled, *Triandria Monogynia*, from the Flowers having Three Stamina, and but One Style: And this is feparated from the *Gladiolus* by the Form of the Flower *, the *Gladiolus* having an irregular or lingent Flower, whose Petals are unequal, and the *Ixia* hath a regular Flower with equal Petals.

Fig. 1. IXIA *foliis gladiolatis nervofis, hirsutis, floribus fpicatis terminalibus*. *Ixia* with Sword-shaped nervous hairy Leaves, and Flowers growing in Spikes at the End of the Stalk.

This hath a round, compressed, bulbous Root, with a red Skin, which is about the Size of a small Sprint *Crocus* Root *, from which arife Five or Six Sword-shaped Leaves, which are hairy, and have many longitudinal Furrows : They are from Two to Four Inches long, and One-third of an Inch broad, of a dark green Colour, fitting clofe together at their Bafe, but fpread open upward, like the Sticks of a Fan. Between thefe Leaves arife the Flower-ftalk, which is Six or Eight Inches long, naked to the Top, where it is terminated by a Spike of blue Flowers, each having a Spatha, or Hood, which remains after the Flower is decayed, as is represented at a ; thefe dry, and cover the Seed-veffel. The Flower hath Six obtufe Petals, represented by c and d; thefe are concave, and equal in Size and Position : At the Bottom of the Petals are inferted Three Stamina, marked ^, which are not fo long as the Petals: And from

from the Germen, which is fituated below the Flower, arifes a Style, which is the Length of the Stamina re-
presented at *?*, where it divides into Three Parts, each being
crowned by a roundifli Stigma. After the Flower is
paff, the Germen becomes an oval three-cornered Seed-
veffel, having Three Cells, which are filled with roundifli
Seeds. This Plant flowers in *May*, and the Seeds ripen
in *July*; soon after which the Stalk and Leaves decay
to the Root, and new ones arife the following Spring.

Fig. 2. *IXIA foliis lineari-gladiolatis floribus alaribus & terminalibus*. Ixia with narrow Sword-shaped Leaves, and Flowers growing from the Side and at the Top of the Stalks.

This hath a round bulbous Root, about the Size of a grey Pea, from which arife Four or Five Leaves,

which are Seven or Eight Inches long, ending in acute Points, and about a Fifth Part of an Inch broad in the Middle, having Two (harp Edges, like a Sword: Between these Leaves arife the Flower-talk, which is round, very tender, and about Nine Inches long; from the Side of which is produced Two or Three short Foot-talks, each supporting Four or Five Flowers growing in a Cluster; and the Stalks are terminated by loose Spikes of the same Flowers, which are composed of Six equal white Petals* as is represented at *i*: The Stamina and Style of the e Flowers are not more than half the Length of the Petal. When the Flowers decay, they are succeeded by roundifli Seed-vessels, surrounded by the Spatha or Sheath; these have Three Cells, which are filled with roundifli Seeds, represented at *h*. This Plant flowers and feeds about the same time as the former, and the Stalks decay in like manner.

P L A T E CLVI.

Fig. i. *IXIA foliis gladiolatis glabris, floribus corymbosis terminalibus*. Ixia with smooth Sword-shaped Leaves, and Flowers growing in round Bunches at the End of the Stalks.

THIS hath an oval, compressed, bulbous Root, represented at ***, where there are Two Roots, to show the upper and under Side: From the Root come out Three or Four smooth Sword-shaped Leaves, near a Foot long, and a Quarter of an Inch broad, having Two (harp Edges, they are of a deep green, and end in acute Points. Between these arifes a tender (liff Stalk, a Foot and a Half long, naked to the Top, where it is terminated by a round Bunch of Flowers, each being inclosed in an oblong Spatha or Sheath, which is permanent, and splits open on one Side. The Flowers are supported by short Foot-talks, and have each Six oblong concave Petals of a deep yellow Colour, each having a dark purple Bottom, represented at *a* and *b*. In the Center of the Flower arifes the short Style, supporting a trifold Stigma, as (hewn at *c*: This is attended by Three short Stamina, terminated by small Summits. After the Flowers decay, the Germen becomes a roundifli Capful, with Three Cells filled with roundifli Seeds, this Sort flowers at the same time with those before-mentioned, and the Stalks decay in the Autumn.

Fig. 2. *Ixi A foliis HnearibuStfloribusfpicatissefilibus*. Ixia with very narrow Leaves, and Flowers growing in close Spikes.

This hath a small, round, bulbous Root, from which

arife Three or Four long, narrow, grassy, Leaves of a deep green, and smooth: Between these the Flower-talk comes out, which rises a Foot and a half high, is very tender and (liff, having no Leaves on the Side, and is terminated by a close Spike of white Flowers, each having a permanent Spatha or Sheath, which covers the Seed-vessel after the Flower is fallen. The Flowers are composed of Six oval Petals, which are equal in Size and Situation, as is represented at *e*; these have Three short Stamina, which are terminated by small roundifli Summits; and from the Germen arifes a single Style, the Length of the Stamina, supporting a trifold Stigma. The Germen afterwards becomes a small roundifli Capful with Three Cells, each containing Two or Three small round Seeds. This Sort flowers the latter End of *May*, and the Seeds ripen in *July* soon after which the Stalks decay to the Root.

These Plants grow naturally at the *Cape of Good Kye*, from whence I received their Seeds, with many other Sorts, some of which have flowered in the *Chelsea* Garden, where there are many different Kinds which will show their Flowers this Season; so that we may expect a great Variety of distinct Species among them: And as very few of these Plants have been mentioned by any of the Writers on Botany, so we have exhibited a greater Number of Species here, than we should otherwise have done, had the Plants been more known in *Europe*; and it is much to be wondered, that they have not been long introduced into the *European* Gardens, since they are in so great Plenty at the *Cape of Good Hope*, as to be eaten as Food.



Fig. 1. Ixia foliis *isru* *U'iqn.* glabris floribus *ocypod* *fo* *terminalibus.*
 Fig. 2. Ixia foliis *lineari* *bus* floribus *•* *'in:* *tu* *spissibus*

Plants arranged in the Herbarium by J. P. Raven, April 1857.

f



LACTUCA foliis lanceolatis dentato-pinnatis lacinis pinnatis dentatis Linn. Hort. Cliff. 311.

W. Smith del.

Painted according to a drawing by W. Smith May 26 1777.

J. Miller sculp.



LAMII. maculatum. vulgare folio. C. B. P. 131.

Painted by a Mr. of London in P. M. May 1794.

Botanic Garden

W. Miller del.

P L A T E CLVII

LACTUCA, *Lin. Gen. Plant.* 814. *Tourn. Inji. R. H.* 473. *Tab.* 267. *Chondrilla, C. B.* P. 130. *Raii Meth. Plant.* 29. Lettuce \ in French, *Laitue*.

THIS Genus of Plants is ranged in the First Section of *Linnæus's* Nineteenth Class, intituled, *Syngenesia Polygamia JEqualis* in which Class and Section he includes those Plants which have compound Flowers, ipade up of hermaphrodite Florets, which are fruitful. *Tournefort* places it in the First Section of his Thirteenth Class, which includes the Herbs with a flocculose Flower, whose Seeds have Down. *Mr. Ray* places it in the First Section of his Sixth Class, which includes the Herbs with a compound Flower, whose Rays are plain, and the Plants have a milky Juice.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Specie here represented is,

LACTUCA *foliis linearibus dentato-pinnatis; laciniis furfum dentatis* *Lin. Hcrt. Cliff.* 384. Lettuce with narrow Leaves indented like winged Leaves, whose upper Segments are indented. This is the *Lattuca perennis humilior, fioreceruleo* *Tourn. Inji. R. H. 4. J3.* Low perennial Lettuce with a blue Flower! *Caffar Bauhin* titles it *Chondrilla carulea altera Cichorii Jylvejlris folio* *Pin. ijp.* Another blue Gum-Cicory, with a Leaf like the wild Cicory,

This Plant grows naturally in *Aufirya, France, and Italy* \ and is here frequently preferred in Gardens for the sake of Variety. It hath a perennial Root composed of many long fleshy Fibres, which abound with a milky Juice. These spread pretty far in the Ground, and frequently put out Plants at some Distance, so that it is frequently propagated by these Suckers. From the Root arise several frong Stalks, which divide, towards the Top, into several Branches. The Leaves, which are near the Root, are Nine or Ten Inches long; and have Six or Seven deep Jags almost to the Midrib, whereby

they have foire Refembli-ence to winged Leaves. These Jags are indented, on their upper Side into acute Points* The Leaves are shorter which grow upon the Stalks, and have fewer Jags; and those immediately below the Flower-Stalks are almost intire. The Flowers are produced at the Top of the Stalks, (landing upon slender branching Footstalks: Some of these sustain Two, others Three, and some Four Flowers. These Flowers have a scaly Empalement represented at *a*, the lower Scales are shorter the other are oblong, and end in acute Points. This common Empalement includes several Florets, or hermaphrodite Flowers, marked *b* \ the Border or Rays which are placed circularly round the Disk, are plain* ending in obtuse Points, as is shewn at *f*; these are of a deep Purple or blue Colour. The Middle, or Disk, represented at *d*, is composed of long tubulous Flowers, which are cut into Five Parts at the Top, each of these Florets has a Germen situated at the Bottom of the Tube, represented at *e*, which is crowned with a Down, as is shewn at *g*; This Germen afterwards becomes the Seed; and the feathery Down, which is situated on the Top, disperses the Seeds, when ripe, to a considerable Distance. The Florets which compose the Border or Ray, are also hermaphrodite \ these have a Germen situated at their Bottom, as is represented at *h* \ but as the Tube of these Rays is short, so the Down fits immediately on the Top of the Embryo or Germen; and the Style, with the forked reflexed Stigma, rises considerably higher, as is shewn at *g*; whereas in those Florets which compose the Disk, the Down is situated near the Top of the Tube.

This Plant flowers in *June* and *July*, and the Seeds ripen in *September*, which are soon dispersed by the Wind, when they are ripe, for the Down which before was closely united, now is expanded to its full Length; and the Tube of the Flower which covered the Organs of Generation, now shrinks and falls down, so as to leave the Seeds naked, by which every Gale of Wind carries them off as they are ripened, and the Down will support the Seeds in the Air, till they are dispersed to a considerable Distance from the Plants.

P L A T E CLVIII

Tournefort, Raii Meth. Plants 63. *Melissa* *Tournefort. Inji. R. H.* 183. *Tab.* 91, *Melittis* *Lin. Gen. Plant.* 650. Dead Nettle,

THIS Genus of Plants is ranged in the Fifth Section of *Mr. Ray's* Fourteenth Class, which includes the Herbs whose Leaves and Flowers grow in Whorls round the Stalks. *Tournefort* places this Plant under his Genus of *Melissa* or Baum; but as the Flowers of Baum grow in Bunches sustained by a common Footstalk, and those of this Plant arise single from the Joints of the Stalks, it should not be put under that Genus. *Dofor Linnaeus* has constituted a new Genus for this Plant, to which he gives the Title of *Melittis*, but the Characters which he exhibits of that Genus, do by no means agree to those of this Plant; therefore it may be doubted, if he knows this \ for he mentions it as a native

Non. XXVII.

Plant in *England, Germany, and other Places*, where it was never seen, except in Gardens; nor is it often to be found in them; so that I believe he never saw it: For this Plant exactly agrees with all his Characters of *Lamium** except that of the upper Lip being intire in *Lamium* and in this it is indented in Three Parts,

The Sort here exhibited is,

LAMIUM *montanum Melissa folio, C. B.* \ Mountain Dead Nettle with a Baum Leaf. *Tournefort* titles it, *Melissa humilis, latifolia, inaximo jlore purpurascente* *Inji. R. II.* 192. Low broad-leaved Baum with a large purplish Flower. *John Bauhin* titles it, *Melissa adalterina quorundam, amplis foliis & Jloribus non grati odoris, Hijl. vol. ii, p. 233.* This is the *Melissa Tragi Hijl. 11.* and the *Melissa Fuchfii Lob. Icon.*

E e

This

This Plant hath perennial Root, and an annual Stalk. The Root is composed of thick strong Heads, which fend out a great Number of Fibres, which extend to a considerable Distance every Way: From these Heads arise, in the Spring, a Number of Stalks, in proportion to the Size of the Roots, for if the Roots are large and strong, they will fend out Eight or Ten Stalks; but small Roots have seldom more than Two or Three. These Stalks are strong, square, and rise a Foot and Half high, growing upright, and never branch: They are garnished at each Joint with Two heart-shaped Leaves placed opposite, which are Four Inches long, and near Three Inches broad in the widest Part, remanent; with an acute Point: These are deeply fawed on their Edges, and their upper Surface is very much veined, of a dark green Colour, and stand upon long Footstalks, which have a deep Channel on their upper Side. Clove to die Base of the Footstalks come out the Flowers, (landing in Whorles close to the Stalks at every Joint, where the Stalks are of a deep purple Colour. The Empalement of the Flower is of One Leaf; the lower Part is tubulous, and a little recurved; the upper Part spreads open, and is divided into Five acute Parts: The upper Segment Hands erect; those on each Side fit close to the Tube of the Flower; the Two lower Segments are a little reflexed. The Flower is of the Kind which Doctour *Linnaeus* titles *rugmt*, or grinning, from die upper Part

of the Flower resembling the Chaps of Animals. It hath but One Petal: The lower Part is tubulous, which rises above the Empalement; then it is swelled out greatly at the Chaps, and is divided into Two Lips; the upper Lip rises above the lower, and is arched at the Top, as is represented at *a*; this is flightily indicated in **Th**: The Parts at the Extremity, and is covered with five pairs of bristles, as at *b*; the Four Stamina stand close to the upper Lip, which are all arched, and terminal by oblong anthers, which are prostrate: The lower Lip is reflexed, and divided into three Parts; the outer Side and in three Segments, but the Middle one is heart-shaped, and indented at the Base. The exterior Part of the Flower is purple, but the Infide is white. The upper Lip hath many purple Streaks on the **Th**: The Two outer Stamina, marked *d* and *e*, are longer than the Two in the Middle. The Style with its forked stigma represented at *f*, in its natural Position, is fastened between the Two inner Stamens; the five-pointed Empatement into *g*, and *h*, is cut open, with Four Embryos kept together, and the Style arising between them; and represents the Four Seeds taken out of the Empatement. This Plant flowers in April and May, and the Seeds ripen in July. The Leaves and Flowers have the same Odour as the common purple Dead Nettle.

P L A T E CLIX.

LAPPA, *Touftt. Inji. R.H. 450. Tab. 256. Raii Meib. Plant. 41. ArMium Lin. Gin. riant. S30. Burdock; in French, Berdane cu Gkutenn.*

THIS Genus of Plants is ranged in the Second Section of *Teunef's* Twelfth Clafs, which includes the Herbs with a fofculous Flower, whole Seeds have a Down adhering to them. Mr. *Ray* places it in the First Section of his Ninth Clafs, which contains the Herbs with compound Flowers collected into Heads, Doctor *Unnms* ranges it in the First Section of his Nineteenth Clafs, intituled, *Syngnefia Polyxsmia A.* The Plants of this Clafs and Section have their Flowers composed of all hermaphrodite Florets which are fruitful. The Characters of this Genus are exhibited in *Gardeners DiSontyn*, under the Article of *Aretium*.

The Species here represented are,

Lappa major noxmsa, capital: *tomsnlgfis. Jive Ar\$Hut; Di&coridii C.B. P. 198.* Greater Mountain Burdock with woolly Heads, or the *Aretium* of *Dieftmdes*. This is the *Aretium foliis ccrdalis imrtibm., cspitulis major-bus tmcr.tc-rticilihtu* of *The Gardenas Diftoitary*; i. e. Burdock, with heart-shaped Leaves without Spines, and larger Heads which have downy Net-work.

Doctour *Linitaiti* has given but One Specie of the common Burdock, by which it appears that he supposed but One distinct Sort; but I have cultivated Three, which have always retained their Difference Twenty Years; so I have enumerated them as three distinct Species in *the Gardeners DiUienary*. There is also a woolly-headed *Bttri&ck* which grows naturally in England, but is very different from this which is here represented; the Heads of that are smaller, rounder, and not so woolly as this. That I suppose to be only a Variety of the common small-headed Burdock; and lead the Seeds which I sowed in the Garden produced Plants of both Sorts: But I have cultivated this Sort above

Two Years, during which Time I never have perceived it to decay. This Plant is biennial, the Plants which arise from Seed, do not flower till the Second Year; and when they have perfected their Seeds, the Root decays. The lower Leaves of this Plant are very large, and are waved on their Edges: They are of a dark green Colour. On their upper Side, but a little hoary on their under, and have a soft Down fallen on them: The Footstalks which sustain them, are thick and fleshy, rounded on their under Side, but are flattened on their upper, having a deep Furrow running through the Middle. There are many of these Leaves which Footstalks rise immediately from the Root, and between these come out the Flower-stalks, which rise near Four Feet high: This is thick, and full of Pith within, covered with a channelled Bark, which is composed of Threads. It is purple on the Outside, but white within, dividing upward into many Branches. These are garnished at each Joint by One Leaf, nearly of the Shape which is here below, but are much smaller: The Joints are terminated by roundish Heart-shaped Flowers, growing in loose Clusters. The common Empalement of these Flowers is finely marked with a white Down, as is shewn at *a*; and has a great Number of soft Spines placed all over it: The Head is composed of a great Number of hermaphrodite Florets of a purple Colour, represented at *b*; these have long slender Tubes which are enlarged upward, as is shewn at *c*, at the Bottom of which is situated the Germen, represented at *d*, which is crowned with five short Down: The style arises from the Top of the Germen, and is terminated by a forked stigma, represented at *e*, the five-pointed Empatement into *g*, and *h*, is cut open, with Four Germen afterward becomes an oval-cornered bted, crowned with a short Down, as is represented *g*. It is WBM? Seeds ripen in *Septembtr*; after which the Root decays: But if the Seeds are permitted to scatter, the Plants will come up the following Spring, and thrive within any Care.

Aretium Lappa!

Lappa major



1. W. a. nigra montana, capitula tenuioribus, fere Arcticis, Desfontain C. B. P. 1818.

Illustrated by L. Miller May 31 1817



LATHYRUS (Corymbosus) minor, floris magis. Boiss. Ind. 117

Painted according to the original in the Herbarium of P. de Rive, May 10 1844

J. B. Smith del.

J. B. Smith fecit.



Fig. 1. LANTANA foliis palmatis lobatis, caulis erecto fruticoso.
Fig. 2. LANTANA foliis palmatis lobatis, caulis herbaceo, floribus laciniatis pedunculatis longifloris.

Class. in reg. in the P. Museum of L. L. - May 1800

are of a reddish purple Colour, and in the lower ripes the Column, shewn at *e*, in which the Organs of Generation are joined into one Body : After the Flower is past, the Germen becomes a compressed Five-cornered Fruit, represented at *f*, having Five Capfules, each containing One kidney-shaped Seed, represented at *g*. This Genus differs from *Althaea* in the outer Empalement, being cut only in Three Parts, whereas that of *Althaea* is cut in five ; and the Seeds of *Lavatera* have a Cover bef

with One Leaf on each Side. The lower Leaves are roundish, and those which are placed a little higher, have an Angle on each Side ; but the upper Leaves are shaped like the Point of an Halbert, and have short Footstalks ; whereas those on the lower Part are very long and slender. They are smooth, and of a light greenish yellow the Flowers stand upon very long Footstalks, which come out from the Wings of the Leaves ; sometimes Two arise from the same Joint* but in general there is only One. The outer Empalement of the Flower is short, angular, and flightily cut into Three Parts ; the inner ripes above this and is pointed, being cut into Five acute Sgments. The Flower is for the most part composed of Five large heart-shaped Petals, which are joined at their Base, and fall off together just before the Flower is termed *Monopetalous*, or of One Petal. It is of a beautiful Rose Colour with a purple Bottom, from which are spread a few purple Streaks, as is represented at *a* : After the Flower is past, the double Empalement becomes the Fruit marked *b*, composed of many Cells, in which the Seeds are placed, as is represented at *f*, where the Cover is taken off to shew how they are ranged.

Fig. 2. *LAVATERA foliis glabris, caule scabro herbaceo, floribus later alibus sedunculis longissimis.* Lavatera with smooth Leaves, a rough Stalk which is herbaceous, and Flowers growing from the Side of the Stalks on very long Footstalks. This is the *Lavatera Africana fore pulcherrimo Boerh. Ind. Ah. i.* African Lavatera with a most beautiful Flower.

This is an annual Plant, which rises with an herbaceous branching Stalk, about Two Feet high, garnished

P L A T E CLXII.

LEONURUS, *Town. Inft. R. H. 187. Tab. 87. RaiiMeth. Plant. 64. Phlomis Lin. Gen. 642.* Lions-tail in French, *Queue de Lion.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Fourth Class, which includes the Herb with a Lip-Flower of One Leaf, whose upper Lip is hollow, like a Spoon. Mr. *Ray* places it in the Fifth Section of his Fourteenth Class, in which he joins the Plants whose Flowers grow in Whorles from the Wings of the Leaves. Doctor *Linnaeus* has joined the Plants of this Genus to those of *Phlomis*, and has given the Title of *Leonurus* to the *Cardiaca*; but if he had joined the *Leonurus* to the *Cardiaca*, their Characters agree better than those of *Phlomis*.

The Speck here represented is,

Fig. 1. *LEONURUS minor, Capitibus Bomfjkei vulgò Boerb. Ind. alt. 1 So.* Smaller Lions-tail of the Cape of Good Hope. This is probably the *Leonurus Americanus, Nepetaefolio, fore phxnicio minore, Breyn. Prod. 2. i. e.* American Lions-tail with a Catmint Leaf, and a smaller scarlet Flower. But this Plant is not annual, nor was it brought from *America*, so that it doth not agree with that Title; yet by the Description given of it, this Plant is undoubtedly what they meant; for *Breynius* \ IV?..... given from a dried Specimen, and not from the living Plant; for he might be easily deceived; especially as he received it by the following Title: *Cardiaca Americana annua Nepetaefolio floribus brr::b:- pfojeniceis H. L. i. e.* Annual American Mother-herb with a Catmint Leaf, and a most beautiful Flower.

This Plant rises with a square ligneous Stalk about Two Feet high, dividing into (short Branches, which are furnished with short crenated Leaves, represented at *a*, the appearance of those of Catmint; the upper and lower Lip of the Flower are of a pure white, and at the Base of the Footstalk arise Two small Branches set with very small Leaves of a heart-shaped Shape. The flowers grow in Whorles round the Stem, as is represented at *b*, fitting very close without any Footstalks the upper Lip of the Flower is stretched out to a great Length, and is set with Hairs on the Infido, as is represented at *c* the lower Lip is very short, and is divided into Three Parts, as is shewn at *d* the Four Stamina are represented at *e*; Two of which are a little shorter than the other. Between these

arise the Style, marked *f*; and the upper Lip turned back, representing the hollow Spoon-shape: The Four-cornered Empalement is represented at *h* and *i*, and *k* shews the Four Seeds which succeed each Flower.

This Plant flowers in *October* and *November*, when it makes a fine Appearance in the Greenhouse.

Fig. 2. *LIGUSTRUM, Tourn. Inft. R.H., 596. Tab. 6j. Lin. Gen. Plant. 18.* Privet-, in French, *Troene.*

Tournefort ranges this Genus of Plants in the Fifth Section of his Twentieth Class, which includes the Trees and Shrubs with a Flower of One Petal, whose Pointal turns to a soft Fruit with hard Seeds. Doctor *Linnaeus* ranges it in the First Section of his Second Class, intitled, *Diandria Monogyyia*, from the Flower having Two Stamina and One Style.

The Specie here represented is,

LIGUSTRUM, *J. B. 1. 52S.* Common Privet. This is the *Ligustrum Germanicum C.: B. P. 475.*, German Privet - *Ligustrum vulgare A*

This Shrub grows very common in the Hedges in most Parts of *England*; but being placed as a medicinal Plant in the Dispensary, we have exhibited a Figure of it. This rises with many shrubby Stalks to the Height of Twelve or Fourteen Feet, dividing into several Branches which are garnished by narrow Leaves placed opposite; the Flowers are produced in Panicles at the End of the Branches, as is represented at *a* One of these taken from the Bunch is represented at *b*, and the Two Stamina are shewn at *c* the Four-cornered Empalement is shewn at *d*, and the same reversed at *e*, the First Appearance of the Fruit at *f*, the same fully grown at *g* and *h*, and *i* represents the Seeds.

This Shrub flowers in *June*, and the Berries ripen in the Autumn. As the Flowers of this are of a pure white, and the Berries are black when ripe, there is little Reason to doubt, that *Virgil* alluded to the Flowers and the Berries of this Plant in this Line,

Alba Ligufira cadunt, vaccinia nigra leguntur

rather than suppose he alluded to the Flowers of one, and the Berries of another, for the Berries of the Privet were formerly used in *Italy* for making of Ink and also for dying.



Salvia purpurea Linn. *Salvia purpurea* Linn. *Salvia purpurea* Linn.

Salvia purpurea Linn. *Salvia purpurea* Linn. *Salvia purpurea* Linn.

Salvia purpurea Linn.



Fig. 1. *Urtica aquatica* Linn. Jacq. R. H. Ker.
 Fig. 2. *Urtica dioica* Linn. Jacq. R. H. Ker.

P L A T E GLXIII.

LILAC, *Tourn. Inft. R. H. 601. Raii Meth. Plant. 158.*
I Syringa, Lin. t^{en}. PL 22. The Lilac.

f-Tjr-^ H IS Genus of Plants is ranged in the Fourth
 Section of *Tourneforth Two* nh Clafs*, in
 JL w h^ he places the Trees andv^nrubs with a
 lower of Vb Petal, whofe Pointal IT: .is to a Fruit
 with many apfules. Mr. Ray ha* placed it among his
 Mifcellane' is Trees and Shrubs in his Appendix. Doc-
 tor *Lirrn<Eus\z%* adapted the old Title of *Syringa* to this
 Genus, an /ranges it in the Firft Se&ion of his Second
 Glafs, which includes the Plants whofe Flowers have
 Two Stanfiha and Gn£ Style.

\ The Chafa&ers of this Genus are exhibited in the
gardeners DiW v rj.

Tb S" jes nere reprefted are,
 LIL A *rejuratalepurpureo, Tourn. Inft. R. H. 602.* Li-
 lac :h a deep purple Flower. This is titled in the
 Ca gue of the *Edinburgh Garden^ Syringa feu Li-*
lac ?faturate' purpureo. Pipe-Tree or Lilac, with a
 d purple Flower. As this is the Firft Book in
 which this particular Sort is mentioned, fo it has ob-
 taine the Name of *Scotch Lilac*, that Garden being the fir-
 st in which it was here known. Doctor *Lin-*
ney has fupplicd the White, the common Blue, and
 following Title: *Syringa foeta* *Hort. Cliff. 6.* Pipe-Tree with oval Heart-lhaped Leaves.
 These Three approach very near each other in their
 effential Characters, yet their Seeds do confantly
 produce the fame Sort, for which Reafon I chufe to
 mention this as a diftind Speties from the other.

This Shrub hath a ftrong woody Stem, which divides
 into many Branches, at afmall Diftance from the Root,
 and thofe Branches do fubdivide again into fmaller
 Branches; thefe generally grow ereft, fo as to form a
 pyramid, like many Sorts of Pear-trees, and in good
 Ground, where the Shrubs are permitted to ftand, they

will rife to the Height of Twenty Feet or upward:
 The Branches are very fubjeft to fpik where the Shrubs
 are expofed much to ftrong Winds, but efppecially in
 Summer when they are cloathed with Leaves, which
 being pretty large, the Wind has great Force againft
 them. Thefe Leaves pull out early in the Spring -,
 and the Shoots of the fame Spring are terminated by the
 Bunches of Flowers, fo that the whole.Shoot is made
 in lefs than Three Weeks *, and the Buds for the next
 Year are formed by Midfummer, which grow to be large
 before the Leaves fall off in the Autumn. The Leaves
 are placed oppofiteon the Branches, having (lender Foot-
 talks ; they are Heart-fhaped, fmooth, and end in acute
 Points. The Shoots and Leaves of this Sort are of a
 dark Green, inclining to Purple, by which the Plants
 may be diftinguifbed when they are deftitute of Flowers
 The Flowers of this are placed much clofer together in
 the Bunches than thofe of the other blue Sort, and their
 Colour being brighter, renders this Sort much more
 valuable.

a Reprcfents the lhort Empelement of the Flower,
 which is of One Leaf, divided at the Top into Four
 Parts, b (hews the Petal of the Flower, whjn hath a
 long (lender Tube, and is cut at the Top into Four
 Parts, which fpread open-, c (hews the Petalfreverfed,
 and d the Tube of the Flower drawn out of the Em-
 palement, leaving the Two Stamina, e is a Flower cut
 open longitudinally to fhew the Pofition of the Two
 Stamina-, /represents the Seed-veffel intire;^ (hews it
 as it opens on the Side, for the Top and Bottom remain
 joined after the Seeds are fcattered -, h represents a Seed-
 vefsel cut through horizontally, to fhew the Two Cells
 in which the Seeds are lodged ; and / fhews One of the
 winged Seeds taken out of the Pod.

This flowers in *May^* at which Time there are few
 Shrubs which equal k for Beauty. The fine green Leaves
 being intermixed with the large Bunches of Flowers,
 renders it very picturefque ; and the Flowers having a
 very agreeable Odour, makes it worthy of Cultivation
 in every good Garden.

P L A T E CLXIV.

LILAC, *fourn Inft. R. H.601. RaiiMetb. 158. Syringa,*
Lin. Gen. Plant. 22. The Lilac or Perfian Jafmine.

F-^E Plants which are here reprefted being of
 the fame Genus with that in the former Plate, I
 ihall not trouble the Reader with a Repetition of the
 gaffes in which they are ranged in the different Syftems
 { Botany,

->. 1. LILAC *ligujirifolio, Tourn. Injl. R. H. 602.* Li-
 fac with a Privet Leaf. This is the *Jafminum Peril-*
cum foliis non lacnatis^ Hort. Edinb. and the *Syringa*
foliis knceolatis inikgis.Hort. Cliff. 6. Pipe-tree, with
 entire Spear-fhaped Leaves.

This Shrub grows naturally in *Perjia*, and was intro-
 duced to the *EngBjh* Gardens about 140 Years paf* , but
 now become one of the moft common flowering
 >rubs which is cultivated for Sale in the Nurferies.
 NUMB. XXVIII.

This was generally known in the Gardens by the Title
 of *Perfian Jafmine*, which was applied to it by *Sutherland*,
 in his Catalogue *of the Edinburgh Garden* : And to this
 Day it paffes, among the Generality of Gardeners, jun-
 der that Appellation. Some indeed call it the *Perfian*
LilaCy to diftinguifh it from the common *Lilac*.

The Stems of this Shrub are woody, covered with a
 brown Bark, and are fmooth ; the Branches are long,
 (lender, and frequently bend downward if they are not
 fupported. Thefe feldom rife above Six or Seven Fe^t
 high, and are garni(hed with fmall Spear-lhaped Leaves
 about Two Inches and an half long, and Three-fourths
 of an Inch broad, ending in acute Points ; they are
 placed oppofite on the Branches, and have Foottalks.
 The Flowers are produced in loofe Bunches at the End
 of the Branches, which are fmaller than thofe of the
 common *Lilac* ; they are of a pale purple Colour, ana
 have a very agreeable Odour : Thefe appear in *May%*
 foon after the common Sort, and continue longer in

F f Beauty,

Beauty. *a*, Represents the Empalement of the Flower; *b*, shews a single Flower expanded, cut into Four Parts at the Brim •, *c*, is a Flower cut open longitudinally, to shew the Situation of the Two Stamina •, and *d*, represents a Flower drawn out of the Empalement, with the Two Stamina left, which were hid in the Tube of the Slower; *e*, (shews an entire Seed-vesiel; *f*, the fame, opening lengthways•, *g*, one cut horizontally to shew the Cells •, and *h*, one of the Seeds.

Fig. 2. LILAC *laciniatofolio* Tourn. Inft. R. H. 602. Lilac, with a cut Leaf. This is the Agent Lilac *Perlarum*, Corn. 189. *Perfian* Lilac, or *Agem* of the *Perfians*. *Cafpar Bauhin* calls it *Ligustrum foliis laciniatis*, Pin. 476 •, and Doctor *Linnaeus* titles it *Syringa foliis lanceolatis integris dijjetifque laciniata*, Hort. Cliff. 6. But in his Species of Plants he supposes this to be only a Variety of the former, though there are such Differences between them, as, I think, are fully sufficient to

make them distinct Species. For the Leaves of this Sort, which are entire, are of the oval Spear-shape, and do not run out to acute Points, as in the former: The Leaves come out in Clusters from the Joints; the Branches are weaker, and have a darker coloured Bark; the Flowers are smaller, and have a deeper Colour, as is represented in the Figure; to which we must add, that most of the Leaves are cut into Three, Five, or Seven Segments, almost to the mid Rib.

This Sort was introduced to the Gardens before the other, but on its first Arrival did not flower for some Years, which occasioned the Title of *Ligustrum* being applied to it, the Leaves of this having a Resemblance to those of *Privet*. But afterward it became hardy, and produced its Flowers in plenty every Year, and is cultivated with as little Trouble as any of the common flowering Shrubs which are propagated for Sale in the Nurseries.

P L A T E CLXV.

LILIUM, Tourn. Inft. R. H. 369. Tab. 195 & 196. *Rail Meth. Plant.* 118, *Lin. Gen. Plant.* 371. Lily; in French, *Lis*.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Ninth Classes, which includes the Herbs with a Lily Flower of Six Petals, whose Pointal becomes a Fruit. Mr. *Ray* places it in the Third Section of his Twenty-third Classes, which contains the flowering Grass-leaved Plants, whose Flowers have Six Petals. Doctor *Linnaeus* ranges it in the First Section of his Sixth Classes, which includes those Plants whose Flowers have Six Stamina and one Style.

The Charaters of this Genus are exhibited in the *Gaydenm*.

The Species here represented are,

Fig. V. LILIUM *foliis verticillatis brevibus corollis campanulatis, unguibus petalorum angustioribus, floribus erectis*. Lily with very short Leaves growing in Whorls round the Stalks, Bell-shaped Petals, whose Bases are very narrow, and erect Flowers.

The Root of this Flower was sent me by Mr. *John Bartram* from *Philadelphia*, who found the Plant growing naturally in that Country. This hath a small white fleshy Root, from which comes out a single upright Stalk, which rises about a Foot and a Quarter high, having Four or Five Whorles of (short obtuse Leaves placed at Distances round the Stalk. This is terminated by Two blowers which stand erect upon short distinct Footstalks; they are of the Bell shape, the Petals (standing erect, which are very narrow at their Base, but widen in the Middle, and terminated in acute Points, as is shewn at *a*. They are of a very bright purple Colour, and are marked with many dark Purple Spots towards their Base, as is represented at *b*. In the Center of the Flower arises the Style and Six Stamina, as is shewn at *c*: The Stamina are not equal in Length, as represented at *d*, and are terminated by oblong Summits, as may be seen at *e*. In the Center

of the Flower is situated a Three-cornered Germen, represented at *g*, supporting a single Style which is longer than the Stamina, crowned by a globular Stigma, which is shewn at *f*. This flowers in July, but produces no Seeds

Fig. 2. LILIUM *foliis sparsis subulatis, floribus reflexis, corollis revolutis*, Hort. Cliff. 120. Lily with Awl-shaped Leaves growing without Order, and reflexed Flowers whose Petals turn back. This is the *Lilium Byzantinum* 1 *miniatum* C. B. P. 78. Carmine Lily of *Byzantium*, commonly called *Scarlet Martagon*.

This hath a pretty large yellow fleshy Root, from which arises an upright Stalk near Three Feet high, garnished with long narrow Leaves, which are placed imperfectly all round the Stalk; they are almost triangular, having a Ridge on their under Side running longitudinally, where the Leaves are much thicker than on their Sides. They are of a deep green, and terminate in acute Points. The upper Part of the Stalk divides into Four or Five Footstalks, each sustaining a single Flower which is reflexed downward, the Base or Tube being contracted; but the upper Part is divided, and the Petals are rolled backward, as is represented at *a*. These are of a fine carmine Colour, and have a few small dark-coloured Spots scattered over them. Out of the Center of the Flower arises the Six Stamina, with their Summits joined to the Style, as is shewn at *b*; these are terminated by oblong rising Summits, as is represented at *c*; and at *d*, is shewn the Germen, which rarely swells in this Country.

This Sort flowers in July, and when the Season is not very warm, the Flowers will continue a considerable Time in Beauty. It is pretty common in the English Gardens at present, where the Roots are propagated in Sale; but the first Sort is very rare in England. These are not any of the Roots here, but those which have been sent by the above-mentioned Mr. *Bartram* from *Pennsylvania*.



Fig. 1. L. 11, 11 M. *L. variegata*, brachis, corolla campanulata, regularis perianthium angustioribus floribus caeruleis
 Fig. 2. L. 11, 11 *L. folio quibus foliis floribus reflexis, corolla caerulea Hort. Cliff. etc.*



Fig. 1. LINARIA. *Her. w. < > nw' n' mw < v * > ^ I C* *flora flavescente, pediculis striatis, lobis nigro purpureis*
Act. Reg. Lond.
 Fig. 2. LINUM. *calycibus capsulisque chartis, foliis alternis lanceolatis cuneis cordatis reniformibus*

P L A T E · CLXVi.

LINARIA, TW//. Injl. R. H. 168. Tab. 76. Raii Meth. Plant. 90. Antirrhinum* Lin. Gen. Plant. 668. Toad-flax ♀ in French, *Linaire*.

The Genus of Plants is ranged in the Fourth Section of Tournefort's Third Class, which includes the Herbs with a tubulous, anomalous, perforated Flower of One Petal. Mr. Ray places it in the Second Section of his Nineteenth Class, which contains the Herbs with a Jabiated Flower, having Spurs or Heels. Doctor Linnaeus has joined this Genus to the *Antirrhinum*, in which I think, he has erred; for as there are several Species of each Genus, so when there is such a distinguishing Character as that of the Flowers of the *Linaria* having a Spur or Heel, which is not in those of the *Antirrhinum*, they should be kept under their former Titles to avoid Confusion. He places this Genus in the Second Section of his Fourteenth Class, which includes the Plants whose Flowers have Two long and Two shorter Stamina; and the Seeds are contained in Capfules.

The Species here represented are,

Linaria *trifida*

Fig. 1. LINARIA *Hispanica procumbens foliis uncialibus glaucis, flore flavescente pulchre Irriato labijs nigro purpureis, AftReg. Lond. ij.* Trailing Spanish Toad-flax with glaucous Leaves an Inch long, yellow Flowers beautifully fringed, and a black-purple Lip. This is the *Linaria tripartita Hispanica*, Hort. Elth. 201. Mournful Spanish Toad-flax. Doctor Linnaeus titles this *Antirrhinum foliis lanceolatis sparsis, inferioribus oppositis, neSlariis subulatis floribus subfijilibus, Hort. Cliff. 498.* Snapdragon with Spear-shaped Leaves placed oppositely, the lower being opposite, an Awl-shaped Nerium, and Flowers fitting close to the Stalks.

This Plant grows naturally on the Rocks about Gibraltar, from whence the late Sir Charles Wager brought the Seeds, which were sown in his Garden at Parson's Green, near Fulham, where they succeeded, and many of the curious Gardens were furnished from thence with the Plants. The Root is perennial, sending out many succulent Stalks, most of which trail on the Ground, but those from the Center do often rise Nine or Ten Inches high; they are garnished with short succulent Leaves, about an Inch long and One-fifth of an Inch broad, of a Sea-green Colour; the Flowers are produced at the End of the Branches, these have a long Heel or Spur, represented at *a*, of a darkish yellow Colour, with some purple Lines; the lower Lip of the Flower, marked *b*, is of a dark Purple, and the upper Lip, represented at *c*, is of the same yellow Colour as the Heel, and marked with dark Lines in the same manner: This Plant flowers in June and July, but doth not produce Seeds in England.

Fig. 2. *Linaria MyTourn. Injl. R.H. 339. Tab. 176. Raii Meth. Plant. 112. Lin. Gen. Plant. 349.* Flax; in French, *Lin.*

This Genus of Plants is ranged in the First Section of Tournefort's Eighth Class, which includes the Herbs with a Clove Gillyflower Flower, whose Pointal becomes a Fruit. Mr. Ray ranges it in the Second Section of his

Twenty-second Class, which contains the Plants whose Flowers are regular and have Five Leaves, and whose Leaves are placed alternate upon the Stalks. Doctor Linnaeus places it in the Fifth Section of his Fifth Class, which includes the Plants whose Flowers have Five Stamina and Five Styles.

The Species here represented is,

LINUM *calycibus capfulisque obtusis, foliis alternis lanceolatis, acutis caulibus ramojiffimis.* Flax with obtuse Empalements and Capfules, Spear-shaped acute Leaves placed alternate, and very branching Stalks, commonly called *Siberian Flax*. This is probably the *Linum calycibus capfulisque obtusis, foliis alternis lanceolatis integerrimis, Lin. Sp. Plant. 277.* Flax with obtuse Empalements and Capfules, and entire Spear-shaped Leaves placed alternate; but the Doctor has added a *Synonima* of *Morrison* to it, by which he makes it the same with our *English Perennial*, from which it differs in having very branching Stalks, longer and broader Leaves, larger Flowers, and the Seed vessels are much larger and more obtuse. These Differences are permanent when the Two Sorts are cultivated on the same Soil and in the same Situation, therefore I conclude they are specifically different.

This hath a perennial Root, which will abide several Years, sending out many Stalks in proportion to the Size of the Roots: These in a rich moist Soil, will grow from Four to Five Feet high, but in very middling Ground will be Three Feet high; they are strong, and divide upward into many Branches; these are garnished with narrow Spear-shaped Leaves placed alternate, they are little more than One Inch long, and One-eighth of an Inch broad, of a deep green Colour, ending in acute Points. The Flowers are produced toward the End of the Branches, coming out from the side of the Stalk, having pretty long Footstalks; these are composed of Five large roundish Petals, marked *a*, which are of a fine blue Colour; in the Center of the Flower are situated Five Stamina and Five Styles, which are represented at *b*; the Petals of the Flower are a little indented at the Brim, as is seen at *c* and at *d*; the Reverse of the Flower is represented to show the Empalement: *e*, shows the Five Stamina terminated by round Summits; *g*, represents the Capfule entire; *h*, the same cut transversely to show the Ten Cells; *i*, the same opened lengthways; *k*, One of the Cells Separated from the Capfule; and *l*, is One of the Seeds taken out of the Capfule. This Plant flowers in June and July, and the Seeds ripen in August and September.

As this hath a perennial Root, so it may be well worth cultivating for Use, because it comes so much earlier in the Season than the annual Sort which is generally cultivated in England; which is a great Advantage, for the Autumns frequently prove so wet, as to render it difficult to get the late Crops of Flax properly sowed. Besides the Produce of this Sort is much greater than of the other, and although the Threads of this are not so fine, yet for the common Purposes it is full as good, and the Threads are stronger, therefore may be of great Service to the Public, if it is cultivated in Quantities sufficient for Use.

LONICERA, *Lin. Gen. Plant.* 210. *Chamacerafus* Tournefort. *Inji. R. H.* 609. *Tab.* 379. *Rail Meth. Plant.* 145. Upright, or Fly-Honeyfuckle.

THIS Genus of Plants is ranged in the First Section of *Linnaeus's* Fifth Class, which includes those Plants whose Flowers have Five Stamina, and but One Style. To this Genus *Doftor Linnæus* has added the '*Caprifolium, Periclymenum* and *Xylojeum* of *Tournefort*, and the *Symphoricarpos* of *Dillenius*; but from the Structure of their Flowers and Fruits, some of these should be kept separate. *Tournefort* places it in the Sixth Section of his Twentieth Class, which contains the Trees and Shrubs with a Flower of One Petal, whose Empalement turns to a Berry. *Mr. Ray* places it among the Trees which bear umbilicated Berries having several Seeds.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here represented are,

Fig. 1. LONICERA *pedunculis bifloris, baccis dillicis* foliis integerrimis pubescentibus *Prod. Leyd.* 238. *Lonicera* with Two Flowers on each Footstalk, distinct Berries, and intire Leaves, which are woolly. This is the *Chamacerafus dumorum, fructu gemino rubro, C. B. P.* 451. Dwarf Cherry with a double red Fruit, commonly called the *Fly Honeyfuckle*. *John Bauhin* titles it *Periclymenum reStum fruffu rubro, Hiji. 2. p.* 206. Upright Honeyfuckle, with red Fruit.

This grows naturally upon the *Alps*, and in Woods in many of the cold Parts of *Europe*, but has been long cultivated, as a flowering Shrub, in the Nurseries Gardens. It rises with a thick woody Stalk to the Height of Five or Six Feet, and divides into many Branches, which have a smooth Bark, and are garnished with oval Leaves which are intire; they are of a pale Green, and are covered with soft Down, these are placed opposite, having short Footstalks. The Flowers come out on each Side the Branches upon slender Footstalks, each sustaining Two Flowers, as is represented at *a*; these have but One Petal, which is divided into Two Lips. In the

Center of the Flower are situated Two Germina, marked *b*, having a short Style, which is attended by Five Stamina, represented at *c*; these are terminated by oblong Summits, which are shown at *e*: Both these Flowers are closely joined at their Base, as is represented at *d*. The Two Germina afterward are turned to Two Berries, marked *e*, which when ripe are red. It flowers in *May*, and the Berries ripen in *August*.

Fig-2. LONICERA *pedunculis biflora, baccis coadunatis dimyis, Lin. Sp. Plant.* 174. *Lonicera* with Two Flowers upon a Footstalk, and Two Berries which are joined. This is *Chamacerafus Alpha, fructu rubro gemino, duobus punctis notato, C. B. P.* 451. Dwarf Cherry of the *Alps*, with twin red Fruit marked with Two Points, commonly called *Red-berried Upright Honeyfuckle*.

This rises with an upright woody Stalk about Four Feet high, sending out many Branches, which grow erect, and are garnished with oval Spear-shaped Leaves Three Inches long, and an Inch and half broad, ending in acute Points. They are of a dark Green, and are placed by Pairs opposite, standing upon short Footstalks: The Footstalks arise on the Side of the Branches, and are placed on each Side of the Branches, from the Wings of the Leaves; they are Two Inches long, but very slender. The Flowers have but One Petal, which is divided into Two Lips, as is represented at *a*; they are of a purple Colour: The upper Lip is indented at the Brim, but the lower Lip is intire. In the Center arise the Five Stamina, which are terminated by oblong purple Summits. When the Flowers first appear they stand erect and are closed, as is shown at *c*, where the Backside of the Flowers are represented, but afterward they open and show the Stamina. After the Flowers decay, the twin Germina, marked *d*, turn to Two red Berries, which are joined together. This flowers about the same Time with the former, and the Seeds ripen in the Autumn. It grows naturally on the *Alps* but is propagated for Sale in the Nurseries Gardens as a flowering Shrub.

LOTUS, *Lin. Gen. Plant.* 803. *Tourn. Inft. R. H.* 402. *Rail Meth. Plant.* 108. Birdsfoot Trefoil in French, *hotier*.

THIS Genus of Plants is ranged in the Third Section of *Linnaeus's* Seventeenth Class, which includes those Plants whose Flowers are of the Butterfly Kind, and have Ten Stamina, Nine of which are joined, and One (stands separate. *Tournefort* places it in the Fourth Section of his Tenth Class, which contains the Herbs with a Butterfly Flower, which are three-leaved. It is ranged in the Second Section of *Mr. Ray's* Twenty-first Class, which includes the leguminous Plants which are three-leaved.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here represented is,

LOTUS *leguminibus subternatis caule herbaceo erecto, foliis Hnearibus* *Lin. Sp. Plant.* 775. Birdsfoot Trefoil, with Pods growing by Threes, an upright herbaceous Stalk and very narrow Leaves. This is the *Lotus angustifolia, flore luteo purpurascente, ex Infula Jacobi, Hcrt. Amft. 2. D.* 165. Narrow-leaved Birdsfoot Trefoil from the Island of *Saint James*, with a purple yellow Flower,

This hath a slender ligneous Stalk, which divides into many slender Branches, which are herbaceous; these rise near Three Feet high, and are garnished with very narrow Leaves, which are sometimes by Threes, but generally Five upon each Footstalk. They are of a pale Green, inclining to a hoary Colour, and fitly adhere to the Branches. The Flowers are produced at the End of the Branches by Two, Three, or Four in each Cluster: They are of the Butterfly or Pea Bloom Kind, having Four Petals. The lower, which is marked *a*, is the Keel (*Carina*); the Two Side Petals, marked *b*, are the Wings (*AU*) and the upper Petal, marked *c*, is the Standard (*Vexillum*). In the Center of the Flower is situated the Stamina and Style, which are included in the Keel; these are represented at *d*. The Style rises from the narrow oblong Germen, marked *e*, situated within the Empalement, but is represented at *l*, where it is separated from it, and the Nine Stamina which are joined, are represented at *f*, with the single One standing separate, marked *b*. The Germen afterwards turns to a slender Pod, marked *l*, which opens with Two Valves, as is represented at *k*, containing One Row of small Seeds marked *l*.

This Plant, when properly managed,¹ continues flowering almost through the Year, and will produce Plenty of good Seeds.



LYTHRUM foliis pinnatis angustifolia, calice inflexo, calycis lobis angustis, pediculis

Pl. —>:••• of Pl. in 17. "Xfc.t. 11 107



LOTUS, japonicus foliosus, caule herbaceo erecto foliis bipinnatis. Lin. Sp. pl. 77A.

Painted according to the original by P. de la Roche



Lathyrus, ruber, repens per an. Fl. Leg. ped. 251.
Lychnis, rubra, repens per an. var. repens 252.

Lathyrus repens et *Lychnis repens* per an. 251. 252.

P L A T E CLXIX.

LUNARIA, *Tourn. Inft. R. H. 218. Tab. 105. Raii Metb. 95. Cardamine, Lin. Gen. Plant. 727; Moonwort, Honefty, or White Sattin. In French, Lunaire^o or Bulbonac.*

THIS Genus of Plants is ranged in the Third Section of *Tournefort's* Fifth Class of Plants, which includes the Herbs with a Cross-shape whose Point turns to a Fruit, with Two Partivalves, divided by an intermediate Partition. Mr. Ray places it in the First Section of his Twentieth Class, which contains the Plants whose Flowers have Four Petals, and are succeeded by Pods with Two Cells, divided by a membranaceous Partition. Doctor *Linnaeus* ranges it in the Second Section of his Fifteenth Class, which includes those Plants whose Flowers have Four long and Two Shorter Stamina, and are succeeded by Pods. The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here represented is,

LUNARIA, *foliisupradecompositis, foliolis trifidis, filiquiis oblongis pendulis* Moonwort or Honefty, with decomposed Leaves, whose Lobes or small Leaves are trifid, and oblong hanging Pods. This is the *Cardamine foliisupradecompositis, filiquiis unilocularibus pendulis. Lin. Sp. Plant. 656. Ladies Smock, with decomposed Leaves and hanging Pods with One Cell.*

This is an annual Plant which grows naturally in Egypt, from whence the Seeds were brought a few Years since to the Royal Garden at Paris. This rises with a smooth branching Stalk about Fifteen Inches high, garnished with winged Leaves, represented at *f*. Thefe are composed of several Pairs of Lobes set along the Midrib, and terminated by an odd one. These Lobes are of different Sizes; some are almost entire, but the greater Part of them are cut at their Extremity into Three Parts, as is shewn at *b* \ they are smooth and of 3. lucid Green. The Flowers are produced from the Side of the Stalks, and also at End of the Branches, each standing upon a short separate Footstalk, these have an Empalement of Four Leaves, which closely embrace the Petals, represented at *c*, which falls off with the Petals. The Flowers are composed of Four roundish Petals, indented at the Top, represented at *d*; these are of a purple Colour, and spread open above the Empalement. In the Tube of the Flower is situated an oblong Germen, as is shewn at *e*; upon which are fixed the Four long Stamina marked *f*-, and below these the Two shorter marked *g*-. In the Middle of these is situated a slender Style, crowned by an erect narrow Stigma. When the Flowers fall away, the Germen becomes an oblong compressed Pod which hangs downward, and is first Green; but, when ripe, turns to a *feuille-mort* Colour, opening with Two Valves, as is represented at *h* and *i*, in which are lodged Three or Four roundish compressed Seeds, fattened to the Side of the Pod. This Plant flowers in June and July, and the Seeds ripen in September and the Plants soon after perih*

P L A T E CLXX.

LUPINUS, *Tourn. Inji. R.H. 392. Tab. 213. Raii Metb. Plant. 104. Lijft. Gen. Plant. 774. Lupine, in French, Lupin.*

THIS Genus of Plant is ranged in the Second Section of *Tournefort's* Tenth Class of Plants, which includes the Herbs with a Butterfly Flower, whose Point becomes a long Pod with One Cell. Mr. Ray places it in the Second Section of his Twenty-first Class, in which he ranges the Plants with a Pea Biofibm and handed Leaves, which do not climb. Doctor *Unnaeus* ranges it the Third Section of his Seventeenth Class, in which he includes the Plants whose Flowers have the Stamina joined in Two Bodies. The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here represented at Fig. 1. is,

LUPINUS, *radice reptatrice perenni, Prod. Leyd. 53 T. Lupine, with a perennial creeping Root. This is the Lupinus ^occendeis minor ferennis, Virginianus repens, Mor. Hist. 2. p. 87. Seff. 2. Tab. 7. l 6. Small, blue, perennial, creeping Lupine of Virginia. Doctor Linnaeus titles it, Lupinus ^ocalycibus alternis inappendicatis, labio fuperiore emarginato ^oinferiore integro, Lin. Sp. Plant. 721. Lupine, with alternate Empalements, having no Appendices, and the upper Lip indented, NUMB. XXIX.*

but the under entire. In the *Flora Virginea* it is titled, *Lupinus, calycibus alternis ^oradice perenni repente* > 172. Lupine, with alternate Empalements, and a perennial creeping Root,

This Plant grows naturally in Virginia, and other Parts of North America, from whence the Seeds were brought to Europe. It hath a perennial Root which runs very deep into the Ground, and spreads to a great Distance each Way. The Stalks rise a Foot and a Half high, which are garnished with Hand-shaped Leaves, composed of several small Leaves (or Lobes) arising from One Center, from Five to Ten in Number; these are oblong, and rounded at their Ends. They are supported by long Footstalks which come out by Pairs opposite, and are of a pale Green. The Flowers terminate the Stalks in long Spikes; they are placed on every Side of the Stalks, sometimes by Pairs, at other times Three or Four Flowers come out at the same Joint. They are of a pale blue Colour, and shaped like the Flower of Pease as is represented at *a*, which shews the Front of a single Flower separated from the Spike, *b* represents the roundish Heart-shaped Standard, whose Sides are reflected, and the End is indented with Two Wings, which are almost as long, as this Standard, are (shewn at *c* and *d*). The Sickle-shaped *Kjkl* is represented at *e*, which is separated from the Two Wings to which it is joined in

their natural Position. In the Keel are situated the Stamina, with the Style, as is represented at *l*. Nine of these Stamina, with their Summits, are joined in One Body, as is shewn at *g* and One Stamina stands separate, as at *h*. The Germen, which is situated in the Empalemerit, supporting a slender Style, is represented at *j*; this afterward turns to a flat oblong Pod, with the Style at the Point, as is shewn at *k*. These Pods, when ripe, twist up in Two Valves, as at *l*; and cast out the roundish compressed Seeds, marked *m*, with an Elasticity. This Plant flowers in *June*, and the Seeds ripen in *August*.

Fig. 2. LYCHNIS, *Tourn. Infl.R.H.* 333. *Tab.* 175. *Raii Meth. Plant.* T09. *Lin. Gen. Plant.* 22. 517. Catchfly, or Campion.

This Genus of Plants is ranged in the First Section of *Tournefort's* Eighth Class of Plants, which includes the Herbs and Under-shrubs with a Clove Gilliflower Flower, whose Pointal becomes the Fruit. Mr. *Ray* places it in the First Section of his Twenty second Class, which contains the Plants with Flowers of Five Petals, whose Seeds are inclosed in a Capiule. Doctor *Linnaeus* ranges it in the First Section of his Tenth Class, which includes the Plants whose Flowers have Ten Stamina and Five Styles.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Plant here represented is,

Lychnis Siquale erecto, calycibus friatis acutis, petalis dif-
feffis. Campion or Lychnis with an upright Stalk, a
fringed acute-pointed Empalemerit, and the Petals of
the Flower cut into Segments.

The Leaves of this Plant are oblong, narrow, and blunt-pointed, and come out in Clusters, formed into separate Heads, which fit near the Ground; from the Center of which arises an upright Stalk about Nine Inches high, garnished with Leaves like those below, but smaller and are more pointed; these are placed opposite. The upper Part of the Stalk branches out into smaller Branches; some of these have Two, and others but One Flower; these have Empalements, which are tubulous, and cut into Five acute Points at the Top, as is represented at *a*. They have several longitudinal Stripes running through them; the Flower is double, so has none of the Parts of Generation; but instead of these, a Multiplicity of Petals, as is represented at *b*. These Petals are deeply cut into several Parts, as is shewn at *c* and *d* they are of a bright purple Colour, and continue long in Beauty. This Plant was brought from *Portugal*; but from what Species of single Lychnis this double one was produced is hard to determine, for we have not any one in the *English* Gardens which will agree with this. It is a perennial Root, and flowers at different Seasons of the Year. I was favoured with this Plant by *John Brownings Esq*; of *Lincoln's Inn*.

P L A T E CLXXI.

LYCIUM, *Lin. Gen. Plant.* 232. *Jasminoides, Nijfol. Att. R. Par.* 1711. *Rhamnus, C. L, P.* 477. Boxthorn,

THIS Genus of Plants is ranged in the First Section of *Linnaeus's* Fifth Class of Plants, which includes those Plants whose Flowers have Five Stamina and One Style. These Plants have by some been ranged under the Genus of *Rhamnus*; but *Nijfol* of *Montpelier* constituted a Genus by the Title of *Jasminoides*, under which he ranged them. But Doctor *Linnaeus* has applied the Title of *Lycium* to this Genus, and has properly exhibited the Characters.

The Species here represented are,

Fig. 1. LYCIUM foliis linearibus longioribus, tubo florum longiori, segmentis obtusis. Boxthorn with longer narrower Leaves, and a longer Tube to the Flower, with obtuse Segments. This is the *Lycium foliis linearibus, Hort. Cliff.* §y. Boxthorn with very narrow Leaves. *Boerhaave* titles it *Rhamnus asperispinis longis, cortice albo, fructu cocculeo, Ind. Alt.* 2. p. 212. *African* Rhamnus with long Spines, white Bark, and a blue Fruit. *Nijfol* calls it *Jasminoides Africanum, J amini aculeati foliis &c? facie, A51. Reg. Par. ijn.* Bastard *African* Jasmine with the Leaves and Appearance of prickly Jasmine.

This Plant grows naturally at the *Cape of Good Hope*, and also in *Portugal*, from whence I have received the Seeds. It rises with a shrubby irregular Stalk to the Height of Ten or Twelve Feet, sending out several ligneous Branches, which have a white Bark, and are armed with long sharp Thorns, upon which grow small Clusters of long narrow Leaves; Some of these Thorns put out One or Two smaller ones from their Side, which have Leaves set on them in the same Manner as the former. The Flowers are produced from the Side of the Branches, standing upon short stalks; they have a

short permanent Empalement of One Leaf which is cut into Five acute Segments at the Top. The Flowers have a long Tube, which is cut into Five obtuse Segments at the Brim, as is represented at *a*; and *b* shews One of the Flowers cut open longitudinally, which discovers the Situation of the Stamina, with their Summits; Three of which are left in their natural Position, and Two are taken out, as is represented at *cc*. The Germen at the Bottom of the Tube, with the Style arising from it, is shewn at *d d*. The Empalement, which incloses the Germen, is represented at *e* and the bifid Stigma upon the Top of the Style is shewn at *t*. The Germen afterward becomes a roundish Berry, marked *h*, which is cut transversely at *b*, shewing the Position of the Seeds, and at *i* the outer Cover is taken off, whereby the Seeds are shewn lying round an oval Placentá. *k* represents the Seeds of their natural Size, and *l* One of them magnified. This Plant continues flowering most Part of Summer, and the Seeds ripen in Autumn!

Fig. 2. LYCIUM foliis Uneari-brevioribus, tubo florum breviori, segmentis ovalibus patentissimis. Boxthorn with shorter narrow Leaves, a shorter Tube to the Flower, and the Segments at the Brim oval, and spread quite open.

This Sort was raised in the *Chelsea* Garden a few Years past, from Seeds which came from the *Cape of Good Hope*. It is of humbler Growth than the First, the Leaves are shorter and a little broader; the Spines are garnished with Bunches of Leaves in the same Manner. The Flowers are smaller, have shorter Tubes, and their Brim cut deeper into oval Segments; the Fruit is also much smaller; but in other Respects they approach near to each other. This Sort flowers great Part of Summer, and the Fruit ripens in Autumn. All the Plants which have been raised from the Seeds of this do continue the same without any Alteration; and there is a Third Sort, with narrower Leaves, very near a-kin to these.

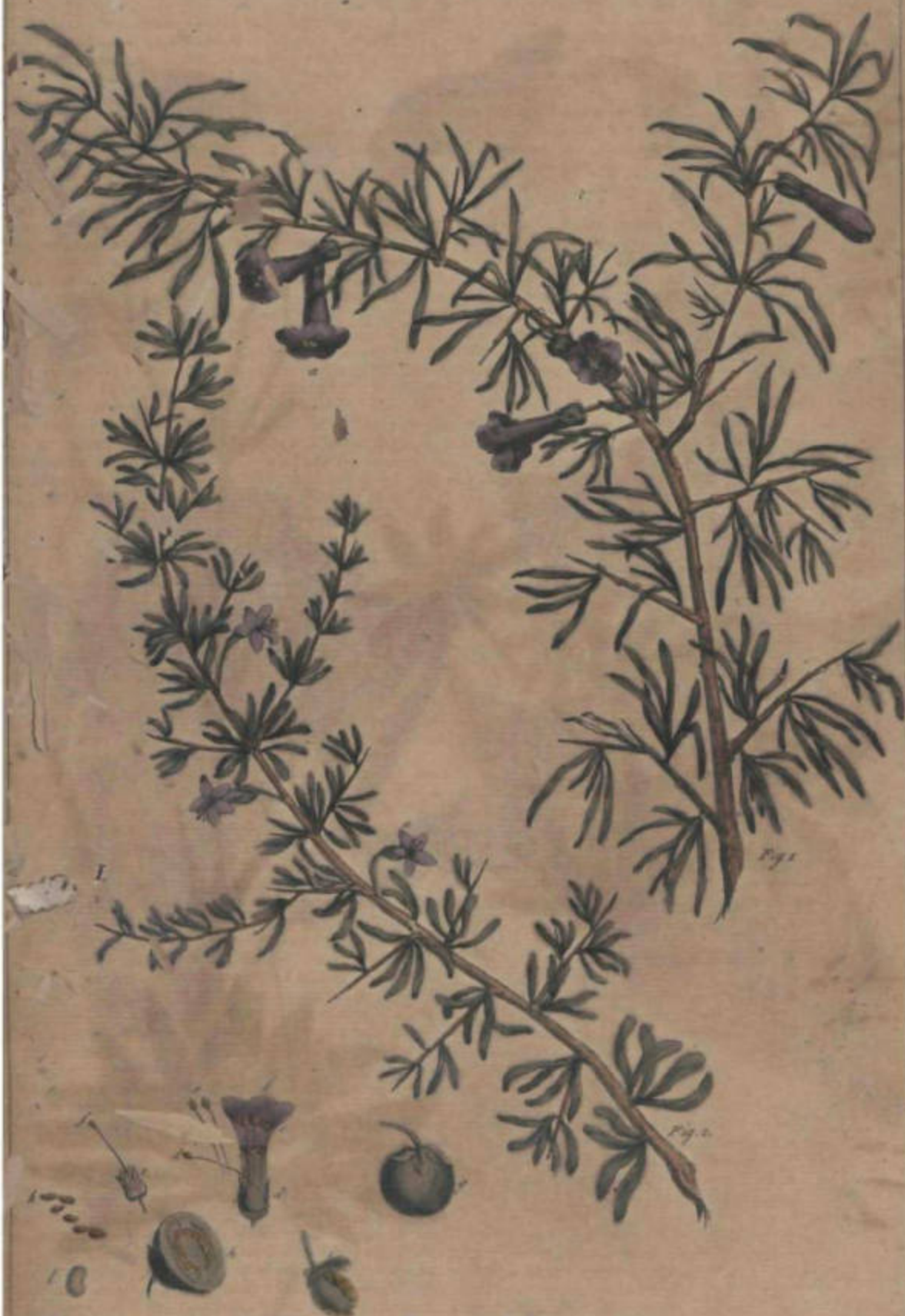


Fig. 1. LYCIUM folio laevi longipedic, calice florum longiore, segmentis oblongis.
 Fig. 2. LYCIUM folio laevi brevipedic, calice florum breviori, segmentis ovalibus perispermatis.

Pinx. G. G. Sculp. G. G. 1753



MAGNOLIA foliis lanceolatis perspicillatis, caulis verrucis spinosus.

Publ. & vendit. in ... Perthes & Sohn, Leipzig, 1847



MANDRAGORA. *See Hort. Cliff. 47.*

Plants growing in the Mountains of the Alps by 1735

J. K. del.

P L A T E CLXXII.

MAGNOLIA, *Plum. Nov. Gen.* 38. *tab. 7. Hort. Elth.* 168. *in. Gen. Plant.* 610. The Laurel-leaved Tulip-tree.

This Genus of Plants is ranged in the Seventh Section of *Linnaeus's* Thirteenth Class, which includes those Plants whose Flowers have many Stamens and Styles.

The Characters of this Genus are exhibited in the *Gave ners Diltiorary*.

The Species here represented is,

MAGNOLIA foliis lanceolath persistentiibus, cattle tretto Arbores. Magnolia with evergreen Spear-shaped Leaves, and an upright Tree-stalk. This is the *Magnolia altijima, flore ingenti candido, Catesb. Carol.* 2. p. 61. Tallest Magnolia with a very white Flower.

This Tree grows naturally in *South Carolina* and *Georgia*, where it rises with an upright Trunk to the Height of Seventy or Eighty Feet, dividing into many spreading trunks, so as to form a large Head. The Branches are garnished with large Spear-shaped Leaves, which are Nine or Ten Inches long, and Three Inches broad in the Middle, they are of a thick Consistence, and a little waved on their Edges, ending in acute Points; and are placed without Order on every Side the Branches, to which they fit close, having no Footstalks, as is represented at *a*. These Leaves continue Green through the Year, and only fall off as the Branches extend in Length, and new Leaves are produced. The Flowers are produced at the End of the Branches; each are composed of Eight or Ten Petals, represented at *b*; which are narrow at their Base, but broad at their Extremity, where they are rounded and a little waved; they are very wide, and are of a fine white Colour. In the Center of the Flower are situated the numerous Stamens, with the several Styles, fattened to One Receptacle, as is represented at *c*. The Bud which is diverted of its Empalement, is shewn at

d, just before it expands, and *e* represents it with the Empalement. *f* is the same at its first Appearance, when included in the Empalement. *g* is a Part of the Empalement taken off from the Flower; *h* exhibits a View of the Germen with the Styles, which are recurved; *i* shews One of the Cells opened, with the Seed in its natural Position; *k* represents the lame, with the Seed disengaged, hanging out by a slender Filament as at *l*; *m* and *n* represent the Scales of the Fruit, *o* and *p* the Two Kernels of the Seeds, and *q* the whole Fruit with the ripe Seeds hanging out; which is represented smaller than Nature, to bear a Proportion to the Size of the Leaves and Flowers, which are too large to be contained of their natural Size in the Compages of this Plate. This Tree flowers with us in *July*, but in its native Country there is a Succession of Flowers for Two or Three Months.

This Tree is one of the greatest Ornaments to the Woods in its native Place of Growth; and if it can by Time be brought so hardy as to resist the Cold of our Winters in *England*, will be the finest Ornament in the *English* Gardens; for its noble ever-green Leaves make a fine Appearance in every Season of the Year; and when the Trees are covered with large Flowers in Summer, there is scarce any Tree of equal Beauty. There are at present several Trees in the *English* Gardens, which have for some Years past produced Flowers; the first of these is in the Garden of Sir *John Colleton*, Bart, in *Devonshire*; there is another in the Garden of Mr. *Christopher Gray*, Nursery-man, near *Fulham*; and there was One a few Years since in the Garden of Sir *Charles Wager* at *Parsons Green*, which flowered several Years: But there are some of these Trees in the Garden of his Grace the Duke of *Richmond* at *Goodwood*, in *Suffex*, which thrive better than any I have yet seen, and have produced Flowers some Years. But our Seasons are not warm enough to bring the Fruit to Maturity; so that we can never hope to see the Trees adorned with them, which is a great Beauty to them in their native Soil.

P L A T E CLXXIII.

MANDRAGORA *four*. *Inft. fi. H.* 76. *tab. 12. Rait Meth.* 74. *Lin. Gen. Plant.* 121. *Mandrake, in trench, Mandragore.*

This Genus of Plants is ranged in the First Section of *Linnaeus's* First Class; which includes Herbs with a Bell-shaped Flower of One Leaf, whose Pointal turns to a soft thick Fruit. Mr. *Ray* places it in his Seventeenth Class, which contains those Plants which bear Berries, and are thinly placed. Doctor *Linnaeus* ranges it in the First Section of his Fifth Class, in which those Plants are contained whose Flowers have Five Stamens and One Style.

The Species here represented are,

MANDRAGORA, Hort. Cliff. 57. *Mandrake.* This is the *Marjagora fruffu rotundo*; *C. B. P.* 169. *Mandrake* with a round Fruit. *John Bauhin* titles it, *Mandragora mas, Hijl.* 3. 617. Male *Mandrake*.

There are some other Varieties of this Plant enumerated in Books, but I have not as yet seen any other than is here represented. Doctor *Linnaeus* supposes them to be but One Species, and herein I believe he is right; for the Distinctions which are made are chiefly in the Colour of their Flower or Fruit, and the Size of their Leaves, which may be only accidental; that Sort, with pale blue Flowers, is titled, *Mandragora foemina*, by *John Bauhin*, but for what Reason I cannot say, for both these produce Fruit equally.

This Plant grows naturally in *Spain, Italy*, and the Islands of the *Archipelago*. It hath a thick, fleshy, taper Root, which runs deep in the Ground, sending out a great Cluster of long, rough, green Leaves, which at first stand erect, but after a little Time spread near the Ground, as is represented at *b*. In the Middle of these come out several Bell-shaped Flowers, cut into Five Parts, as is represented at *a*; these rise each with a long Footstalk immediately from the Crown of the Root; they have an Empalement which is deeply divided into



MEXICANO, *Lymanthus leucis marginis integrifolius* male arboris Herb. Cliff. 376

J. Miller del. et sculp.

Published according to a list of specimens of the author August 1810.



Fig. 1. *MESEMBRYANTHEMUM* *foliis a. subformicatis Hort. Cliff. 129.*
 Fig. 2. *MESEMBRYANTHEMUM* *caule hispido foliis cylindricis deflexis Lin. 129.*
 Fig. 3. *MESEMBRYANTHEMUM* *caule hispido foliis cylindricis deflexis Lin. 129.*

Printed and sold by W. Woodcut, at the Sign of the Sun in Pall Mall.

P... L... A... T E CLXXV.

MEDIC AGO 7W#. #/?. £. #. 412. Tiff. 213. *Lin. Gen. Plant.* 805. *Raii Meth. Plant.* 108. Moon-trefoil, or *Cytifus* of *PNgl.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Tenth Clafs, which includes the Plants with a Butterfly Flower, whose Leaves are trifoliate. Doftor *Linnaeus* places it in the Third Section of his Seventeenth Clafs, which contains thofe Plants which have Butterfly Flowers with Ten Stamina, Nine of which are joined together, and One ftands feparate. Mr. *Ray* ranges it in the Second Section of his Twenty-firft Clafs, which includes the leguminous Plants with Three Leaves.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here reprefted is,

MEDIC AGO *leguminibus lunatis margine integerrimis cattib* where the Pod is fplit open^to repreft how the Seeds are lodged \ and *m* fhews a fingle Seed taken out of the Pod.
arboreo Hort. Cliff. 376. Moon-trefoil, with moon-fhaper^l Pods, whole Borders are intire, and a Tree-like Stalk. This is the *Cytifus incanus^filiquisfalcatis*, *C. B. P.* 389. Hoary *Cytifus*, with fickle-fhaped Pods. *John Bauhin* titles it *Cytifus filiquid incurvd folio candicante Hipp.* 1. 361. *Cytifus* with incurved Pods, and a white Leaf.

This Plant grows naturally in *Abruzzo*, and alfo in the Iflands of the *Archipelago*, where the Cattle browfe on the Branches; and the Stems are ufed by the *Turks* for Handles to their Scymetars. It rifes with a woody Stem Four or Five Feet high, fending out many ligneous Branches on every Side, fo as to form a large bulhy Head, where Cattle are not permitted to feed on it. Thefe Branches are garnifhed with trifoliate Leaves, reprefted at *a*> which Hand on pretty long Footstalks, and arc of a deep Green on their upper Sides, but are hoary on their \mdef Sicfat thefe^l bShtraft the'mfelves cMey

Evening, and, in cold Weather, turning their undef Side outward, the Flowers are produced in Clutters at the End of the Branches, as is fhewn at £, Itanding upon pretty long Footstalks, each fuftaining Four or Five^ Flowers of a deep yellow Colour; they are of the Butterfly < Kind, having an oval intire Standard, marked *c*, whose Edges are inflexed •, but the whole is reflexed, with Two oval Wings marked *d*> which are clofely fhut together, and a Keel marked *e*, which is oblong, bifid, and inflexed: Thefe Flowers have Nine Stamina, which are joined, as is reprefted at i?; and the other ieparates from them at the Top, as is fhewn at*. The Style is fhut up in the Standard, where it is twifted, but is reprefted fraiter at £, in the Manner it extends when taken out. The Germen is fituated in a tubulous Empalement, reprefted at /, which is cut at the Top into Five acute Segments. The Germen afterwards turns to a compreffed Sickle-fhaped Pod, marked *k*, in which are Three or Four Kidney-fhaped Seeds, as is (hewn at /, where the Pod is fplit open^to repreft how the Seeds are lodged \ and *m* fhews a fingle Seed taken out of the Pod.

This Plant begins to produce its Flowers in *April*, and continues a Succeffion of them till the hard Froft puts a Stop to them •, fo that, in a moderate Climate, it will continue flowering all the Year. The Flowers are fucceeded by compreffed incurved Pods, which ripen in Succeffion, as they are produced all the Summer. The Plants are propagated by Cuttings or Slips; thefe, when young, are frequently deftroyed by Froft; but when they have acquired Strength, they will live through the Winter in the open Air, provided they are in a dry Soil, and a flickered Situation,

If the Tops of the Shoots are bruifed between the Fingers, they emit a ftrong Odour, fomewhat like the *Rocket*; but they have a fweet leguminous Tafte like the Tops of *Peafe*, fo are certainly a good Feed for mod Sorts of Cattle in thofe Countries where it naturally grows j but it is too tender for that Purpofe in *England*^

p- 17 A T E CLXXVI.

MESEMBRYANTHEMUM *Dill Gen. Plant.* 9. *Lin. Gen. Plant.* 552. *Ficoides Herm. Tourn. A3. R. Scien.* 1705. *Raii. App.* 193. Fig Marygold.

THIS Genus of Plants is ranged in the Fourth Section of *LinH*eus's* Twelfth Clafs, which includes thofe Plants whose Flowers have about Twenty Stamina and Five Styles. *Tournefort* and *Ray* range this with the Plants whose Flowers are fucceeded by feveral Capfules. Doftor *Herman* gave the Title of *Ficoides* to this Genus, from the Similitude between the Fruit of this Plant and the Fig; in which he was followed by *Tournefort*, *Ray*, and *Boerhaave*: But Doftor *Dillenius* gave the Characters of this Genus, in the Appendix to his Catalogue of Plants which grow naturally about *Giffan* in *Germany*, under this Title of *Mefembryanthemum* which has been adopted by mod of the late Writers on Botany.

The Characters are exhibited in the *Gardeners Dictionary*.

NUMB. XXX.

The Species here reprefted are,

Fig. 1. MESEMBRYANTHEMUM *acaule, foliis fubteretibus < connatis^flonbus ottagynis Lin. Sp. Plant.* 481. *Mefembryanthemum* without a Stalk, taper Leaves joined at their Bafe, and Flowers with Eight Styles. This is the *Ficoides Capenfis humilis, cep&<e folio, flore firamineo Brad. Succ.* 2. p. 10. f. 19. Dwarf Cape Fig Marygold, with an Onion-Leaf and a Straw-coloured Flower. This is titled by Doftor *Dilkuius*, *Mefembryanthemum folio calamiforme Hort. Elth.* 239. *Mefembryanthemum* with a quill-ihaped Leaf.

This Plant grows naturally at the *Cape of Good Hope* among the Rocks and Sand, from whence it was brought to *Holland*, where it was cultivated \ and in the Year 1718 was brought to *England*. This Plant never rifes with a Stalk, the Leaves growing always clofe to the Ground; thefe are about Three Inches long, taper, excepting on the upper Side, where, toward their Bafe, they are

H li a liule

little flattened. They are of a dark Green, and full of lioifiture, (landing by Pairs, with their Bafe joined, fo that the Stalk feems to perforate them. The Flowers Aand upon fhort thick fucculent Footstalks, which do Dor rife above the Leaves, fupporting one large Straw-coloured Flower at the Top, with pale purplifh Rays or * Borders, marked a. Thefe Flowers appear at different Times of the Year, fo are not conftant to any Seafon ; and fometimes the Seeds ripen in warm Seafons.

Fig. 2. MESEMBRYANTHEMUM foliis dolabriformibus Hort. Cliff. 219. Mefembryanthemum with an axe-haped Leaf. This is the *Ficoides Afric^a folio triangulari, fecuris forma^a flore aureo jellato* Bocrb. Ind. Alt. Sp. 290. African Fig Marygold, with a triangular hatchet-fhaped Leaf, and a ftarry gold-coloured Flower. *Bradley* * in his Decades of fucculent Plants, titles it *Ficoides Capenfis humilis, foliis cornua cervi referentibus petalis luteis^a noElififora*. Dec. Sp. 11. Dwarf Cape Fig Marygold with Leaves like Stag's Horns, and yellow Petals, which expand at Night.

This Sort hath ligneous Stalks, which rife Three or Four Inches high, and divide into feveral fhort Branches, which are garnifhed with fucculent Leaves, that are thick (n) their upper Edge, having Two obtufe Angles; and the lower Edge is thinner; the Ends of the Leaves are blunt, and fome of them are fhaped like an Axe; they are of a pale green Colour, and embrace the Stalks

with their Bafe. The PU Footstalks at the End O M E V " produced an fhort deep yellow Colour and \ Branches, they are of * feting* it flowers \ "A, o, l, e, u, the Sun is near

Fig 3 u Z ^ 7 1/2 inch; High: Dwarf drias deflexis Lin. Sp. Plow. 482. Med. t^m by antherum with a rough hairy Stalk, and Leaves. Ph *Ficoides Afric^a p^ois argentea* *Falis tereti p^ois* *genuis gaud^o fcahra* *fere violacea* *Boerb. Ind. alt. Sp. 291.* Shrubby African Fig Marygold with Stalks covered with filvery Wool, and a small long tepty Leaf with filvery rough Drops, and a violet-coloured Flower.

cylindrical and d flc'd The " ac & Joint' Ltf. are being naked hairy Footstalks at the Ends of the Branches; they are entoped of many purple Petals, fet round is represented at b b; the Dalk or Middle is filled with Gender Stamens, marked c c, having four prostrate humulus after the Flower is past; the Germens fells to an oblong Fitch, having five Cells marked d, which are filled with small roundish Seeds. This Plant flowers in May and June, and frequently perfects Seeds in the Autumn.

P L A T E

CLXXVII

Fig. 1. MESKMBRYANTHEMUM foliis fubtriquetris fca-bris, corollis bicoloribus Lin. Sp. Plant. 485. Mefembry-anthemim with rough three-cornered Leaves, and the Petals of the Flower of Two Colours.

THIS is the *Ficoides^a feu Ficus Africana^a folio longo tenuiflore aurantio*. It hath flender ligneous Stalks, which rife Two Feet high, fending out many Branches, which are garnifhed with long flender three-cornered fucculent Leaves of a light green Colour, which are placed by Pairs, embracing the Stalks with their Bafe. From the Bofom of theie are produced Clusters of fmaller Leaves of the fame Form -, and from the Wings of the Stalk are produced fmaller Branches, which are garnifhed with the like Leaves. The Ends of the Stalks are terminated by Flowers, which are radiated like the other Species, and are pretty large. The Petals are long and narrow, of a gold Colour below, but are tipped with Purple, as is repreftnted at a and b; they are broader at their Bafe than their Points, as is fhewn at c, which is One of the ^Petals feperated from the Flower. In the Center are fituated a great Number of flearW *Rutima* - which are terminated by *Eunc* *Siliculis*, as is represented at d. Under the Flower is fhewn an oblong Germen, which afterwards becomes a flefliy fucculent Capfule, marked e, having Five Cells, as is fhewn at f, which are filled with fmall Seeds. This Plant flowers at different Seafons; but the moft ufual Time of its flowering is the latter End of May, and in June; and thefe are often fucceeded by Fruit which ripen their Seeds in the Autumn, when the Sea-

are favourable. The Plants do alfo flower again in Autumn. *Mefembryanthemum Ranzan^o* Fig. 2. MESEMBRYANTHEMUM fubrotundis, foliis obtusis Hort. Cliff. 218. Mefembryanthemum with fource any Stalk, and " « indented, ending with an Hair. This is the *Mefembryanthemum ritzio* *capensis* *Hort. Cliff. 241.* commonly called *Ugg's* *Fig* *Ficoides*. *Bradley*, in his Decades of fucculent Plants, titles it *Ficoides Capenfis humilis, folio triangulari prope fummum dentato, fere fava* Dec. 2. p. 8. Dwarf Cape Fig Marygold with a triangular Leaf indented upward the End, and a yellow Flower. *Ducart* *depo* *Ficoides*, to be only Varieties; but whoever fees *Fimex* *Hippoc^o ritzis*, and what is called the *Cap* *brich* Plants, cannot doubt of their being diftinct Species.

This hath very thick fucculent Leaves of a grey Colour, which are triangular at their Ends; but their lower Part is convex and rounding. Their upper fide is flat, and towards their Bafe is indented as their Edges like Teeth, marked b. The Ends of the Leaves are blunt, and rounded inward, as at a; they grow clofe to the Ground, having no Footstalks, and from the Root divide into feperate Heads. The Flowers rife they grow about five Inches high, fupporting one large pedow Flower, like thofe of the other Species: They appear at different Seafons of the Year.



Fig. 1. MESEMBRYANTHEMUM, folia sublongiora, fistula, ovula hirsutiora. Lin. sp. plant. 222.
 Fig. 2. MESEMBRYANTHEMUM, fistulicola, folia subrotunda hirsuta. Moench. Cliff. 222.



Fig. 1. *MESPILUS, inermis, foliis ovatis serratis, cunctis hispida* — Lin. *Sp. plant.* 478.
 Fig. 2. *MESPILUS, foliis lanceolatis serratis, spinis robustioribus, floribus corymbosis.*



MESELU s. foliis aculeatis ovatis serratis l. maiyrtuj it*ifr/t-f*Tz/M nir-vo - Spangla.

P L A T E CLXXVIII

MESPILUS *Tourn. Inft. R. H. 641. Tab. 410. Rail Meth. Plant. 143. Lin. Gen. Plant. 549. The Medlar or Hawthorn.*

THIS Genus of Plants is ranged in the Ninth Section of *Tournefort's* Twenty-first Class, which includes the Trees and Shrubs with a Rose Flower, whose Empalement becomes a Fruit with hard Seeds. Mr. *Ray* places it in the Appendix to his *Method* with the Trees that produce umbilicated Fruit with several Seeds. Doctor *Linnaeus* ranges it in the Fourth Section of his Twelfth Class, which includes those Plants whose Flowers have about Twenty Stamina and Five Styles, and separates those which have only Two Styles to his Genus *CraUgus* -, those with Three under *Sorbus*; and those with Five under *Mespilus*. But these Distinctions are not permanent, for most not be followed; for the Number of Stamina and Styles differs in the Flowers of the same Tree.

The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Plants here represented are,

Fig. 1. MESPILUS *inermis, foliis ovalibus ferratis cauliculis hirsutis* Lin. Sp. Plant. 478. Medlar without Spines, oval-fawed Leaves, and hairy Stalks. This is the *Mespilus folio rotundiori, fructu nigro subdulci* *Tourn. Inft. 642.* Medlar with a rounder Leaf, and a black sweetish Fruit. *Caspar Bauhin* titles it *Alni effigie lanato folio minor* Pin. 452. The *Amelanchier*, by some called *New England Quince*.

* This Plant grows naturally in *France* and *Germany* where it rises with a shrubby Stalk Five or Six Feet high, with a smooth purplish Bark, which in the young Shoots is covered with a hairy Down; these are garnished with oval Leaves, which have a thick white Down over their under Side, but are smooth above, and (lightly fawed on their Edges. The Flowers are produced from the Side of the Stalk, in loose Spikes at every Joint; these are composed of Six narrow white Petals, as is represented at #, where the Front of the Flower is exhibited to View, and *b* shews the back Part of the Flower. These have an Empalement of One Leaf, which is tubulous, and cut into Six Segments at the Top, as is represented at *c* and *d* \ *e* represents One of the Flowers taken from the Spike, which has but Five Petals, for they are not constant in their Number. In the Center are situated the Stamina, with their Summits, which are not longer than the Tube of the Flower; these immediately surround the Styles which arise from the Germen, situated under the Flower, and, after the Flower is past, turn to an umbilicated Fruit represented at /; this turns black when ripe, and is divided into Two Cells, as is shewn at £, where the Fruit is cut hori-

zontally, to shew the Two hard Seeds marked *h*, as they lie in the Fruit.

This Shrub flowers in *May* and makes a fine Appearance in the Garden when intermixed with other Shrubs of the same Growth; the Fruit ripens in *September*, but the Birds often get these as soon as they ripen.

There is another Sort of this which came from *America* and has been supposed to be the same with this, but the Leaves are of a different Shape, being narrow at their Base, but broad and round at their Extremities; these are almost entire and smooth on both Sides, (landing upon (under Footstalks) so that it is undoubtedly a distinct Species from this.

Fig. 2. MESPILUS *foliis lanceolatis ferratis, spinis robustioribus floribus corymbosis.* Medlar with spear-shaped fawed Leaves, very strong Spines and Flowers growing in a Corymbus. This is supposed to be the *Mespilus Pruni foliis, spinis longissimis fortibus fructu rubro magno* *Clayt. Flor. Virg. 55.*

This Sort grows naturally in *North America*; the Fruit of it was sent me from *Philadelphia*. It rises with a strong Stem to the Height of Ten or Twelve Feet; the Bark of the Stem is rough when it becomes large, but that of the Branches is smooth, and of a reddish Colour. The Branches spread flat, and intermix with each other very irregularly -, these are garnished with spear-shaped Leaves about Three Inches long, and One broad in the Middle; they are fawed on their Edges, and are of a lucid Green, placed alternately on the Branches; but at many of the Joints there are smaller Leaves, which come out in Clusters; and under the Leaves come out very strong Thorns, which are Two Inches long, and very strong; so that a Hedge planted with this Sort of Trees would be one of the securest Fences for Inclosures. The Flowers are produced from the Wings of the Stalk in roundish Bunches, as is represented at *a*; these are composed of Five roundish Petals marked *c*, which are white, with a Blush of Red. There are generally Two Flowers upon each Footstalk, as is represented at *b*. The Flowers have Ten Stamina in each, which are terminated by roundish Summits of a bright red Colour; these spread open in the same Manner as the Petals, and between them arise Three Styles, represented at *d* *, these stand upon the globular Germen, which is situated below the Flower, and afterwards turns to a globular umbilicated Fruit of a fine red Colour, as is shewn at *e*, which is cut horizontally at /, to shew the Seeds *g*, which are hard, and but Two in each Fruit.

This Sort flowers in *June* at which Time it makes a fine Appearance, as it also does in the Autumn when the Fruit is ripe, so is worthy of a Place in every Garden where there is Room for a Plantation of Trees and Shrubs,

P L A T E CLXXIX.

MESPILUS *foliis cordato-ovatis acuminatis, acute ferratis ramis spinosis.* Medlar or Hawthorn, with oval heart-shaped pointed Leaves, which are sharply fawed on their Edges, and Thorns on the Branches.

THIS Sort was raised from Seeds in the *Chelsea* Garden in 1738, which came from *North America*, by the Title of *New Haw*. As all the Plants which

came from the Fruit of those were the same, without Variation, we may put it down as a new Species.

It rises with a strong woody Stem about Four Feet high, sending out many spreading Branches, which incline to a horizontal Position; these are garnished with Leaves differing in their Form; some are indented at the Footstalk, like heart-shaped Leaves, but others are not; they are about One Inch and a half long, and nearly



Fig. 1. MALPIGHIA, foliis oblongo-ovatis mucronatis, flos pappusibus pedunculatis, antheris uniserialibus.
 Fig. 2. MALPIGHIA, foliis ovatis mucronatis glabris, pedunculatis umbellatis.

Delinavit auctoribus in horto botanico Lipsiensi. Sculpit J. G. Schlegel. 1752.



Fig. 1. MIMOSA (USA), caudex, foliis bipinnatis, caule quadrangulo aculeo serrato, leguminibus 1M, Fr.: ...
 ! IMOSA A, ut rmt Jfr/,, leguminibus, ...
 MIMOSA: caule fruticose, foliis bipinnatis, aculeis, aculeis geminis, siliquis >iaiafi,i /!,*,_j

Revised according to list of specimens by J. P. Miller, April 22, 1857

P L A T E

CLXXXI.

MALPIGHIA, *Plum. Nov. Gen.* 46. *Tab.* 36. *Lin. Gen. Plant.* 508. Barbadoes Cherry.

THIS Genus of Plants is ranged in the Third Section of *Linnæus's* Tenth Clafs, which includes thofe Plants whose Flowers have Ten Stamina and Three Styles. *Plumier* places it in the Sixth Section of *Tournefort's* Twenty-first Clafs, in which he ranges the Trees and Shrubs with a Rose Flower* whose Pointal becomes a fleshy Fruit inclofing hard Seeds.

The Species here represented are

Fig. i. MALPIGHIA *foliis oblongo-ovatis acuminatis setis pungentibus, pedunculis unifloris verticillatis.* Malpighia with oblong oval-pointed Leaves set clofe with flinging Briftles, and Footstalks with One Flower growing in Whorles round the Stalks.

The Seeds of this Plant were sent me by Mr. *Richard*, Gardener to the King of France at *Trianon*, by the Title of *Bois de Capitain*, about Four Years past; and from them several Plants were raised, which have flowered the Two last Years in the *Chelsea* Garden. This Plant rises with a strong upright Stem about Three Feet high covered with a smooth Bark, sending out several Side Branches which grow erect, and are garnished with oblong oval Leaves ending in acute Points, these fit clofe to the Branches, and are clofely covered with fine Briftles which do not appear, unless clofely viewed; but, upon handling any of the Leaves, they flick into the Skin, and fling as bad as Cow-itch, so that it is very troublesome to handle the Plants. The Flowers come out upon long slender Footstalks, each of them supporting One Flower -, they rise from the Wings of the Stalk at each Joint, Four, Five, and sometimes Six of these come out from the same Joint, standing round the Stalk in a Sort of Whorles, as is represented at *a* and *b*. The Flower hath a small permanent Empalement, which is cut into Five Parts, as is shewn at *c*; and Five oval Petals, represented at *d*, which spread open; and at their Base have Two oval convex Honey-Glands adhering to them. In the Center arise Ten flat awl-shaped Stamina, which join and form a Cylinder, as is represented at *e* - these are terminated by small heart-shaped Summits. At the Bottom is situated a roundish Germen supporting Three Styles, as is shewn at * and *g*; these stand apart, and are crowned by small obtuse Stigmas. *l* represents the Germen cut through longitudinally, with One of the Styles extended beyond the Stamina; *h* shews one of the Stamina as it is situated on the Side of the Germen, and adheres to the Bottom of it with its Base. This Plant flowers in *July* and *August*, but has not as yet perfected Seeds in *England*.

This is very different from *Plumier's* Malpighia *foliis ovatis, folio subtus spinoso*, in the Size and Shape of the Leaves. The Leaves of this are more than twice the Size of thofe, and are armed on both Sides with thofe flinging Briftles, whereas the other have them only on their under Side; and *Plumier's* Plant rises with a much taller Stem than this, and but seldom flowers here; there are Plants of it in the *Chelsea* Garden Ten Feet high* which have not as yet flowered, tho' they thrive, and are in perfect Health -, but the Sort here represented flowers annually.

Fig. 2. MALPIGHIA *foliis ovatis integerrimis giabris pedunculis umbellatis*, *Hort. Cliff.* 169. Malpighia with smooth, oval, intire Leaves, and Footstalks supporting Umbels of Flowers. This is the *Malpighia Mali punici facie*, *Plum. Novi Gen.* 46. Malpighia with the Appearance of Pomegranate. *Commeline* titles it *Cerafus Jamaicensis fructu tetrapyreno*, *Hort. Amst. Sp.* 145. Jamaica Cherry with a Fruit having Four Seeds.

This Sort grows plentifully in most of the Islands in the *West Indies*, but whether it is natural there, or has been lately introduced into thofe Wands, is not easy to determine* for the Birds who devour the Fruit, have carried the Seeds all over thofe Islands; so that the Trees grow in such Plenty, where they are permitted to stand* as if they were Natives of the Place.

This Sort grows to be a Tree of middling Size in *America* and we have several Plants in *England* which arc upward of Ten Feet high, with strong woody Stems* which are well furnished with Branches covered with & dark brown Bark, and garnished with smooth oval Leaves which are intire; they are placed by Pairs opposite, fitting clofe to the Branches. The Flowers are produced in Umbels from the Side and at the End of the Branches, standing upon short Footstalks, as is represented at *a*; these have Five oval Petals, ranged in the same Order as thofe of the former Sort, but are of a brighter red Colour, and are waved on their Edges, as is represented at *b*: These Flowers are sometimes succeeded by Fruit in *England*, which are about the Size of grey Peafe, having a thin red Pulp covering Three or Four rough angular Seeds. The Flesh is of a pleasant tart Taste, and is so very thin as to be of little Esteem* but in the *West Indies*, the Fruit is served up at their Tables for want of better.

This Sort flowers usually here in *March* and *April*, but thofe Flowers are seldom succeeded by Fruit*, they alib flower again in *July*, and when the Seasons are warm, from these Flowers there is often Fruit produced so for at that Time of the Year the Plants are usually removed into the open Air.

P L A T E

CLXXXII.

MIMOSA, *Tourn. Inft. H.H.* 60s* *Nat.* 375. *Raii Gerli Plant.* 161. *Lin. Gen. Plant.* 597. The fenfitive Plant.

THIS Genus of Plants is ranged in the Fifth Section of *Tournefort's* Twentieth Clafs, which includes the Trees and Shrubs with a Flower of One Petal, whose Pointal becomes a Pod. Mr. *Ray* places it among the Trees which bear Pods, whose Flowers are not of the Butterfly Kind. Doctor *Linnæus* ranges it in the First Section of his Thirteenth Clafs, which includes thofe Plants whose Flowers have many Stamina and but One Style, and under this Genus he ranges the *Acacia* of *Tournefort* and the *Inga* of *Plumier*. But as the Species of *Acacia* are very numerous, so it is better to ireep them separate, especially as thereby the officinal Name of *Acacia* will be preferred to the Genus.

Nat. XXXI.

The Species here represented are,

Fig. 1. MIMOSA *aculeata, foliis bipinnatis, caule quadrangulo, acukis recurtis, leguminibus quadrivahibus*, *Lin. Sp. Plant.* 522. Prickly fenfitive Plant with doubly-winged Leaves, a square Stalk, recurved Spines, and Pods with Four Valves* This is the *Mimosa herbacea procumbens* & *spinosa, caule quadrangulo, filiquis quadrivahibus*, *Houft. MS.* Trailing herbaceous and prickly fenfitive Plant with square Stalks, and Pods with four Valves.

This Sort of fenfitive Plant was discovered by the late Dr. *William Houfton* at *La Vera Cruz*, in *New Spain*, from whence he lent the Seeds which succeeded in several Gardens here. This hath an herbaceous prickly Stalk.

I i the

the Spines are ail recurved, as is reprinted at a. As these Stalks are too weak to support themselves when grown to a Length, fo they decline to the Ground; these are garnished with winged Leaves, compofed for the moft part of Two Pairs of Pinna*) or Wings, as is fhewn at b. From the Wings of the Stalk arife the Foottalks, each fuftaining One globular Head of purple Flowers, reprinted at c; these are fucceeded by long, Four-cornered prickly Pods, reprinted at d which open with Four Valves, as is fhewn at e \ filled with angular Seeds, as is fhewn at/. This Plant hath a perennial creeping Root, by which it multiplies greatly in the Places where it grows naturally, fo that it fpreads over the Sands all round the Town of Vera Cruz. It is One of thofe Sorts which is generally diftinguifhed by the Title of humble Plants, becaufe the whole Leaf, with its Foottalk, falls away from the Touch. This feems to be the Caeae i. of Pifo, p. 202.

Fig. 2. MIMOSA inermis, foliis bipinnatis, fpicanimfloribus pentandris inferioribus plenis, Hort. Upfal. 145. Senfitive Plant without Spines, doubly-winged Leaves, Spikes of Flowers with Five Stamina, the lower being double. This is the Mimosa non fpinofa palujris & berbasea procumbens fore luteo pleno, Houfl. MS. Marfh trailing herbaceous fenfitive Plant without Spines, and a yellow double Flower.

This Sort was alfo difcovered by the late Do&or Houffoun at La Vera Cruz, growing in ftagnate Waters, where the Stalks floated on the Surface of the Water, and were flat; but, when it was cultivated on dry Ground, the Stalks grew more ereft, and were round, in like manner as the perennial Arfefmart •, which in Water floats like the Pond Weeds, but in dry Ground the Stalks are ereft. The Stalks are fmooth, herbaceous, and have bending Joints, as is reprinted at a. From each of the Joints comes out One winged Leaf, compofed of Three or Four Pairs of fingle-winged Leaves, reprinted at b -, and below the Foottalk of the Leaf comes out that of the Flower, which grows Three or Four Inches long, having Two Appendages of Leaves (or Brafiea) at about an Inch apart; and at the Top fuftains a large Head of Flowers, which are yellow, and of different Form>s and Nature; thofe on the upper Part of the Spike, or Head, have no Stamina, but are full of broadiith Leaves of a yellowifh Green, as is reprinted at c -> thefe when growing together in the Head have much the Appearance of the other, but are more fpecious; thofe Flowers which are fituated in the Middle are wholly Male, having Five Stamina and no Embrio, or Style, as is reprinted at d but the lower Flowers are Hermaphrodite, having each Five Stamina terminated by obtufe Summits, with a fmall five-pointed Empalement, reprinted at e \ in which is fituated aGermen fupporting a fhort Style, crowned by a fquare Stigma. The

Germen afterwards becomes a broad compreffed Po. reprinted at /; which opens lengthwife^wkh Two Valve, as is fhewn at ^, in which £ lodged One Row of fmooth compreffed Seeds, as is reprinted at h.

upright, and the Leaves are We f L A few Years much larger and the Pods are c Serru by a friend, Hence I had fome Seeds of this Sort fent in the Island of not on a Branch at the ed with a Lixivium, probably grow in fome of the other Islands.

Fig. 3. This Plant is a woody Stalk, doubly-winged Leaves, which are prickly, the Spines growing by Pairs, an hairy Pods fpread open like Rays. This is the Mimosa fruticefa fpinofa filiquis latis, hirsutis & articulate Houfl. MS. Shubby prickly fenfitive Plant, with broad hairy, and jointed Pods; and the Jefchynomena fpinoj 4. five foliolis Acacia angufioribus, frondibus valid? \ mas jpinas habentibus, Breyn. Cent. 1. 43. The Four L prickly fenfitive Plant with narrow Acacia Leaves very clofely armed with Spines.

This Sort was difcovered growing naturally at Vera Cruz by the late Doftor Hcuyloun, who fent the Seed to England. This rife with a woody Stalk Five or Six Feet high, fending out fome Side Branches; thefe, and alfo the main Stalks, are armed with ftrong white Spines, which are broad at their Bafe, but narrow and recurved at their Point \ they are placed by Pairs oppofite, and ftand alternate with the Leaves 5 the Stalk is alfo hairy > as is reprinted at a. The Leaves are placed alternately on the Stalks, and are compofed of Five or Six Pairs of fingle-winged Leaves, reprinted at b; thefe have very narrow Pinna^ or Wings \ and between each Pair of thefe come out from the Midrib Two fhort Spines oppofite, fhaped like thofe on the Branches, but are fmall and not bent, fo ftand horizontal with the Leaves. The Flowers are collefted into a round Head, as is fhewn at c y they are of a bright purple Colour, and ftand upon ftrong Foottalks, which arife from the Infertion of the Leaves. When the Flowers decay, they are fucceeded by long compreffed hairy Pods, which are jointed, reprinted at e; thefe are fpread open like Rays, as is fhewn at d. When the Pods are ripe, they open with Two longitudinal Valves, having One Seed lodged in each Joint, as is reprinted at / 5 the Seeds are oval and compreffed, as is fhewn at g. It grows plentifully in the rich moft Ground about the Town of Vera Cruz.*

P L A T E

CLXXXIII

MONARDA, Lin. Gen. Plant. 34. Leonurus, Journ. Inft. R. H. 187. Tab. 87. Origanum, Cornu* 13. Monarda, fcarlet Leonurus, and Ofwego Tea.

the Leonurus Canadensis It is by Cornuus call'd the Origanum American Canadensis, by fome called the fcarlet O of Canad. It is Ofwego Tea, from the Life which the Canadian make of this Plant.

THIS Genus of Plants is ranged in the Firft Section of Linnaus's Second Clafs, which includes thofe Plants whole Flowers have Two Stamina and One Style. ffournefort joins the Firft Sort to his Genus of Leonurus, which is ranged in the Second Section of his Fourth Clafs, in which he places the Herbs with a Lip Flower of One Leaf, whose upper Lip is hollowed like a Spoon.

It hath a perennial Root compofed of many ftraggling fibres, which run at the Top in feveral Heads; thefe fpread and increafe in the Spring, and are much in Ufe for the Number of them, which are four obwife An of * Roots.

The Species here reprinted are,

Fig. 1. MONARDA capitulis terminalibus, caule obtufangulo, Hort. Upfal. 12. Monarda with Heads terminating the Stalks, which have obtufe Angles. This is

are garnifhed with oblong oval Leaves, placed oppofite by



Fig. 1. MONARDA, capitulis terminalibus, caulis ad angulos floris. W. fol. 22.

Fig. 2. MONARDA, floribus capitate sub terminalibus, caulis arborigulis. L. in Sp. pl. 22.

L. Bat. 1700. n. 1000

Printed according to an original by J. Miller. 1757.



Fig. 1

Fig. 2

Fig. 1 MYRTUS laevis Roxburgh C. B. P. 473.
 Fig. 2 MYRTUS floribunda (formis) Jacq. 403.

Illustratio a 1749

Pl. CXXXV. Botanic Garden of Padua. 1749. 1750.

P L A T E CLXXXV.

NICOTIANA, *Tourn. Inft. R. II. 117. Tab. 4.1. Rail*
"Meth. Plant. 81. Lin. Gen. Plant. 220. Tobacco, in
French^ Nicatiane, ou Tabac.

THIS Genus of Plants is ranged in the First Section of *Tournefort's* Second Clafs, which includes the Plants with a funnel-shaped Flower of One Petal, whose Pointal turns to a Fruit. Mr. *Ray* places it in the First Section of his Nineteenth Clafs, in which he ranges the Plants with a regular Flower of One Petal, which is succeeded by Capfules. Doñlor *Linnaeus* ranges it in the First Section of his Fifth Clafs, which includes those Plants whose Flowers have Five Stamina and One Style.

The Species here represented are,

Fig. 1. *NICOTIANA foliis lanceolatis acutis, feffilibus, calycibus acutis, tubo floris longiffimo.* Tobacco with spear-shaped Leaves ending in acute Points fitting clofe to the Stalks, fharp-pointed Empalements, and a very long Tube to the Flower. This is the *Nicotiana major anguftifolia*, *C. B. P. 170.* Greater Tobacco with a narrow Leaf. This Sort of Tobacco grows naturally on the Coast of *Guiney*, from whence I have received the Seeds, it alfo grows in the *Brafiks*, where it is cultivated, and fent to *Europe* by the Title of sweet-fented Tobacco.

This Sort rifes with an upright branching Stalk Four or Five Feet high, garnifhed with Leaves which are more than a Foot and Half long, and Four Inches broad in the Middle, ending in acute Points. They are a little waved on their Edges, and have many deep tranfverfe Veins going from the Midrib to the Edges, and in warm Weather fweat out a clammy Juice, the upper Leaves are much narrower and fhorter. The Flowers are produced in loofe Bunches at the End of the Stalks, thofe which come out from the Wings of the Stalk ftand on long Footstalks, which do each fustain Four or Five Flowers; but thofe at the Top of the Stalk fit very clofe; thefe have Empalements, which are cut into Five acute

Segments. The Tube of the Flower is very long, as b represented at a; and at the Top is divided into Five Angles or Points which fpread open, as is represented at b where the Flower is cut open longitudinally to fhew the Situation of the Five Stamina, Four of which, marked c, are longer than the other; thefe are terminated by oblong erect Summits. At the Bottom of the Empalement marked e, is fituated the Germen, fupporting a long (lender Style d) crowned by an obtufe Stigma; which afterward becomes a conical Veffel, as is represented at l, with a longitudinal Furrow on each Side, represented at £, opening at the Top; having Two Cells, as is fhewn at h and z, where the Capfule is opened longitudinally, and cut tranfverfly to fhew the Situation of the fmall Seeds k, One of which is magnified at l. This Plant will live thro' the Winter if it is protected from the Cold, but as the Seeds ripen annually, fo there are few Peribns who are at the Trouble to

Fig. 2. *NICOTIANA foliis ovato-lanceolatis, obtufis, rugofis, calycibus breviffimis.* Tobacco with oval fpear-shaped Leaves, which are obtufe and rough, and very fhort Empalements to the Flower. This is the *Nicotiana humilis, primula veris folio, Hcuft. MS.* Dwarf Tobacco with a Primrofe Leaf.

This Plant was difcovered by the late Doñor *Houftoun* at *La Vera Cruz*, from whence he fent the Seeds to *England*. It hwh a thick Tap Root which runs deep, into the Ground, fending out fome fmall Fibres from the Sides; and from the Top come out Six or Seven oval fpear-shaped Leaves, which fpread near the Ground. They are about the Size of thofe of the common Primrofe, but of a deeper Green. The Flower Stalk rifes about a Foot high, branching into Three or Four Divifions, each of which is terminated by a loofe Spike of tubulous fmall P lowers of a yellowifh-green Colour, fitting in very fhort Empalements. Thefe are fucceeded by fmaB oval Capfules with Two Cells, filled with fmall Seeds.

P L A T E GLXXXVL

VINCA, *Lin. Gen. Plant. 261. Pervinca, Tourn. Inft. R. II. 119. Tab. 45. Clematis Daphnoides, Rail Meth.*
Perriwinkle; in French^, gtménche.

THIS Genus of Plants is ranged in the First Section of *Linnaeus's* Fifth Clafs, which includes thofe Plants whose Flowers have Five Stamina and One Style. *Tournefort* places it in the First Section of his Second Clafs, which contains the Herbs with a funnel-shaped Flower of One Leaf, whose Pointal becomes the Fruit. Mr. *Ray* puts it in his Eighteenth Clafs, which contains the Plants with a regular Flower which is fucceeded by Two Pods.

The Spcies here represented is,

VINCA foliis oblongo-ovatis integerrimis, tubo floris longifjimo cattle ramofo fruticofo.* Perriwinkle with oblong oval intire Leaves, a very long Tube to the Flower, and a branching fhubby Stalk.

The Seeds of this Plant were brought from *Madagafcar* to *Paris*, and fown in the King's Garden at *im&Mn*, where they fucceeded; and from thence I was fui^Med with the Seeds, which fucceeded in the *Chelfea* Garden. It rifes with an upright branching Stalk to the Height of Three or Four Feet; which at firft is herbaceous and fucculent, covered with a fmoother purplifh Skin, but afterwards it becomes ligneous and tough. This divides upward into feveral Branches, which are garnifhed with oblong oval fmoother Leaves, which are fieffy and intire. At the Bafe of the Leaves come out One Flower with a very long Tube, which is divided at the Top into Five broad obtufe Segments, which fpread open flat, and are of a bright Peach Colour on their upper Side, as is represented at a, but of a pale Bluifh Colour on the under, as

is fhewn at b. Thefe have a very fhort Empalement which is cut at the Brim into Five acute Segments, which is represented at c; and at d, the Flower is cut

longitudinally to fhew the Situation of the Five Stamina, which are terminated by oblong erect Summits. At the Bottom of the Empalement marked e, is fituated the Germen, fupporting a long (lender Style d) crowned by an obtufe Stigma; which afterward becomes a conical Veffel, as is represented at l, with a longitudinal Furrow on each Side, represented at £, opening at the Top; having Two Cells, as is fhewn at h and z, where the Capfule is opened longitudinally, and cut tranfverfly to fhew the Situation of the fmall Seeds k, One of which is magnified at l. This Plant will live thro' the Winter if it is protected from the Cold, but as the Seeds ripen annually, fo there are few Peribns who are at the Trouble to

If the Flowers of this Plant are clofely fhut up, they are not perceived at a fmall Difftance. The Duration of thefe Flowers on the Plants for a few Months in the Year; for they begin to appear at the End of *March* or the Beginning of *April*, and continue to the End of *December*; fo that for the Winter they make a fine Appearance in the

As this Plant is a great Novelty in *P*, exhibited it out of the Order which we have the Courfe of this Work, but as it is not yet observed in at prefent, we hope there will need no doing, becaufe the Figure of this Plant is not as yet



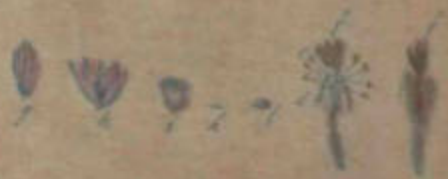
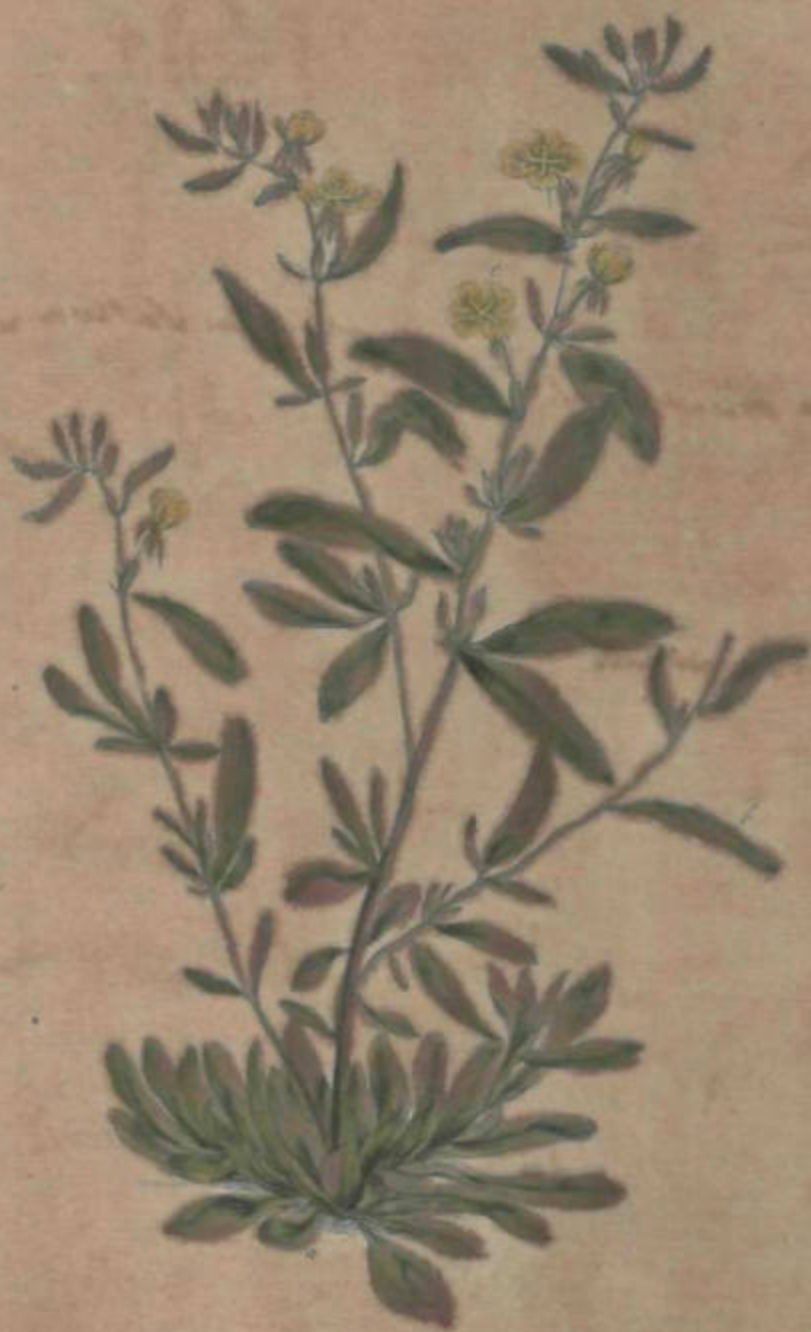
Fig. 1. NICOTIANA foliis lanceolatis acutis, sessilibus, calycibus acutis, tubo floris longissimo.
 Fig. 2. NICOTIANA foliis ovato-lanceolatis obtusis rugosis, calycibus brevissimis.

Illustrationes auctoris in Horto Botanico Petropolitano, 1827.



Fig. 1. NIGELLA, parviflora, semine ovulis longioribus Hort. Cliff. 170.
 Fig. 2. NIGELLA, parviflora, semine ovulis brevioribus, foliis subpinnatis Hort. Cliff. 170.

Printed & sold by W. Wood, at the Sign of the Sun in Pall-mall, 1727.



OXOTHERA foliis subultrior ovatis caulis lanuolatis oblongis, apiculatis, raris foliosis.

Coll. de ...

Publicum ...

P L A T E . CLXXXVII.

NIGELLA, *Tourn. Inf. R. H.* 258. *fab.* 134. *Raii Meth. Plat. in. Lin. Gen. Plant.* 606. Fennel Flower., \r Devil in a Bufli.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Sixth Oafs, which includes the Herbs with a Rose Flower, whose Pointal turns to a Fruit with many Capfules. Mr. *Ray* places it in the Second Section of his Twenty-fecond Clafs, which contains the Herbs with an uniform regular Flower of Five Petals, whose Seeds are included in Capfules. Do6lor *Linnaeus* ranges it in the Fifth Section of his Thirteenth Clafs, which includes thofe Plants whose Flowers have many Stamina and Five Styles.

The Species here represented are,

orientalis L.
Fig. i. NIGELLA pistillis denis corolla longioribus[^] *Hort. Cliff.* 215. Fennel Flower with Ten Pointals which are longer than the Petals. This is the *Nigella Orientalis* *flor. flavescens* *feminealato plano* [^] *Tourn. Cor.* 19. Eaftern Fennel Flower with a yellowifh Flower, and a flat winged Seed. Doftor *Morrifon* titles it, *Nigella Chalepensis lutea, corniculis longioribus, Hift.* 3. p. 516. Yellow Fennel Flower of *Aleppo* with longer Horns.

This Plant grows naturally in the Cbrn Fields about ~~the Mountains~~ ^{J^pught to} ~~the Mountains~~ where the Plants have been cultivated many Years in fome curious Gardenſ. It is an annual Plant which rife with a branching Stalk a Foot and Half high, garnifhed with pretty long Leaves, which are divided into many long narrow Segments to the Midrib. Thefe Segments are again divided into Two, Three, or Four Parts at the Top *, the Flowers are produced at the End of the Branches. They are compofed of Five oblong yellow Petals ending in acute Points *, and at the Bafe of thefe are placed Eight Ne&ariums, with a great Number of Stamina arifing between them, as is repre-

ſented at *a*; and between thefe are fituated fometimes Five, at others Eight, Nine, or Ten Germina, which are oblong and compreffed, terminating with fo many Styles* to which the Stigmas are fattened longitudinally, as is (hewn at; *b*. The Germina afterward turn to fo many horned Capfules, repreſented at *c*, which join at their Balc -, having Two longitudinal Seams, as is ſhewn at *d* *, the outer one opening as repreſented at *e*, ſhowing how the compreffed Seeds are ranged within. / {hews one of the Stamina with its Summit magnified, and *g*, one of the natural Size, *h* ſhews a fingle Petal taken from the Flower, and *, one of the Neftariums or Honey Cells.

Nigella Sativa L.

Fig. 2. NIGELLA pefalis tricujpidatis[^] foliis ſubpilofis[^] *Hort. Vpſal.* 154. Fennel Flower whose Petals end with Three Points, and the Leaves are a little hairy. This is the *Nigella anguififolia* * *flor. majore cceruleo,* *C < B. P.* 145. Narrow-leaved Fennel Flower with a larger blue Flower.

This is an annual Plant which grows naturally in feveral Parts of *Afia* \ it rife with a branching Stalk near Two Feet high, garni(hed with Leaves which are finely cut like thofe of Fennel. The Flowers are produced at the End of the Branches,, as thofe of the other Sort. Thefe are compofed of a greater Number of Petals than the other, but have no Neftariums. They have a great Number of Stamina, and the Petals end with Three acute Points, as is repreſented at *a* -> but the inner Petals end with One Point, as is ſhewn at *b*. At *c*, is One of the Stamina with its Summit of the natural Size ; and *d* ſhews One magnified. At *e* are repreſented the Five Capfules, which in this Sort are fwollen, and cut tranſverſely *, and / is One of them feperated ; thefe are filled with fmall angular Seeds, repreſented at *e*. Thefe Plants produce their Flowers from *June* to *September* in a Succeſſion, fo are cultivated in the Flower Gardens for Ornament. Their Seeds ripen in the Autumn*

P L A T E . CLXXXVIII.

OENOTHERA, *Lin. Gen. Plant.* 424. *Onagra* [^] *Tourn. Inf. R. H.* 302. *Tab.* 156. *Lyfimachia* *JUiquofa* *Rail Meth.* 100. Tree or Night Primrofe.

THIS Genus of Plants is ranged in the Firft Section of *Linnaeus*'s Eighth Clafs, which includes thofe Plants whose Flowers have Eight Stamina and One Style; *Tournefort* ranges it in the Ninth Section of his Sixth Clafs, which contains the Herbs with a Rose Flower whose Empalement becomes a dry Fruit. Mr. *Ray* places it in the laft Section of his Twentieth Clafs, which includes the Herbs with a Flower of Four Leaves, which is of an anomalous Figure.

*The Species here represented is,

OENOTHERA foliis radicalibus ovatis, caulinis lanceolatis, obtoffis, capfulis ovatis fulcatis. Night Primrofe with NUMB. XXXII.

oval Leaves at the Root, thofe upon the Stalk ſpear-flaped and blunt-pointed, and oval furrowed Seed-veffels.

This Plant grows naturally in *Canada* [^] from whence the Seeds were brought to the Royal Garden at *Paris* ; and Part of the Seeds were ſent me by Mr. *Richard* [^] the King's Gardener at *Trianon*, which have ſucceeded in the *Cbelfea* Garden. This is a perennial Plant with a fibrous Root, from which come out many oval Leaves which fit clofe to the Ground, as is repreſented at *a*. From between thefe arife One or Two (lender branching Stalks, which grow near a Foot high, garnifhed with ſpear-flaped Leaves ending in blunt Points, as is ſhewn at *b*; thefe are of a light Green, and fit clofe to the Branches. The Flowers come out ſingly from the Wings of the Leaves, as is repreſented at *c*. Thefe have an Empalement of One Leaf, cut into Five acute Segments

Segments which are deflexed, as is shewn at & \>. The Flowers are composed of Four oval Petals, which are indented at their Points. They are of a bright yellow Colour; and within the Petals are situated Eight Stamina, which are terminated by oval Summits, as is represented at e \ these spread open, and are little more than Half the Length of the Petals. Under the Tube of the Empalement is situated an oblong Germen, supporting a slender Style, which is shorter than the Stamina, and is crowned by a four-pointed Stigma, represented at // * The Stigma is oblong, thick, and spreads open, lying upon the Four Petals of the Flower when it is fully blown; but, after the Petals fall off, these are

contracted before they drop. The Germen, which is situated below the Tube of the Empalement, afterward turns to an oval furrowed Capsule, represented 2X g \ having Four Cells, opening with Four Valves, as is shewn at h g, inclosing many angular Seeds adhering to a four-cornered Column in the Center. / (shews the Capsule cut transversely; £, the Seeds of their natural Size; and /, shews One of them magnified A This Plant begins to shew its Flowers in June, and it is generally a Succession of the Flowers till the Autumn, and the Seeds ripen about Two Months after the Flowers have fallen, in the same Succession.

R *y* *A* T E V . ^CLXXXIX.

ΟΙΚΟΝΟΜΙΑ, Lin. Gen. Plant. 424, &c. Tree Primrose.

THESE Plants are of the same Genus with that in the former Plate; for the same References to the Classes of the different Authors will do for this.

The Species here represented are,

Fig. 1. *OENOTHERA foliis lanceolatis dentatis, caule hispido*. Tree Primrose with spear-shaped indented Leaves, and a prickly Stalk. This is the *Oenothera foliis lanceolatis, capsulis acutangulis*, Lin. Sp. Plant. 346.

* Tree Primrose with spear-shaped Leaves, and Capsules with acute Angles. *Tournefort* titles it, *Onagra angulifolia, caule rubro, flore minori*, Injt. R. H. 302-Narrow-leaved Tree Primrose with a red Stalk and a smaller Flower,

This Plant grows naturally in *Virginia*, from whence the Seeds were first brought to *Europe*, but having been long cultivated in Gardens, the Seeds have scattered, and thereby propagated the Plants in so great Plenty, as to appear as if it was a Native of *England*; for where any of the Seeds have been accidentally scattered upon Dunghills or waste Spots of Ground, the Plants have come up in Plenty the following Spring.

This Sort is a biennial Plant, which rarely flowers the same Year the Seeds are sown. The first Year there are a great Number of pretty broad spear-shaped Leaves produced, which spread flat on the Ground in a circular Order, like that of a full-blown Rose. The Spring following arises an upright red Stalk near Three Feet high, having many rough Prickles the whole Length, and garnished with spear-shaped Leaves, which are a little indented on their Edges, ending in acute Points. The Flowers are produced singly from the Wings of the Leaves; which are composed of Four oval Petals, indented at the Top, as is represented at a. These are of a bright yellow Colour, and have an Empalement of One Leaf, cut into Four acute Segments, which are deflexed, as is shewn at b. From the Tube of the Empalement arise Eight Stamina, represented at c c -, which are terminated by oblong prostrate Summits. In the Center arises a Style, which is situated upon the Germen

at the Bottom of the Empalement -, it is shorter than

the Germen
indented at
Summits, of which
Seeds, as is
represented at
cut transversely
shews Two
of the Seeds magnified

Tree Primrose with
this is the *Oenothera foliis ovato-lanceolata*

indebted to the
Win-s of the
Kuriefert Part of the Stalk

Broad-leaved Tree
Lyfimachia lutea
by C. A. B.
Pm. 245. Yellow horned

This Plant is
was the first Species of
Europe, for is
any of the other Species
is spread about from
that it might be found
Wood near *Haerlem*

Ground, inasmuch that
it was a Native of that
counted for, because
that Place, are chiefly
the Earth of the Beds
out of their old
of the Seeds were
and those being sown
vt d
t t
t r

Let
much
^ London better



Fig. 1. OENOTHERA, folia lanceolata, densius caulis bipartitus.
 Fig. 2. OENOTHERA, folia ovata, lanceolata, planis. V. Cl. 22.



Fig 1. *DIPLODIA*, *Lophocarpus* *leucocarpus* *Hooker* *et* *Thunberg* *Bot. Beech.* *Pl. 136*
 Fig 2. *DIPLODIA*, *Sparganium* *leucocarpus* *Hooker* *et* *Thunberg* *Bot. Beech.* *Pl. 136*

Illustration of the plant in the text



OPUNTIA foliis ovatis, areolis & compressis. Annon. Hist. Nat. Mex.

P L A T E CXC.

OMPHALODES, *Tourn. Inf. R. H. 140. Tab. 58. Linum umbilicairm, Raii Meth. Plant. 5J. Cynogloffum, Lin. Gen. Pl'M. 168. Venus Navelwort.*

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Second Clafs, which includes the Herbs with a funnel or wheel-flaped Flower of One Petal, whose Pointal arifes from Four Embryos, which turn to fo many Seeds that ripen in the Empalement. Mr. *Ray*, places it in his Thirteenth Clafs, which contains the Herbs with rough Leaves whose Flowers are fucceeded by Four naked Seeds. Doftor *Linnaeus* places it in the Firft Section of his Fifth Clafs, which includes thofe Plants whose Flowers have Five Stamina and XfUur Style#; and he joins it to the Genus of *Cynogloffum*, or Hound's-tongue.

The Species here reprinted

Fig. 1. OMPHALODES *Lufitanka elatior, Cynoglojji folio*, *Tourn. Inf. R. H. 140.* Taller Portugal Navelwort with a Hound's-tongue Leaf.

This Species is generally confounded with the *Omphalodes Lufitanka lint folio, Tourn. Inf. 140.* Portugal Navelwort with a Flax Leaf; which is titled by *Parkinſon*, and other old Authors, *Linum umbilicatum* \ and in *Engliſh* is called* *Venus Navelwort*. But the former old Sort, which was cultivated in the Gardens, is almoſt loft in *England*; for the Sort here figured being a larger Plant, and making a better Appearance, has been generally cultivated ſince it was introduced* and the old one has been neglected. Theſe Two Sorts grow naturally in *Portugal*, but were not diſtinguiſhed till *Tourneforti* was there, who obſerved their Difference, and inferted them in his *Inſtitutions* as diſtinct Species, which they undoubtedly are •, for I have many Years cultivated them both, and have never found them vary.

This riles with a branching Stalk Eight or Nine Inches high, garniſhed with ſpear-flaped narrow Leaves; but the Bottom Leaves are much broader- They are of a grey Colour and ſmooth. The Flowers grow in a looſe Bunch at the End of the Branches; they are white, and compoſed of Four roundiſh Petals ſpread open. Theſe have an Empalement of One Leaf, cut almoſt to

the Bottom in Four narrow acute-pointed Segments; which ſpread open between the Petals. In the Tube of the Flower are fituated Five ſhort Stamina, terminated by roundiſh Summits. In the Center are fituated Four roundiſh depreſſed Germina, from which arifes an awl-flaped Style, crowned by an indented Stigma; the Germina afterward become Four depreſſed concave roundiſh Seeds fitting in the Empalement. This flowers in *June*, and the Seeds ripen in the Autumn, and then the Plants decay. It is titled by Doftor *Linnaeus*, *Cynogloffum foliis Uneari-lanceGhtis glabris, Hort. Cliff. 47. i. e.* Hound's-tongue with ſmooth narrow ſpear-flaped Leaves.

Fig. 2. OMPHALODES *pumila verna, Symphyti folio, Inf. R. H. 140.* Low Spring Navelwort with a Comfrey Leaf. This is by *Cafpar Bauhin* titled, *Symphytum minus Boraginis facie, Pin. 259.* Smaller Comfrey with the Appearance of Borage. *John Bauhin* call it, *Symphytum pumilum repens, five Borago minima Herbariorumi Hi/L. 3. 597. i. e.* Low creeping Comfrey, or the leaf Borage of the Herboriſts. Doftor *Linnaeus* titles it, *Cynogloffum repens, foliis radicalibus cordatis, Hor^ Cliff. 47* f. e%* creeping Hound's-tongue with heart-flaped lower Leaves.

This is a perennial Plant with trailing Stalks, which put out Roots from the Joints by which it propagates. The lower Leaves are heart-flaped, rough, and like thoſe of Borage-, the upper are ſpear-flaped. The Flowers ar^* produced upon branching Footstalks from the Side of the Stalks. Theſe divide into Four or Five ſmall ones, each ſupporting a blue Flower of One Petal, as is repreſented at *a*, which has a ſhort Tube •, but is divided above in Five roundiſh Segments, as is ſhewn at *b* and *c*. Theſe fit in an Empalement, which is cut into Five acute Segments, repreſented at *e*, and *d* ſhews the hinder Part of the Flower with the Tube, taken out of the Empalement. After the Flower is paſt, the four Germina, fituated in the Empalement, turn to Four concave/roundiſh, depreſſed Seeds, as is repreſented at *f*; *g* ſhews the Empalement after the Seeds are fallen, *h* ſhews a ſingle Seed taken out of its Cover magnified, and *i*, of the natural Size. It flowers in *April* and *May*, and delights in a moiſt ſhady Situation.

P L A T E CXCi.

OPUNTIA, *Tourn. Inf. R. H. 239. Tab. 123. Opuntia feu Tuna, Raii Meth. Plant. 144- CaRus, Lin. Gen. 539. Indian Fig or prickly Pear; in French, Raquette, ou Cardaffe.*

r T^HIS Genus of Plants is ranged in the Second Section of *Tournefort's* Sixth Clafs, which includes the Herbs with a Roſe Flower, whose Pointal or Empalement becomes a Fruit with One Capſule. Mr. *Ray* places it among the Trees which have a large, ſoft, umbilicated Fruit. Doftor *Linnaeus* has joined this Genus, and the *Cereus, Melocafus*, and *Perejkia* together, making them Species of the ſame Genus, and ranges it

in the Firſt Section of his Twelfth Clafs, which includes thoſe Plants whose Flowers have about Twenty Stamina and One Style.

The Species here reprinted is,

OPUNTIA *folio minori, rotundiori, &? compreffiori, Tourn. Inf. R. H. 239.* Indian Fig with a ſmaller, rounder, and more compreffed Leaf. This is the *Ficus Indica* feu *Opuntia folio minori, rotundiori, &? compreffiori, H. L.* Indian Fig or Opuntia with a ſmaller, rounder, and more compreffed Leaf.



Gnaphalium austroriparium

Gnaphalium austroriparium

Gnaphalium austroriparium

Gnaphalium austroriparium

GNAPHALIUM, ramis cava basi, pediculis longifloris, floribus coccis.

fructus coccis - in specimenibus a J. G. Smith.



Fig. 1. ONONIS, foliis Pinnatis *Ononis spinosa* stipulis rotundatis, lacinis dentatis, caulis simplicis Lin. Sp. plant. 728.
 Fig. 2. ONONIS, *Ononis spinosa* foliis pinnatis ovatis acutis
 Published according to the sketch by Dr. Kuhn 2000 70 100 *Ononis spinosa* L.



Fig. 1. *OSTEOSPERMUM*, foliis lanceolatis acutis densissime serratis, radiis frutescentibus
 Fig. 2. *OTHONNA*, foliis pinnatifidis laciniis lanceolatis parvulis. Fl. (C. Hoffm. 1794)

quod videri potest in figura 1. p. 1. 2. 3.

P L A T E CXCIII

OROBUS, *Tourn. Infl. R. H.* 393. *Tab.* 214. *Raii Meth.* 104. *Lin. Gen. Plant.* 780. Bitter Vetch in *French*, Orobe.

THIS Genus of Plants is Ranged in the Second Section of *fourkefort's* Tenth Clafs, which includes the Herbs with a Butterfly Flower, whose Pointal turns to a long Pod, with One Capfule. Mr. *Ray* places it in the Second Section of his Twenty-first Clafs, which contains the leguminous Plants with winged Leaves which do not climb. Doftor *Linnaeus* ranges it in the Third Section of his Seventeenth Clafs, which includes the Plants whose Flowers have Ten Stamina joined in TWO Bodies.

The Species here represented are,

Fig. 1. OROBUS *foliis pinnatis ovato-oblongis, Jlipulis rotundato-lunatis dentatis, caule Jimplici* *Lin. Sp. Plant.* 728. Bitter Vetch, with oblong oval winged Leaves, roundish moon-shaped indented Stipulse, and a fingle Stalk.

This Plant grows naturally in *Siberia*, from whence the Seeds were brought to the Imperial Garden at *Peterburgh* where they succeeded; and from thence the Seeds were sent me a few Years past. This hath a perennial Root, and an annual Stalk, which decays early in the Autumn. In the Spring there are Three or Four Stalks which rise from the Root, in Number proportional to the Strength and Age of the Roots. These are near a Foot long; they are herbaceous, smooth, and, if not supported, decline toward the Ground. The Leaves come out from the Joints of the Stalk, they are winged, and composed of Four or Five Pair of oblong oval Lobes, as is represented in the Figure; these are of a yellowish green Colour, contracting every Afternoon, and in wet Weather, but expand in the Morning. The Flowers come out from the Wings of the Leaves upon Foot-

stalks, which are about Three or Four Inches long; and divide into smaller, each sustaining One purple Butterfly Flower, with a short tubulous Empalement, cut at the Top into Five acute Segments, represented at *a*, out of which arises the Flower, composed of a broad reflexed Standard, represented at *b b*, and an oval concave Keel, marked *c*. The Two Wings are small, and are hid by the Keel, represented at *e*, where they are contracted; but One of them is thrown at *d*, which is spread open, / flies the Stamina with their Summits, and the Style with its Stigma. These Flowers appear towards the End of *Aprils* and are succeeded by long Pods, represented at *h*, which open lengthways, as is represented at *u* and contain one Row of roundish Seeds which ripen in *July*.

Fig. 2. OROBUS *foliis pinnatis ovatis acutis, quatuor jugatis, caule Jimplici*. Bitter Vetch, with oval acute winged Leaves, having Four Pair of Lobes, and a fingle Stalk. This is the *Orobus Venetus* *Cluf. Hist.* 232. The *Venetian* Vetch.

The Title of this Plant upon the Plate was, by Mistake, transposed from another Drawing, so the Reader is desired to correct it, as it was occasioned by the Change of our Engravers.

This hath a perennial Root, from which arise Two or Three fingle Stalks about a Foot long, garnished with winged Leaves, composed of Four Pair of oval Lobes ending in acute Points. They are smooth, of a yellowish Green, and stand pretty far distant upon the Midrib. The Flowers come out from the Wings of the Leaves upon slender Footstalks, each sustaining Four or Five purple Flowers, shaped like those of the first Sort, but smaller, and not so openly expanded. These Flowers appear toward the End of *March*, and continue great Part of *April*, but seldom are succeeded by Seeds in *England*.

P L A T E Q&QIV.

OSTEOSPERMUM, *Lin. Gen. Plant.* 887. *Chrysanthemoides* *Tourn. Aft. R. Par.* 1705. *Monilifera* *Vaill. Ati. R. Par.* 1720. Hard-headed Chrysanthemum.

THIS Genus of Plants is ranged in the Fourth Section of *Linnaeus's* Nineteenth Clafs, which includes those Plants with compound Flowers which have hermaphrodite Flowers in the Center that are barren, and female Flowers in the Margin which are fruitful.

The Species here represented is,

Fig. 1. OSTEOSPERMUM *foliis lanceolatis acute dentatis, caule fruticoso*. Hard-headed Chrysanthemum, with spear-shaped Leaves acutely indented, and a shrubby Stalk.

This Plant grows naturally at the *Cape of Good Hope*, from whence I received the Seeds. It rises with a shrubby Stalk Four or Five Feet high, dividing into many Branches towards the Top, which spread out flat on every Side; they have a purplish Bark, and are garnished with spear-shaped Leaves, which have several acute indentures on their Edges, represented at *a*, these are of a thick Confidence, and succulent, standing alternately from the Branches, having yellowish Footstalks and are of a light green Colour; they are from two to Three Inches long, and One Inch broad in the Middle, lessening gradually to both Ends. The Flowers stand fingle upon long Footstalks, which arise from the Wings of the Leaves, and have a few very small Leaves growing alternately their whole Length and at the Top comes out the Flower, which appears closed, as is represented at *b*, in a fingle hemispherical Empalement composed of many small awl-shaped Leaves. The Flower is radiated, the Border being composed of several female Half-Florets, represented at *c*, which spread open, and are fruitful. The Center of the Flower is composed of hermaphrodite Florets, represented at *d*, which are tubulous, and indented at the Top in Five Parts, but these are barren. The female Half-Florets have a globular Germen, which afterward turns to an oval Berry, represented at *e*, which is first green, then red, but, when fully ripe, of a dark purple Colour, having a thin Pulp, which covers One hard Seed represented

with spear-shaped Leaves, which have several acute indentures on their Edges, represented at *a*, these are of a thick Confidence, and succulent, standing alternately from the Branches, having yellowish Footstalks and are of a light green Colour; they are from two to Three Inches long, and One Inch broad in the Middle, lessening gradually to both Ends. The Flowers stand fingle upon long Footstalks, which arise from the Wings of the Leaves, and have a few very small Leaves growing alternately their whole Length and at the Top comes out the Flower, which appears closed, as is represented at *b*, in a fingle hemispherical Empalement composed of many small awl-shaped Leaves. The Flower is radiated, the Border being composed of several female Half-Florets, represented at *c*, which spread open, and are fruitful. The Center of the Flower is composed of hermaphrodite Florets, represented at *d*, which are tubulous, and indented at the Top in Five Parts, but these are barren. The female Half-Florets have a globular Germen, which afterward turns to an oval Berry, represented at *e*, which is first green, then red, but, when fully ripe, of a dark purple Colour, having a thin Pulp, which covers One hard Seed represented

represented at / and g ; the latter being of the natural Size, but the former is a little magnified.

This Plant approaches near to the *Oleofpermum frutescens* *subrotundis foliis, ad-or as dentibus rubris notatis* *Burm. Plant. African. P. 169* ; but the Leaves of this are shorter, rounder, and more indented on their Edges, and have longer Footstalks. The Flowers have a much greater Number of Rays, which are shorter and more obtuse than those of our Plant ; so that we may pronounce it a distinct Species.

The Plant here figured continues in flower great Part of the Year; and those Flowers which appear early in the Spring, are frequently succeeded by Fruit which ripens in the Autumn.

OTHONNA *Lin. Gen. Plant. 888. Jacob & a Hort. Arnft. Jacobaeastrum Vaill. Art. R. Par. 1720. Bastard Ragwort.*

This Genus of Plants is ranged by Doctor *Linnaeus* in the same Section and Class with the former.

The Species here represented is,

Fig. 2. OTHONNA *foliis pinnatifidis laciniis linearibus paralkis* *Hort. Cliff. 419.* Othonna with wing-pointed Leaves, whose Segments are narrow and parallel. This is the *Jacobaea Africana frutescens, foliis abfinthii umbel-*

iferi incanis *Hort. Amji. 2. P. 137.* Shrubby African Ragwort, with hoary Leaves like, the umbellated Wormwood.

This Sort rises with a shrubby Stalk from Two to Three Feet high; sending out several Branches toward the Top, which are closely furnished with hoary Leaves Hanging without Order. They are cut into many narrow Segments almost to the Midrib, and these are indented at the Top, as is represented at a. The Flowers stand upon long naked Footstalks, which arise from the End of the Branches ; these have an Empalement of One Leaf, divided into Eight or Ten Segments, which are obtuse at their Base, but end in acute Points, represented at c. The Flower is composed of several female Half-Florets in the Border ; and the Disk or Middle is made up of hermaphrodite Florets, represented at e. The female Half-Florets, or Rays, are indented at their Ends in Three Parts; they are of a bright yellow Colour, and are succeeded by Seeds; but the hermaphrodite Flowers in the Center are barren. This Plant flowers in *March, April* ; its Seeds are sown in the Greenhouse, for its silvery Leaves continuing all the Year, make a very fine Variety when intermixed with other foreign Plants; and as these produce their Flowers early in the Spring, so that their Seafon they are beautiful.

P L A T E C X C V .

OXALIS, *Lin. Sp. Plant. 515. Oxys Tourn. Inft. R. H. 88. Tab. 19. Trifolium acetosum Raii Meth. Plant. 86. Wood Sorrel; in French, Alleuia.*

THIS Genus of Plants is ranged in the Fifth Section of *Linnaeus's* Tenth Class, which includes the Plants whose Flowers have Ten Stamina and Five Styles. *Tournefort* places it in the Third Section of his First Class, which contains the Herbs with a bell-shaped Flower of One Leaf, whose Pointal turns to a dry Fruit or Head with several Capsules. *Mr. Ray* ranges it in his Nineteenth Class, where he places the Herbs with a Flower of One Petal, which is succeeded by a Fruit with many Cells.

The Species here represented are,

Fig. 1. OXALIS *Scapo utroque foliis ternatis bipartitis* *Lin. Sp. Plant. 434.* Wood Sorrel with an umbelliferous Stalk, and trifoliate Leaves divided into Two Parts. This is the *Oxys Africana bulbosa floribus amplexiluteis foliis minimis hirsutis* *Raii Hist. Pl. 94. * U+ **** * C*v* * f*

This Plant grows naturally at the *Cape of Good Hope*, from whence the Roots were sent me. It hath a small bulbous Root, covered with a purplish Skin, from which come out several trifoliate Leaves upon very long Footstalks ; these are small, hairy, and indented at their Ends in Two Parts, as represented at a, of a bright green Colour. The Flowers stand upon very long Footstalks, which divide at the Top into smaller, as is shewn at b ; each of these smaller Footstalks sustain One bright yellow Flower, represented at c, which is cut into Five obtuse Segments. In the Center of the Flower is situated the Germen, surrounded by Ten Stamina, as is shewn at d', these arise from the Side of the Column, as is represented at e. The Column is terminated by Five Stiles, as is shewn at /; these are magnified, and at g they are represented of their natural Size, h shews the Five-cornered Capsule fully grown ; and / is One cut through transversely to shew the Five Cells ; and at k are Two of

seeds taken out of the Capsule. This Plant flowers in February, when it makes a fine Appearance.

Fig. 2. Oxalis *Scapo umbra, foliis ternatis, radice squamulosa-articulata* *Hort. Cliff. 175.* Wood Sorrel with One Flower upon a Stalk, trifoliate Leaves, and a squamulose jointed Root. This is the *Corydalis alba* *Tournef. Juss. R. H. 88.* Wood Sorrel with a white Flower. *Yves Bauhin* calls it *Oxys* for trifoliate leaves *Thé. v. 387.* Oxys, or Sweet Trefoil. It is the *Trifolium acetosum* *Wright. Hort. Kew. C. B. Pl. 330.* Common three-leaved Sorrel with a milkwhite Flower.

Oxalis Ace.
This Plant grows naturally in moist shady Woods in most Parts of England; and Years it has been used as a Salad Herb.

It is a low Plant with S g S S n S d f P A is represented at a, from which the Roots, as the Flowers immediately arise; and this is easily distinguished from the yellow Wood Sorrel which is now commonly sold in the Markets; though there is scarce any Addition to be substituted for it; for the improved Per to be Four or Five Inches high, stands upon a separate Footstalk as do also the Flowers which

in the Colour within, and have some purplish Stripes on the Outside, as is represented at b. These are succeeded by pyramidal five-cornered Capsules, represented at c, which have five Cells, as is shewn at e; these are filled with small oval Seeds, as is shewn at f; these are filled as the Capsules, on being touched, spring open with an Elasticity, and cast out the Seeds to a considerable Distance. The Leaves of this Plant are used in Medicine.



Fig. 1. *OXALIS* ~~stricta~~ *corniculata*, foliis truncatis bipinnatis, & lacin. 4. pet. 5. lobat. 5. 2.
 Fig. 2. *OXALIS* *stricta*, foliis truncatis, rotatis, & bipinnatis, articulatis. Herb. V. 1. p. 173.



Fig 1 PADUS, foliis oblongo-ovatis serriserrimibus clypeolatis.
 Fig 2 PADUS, foliis lanceolato-ovatis serratis petiolis longipedunculatis

Printed under a Act of Parliament by J. Miller Nov 24. 1797.

J. Miller del.

P L A T E C X C V L

PADUS *Theoph. Lin. Gen. PL ed. prim. Cerasus Tottm. Inf. R. H. 625. Tab. 401. Padus Rañ Meth. Plant. 150. Prunus Lin. Gen. ed. 5. The Bird Cherry, vulgo; in French Bois de Sainte Lucie.*

THIS Genus of Plants is by *Tournefort* joined to the Cherry, and is placed in the Seventh Sediton at his Twenty-firfl. Clafs, which contains the Trees and Shrubs with a rofe-flaped Flower, whose Pointal turns to a Fruit inclofing a Stone. Mr. *Ray* ranges it among the Trees with a moift Fmit inclofing a Stone, which grow in long Bunches. Doftor *Linnaeus* in the laft Edition of his *Genera Plantarum*, and in his *Species Plantarum*, has joined the Plants of this Genus to the Plumbs, as he alfo has all the Species of Cherry. But as the Fruit of thefe and the Cherries are remarkably different in their Shape from the Plumb, and neither of thefe will grow when grafted or budded upon Stocks of the other Sorts, fo there appear a natural Separation between the Plumb and the Cherry; and as the Flowers of this Genus are difpofed in long Bunches or Spikes; fo that is a very obvious Mark of Difindtion from the Cherry, which fhould not be omitted.

The Species here reprefented are;

Fig. 1. PADUS *foliis oblongo-ovatis fempervirentibus eglan- dulofis* Padus with fpear-oval evergreen Leaves, which have no Glandules to their Footstalks. This is the *Lauro-cerasus Lufitanica minor* *Azarero Lufitano- rum Tourn. Inf. R. H. 628 •*, Small Portugal Laurel, by the *Portuguese* called *Azarero*. In the *Hortus Clif- fortianus* it is titled, *Padus foliis fempervirentibus ovatis* * p. 185; and in the *Hortus Upfalienfis* * *Padus foliis glandula dejlitutis* ^ p. 126; Padus with Leaves having no Glandules. In the *Species Plantarum* it is titled, *Prunus floribus racemofis foliis fempervirentibus eglan- dulofis*, p. 473; Plumb-tree with Flowers in long Bunches, and evergreen Leaves without Glandules. It is commonly known among the Gardeners by the Title of *Portugal Laurel* or *Cherry*,

This Tree is fuppofed to grow naturally in *Portugal*; but I rather believe it has been imported from fome other Country, for it is rarely found there but in Gardens. It rifes with a ftrong Tree-like Stem to the Height of Twenty Feet or more, fending out many Branches on every Side, which have a fhining purplifh Bark, and are garnifhed with ftrong evergreen Leaves ftanding upon fhort Footstalks. They are of a lucid Gn:en, about Three Inches long, and an Inch and half brdad in the Middle; they are fometimes (lightly fawed on their Edges, but generally they are intire. The Flowers are produced in long Spikes, as is reprefented at a) they are compofed of Five roundifh Petals, which expand in Form of a Rofo, reprefented at b; within thefe ar^Sfuated about Twenty Stamina, which are half the J hghth of the Petals, and terminated by obtufe

Stamina, as is reprefented at*/; thefe ftand about an oval Germen, which fupports a Style the Length of the Stamina, crowned by a roundifh Stigma. The Germen afterwards turns to a roundifh pulpy Berry, reprefented at £, which when ripe is of a dark purple Colour, inclofing an oval Stone, reprefented at/, in which there is inclofed a Kernel of the fame Shape.

This Plant flowers in *June*, and the Berries ripen ia *October*^ which fhould be gathered as foon as they are ripe, otherwife the Birds will devour them.

This is one of the moft beautiful Evergreen Trees which we have in the *Englifh* Gardens, epecially when it is planted in a loofe moift Soil, where it rifes with a very thick Stem; the Branches are covered with a bright purple Bark, which, together with the fhining green Leaves* make, a fine Appearance; and when the long Spikes of white Flowers are thruft out from the Branches, they greatly add to its Beauty; and as it is very hardy* being very rarely injured by the fevereft Cold of our Winters, fo there is not any Tree which better deërves our Care to propagate.

Fig. 2. PADUS *foliis lanceolato-ovatis deciduus, petiolis biglandulofis*; Padus with fpear-flaped oval Leaves which fall off in Autumn, whose Footstalks have Two Glandules. This is the *Cerasus ractmofus Jyhefiris* > *frufu non eduli rubro H. R. Par.* Wild Cherry whose Flowers are difpofed in long Branches, and a red Fruit not eatable: And the *Ceracia racemofa rubra Tab. Icon. 987*; Red racemous Cherry* commonly called *Cornifh Cherry* in the Gardens.

This has been generally confounded with the Common Bird Cherry; but moft of the late Writers on Botany have fuppofed they were the fame, differing only in Culture; but I have raifed both Species from Seeds, and have always found the young Plants keep the Difference of the parent Plants.

It rifes with an upright Stem to the Height of Eighteen or Twenty Feet, fending out Branches on every Side at the Top, which form a regular Head; whereas the Common Bird Cherry rifes with feveral Stems, the Branches grow diffufed, and cannot be regularly trained. The Leaves of this are more of an oval Shape, and not fo rough as thofe of the other; the Spikes of the Flowers are fhorter, and the Flowers ftand much clofer in the Bunches; the Petals of the Flower are rounder, as is reprefented at 0, and the Fruit is much larger, as is fhewn at b. Thefe are not fo greedily devoured by the Birds as thofe of the common Sort, which do feldom remain on the Trees to be perfectly ripe.

This is raifed in the NurferieS, and fold as a flowering Shrub for Ornament* and is much preferable to the common Sort, becaufe it grows regular, and does not intermix its Branches with the neighbouring Trees. It flowers in *May*, and the Fruit ripens in *AuguJL*.

P L A T E CXC VII.

PANCRATIUM, *Lin. Gen. Pl. dnt. 365. Narcifus *Tbnn. mji. R. H. 353. Tab. 185. Rail Metb. Plant. 116; Sea Daffodil.*

THIS Genus of Plants is ranged in the First Section of *Lin. rus's* Sixth Clafs, which includes thole Plants whole Flowers have Six Stamina and One Style. *Tournefort* places it in the Second Section of his Ninth Clafs, which includes the Herbs with a Lilly Flower of One Leaf cut into Six Segments, whole Empalement turns to a Fruit. *Mr. Ray* ranges it in his Twenty-third Clafs, which contains the bulbous-rooted Plants whole Flowers fit on the Top of the Fruit.

The Species here represented is,

PANCRATIUM *fpatha multiflora^ petnlis plants, foliis lingu- latis Lin. Sp. Plant. 291; Sea Daffodil whole Spatha or Sheath inclofs many Flowers with plain Petals, and Leaves which are tongue-shaped- This is the Narcifus maritimus C. B. P. 34; Sea Daffodil. Clufius titles it, Hemejrocallts Valentina Hijfi. Sp. 167. and John Bauhin, Pancratium Monfpelulanum, multis -o Scilla alba parva Hijl. 2. 611; Montpellier Sea Daffodil^ and by fome, Small White Squill.*

This Plant hath a large oblong bulbous Root, refem- bling that of the Squill, but fmaller, covered with a Brown Skin, and within white, compofed of feveral Coats like thofe of the Onion, -which are pellucid and

gently ftriped, vifcid, and full of a clammy Juice, bitter to the Tafte without Acrimony; from thefe arife Seven or Eight Leaves (in full-grown Raots) which are Twelve or Fourteen Inches long, flat* of a gray Colour, and rounded at their Ends •, between thefe arife a ftrong Flower-ftalk a Foot and an half high-, naked to the Top, where in a membraneous Sheath are inclofed many Flowers. This Sheath divides into Two Parts, which turn backward to let out the Flower buds. The Flowers are of One Leaf, cut into Six fpear-shaped Segments almoft to the Bottom, as is represented at *a*, fo as to appear like fo many diftint Petals; but they are joined together at their Bafe. In the Center there is a cylindrical Nectarium of One Leaf, which is cut into Ten Segments at the Top, which fpread open, in which are inserted the Six long Stamina, which lie incumbent on the Segments of the Petal, and are terminated by decumbent rifing Summits, represented at *c c*. The Germen is fituated under the Flower, as is fhewn at *b** from the Top of which arifes the Style *d*, which is crowned by a fmall oval Stigma •, the Germen *e* afterwards turns to a roundifh Three-cornered Capfule, with Three Cells filled with large black Seeds. This Plant grows on the Sea Shore in the South of *France, Spain, and Italy.*

There are fome Species of this Genus which are Natives of *America*, whole Germen or Receptacle turns to Bulbs, as is represented at *f*; and others with an oval-fleffy Capfule, as is fhewn at *g*, which include fmall Seeds, fhewn at *h*.

P L A T E CXC Vm

PAVIA, *Boerh. Ind. alt. 2. p. 260. Efculus Lin. Gen. Plant. 420-, The Scarlet Horfe-chefnut.*

THIS Plant is joined to the common Horfe-chefnut by *Doflor Linnaeus*, who ranges it in the First Section of his Seventh Clafs, which includes thole Plants whole Flowers have Seven Stamina and One Style. This was feperated by *Doflor Boerbaave* from the Horfe-chefnut, becaufe the Flower is contracted like a Beak, and the Cover of the Fruit is not prickly. "There is but this One Species at prefent known.

PAVIA *Boerh. Ind. alt. 2. p. 260; Scarlet Horfe-chef- nut. This is the Saamouna Pifonis filiquifera Brajili- tnjis arbor, digitatis foliis ferratis, fioribus Teucii pur- pur eis Pluk. Aim. 326. Doflor Linnaeus titles it, JSfcu- lus fioribus oclandris Sp. plant. 344; Efculus with Flowers having Five Stamina.*

This Tree grows naturally in *Brazil and Carolina*, where it rifes with a woody Stalk Eight or Ten Feet high, covered with a fmooth Bark, and divides into feve- ral Branches, which are garnifhed with hand-shaped

Leaves, compofed of Five fpear-shaped Lobes which unite at their Bafe, where they join the Footftalk. They are bowed on their Edges, are of a light Green, and are placed oppofite on the Branches, ftanding upon long the Branches upon long, naked Footftalks, each ftain- ing Four or Five Flowers; thefe are tubulous, as is reprefented at *a* and *b*, opening a little at the Top, where the Stamina peep out, as is fhewn at *c c*, which are ter- minated by roundifh Summits; thefe are fometimes feven, and at o- ght, in Number. In the Mid- dle of the St- en the Style *d*, which is much longer than the Stamina, the Flowers are of a bright red Col- pear in Year, thefe are fometimes fmoother, which rarely ripen here. When they are beaded upon the common Horfe- is the moft common Method of propagating the Tree here; they grow to a greater Height than upon their own Root; but as the Growth never keeps pace in Growth with the Stock, fo they appear unftightly, and are frequently blown out by ftroag Winds where they are expofed.



FARRINGTONIA - fructu multiglobo, pediculis filiformibus, lobis lobis. Linn. Sp. Pl. 148.

fructu multiglobo, pediculis filiformibus, lobis lobis. Linn. Sp. Pl. 148.



FAVIA, Boerb. Ind. alt. v. p. 160.

Spotted according to a list of plants sent by P. Miller Nov. 29. 1791.

J. Miller del.

J. Miller sculp.



PENTAPETES, folio hastato-lanceolatis serratis Linn. sp. plant. 698.

Published according to the order of Parliament by P. Miller, Sculptor in 1754.

P L A T E CXCIX.

PENTIA, *Tourn. Inji. R.H. 273. Tab. 146. Raii Meth. Plant. 77. Lin. Gen. Plant, 600.* Piony •, in French[^] Pivoine.

THIS Genus of Plants is ranged in the Sixth Section of *Tourneforts* Sixth Clafs, which includes the Herbs with a Rose-flower, whose Pointal afterward turns to a Fruit compofed of feveral Capfules. Mr. *Ray* places it in the Second Section of his Eighteenth Clafs, which contains the Herbs with many Pods and regular Flowers, whose Leaves are narrow and lefs fucculent. Dr. *Linnaeus* ranges it in the Second Section of his Thirteenth Clafs, which includes the Plants whose Flowers have many Stamina and Two Styles. The Charafters of the Genus are exhibited in the *Gardeners Dictionary*.

The Species here repreftented is,

PENTIA *foliis difformiter lobatis pubefcentibus.* Piony • With difform lobated Leaves, which are downy.

Of this there are Two Varieties, one with a fingle and the other with a double Flower. The Seeds of this Sort were brought from the *Levant*; and both the fingle and double Flowers were produced from the fame Seeds. The Roots of this are compofed of a great Number of oblong flefhy Tubers, which are joined to the Crown of

the Root by fmall Strings of the fame (Colour with th* Tubers. The Leaves are very irregular in their Form, fome being compofed of Eleven, and others of Thirteen Lobes. The Footstalk feperates into Three Divifions, as is repreftented at *a*: The Two Side Divifions next the Stalk are, for the moft part, compofed of Three Lobes; but the middle one, which is extended in Length, is commonly compofed of Seven Lobes, as is (hewn at *b*. Thefe Lobes are narrow, fmooth, and intire on their Edges: They are fmaller than thofe of the common Sort, and are covered with a foft hairy Down. The Stalks do not rife fo high as thofe of the common Piony, feldom being more than a Foot and a Half long: They are terminated by One Flower, of a bright red Colour, as is repreftented at *c*. Thefe are fmaller, and lefs double, than thofe of the common Piony; and have generally Three, fometimes Four, and at others Five, Germina in their Center: Thefe afterwards turn to fo many downy oblong Capfules, repreftented at *d* Two or Three of which are much larger than the reft: Thefe open longitudinally, as is fhewn at *e*, difplaying Two Rows of ihining black Seeds, which adhere to a deep-red flefhy Placenta. The Seeds are oval, terminating in a Point at the End, which is fattened to the Placenta, as is repreftented at *e*.

The Flowers appear in *June*[^] and the Seeds ripen in *September*. This Sort is not fo hardy as the common Piony, nor do the Roots increafe fo faft.

p L A T E CC.

PENTAPETES, *Lin. Gen. Plant, 757. Pterofpermadendron Amm. Ruth. Scarlet Ketmia vulgo.*

THIS Genus of Plants is ranged in the Third Section of *Linnaeus*'s Sixteenth Clafs, which includes thofe Plants whose Flowers have many Stamina joined in One Body. The Characters of this Genus are exhibited in the *Gardeners Dictionary*.

The Species here repreftented is,

PENTAPETES *foliis haftato-lanceolatis ferratis* *Lin. Sp. Plant. 698.* Pentapetes with arrow fpear-lhaped fawed Leaves. This is the *Blattaria Ceylanica*[^] *flore amplo cocdneo Hort. Amjl. 1. Tab. 6.* Moth Mullein of *Ceylon* with a large fcarlet Flower. Mr. *Ray* titles it *Alcea Indica*[^] *lucido hafi at 0 folio*[^] *flore Blattaria Phoenicio*[^] *Hiji. Supp. 523.* Indian Vervain Mallow with a ihining arrow-fhaped Leaf, and a fcarlet Flower like the Moth Mullein. Dr. *Plukenett* has given a very bad Figure of this Plant in his *Phytographia*, *Tab. 126. l. 4.* by the Title of *Alcea fruticofa, pentaphylloides* *<emula, floribus amcniffime rubellis*[^] *calyce produlto.* Shrub by Vervain Mallow, emulating the Baftard Cinquefoil, with a beautiful red Flower, and the Empalement fretched out.

The Figure of this Plant, which is engraven in the firft Volume of the *Amfterdam Garden*, is far beyond NUMB. XXXIV.

Nature: The Leaves of the Plant are near twice the Size of thofe of the moft vigorous Plant I have yet feen, and the Indentures on the Edges are much deeper than they ever appear in Nature; but yet we may be allured of that being intended for the Plant here exhibited. Indeed, many of the Figures in that Volume do greatly exceed the Plants, when growing in their native Soil. The Figure of this Plant, in *Plukenett's Phytographia*, is, oil the contrary, as much too fmall; and the Leaves of the Plant are not a Third Part fo long as* they are in Nature. That which is here exhibited is as true a Reprefentation of the Plant as can be given.

It grows naturally in *India*, from whence I have feveral times received the Seeds. This is an annual Plant, with an upright Stalk, from Two to Three Feet high, fending out feveral Side Branches from the lower Part of the Stalk: Thefe are garnifhed with fhining green^P Leaves; fome of which are cut into Three Parts toward their Bafe •, the Two Side Segments being fhort, and acute-pointed: The middle one is extended to a great Length beyond them -> fo that thefe Leaves are formed like Points of Arrows, or thofe of Huberts: Others have no Jaggs on their Sides, but are oblong and fpear-fhaped: They are fome of them (lightly fawed on their Edges, and their Surface a little rough, (landing alternate on the Branches: Their under Surface is of a pale green, and a little hairy. From the Wings of the Stalk come out the Flowers: Sometimes there are Two arifing from the fame Footstalk of the Leaf; but in

general they are single, each landing upon a distinct Footstalk. The Empalement of the Flower is of One Leaf, cut at the Top into Five acute Segments, which are extended almost the Length of the Petals, and spread open every Way. The Flower has but One Petal, which is cut into Five obtuse Segments, represented at *a*: These are divided almost to the Bottom; but as they are joined at their Base, and fall off without separating, so it is called a Flower of One Petal. There are Fifteen fertile Stamina situated in the Bottom of the Flower, which are narrow, and are terminated by oblong erect yellow Summits; and between these are Five large red Stamina, which are barren, represented at *b*, one of these rising between every Three of the fertile Stamina, as is shewn at *J*, where there are Two of the barren Stamina represented, with the Three fertile ones between, in the Manner they are con-

joined together. Between these arise a single Style, which is longer than the coloured Stamina, crowned with a thick Stigma, as is represented at *c*. The Germen, which is situated in the Center of the Flower, afterward turns to a roundish Capsule, which is shewn at *e*, fitting in the Empalement of the Flower: This is divided into Five Cells, as is represented by *and g*, which opens into Two Valves, each Cell containing Two Rows of oblong Seeds, which are narrowed at their Base, represented at *h*.

This Plant must be raised on a Hotbed, and brought forward in the Spring, otherwise it will not perfect Seeds here, and, when it is so managed, it will flower in July, and there will be a Succession of these Flowers till Autumn: But these Flowers only will be succeeded by good Seeds, which flower early in the Summer.

P L A T E C C I.

PERsICARIA, *Tour. Inst. R. II. 509. Tab. 290. Raii Metb. Plant. 21. Polygonum Lin. Gen. Plant. 445. Arfmarc* -, in *French*, *Perficaria*.

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Fifteenth Class, which includes the Herbs with a flamineous Flower, whose Pointal turns to a Seed wrapped up in the Empalement. Mr. *Ray* places it in the Second Section of his Fifth Class, which contains the Herbs with flamineous Flowers, which are joined to the Fruit. Dr. *Linnaeus* has joined this Genus, with the *Biforta* and *Fagopyrum* of *Tournefort*, to the *Polygonum*; which he ranges in the Third Section of his Eighth Class, which includes those Plants whose Flowers have Eight Stamina and Three Styles.

The Specie here represented is,

VERSICARIA foliis ovato-lanceolatis acutis, floribus pentandris caule erecto. Arfmarc with oval spear-shaped acute-pointed Leaves, Flowers with Five Styles, and an erect Stalk. This is the *Perficaria Orientalis* *nicotians folio, calyce forum purpureo* *Tourn. Cor. 38.* Eastern Arfmarc with a Tobacco Leaf and a purple Empalement to the Flower. Dr. *Linnaeus* titles it *Polygonum floribus heptandris digynis, foliis ovatis, caule erecto*, *Jlilipulis hirtis* *Sp. Plant. 362.* Knot-grass whose Flowers have Seven Stamina and Two Styles, with oval Leaves, an erect Stalk, and hairy Stipule. And in the Catalogue of *Clifford's* Garden, he titles it *Perficaria florum flaminibus sex pluribusque, flylo duplici*, 42. Arfmarc with Six and more Stamina in the Flower, and a double Style.

The Seeds of this Plant were, first sent to *Europe* by Dr. *Tournefort*, who saw it first growing in the Prince of *Teffis's* Garden in *Georgia*, and afterwards in the Garden of the Monks of the Three Churches near Mount *Ararat* but he could not learn where it grew naturally. They cultivate the Plant in the Gardens of *Georgia* and *Armenia*, not only for the Beauty of its Flowers, but also for the Virtues with which the Plant is possessed;

which are nearly the same with those attributed to the common Arfmarc of *Europe*.

The Root of this Plant is composed of many strong Fibres, which grow in Tufts, and extend to a great Length from the Center. The Stalk is joined in the same Manner as those of the common Sort: It rises Eight or Ten Feet high: The lower Part of the Stalk becomes ligneous, and as thick as an ordinary Walking Cane, of a fine green, and a little hairy. The Leaves come out alternately at the Joints, which are often a Foot long, and Six Inches broad in the Middle, lessening toward each End, and terminating in acute Points: They have one strong longitudinal Vein running through the Middle, and several transverse Veins, which run upward toward the Point: Their Surfaces are a little hairy; the upper being of a bright green, and the under of a pale Colour. The Footstalks of the Leaves are broad, and at their Base half embrace the Stalk. The Flowers are produced in Spikes at the Top of the Stalk, and the Ends of the Branches, in close Spikes, which are Seven or Eight Inches long, hanging downward. The Flower has sometimes Five, at others Six, and sometimes Seven Stamina, terminated by final Summits: These are included in what some Botanists call an Empalement, and others a Petal, of One Leaf (for as these are coloured, so that is a Division made by some between the Petal and Empalement); but as the Flowers of this Specie have a two-leaved Empalement, represented at *a*, which soon falls off, so I shall chuse to call the other a Petal. This is cut into Five Segments, as is represented at *b*, and between these are the Five Stamina, which spread open in the same manner as the Petals, as is shewn at *c*. In the Center of the Flower is situated the Germen, supporting a double Style, as is represented at *d*, crowned by obtuse Stigmas, and surrounded by the Five Styles, which are inserted in the Receptacle of the Flower, as is represented at *e*. The Germen afterward turns to an oval Seed, wrapped up in the Petal of the Flower, as is represented at *f*, and at *g* and *b* are Two Seeds shewn, taken out of their Covers. This Plant begins to shew its Flowers in July, and continues in Beauty till the Frost puts a Stop to them, and soon after the Plant decays.



Phlox, foliis oblongo-ovatis, foliis immixtis, caulis fruticosus.

Phlox paniculata L. in Tabern. Icon. Herbar. 16. 1651.

Faint handwritten notes in the upper left corner.



PELONIA folia lanceolata, corollae tubulosa, involucris parvis lanceatis. Lin. sp. plant. 522.

Pelonia unguis a. 1788. P. unguis L. f. 1788. P. unguis L. f. 1788.

Small handwritten mark or signature in the bottom right corner.

P L A T E C C I I .

[^] r a i? W i7 tab 82. Rail Meth.
PHLOMIS, *fotm. Lift. R. H. 177-²* *Mem Sao-e
Plant. 58. Lin. Gen. Plant. 642. Jeuiufalem ba,e,
or Mullein. *

THIS Genus of Plants is ranged in the first
Section of Tournefort's Fourth Class, which in-
cludes the Helms with a Lip-flower of One Leaf, whose
upper Lip is hooked, or helmet-shaped. Mr. Ray ranges
it in the first Section of his Fourteenth Class, which
contains the Plants with whorled Flowers, which have
shrubby Stalks. Dr. Linnæus ranges it in
Section of his Fourteenth Class, which in-
cludes Plants whose Flowers have Two long and
Two short Stamina.

The Specie here represented is,

PHLOMIS *fotm. Lift. R. H. 177-²* *Mem Sao-e
Plant. 58. Lin. Gen. Plant. 642. Jeuiufalem ba,e,
or Mullein. *
Jerusalem Sage with heart-shaped Leaves,
which are woolly on their
Stalk. This is the flower.
Jerusalem Sage with a purple flower and
Leaves. Dr. Pichone has given a small
Figure of this Plant, by the Title of *Salsola*
F. B. Scrubby Sage with a Roundish Leaf not hairy,
and purple Flowers. Caspar Bauhin titles it *Phlomis*
and Mullein with a
roundish Sage/Leaf.

This Part 8»- "tbv"/. " ^ " ^ T F O ^
& S ^ S * Brakes a K covered

with a soft Down, Represented at *a*-, and are giuiui^c
with oblong heart-shaped Leaves, which are woolly on
their under Side, represented at *b*. The upper Parts of
the Stalks and Branches are left woolly, and the Leaves
are longer and narrower than those below : They are
placed by Pairs, fitting pretty close to the Stalks 3 and
at each Joint, dole to the Footstalks of the Leaves, the
Flowers come out in Whorles round the Stalks, as is
shewn at *c*: These have a tubulous Empalement of One
Leaf, having Five acute Angles, and are cut at the
Brim into Five acute Segments, represented at *d* and *e*.
The Flower hath but One Petal, which is divided into
Two Parts : The upper Part, which is called the *Galea*,
or *Helmet*, is arched, Hanging erect, as is (shewn at /
and *g*: The former represents the Backside, and the
latter the Front. This rests at the Base upon the lower
Lip or Beard, which is hollowed like a Spoon, and is
indented in Three Parts, the middle one being longer
than the Two Side Segments. The Flower has Four
Stamina^ Two of which are longer than the other, re-
presented at *h*, *h*; the Two shorter are marked *f*, *g*;
These are in their natural Position, situated under the
Helmet of the Flower, and are hooked in the like Man-
ner : They are terminated by oblong Summits. In the
Bottom of the Empalement is situated a Germen with
Four Parts, supporting a slender Style, represented at *l*,
and *j* the former shews it inclosed in the Empalement^
and the latter when taken out. The Style is terminated
by an acute bifid Strygma. The Germen afterwards
turns to Four oblong naked Seeds fitting in the Empale-
ment, One of which is represented at *m* \ and *n* shews
the Style reverfed, with the Germen at the Base

This Shrub flowers in June and July \ but the Seeds
feldom ripen here,

p L A T E can

<r> ., Tab. 82. Lin. Gen. Plant.
PHLOMIS, *four?*. ; -7r im
642. Jerusalem Sage.

Genius with the former
die Clafles under which
different Botanists have ranged it.

The Specie here represented is,

PHLOMIS joins / <., -/ ., p. 82. 5- Jerusalem
volucrh *fatceis* & » » * £ flw Leases, but those
lem Sage with ^ ^ ^ / S I. biffly downy fo-
und* the F ^ s X S t ^ W » Cluftiifi^
volucrum. This is TM^bfm anKyJiis Jalvix joins
Cafpar Bauhtn titles it ^f^ Cal. Leases. And

fib* Icon. 55*. W^a his Fkra Montpellier, titles it
Leaves. Sauvages in J raBs invo-
Phlomis fotns hngidatis utrwa
tori *fatceis* ^ / ^ Joolly on eve'y Side,
and lasty.

This Plant grows naturally in the South of France, in
Spain* and Italy. It hath a perennial Root, and an an-
nual Stalk which decays every Autumn. From this
Root the Leaves come out in Tufts, being enveloped
at their Base by a common Covering : These are long
and (tender, as fe represented at *a*-, and are soft down/
and reflexed. By the Side of these comes out the Stalk,
which is tender, and near Two Feet long, garnished
with Two oval Leaves at each Joint* which embrace
the Stalk with their Base, as is represented at *. The
Whorles of Flowers are encompassed by these Leaves,
within which, is situated a radiated bristly Involucrum,
as is shewn at *c*: These are represented taken out of the
Leaves at *d* and *e*. *f*, and *g*, shew both Sides of the
Galea or *Helmet* *, *h*, represents the under Lip or Beard;
and *u* the Four Stamina, with their Summits; *, and-/
the Style reverfed, with the Germen at the Base; and
m shews it in its natural Position.

This Plant flowers in June and July i but seldom
produces good Seeds in England.

P L A T E CCIV.

is, *Tourn. Inf.* &c.

THIS is of the same Genus with the Two former Plates; but as I have never seen a Representation of it in any of the Books of Botany, so we have represented here.

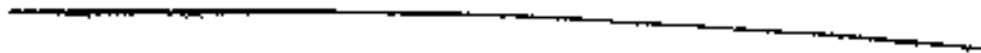
The Specie is,

PHLOMIS *foliis Tadhalibus cordatis, utrinque fomentosis villosis* *Lin. Sf. Plant.* 585. Jerufaiem Sage whose lower Leaves are heart-shaped, and woolly and hairy on both Sides. This is the *Phlomis orient atis, foliis auriculatis incanis, flore luteo Niffbl.* Eastern Jerufaiem Sage with hoary-eared Leaves and a yellow Flower.

This Plant grows naturally in the *Levant*, and also in *Sfain*, from whence the Seeds were sent me. It hath

and Salt The

the Root, and an en
 Clusters from the Root, as is shown at a,
 ing upon pretty long hairy Footstalks; they are
 shaped, as is shown at b, and woolly and hairy.
 The Stalks come out from the Side of the Leaves,
 and rise near Two Feet high, dividing upward into
 Two or Three small Branches. These are garnished at
 each Joint by Two narrow spear-shaped Leaves, repre-
 sented at c. From the Bottom of the Leaves come out
 the Flowers, in small Whorls, as is shown at d. At e,
 is One of the Flowers taken from the Whorls; f, and
 g, show the Two Sides of the Calyx or Helmet; at h
 are represented the Four hooked Stamina, with their
 Summits; at i, is shown the Style arising from the
 Germen; k, represents the five-pointed Limbeck.
 This Plant flowers at the same time with the former;
 but seldom produces good Seeds in England.





PHLOMIS folia subrotunda cordata utrinque serrata calycis lobis... sp. plant. 312.

Phlomis tuberosa L. in spec. bot. 1773. tab. 101. fig. 1.

C. G. D.



Fig. 1. PHLOX foliis lanceolatis, inflorescentia corymbosa, calice roseo, tubo corollae albo. Sp. plant. 152.
 Fig. 2. PHLOX foliis lanceolatis, marginibus serratis, corymbosa, calice roseo, tubo corollae albo. Sp. plant. 152.

Printed and sold by J. G. Smith, at the British Museum, London.



Fig. 1. PHYTALIS herbacea v. v. foliis ovato-lanceolatis acutis serratis.
 Fig. 2. PHYTALIS foliis ovato-lanceolatis serratis ovato-fragili fructu.

L. Miller del. & sculp.

Spalding & Co. Printers & Publishers No. 17. N. 2nd St. New York 1850



PHYLLACCA, *Spica florum longissima, rubra, ovata.*

Spica florum longissima, rubra, ovata.

C. G. S. P.



Pinus strobus, foliis geminis teretibus, conis striatis raris parvis.

Pinus strobus - Pinus strobus by Peter Simon Pallas, 1788.

the Seed of this Plant was brought from th^e Coast of *Malabar*; which succeeded in the *Chelfea* Garden, where the Plants have been several Years cultivated. The Root of this is annual, in which it differs from the common Sort, which hath a perennial Root. The Stalk rises from Two to Three Feet high, having several longitudinal Furrows, and is marked with Purple: It is garnished with spear-flaped Leaves, Six or Seven Inches long, and Three broad in the middle, ending in Points: They are of a dark Green, and placed opposite, having very short Footstalks. The Flowers are produced in Spikes, which are Nine or Ten Inches long in which it differs from all the other Species. These have very

short Footstalks: They are white within, of an herbaceous Colour on their Brims, and the middle is purple: There is not always the same Number of Stamina in them; some having Eight and others Nine: These are terminated by roundish Summits. It flowers in *July*, and after the Flowers are past, the Germen becomes an orbicular compressed Berry, divided on the Outside into Ten Cells by longitudinal Furrows, each of these inclose One shining smooth black Seed. These Berries have a fine purple Juice, which stains Paper or Linen of a beautiful Colour; but it is not permanent. The Root of this Sort decays soon after the Seeds are ripe.

P L A T E CCVIII.

PINUS, *Tourn. Inft. R. H.* 585. ^- 355. *Rai Arb.* 1506. *Tree*; *Plant. 138. Lin. Gen. Plant.* 956. The *Tree*; in *French Pin*.

n^o H I S Genus of Plants is ranged in the Third Section of *Tournefort's* Nineteenth Class, which includes the Trees and Shrubs with amentaceous flowers, growing at separate Distances from the Fruit on the same Tree, and a scaly Fruit. Mr. *Ray* places it in the First Section of his Class of Trees, which bear Cones at separate Distances from the Male Flowers on the same Tree: Dr. *Wugus* ranges it in the Ninth Section or Twenty-Br Classes, which includes the Plants with Male Flowers and Fruit on the same Plant, whole Stamina are joined in One Body.

The Characters of this Genus are,

The Male Flowers are collected into a conical scaly Bunch: these have no Petals; but have many & amin. L. JTM " ? connected at their Base, but divide at their Points terminated by ere El Summits. These are included in e Scales, which supply the Want of Petals and Emplacement the female Flowers are colWed in One common oval Cone, at a separate Distance from the Male on the same Tree. Under each Scale of the Cone is produced Two Flowers, f. b. T M no Petals, but a small Germen, supporting an awl-flaped Style crowned by a Jingle Stigma. The Germen afterward becomes an oblong Nut, crowned with a Wing, included in the rigid Scale of the Cone.*

The Specie here represented is,

PINUS *foliis geminis tenuiffimis, conis obhifis, ramis patulis.* Pine Tree with Two very narrow Leaves coming out of each Sheath* obtuse Cones, and spreading Branches* This is the *Pinus Hahpenfis, foliis tenuibus Uvt vindibus Rand. Hart. Chelf. Cat.* 158. ^* Pine Tree, with narrow light-green Leaves.

The Seeds of this Tree were sent me ^tm Aleppo, by *Conful Cox*, in the Year 1732; from which I raised many of the Plants in the *Chelfea* Garden* some of wmen

were grown upward of Eight Feet high by the Year 1740, when they were most of them destroyed by the severe Frost. But Two of the Plants which I had presented to the late Duke of *Richmond* in 1738, which were planted at *Goodwood* in *Suffex*, were very little injured by the Cold: For as they had been lately removed, so they had not so well recovered as to have made any Shoots, whereby the Frost had little Effect on them. It was from One of those Trees this Branch, with the Cone growing on it, was taken, which is here represented.

This seems to be a Tree of low Growth, branching out greatly on every Side, almost from the Ground. The Bark of these Trees is as yet smooth, and of a light Brown*, the Branches are slender and weak; the Leaves are long and narrow, Two coming out from each *Vbea* (or Sheath) as is represented at *a*: These are of a light Green; and, if bruised, emit an Odour of Turpentine: The Cones come out from the Sides of the Branches, as is shewn at *b*: These are not so long as those of the *Pineafter*, and end in more obtuse Points: The Scales of the Cones are also more obtuse, and have a greater Resemblance to those of the True Or *Garden Pine*, in these Respects \ but are not more than half their Size: These are composed of hard Scales; under each of these are lodged Two small Seeds, represented at *c*: These are crowned with broad Wings, as is shewn at *d*; which are of use to carry the Seeds to some Distance, when they fall out of the Cones.

I have lately received some Cones of a *Pine Tree** which were brought from *Aleppo* by Dr. *Ruffel*, who had been several Years Physician to the *Englijh* Faculty there v from which I have raised many of the Plants, which have a near Resemblance to this here figured at present; but the Cones were more pointed, and the scaly Protuberances sharper than those of the Cones which grew at *Goodwood*; so that I suspect they may be different: For the Seeds which came from *Conful Cox*, and from which the Trees at *Goodwood* were raised, were taken out of the Cones abroad*, so that until the Trees had produced their Cones here, I was at a loss to know the Specie. I do imagine these Cones brought by the Doctor to be of *Tournefort's Pine*; which he titles *Pinus Orientalis, foliis durioribus umaris^ fructu parvo peracuto. Cor.* 41.



POLF MONTANUM, folio p. *_* radicebus repensibus Flor. Virg. 22.

Spencer's copy is a copy of the original by J. P. Miller January 21. 1732.

Miller's copy



POLLANTHERA floribus caeruleis The Cliff.

Sp. pl. ed. 1753. p. 104. f. 104. g. 1.



Viburnum folio serrato - Lin. s. p. plant. 107.

Edm. Smith del.

Printed and sold by J. G. Fisher, No. 10, N. 2nd St. Phila. 1841.

ly. cexa.



V

PULMONARIA vulgaris abnormis 4>£'bis lanceol' 'iii *bisfimbri' Lem. ^yife 133.

probat. unguis a - bot. of pinnace 14 p. - 1818 - Feb. 22 1918

J. Miller 1818

P L A T E CCXI.

PTELEA *Lin. Gen. Plant.* 141. Carolina Shrub Trefoil

The Characters are,

"The Flower hath four oval spear-shaped Petals, which are thick, plains and spread open; these are longer than the Empalement a. The Empalement b is cut into four acute Parts, which are finally: The Flower has four awl-shaped Stamina, terminated by roundish Summits; *1 hath a roundish compressed Germen, supporting a foot Style, crowned by Two obtuse Stigmas. The Germen afterwards becomes a membranous roundish Capful, as is represented at c, standing perpendicular, having Two Cells, each containing One obtuse Seed, fastened to the Base of the Capful.

THIS Genus of Plants is ranged in the First Section of *Linnaeus*'s Fourth Class, which includes those Plants whose Flowers have Four Stamina and One Style.

The Species here represented is,

PTELEA *foliis ternatis Lin. Sp. Plant.* 118. Ptelea, with trifoliate Leaves. This is the *Frutex Virginianus trifolius, ulmi Samaritani Banifiteri Pluk. Aim.* 159; Virginia Trefoil Shrub, with Seeds like those of the Elm Tree, commonly called by the Gardeners *Carolina Shrub Trefoil*.

This Shrub rises with a Stem about Three Inches Diameter, to the Height of Five or Six Feet, dividing into several Branches, which are covered with a smooth greyish Bark, and are garnished with trifoliate Leaves, hanging upon long Footstalks. The Lobes are oval spear-shaped, smooth, and of a deep Green; these come

out late in the Spring, and about the same time the Bunches of Flower-buds appear, which is in *June*. The Leaves are then but small, and afterwards increase in their Size, and do not arrive to their full Bigness till the Flowers are decayed. The Flowers come out in large Bunches at the End of the Branches; they are of a whitish green Colour, and composed of Four or Five flori Petals, which end in acute Points; these are fastened at their Base to a flori Empalement, cut into Four Segments, almost to the Bottom. In the Center of the Petals are situated the Germen and Stamina. The Germen is roundish, compressed, and stands perpendicular, supporting a very flori Style, crowned by obtuse Stigmas: This is surrounded by Four flori, coloured Styles, which are terminated by roundish Summits. After the Flowers decay, the Germen turns to a roundish Capful with Two Cells, having a leamy Membrane round it, like the Seeds of the *Elm Tree*. In each Capful is included One Seed.

This Plant grows naturally in *Virginia*, where it was discovered by Mr. *Banifter*, who sent it to *England*; and many Years after Mr. *Catesby* sent over the Seeds of this Plant from *Carolina*, where it was found growing in plenty. It flowers in *June* and in warm seasons the Seeds will sometimes ripen here the Beginning of *September*.

This Shrub is hardy enough to thrive in the open Air in *England*, provided it is planted in a dry Soil, and a warm Situation; but in strong Land, where the Wet is detained in Winter, the Plants are frequently destroyed by severe Frosts.

There is no great Beauty in the Flowers of this Shrub; but those who are curious in collecting rare Trees and Shrubs, preserve it in their Gardens for the sake of Variety.

P L A T E CCXII.

PULMONARIA *Tourn. Inft.* 136. *Tab.* 55. *Raii Meth. Plant.* 56. *Lin. Gen. Plant.* 169. Lungwort; in *French*, Pulmonaire.

THIS Genus of Plants is ranged in the Fourth Section of *Tournefort's* Second Class, which includes the Herbs with a funnel, or wheel-shaped Flower of One Leaf, whose Pointal is encompassed with Four Embryo's, which afterward become so many Seeds, that ripen in the Empalement. Mr. *Ray* places it in his Thirteenth Class, in which he ranges the Herbs with rough Leaves, whose Flowers are succeeded for the most part by Four naked Seeds. Dr. *Linnaeus* ranges it in the First Section of his Fifth Class, which includes those Plants whose Flowers have Five Stamina and One Style.

The Characters are,

The Flower is of One Petal, having a cylindrical Tube, as is represented at c; the Brim is obtuse, erect, and spreading; the Chaps are perforated. This fits in a Five-cornered cylindrical Empalement of One Leaf, which is permanent, represented at d. The Flower has Five short Stamina in-
NUMB. XXXVI.

cluded in the Tube, as is shewn at e, terminated by erect Summits, as is represented at f. There are Four Germina situated in the Empalement g, between which arises the Pointal, which is terminated by an indented Stigma. The Germina afterward become so many roundish Seeds fitting in the Empalement.

The Species here represented is,

PULMONARIA *calycibus abbreviatis, foliis lanceolatis obtusifculis Lin. Gen. Plant.* 135. Lungwort with a shorter Empalement, and spear-shaped Leaves ending in very blunt Points. This is the *Symphytum f Pulmonaria non maculosa, foliis glabris Americana, flore patulo caruleo Pluk. Aim.* 359. American Comfrey or Lungwort, not spotted, with smooth Leaves, and a blue spreading Flower. In the *Flora Virginiana* it is titled *Pulmonaria calyce tubo corolla brevior, perianthis quinquepartitis* 20. Lungwort, with an Empalement shorter than the Tube of the Petal, and divided into Five Parts at the Rim.

This Plant grows naturally on the Mountains in *North America*. The Seeds of this were sent from *Virginia* by Mr. *Banifter* many Years since and some of



Fig. 1. PUNICA, flore plena majore. Icon. Bot. 136.
 Fig. 2. PUNICA, que etiam Granatum fere. Conf. p. 137.

Handwritten text at the bottom left corner.

Handwritten text at the bottom center.

Handwritten text in the upper right corner.

Handwritten text in the lower right corner.



QUAMOCLIT. folia bipinnata, angulis & pinnulis. Thournefort, Hist. Pl. Coch. Pl. II. 166.

Quamoclit L. f. *Quamoclit* L. f. *Quamoclit* L. f.



QUERCUS *alba* L. *macrocarpa* Lam. *sp. pl. 1752*

Spécimen envoyé à l'Académie de Paris par P. de La Roche, le 10 Mars 1758.

P L A T E CCXIV.

QUAMOCLIT *Tourn. In J. R. H. u6. Tab. 39. Rah. A Sp. Meth. 190. Ipemaa Lin. Gen. Plant. 199. Scarlet Convolvulus, or Sweet William.*

THIS Genus of Plants is ranged in the First Section of *Turner's* Second Clafs, which includes the Herbs with a funnel-shaped Flower of One Petal, whose Poirital becomes the Fruit. It must be ranged, in Mr. *Ray's* First Section of his Nineteenth Clafs, which includes the Herbs with a uniform regular Flower or One Petal, whose Seeds are included in Capsules. Dr. *Linnaeus* places it in the First Section of his Fifth Clafs, which contains those Plants whose Flowers have Five Stamina and One Style.

The Characters are,

*The Flower is of One Petal, which is funnel-shaped, having a long cylindrical Tube cut into Five Parts at the Top which spread open, as is represented at e. It hath five awl-shaped Stamina, which are almost the Length of the Petal, terminated by roundish Summits as ts & ** * * * J" roundish Germen situated at the Bottom of the Style, supporting a Style which is longer than the Stamina, lined by a roundish Stigma, represented at h, these are included in a small Empalement cut so Five Jarts. The Germen after ward turns to an oval Capsule, which hath Three Cells, represented at i, each containing One oblong Seed, marked l.*

The Specie here represented is,

QUAMOCUT *foliis tenuiter incisiff. ? TM * * * TM i 2d J? H. 116. Quamoclit with Leaves finely cut and winged. This is the Quamoclit f. Jafminum America-*

num Cluf pofi. 9. Quamoclit, or American Jafmine Caffar Bauhin titles it Jafminum Millefolii folio Pin* 391. Jafmine with a Milfoil Leaf. Dr. Linnaeus titles it Ipomoea foliis pinnatifidis linearibus, floribus folitariis Sp. Plant. 159. Ipomoea with linear wing-pointed Leaves, and Flowers standing singly.*

This Plant grows naturally in both *Indies*, from whence the Seeds were first brought to *Europe*, where it has been long cultivated in the curious Gardens. It is an annual Plant, which rises with Two oblong pretty broad feed Leaves, which remain a considerable time before they fall off. Between these come out One or Two flender twining Stalks, which fallen themselves about any neighbouring Support, and will rise to the Height of Four or Five Feet, sending out several Side Branches, which twine about each other, and also about the principal Stalk. These are garnished with winged Leaves, placed alternately, represented at a, which are composed of several narrow Lobes or Wings, marked b, placed opposite along the Midrib they are of a bright green Colour, standing upon pretty long Footstalks. The Flowers come out singly from the Side of the Stalks, standing upon flender Footstalks: They have a long flender Tube, which is enlarged toward the Top, where it is cut into Five Segments, which spread open in Form of a Star. They are of a beautiful red Colour, and appear in *July* and *August*, continuing in Succession great Part of *September*. These are succeeded by oval-seed Vessels having Three Cells, each containing One oblong Seed, which ripen in the Autumn.

The Inhabitants of the *British* Islands in *America* call this Plant *Sweet William*-, I suppose, for the Beauty of its Flowers, for they have no Scent. It runs up the Hedges in those Countries to a considerable Height, and makes a fine Appearance*

P L A T E CCXV.

QUBICITS *Tourn. In J. R. H. u6. Tab. 39. Rah. A Sp. Meth. 190. Ipemaa Lin. Gen. Plant. 199. Scarlet Convolvulus, or Sweet William.*

THIS Genus of Plants is ranged in the Second Section of *Turner's* Nineteenth Clafs, which includes the Trees and Shrubs with rosy Flowers, growing at separate Distances from Trees, whose Fruit has a leathery Mr. *Ray* places it among the Trees, whose interior Ker- separate Distances from the Trees, whose interior Ker- nel is soft, and the Shell leathery. Dr. *Linnaeus* ranges it in the Eighth Section of his Twenty-first Clafs, which includes the Plants with Male and Female Flowers on the same Plant, whose Male Flowers have many Sta- mina.

The Characters are,

The Male Flowers are disposed loosely, in form of a Rope, as is represented at a: These have no Petals; but an Empalement of One Leaf cut into Four or Five acute Points, as

is shewn at b, in which are a great Number of short Stamina, terminated by large twin Summits. The Female Flowers sit close to the Branches on the same Tree: These have a hemispherical rough Empalement, which afterward become: the Cup of the Fruit marked c: They have no Petals, but a small oval Germen, supporting a single quinquefid Style, crowned by single Stigmas. The Germen afterward becomes an oval Nut, represented at d, fixed at the Base to the Cup which was the Empalement.*

The Specie here represented is,

QUERCUS *foliis ovato-oblongis glabris ferrato-repandis Lin. Sp. Plant. 996. Oak with oblong oval smooth Leaves, sawed on their Edges, whose Serratures turn backward. This is the Quercus calyce echinato, glande majore C. B. P. 420. Oak with a large Acorn, having a prickly Cup. Bodonaus titles it Mgilops five Cerris majore glande Pempt. 831. Eglyops or Cerris, with a larger Acorn.*

This

This Tree grows naturally in the *Levant*, from whence the Fruit are brought annually for Dyeing: These are called *Velaniy* and the Tree *Velanida*, by the *Greeks*. It is one of the fairest Species of Oak in the World: The Trunk of this rises as high as the common Oak: The Branches extend very wide on every hand; these are covered with a greyish Bark, intermixed with brown Spots: They are closely garnished with oblong oval Leaves about Three Inches long, and almost Two broad, which are deeply fawed on their Edges: Most of the Serratures or Teeth turn backward, and terminate in a brown Point: These Leaves are stiff, of a pale Green on their upper Side, and covered on their under with an almost imperceptible hoary Down. The Acorns are very different from those of the common Oak, having

very large scaly Cups which almost cover the Acorn, the Point of which only appears out of it, which is hollowed like a JStavel: The Scales of the Cups lie over each other like those of Filh, but end in rough blunt Ridges, which are raised a Quarter of an Inch high. These Cups are, some of them, as large as small Apples: The i^corns are fierter than those of our common Oak; they are broad and flatted at the Top, but narrower at their Base, as is represented at /; and at g and e the Fruit is hewn cut open longitudinally.

This Tree thrives very well in the open Air in *England*, and is never injured by Frost; but there are but few of them at present here, the greatest Part of which were raised in the *Chelfea* Garden in 1748.

P L A T E G C X V I .

RANUNCULUS *Tourn. Infl. R. H. 285. Tab. 149. Rait Meth. Plant. 6y. Lin. Gen. Plant. 619. Crowfoot^ in French, Renoncule.*

THIS Genus of Plants is ranged in the Seventh Section of *Tournefort's* Sixth Class, which includes the Herbs with a rose Flower, whose Pointal turns to a Fruit, composed of several Seeds gathered into a kind of Head. Mr. *Ray* places it in his Fifteenth Class, with the Herbs whose Flowers have Five Petals, which are succeeded by many naked Seeds. Dr. *Linnaeus* ranges it in the Seventh Section of his Thirteenth Class, which includes those Plants whose Flowers have many Stamina and Germina.

The Characters are,

The Emplacement of the Flower, is composed of Five oval Leaves, marked a, which are concave, and fall away. The single Flowers have Five obtuse, neat Petals, b, with small jTails, each having a Nestrarium rising from a Hole on the upper Side of the Tail. In the Center of the Flower is situated a great Number of Stamina, about half the Length of the Petals, represented at c, and a great Number of Germina collected in a Head, as is shewn at d: These have 710 Styles, but have small reflexed Stigmas. The Germina afterward become so many naked Seeds jlanding on small Footstalks, represented at e, which are fastened to the Receptacle f. The Seeds are of uncertain Figures, and are reflexed at their Points, as is shewn at m.

The Specie here represented is,

RANUNCULUS *foliis ternatis biternatifque, fidiolis trifidis inctfts^ caule inferne ramofo Lin. Sp. Plant. 552. Ranunculus with trifoliate, and twice trifoliate Leaves, whose Lobes end in Three Points, which are cut; and the Stalk branches from the Bottom.*

This general Title includes all those Varieties of *Perfian Ranunculi*, which are to be found in the *European Gar-*

dens: For all the beautiful Flowers with which the Florists Gardens are now stred, have been produced from Seeds of single Flowers originally; but by Culture have been so much improved, as to vie for Beauty and Fulness of Flowers with any of the flowery Tribe. But as these are only femal Variations, so they should be kept under this specific Title.

The Flowers here exhibited are such as the Florals term femi-double -, and from the Seeds of such all the most valuable Flowers are produced; so I chose rather to take the Figures of these, than of the most double Flowers, because in these the Characters are almost as perfect as those of the single Flowers, and these are wanting in the very full Flowers-, so that these exhibit the Representation of perfect good Flowers

The Root of this Plant, represented at h/h composed of many thick fleshy Fangs or Fibres, which unite at the Top into a Head: From these are sent forth many (lender long Fibres, sinking deep in the Ground, and from the Head arise several Leaves, which are composed of Three, Six, or Nine Lobes of irregular Forms, and cut the i^o vari^us Segm^ts. Between these arise the Flower-stalks, which are about a Foot high, taper, hairy, and branching out at a little Distance from the Root: They are garnished with Leaves, standing on

Stalks; the Leaves divide first into Three Parts, which are again divided or cut, as is shewn at *, and these are generally terminated by trifid Points, as is represented at i. The i^o vari^us Segm^ts. Between these arise the Flower-stalks, which are about a Foot high, taper, hairy, and branching out at a little Distance from the Root: They are garnished with Leaves, standing on Stalks; the Leaves divide first into Three Parts, which are again divided or cut, as is shewn at *, and these are generally terminated by trifid Points, as is represented at i. The i^o vari^us Segm^ts. Between these arise the Flower-stalks, which are about a Foot high, taper, hairy, and branching out at a little Distance from the Root: They are garnished with Leaves, standing on Stalks; the Leaves divide first into Three Parts, which are again divided or cut, as is shewn at *, and these are generally terminated by trifid Points, as is represented at i. The i^o vari^us Segm^ts. Between these arise the Flower-stalks, which are about a Foot high, taper, hairy, and branching out at a little Distance from the Root: They are garnished with Leaves, standing on



900 22

RANUNCULUS foliis acris hirsutusque foliis cymosis anglicis, caulis inflexus nuncup. Lin. Sp. pl. 201.

Sp. pl. 201. n. 116. of Ranunculus by P. Miller Pl. in 1753.



RESEDA, foliis simplicibus, calicibus floribus tetragynis.

Species in a bot. of Portugal by P. de la Roche, in 1753.



Handwritten notes:
 Rhizom
 Rhizom

Handwritten notes:
 Rhizom
 Rhizom

RHEUM. *Rheum acutatum glabra angustata fimbria fimbria*

Handwritten: Rhizom

Handwritten: Rhizom

P L A T E C C X V I I

Rissoia Tom., Inf. R. B.M. « 238. Rafi Misk. Gallus Rocket. Plant. Hi. Un. Gen. Plmt. 535-

THIS Genus of Plants is ranged in the First Section of Tournefort's Eleventh Class, which includes the Herbe with an anomalous Flower, whose Pointal turns to a Fruit with Mr. Ray places it in the Second Division of his Twenty-second Class, and Section of his Twenty-second Class, which contains the Plants with an irregular outline Flower, whose Seeds grow. Dr. James ranges it in the Third Section of his Fourth Class, which includes those Plants whose Flowers have from Eleven to Nineteen Stamina, and Three Myles.

The Characters of the Genus are,

The Empalement of the Flower is of One Leaf, cut into three, acute, erect. The Flower is composed of five Petals, unequal in Size, and always termi- nated by obtuse erect Summits. The Germen fitting upon very short Styles, crowned by Jingle Stigmas. The Germen afterwards turns to an angular gibbous Capsule, opening between the Styles, with One Celly filled with angular kidney-shaped Seeds, fastened to the Capsule.

The Specie here represented is,

Rissoia ... Refeda, or Mignonette d'Egypte.

This Plant is supposed to be a Native of Egypt, from whence the Seeds were brought to the South of France. The Seeds of this were sent me from Leyden by Dr. Adrian Van Roye, which succeeded in the Chelsea Garden, and soon after the Seeds were brought from the South of France by the Right Honourable the Lord Bateman. This Plant sends out from the Root many Stalks, which lie prostrate on the Ground, and divide into many diffused Branches, spreading on every Side more than a Foot from the Root; they are sometimes intire, but generally are divided into Three Lobes, as is represented at g, these are of a light Green, and are placed without Order, having very short Footstalks. The Flowers are produced in loose Spikes at the End of the Branches, each standing upon a short Footstalk. They are of an herbaceous white Colour, composed of several small triad Petals, represented at <, in the Center of which is situated the Germen, as is (shewn at b) surrounded by many short Stamina, and Four Styles crowned by erect Stigmas marked c. These Flowers have an Odour like that of fresh Raspberries, for which the Plants are chiefly esteemed: After the Flowers fade the Germen turns to an oblong angular Husk, represented at d, opening toward the Top, having but One Cell as is shewn at e, including many small Seeds represented at f. These Plants flower most Part of Summer, and, if they are placed in a good Green-house, they may be preferred One Winter, and continue flowering till the Spring. The Seeds ripen in the Autumn.

This Plant is so like the common smaller Refeda in its Appearance, as scarcely to be distinguished from it; but the Flowers of the common Sort have no Scent: And I believe that the Seeds of that have been fold for the Mignonette which has occasioned some Persons to suppose that the Mignonette had lost its Sweetness.

L A T E C C X V I I I

RH^M Un. Gen. Plant. 454- Bbabarb* m Tourne. Inf. R. H. 89. tab. 18. Rhubarb.

HIS Genus of Plants is ranged in the Second T Section of L/W's Ninth Class, which includes those Plants whose Flowers have N e S f f l m j ^ Three Styles. Tournefort places it in the Fourth Section of his First Class, which contains the Herbs with a bell-flaped Flower of One Leaf, whose Pointal turns to a single Seed.

The Characters of this Genus are,

The Flower has no Empalement; it hath One Petal whose Base is narrow and impervious, cut at the Tip into three Segments, as is represented at a, a. The first is of the natural Size, the other is magnified. These are spread apart. It hath Nine hair-like Stamina represented at c, which are infered in the Petal, and are of the same Length NUMB. XXXVII.

as is shewn at A, d, terminated by oblong Summits represented at e. In the Center is situated a three-cornered short Germen, with no visible Style, crowned by Three feathered reflexed Stigmas: The Germen afterward becomes a large three-cornered pointed Seed, represented at f, having membranaceous Borders as is shewn at g: In the Center of this is lodged the oblong Germ h.

The Specie here represented is,

RHEUHT foliis cordatis glabris, marginibus sinuatis, spicis divisis nutantibus. Rhubarb with smooth heart-flaped Leaves, sinuated on their Borders, and divided Spikes of Flowers which nod.

The Seeds of this Sort were sent me from Peterburgh for the true Rhubarb, and so far as I can judge from the Appearance of the Root, it approaches nearer to the foreign Rhubarb than any of the Plants which have



Ricinus communis

RICINUS folia palmatis impunctatis serratis, capsulis bispinis.

de B. & H. Icones botan.

Illustration according to the description by J. Miller, drawn by G. G. Smith.

L. Miller delin.



Ricinus folio palmatis serratis.

capitulo rugoso non scissato.

fa**



Fig. 1. ROSA rubra plus speciosa, pediculis inflexis, lat. 1. 1777.
 Fig. 2. ROSA pratincola, variegata plus, Hort. 1777.

Spices among the flowers of the rose, 1777.

This Sort grows naturally in the West Indies. It is an annual Plant; the Stalk is thick, herbaceous, and of a slender or three Foot high, and divides at the Top into Three or Four final Branches, which spread out in a Green on their under, and the deeply cut and Seven-angled Segments, which join at their Base. The Footstalks which are large, of which there are Eight spread out once horizontally than those of the common Sort, and are much shorter. The principal Stalk and also the Branches are terminated by Jovis

Spikes of blowers; those on the lower Part of the Spikes are Male; these have five or six Empalements, which open and expose to View the great Number of Stamina which are collected into different Bodies, and are terminated by whitish oblong Twin Summits: These Flowers fall away soon after they have cast their Farina. The Female Flowers occupy the upper Part of the Spike; these have prickly Empalements, which are closely shut, so that no Part of the Flower is visible but the Three Styles, which are stretched out beyond the Empalement, unless the Empalement is opened. The Male Flowers appear first, and then the Female come out above them; and these are succeeded by roundish Capfules, divided into Three Cells, each containing One oblong brown Seed, with some yellowish Marks. This Plant flowers in July and August) and, if the Autumn proves favourable, the Seeds will ripen in October*

P L A T E CCXX.

RECIPIENS TOUR. Inf. R. H. 332. Tab. 307. Rof. Meth. Plant. 144. Lin. Gen. Plant. 552. Palma Christi, or Oil Seed j in French R^{cin}.

THIS being of the same Genus with the former, the Characters are the same; but as there are several Species of this Genus whose Empalements of the Flowers have Prickles, so I have given ^W & 2[^] them as there has been no Notice of this Difference in any of the Books, though it is permanent; for I have several Years cultivated Three Species, which have always proved the same, without the least Variation.

This is, *fe+C+w4 C?>~'»*"*

RICINUS *folius peltatis ferratis, capulis rugosis non echinatis* Palma Christi with target-shaped Leaves which are fawed, and rough Capfules which have no Prickles.

This Sort grows naturally in the Spanish West Indies, from whence I received the Seeds. This is also an annual Plant, which has a thick herbaceous Stalk up to

Leaves are of a deeper Green on their upper Part, but are paler on their under. The Segments of the Leaves have their Edges more regularly fawed. The Male Flowers have a greater Number of Stamina, their Empalements are cut into Three Parts, which are of a yellow Colour, and the Seed-Vessels are larger, oval, and have no Prickles. These Differences are permanent.

Fig. #, tf, represents the Male Flowers, One as they are situated on the lower Part of the Spike, the other is separated from it, to shew the Empalement, which is cut into Three oval concave Segments* b shews the Female Flowers on the upper Part of the Spike, with the Three Styles standing out beyond the rough Empalement c; these Flowers are succeeded by oval rough Fruit, represented at d, having Three deep Furrows which separate the Three Cells, and have the Three Styles on the Top: These outer Covers fall off, and disclose a Nut with Three Cells represented at e and f, each Cell containing One oblong brownish marked Seed* as is shewn at g. The Footstalk of the Leaf is represented at h, as it is inserted in the Middle of the Leaf; i shews One of the Segments with One of its Edges turned up; k shews a Leaf with its upper Surface fully expanded; and l shews one reversed, with the under Side outward.

of this are father fLder than in the other Sort; the

P L A T E CCXXi.

ROSA TOUR*. Inf. R. H. 636. ***. 40S. Rm Meth. Plant. 144. Lin. Gen. Plant. 556. The Rose; in French, Rofier.

THIS Genus of Plants is ranged in the Eighth Section of *fourneforfs* Twenty-first Clafs, which includes the Trees and Shrubs with a Rose Flower, whose Empalement becomes a Fruit with hard Seeds. Mr. Ray places it among the Apple-bearing Trees, with an umbilicated Fruit. Dr. *Umaus* ranges it in the Fifth Section of his Twelfth Clafs, which includes those Plants whose Flowers have from Twenty to Thirty Stamina, which are inserted either into the Empalement or the Petals, and have many Styles.

The Characters of this Genus are,

The Empalement of the Flower is of One Leaf which at the Base is of a globular Bell-shape, but is divided above into Five long narrow Segments^ having an Appendix on each Side, as is represented at a: "The single Flowers have but Five Petals, of a round Heart-shape, inserted into the Empalement; but the double Flowers are composed of a great Number of Petals', of the same Shape as is shewn at b: In the Center are situated a great Number of port Stamina, which are inserted into the Necks of the Petals^ terminated by three-cornered Summits, represented at c*, which are represented without the Petals at d, e, and f. In the Bottom of the Empalement g are situated many Germina, having each

each a short hairy Style inferted in the Side of the Germen[^] crowned by obtuse Stigmas, reprinted at i and k. The Empalement afterward turns to a soft Fruit with One Cell, which is coloured when ripe, reprinted at m. The Fruit cut open lengthways is reprinted at n, and o Jhews One of the Seeds, p and q shew the Style, which at p is magnified, and q is of the natural Size.

The Sorts here reprinted are,

Fig. i. ROSA rubra plena, spinosissima, pedunculo muscovo. Boer. Ind. alt. 2. P. 252. The molt prickly double red Rose, with a mossy Footstalk, commonly called the Moss Provence Rose.

This Rose has not been many Years known in England: The first time I saw it was in the Year 1727, in the Garden of Dr. Boerhaave near Leyden, who was so good as to give me One of the Plants, but from whence it originally came I could not learn. It is probably a Variety which was obtained by Seeds from some other double Rose, for I have frequently raised Roses from Seeds, and have always found the Seeds of double Flowers produce others with double Flowers, and those of single Flowers always produced the same, but those from the double Flowers produced Variety of different coloured Flowers, scarce any of the same Colour with those of the Parent Plant. This Sort sends out but few Stalks from the Root. These are covered with a dark

brown Bark, and closely armed with sharp Thorns, the Leaves are composed of Five oblong oval Lobes, which are hairy and fawed on their Edges, the Footstalks of the Flowers are strong, standing erect, and are covered with a dark green Moss, as is also the Empalement of the Flower. The Flowers are of the same Shape and Colour as the common Provence Rose, and have the like agreeable Odour. It flowers in June and July but is not succeeded by Fruit.

Fig. v. ROSA praevenestina, variegata plena. Hort. Eyji. The double variegated Rose, commonly called the York and Lancaster Rose.

This is certainly a Variety of the Damask Rose, the Plants being in Stalk, Leaf, and every Part the same, differing only in the Colour of the Flower, those of this Sort being variegated with white Stripes, and the others are plain. There is another Variety of this which is called Mrs. Hart's Rose, which only differs in having the white Stripes more distinct. As the Flowers of this are less double than of many other Sorts, so they are frequently succeeded by Fruit, and have ripe Seeds, from which some Varieties may be obtained. The Stalks of this Sort rise Six or Seven Feet high, and are like those of the Damask Rose, as not to be distinguished from it, so there needs no Description of this, as the other is so generally known.

P L A T E CCXXII.

AGAVE Lin. Gen. Plant. 390. Aloe Toarn. Inf. R. H. 366. Tab. 191. Raii Meth. Plant. 117. Aloe, in French Aloes.

THIS Genus of Plants is ranged in the First Section of Linnaeus's Sixth Class, which includes those Plants whose Stipules are One. It is distinguished from the Genus of Heloparasus Aloe, because the Segments of the real Petal, whereas those of the Aloe are equally divided into Six Parts, fitting upon the Top of the Fruit.

The Characters of this Genus are,

The Viewer has no Empalement, as is shewn at a, it hath One funnel-shaped Petal, cut at the top into Six equal Parts, which stand like, as at b. It has Six slender erect Stamina, represented at c, which are twice the Length of the Petal, terminated by linear Summits, which may be turned round, represented at d; under the Flower is situated an oblong Germen e, which is narrowed at both Ends, supporting a Style the Length of the Stamina, as is shewn at f, crowned by a three-cornered Stigma, represented at g: The Germen afterward turns to an oblong three-cornered Capsule as at h opening in Three Cells, as is shewn at i, filled with a double Tier of flat Seeds, represented at k.

The Species here reprinted is,

AGAVE foliis angustioribus, dentato-spinosis, scapo diviso, randsere Similis. Agave with narrower Leaves, whole

Indentures have Spines, a divided Stalk, and erect Branches.

The Plant here reprinted was given me by Mr. Chelsea Garden the last Summer, Anno 1757; and being a very different Species from the common American Aloe, and not mentioned in any of the Botanic Books, I have here given a Figure of it, hoping it will not be unacceptable to the curious: And as there have been many Figures

of the common Aloe exhibited of late Years, so I shall only mention how this differs from that. The Leaves of this are narrower, of a paler Green,

and the Indentures on the Edges are not so deep, the Spines at the Indentures are shorter, and not so strong: The Leaves do not grow so erect, and are drawn in much narrower toward their Points. The Stalk arises from the

Center of the Plant, growing erect, this was Ten Inches in Circumference below, gradually diminishing like a Column, to the Height of Eight Feet, where it divided into several Branches; those in the Middle grew Three Feet high, the others were shorter, but they all grew erect: Whereas those of the common Sort are horizontal, turning upwards at their Ends, like the Branches of a Chandelier. The Flowers of this were collected in close Bunches or Clusters, at the End of the Branches, standing erect, but those of the common Sort grow in Clusters, from the Side of the Branches, and also at their Extremities. The Flowers of this are like those of the common Sort, but are rather larger. The Stalk was about Six Weeks growing to its full Height, and the Flowers began to open about a Month after; a Succession of them was continued near Six Weeks, and the Germen afterward grew to their full Size, many of them full coming upon the Plant, and may probably have perished their Seeds. There was another Singularity in this Plant, which was, many of the young Suckers from the Root flowered at the same time with the old Plant.





RUBUS, foliis simplicibus palmatis, cunctis inermi, multifloro multifloro Hort. Cliff. 1731.

Spence's copy of the original in the British Museum, April 20 1731.



Fig. 1. RUBRICOLA, foliis lanceolatis, nervis albis, utrinque pinnatis, radiis latis. Fl. 279. n.
 Fig. 2. COREOPSIS, foliis lanceolatis, integerrimis. Fl. 279. n.

Tab. 100. n. 100.

Printed according to the original in the Royal Botanic Garden, Edinburgh, in 1794.

P L A T E CCXXIII.

RUBUS Tourn. Inf. R. H. 614. Tab. "385. Raii Meth. Plant. 156. Lin. Gen. Plant. 557. Raspberry; in French, Roncée,

The Characters of this Genus are,

The Flower hath a permanent Empalement of One Leaf, cut into Five oblong Segments, which spread open, a; it hath Five roundish Petals b, which are inferted in the Empalement, and spread open \ and a great Number of Stamina c, which are much shorter than the Petals, and are inferted in the Empalement \ terminated by roundish compressed Summits. It has a great Number of Germina, with small hair-like Styles on their Sides, crowned by permanent Stigmas. The Germina afterward become a Fruit, composed of many Acini d, collected in a convex Head, which is concave on the under Side \ each Acinus f, has One Cell, containing One kidney-shaped Seed e.

THIS Genus of Plants is ranged in the Second Section of Tournefort's Twenty-first Class, which includes the Trees and Shrubbs with a Rose Flower, whose Pointal becomes a Berry, composed of several small ones.

Mr. Ray places it among the Trees and Shrubbs, whose Fruit is composed of many small Acini or Berries.

Doctor Linnaeus places it in the Fifth Section of his Twelfth Class, which includes those Plants whose Flowers have many Stamina, which are inferted in the Empalement, and many Styles.

The Species here represented is

RUBUS foliis simplicibus palmatis, caule inermi multifolio multifloro, Lin. Hort. Cliff. 192. Raspberry with single hand shaped Leaves, an unarmed Stalk with many Leaves and Flowers. This is the *Rubus odoratus* Corn. Canad. 149. Tab. 150. Sweet Canada Raspberry, commonly called the Flowering Raspberry.

This Plant was first brought to Europe from Canada* where it grows naturally \ as it also does in many other Parts of North America. The Root is perennial, and creeps far on every Side, sending up many Stalks, so propagates itself very fast -, the Stalks rise from four to seven Feet high, according as the Soil is strong and moist, for in dry Ground they are but flört, and the Leaves small, but in moist rich Land they will grow very tall. The Stalks are about the Size of a Man's little Finger, they are covered with a smooth tiark, of a light brown Colour, and branch out a little toward their Tops. The Leaves are Six Inches long, and Seven broad, cut into Three, Four, or Five angular Lobes, ending in acute Points, in some measure resembling a Hand spread open. They are sawed on their Edges, and have several Veins which arise from the Mid-rib, running upward diverging toward the Borders. The upper Sides of the Leaves are of a deep Green, but their under Sides are of a light Green and smooth; their Footstalks are Four Inches long and come out alternately from the Stalk. The Flowers are produced in loose Bunches at the Top of the Stalks, each standing upon a long Footstalk; they are composed of Five large roundish Petals of a light purple Colour, which spread open like a Rose, and within are situated a great Number of Stamina, which are inferted in the Empalement, terminated by roundish compressed Summits, c. 1. is one of these Stamina of the natural Size, and c. 2. is one magnified, b represents one of the Germina magnified, and d shews one of the natural Size. After the Flower is decayed, the Germina swell to so many succulent small Berries, represented at /, which are collected in a Head* as is shewn at d, in Shape like the common Raspberry \ This Plant begins to flower early in July, and there is commonly a Succession of Flowers upon them till the Autumn; so that it is cultivated for the Sake of its Flowers, and is sold among flowering Shrubbs by the Nursery Gardeners: For the Fruit is of little Value^ having no Flavour \ nor do the Plants always produce Fruit.

P L A T E CCXXIV.

RUDBECKIA Lin. Gen. Plant. 878. Obeliscotheca Vaill Act. Par. 1720. Bobartia Pet. Muf. Dwarf Sun-flower. prothite fruitful

The Characters of this Genus are,

The common Empalement is composed of Two Orders of Leaves, which are flat and plain; the Flower is composed of several female Half Florets, which form the Rays or Border b; these are first etched out on one Side like a Tongue, ¹ ve One or Two Indentures at their Points. These have ¹ 'icn under the Flower, which is abortive. The Hermaphrodite Flowers form the Dijk c, which is conical; they are small, tubulous, and Funnel-shaped, indented in Five Parts at their Brim; these have Five hair-like Stamina, terminated by cylindrical tubulous Summits. The Germen is situated in the common Empalement, supporting a slender Style, crowned with a revolved two-parted Stigma. The Germen afterward becomes a single oblong four-cornered Seed, crowned by its proper Cup, which has Four Indentures.

THIS Genus of Plants is ranged in the Third X Section of Linnæus's Nineteenth Class, which includes those Plants whose Flowers are composed of Fc- NUMB. XXXVIII.

male Half-Florets, which are barren, and form the Rays or Border; and the Disk is formed of Hermaphrodite Flowers.

The Species here represented, Fig. 1. is*

RUDBECKIA foliis lanceolato-ovatis alternis indhifis, petalis radii integris, Flor. Virg. 181. Rudbeckia with oval spear-shaped Leaves, which are intire and alternate, and the Rays of the Flower are intire. This is the *Chrysanthemum helenii folio, umbone floris grandifuculo prominente* Pluk. Aim. 99. Tab. 242. Corn Marygold with an Elecampane Leaf, and the Middle of the Flower large and prominent. Doctor D/£ lenius titles it, *Obeliscotheca integrifolia, radio aureo, umbone atro-rubente* Hort. Elth. 295. Tab. 218.: Obeliscotheca with an intire Leaf, yellow Rays to the Flower, and a dark-red Middle.

This Plant grows naturally in North America; the Root is perennial \ the Leaves are oval, hairy,* and intire, they are about Four Inches long, and Two broad in the Middle; the Stalks are single, a Foot high, having Two or Three Leaves toward the Bottom, which are placed

Placed alternate •, the Stalks are terminated by One Flower, shaped like a small Sun-flower, composed of several yellow Petals or Rays, which are intire; and the Disk or Middle of the Flower is very prominent, which is composed of many hermaphrodite Florets, of a dark-red, or purple Colour. The Flowers appear in July, and there is a Succession of them on the Plants, till the Frost flops them.

The other Plant, Fig. 2. although by the alphabetical Order observed in this Work, it is at a great Distance from the First, yet, according to the Characters of the Flowers, is very near allied to it, and being a Plant not yet figured, we have added it here.

This is the *COREOPSIS foliis linearibus integerrimis, caule erecto Flor. Virg.* 181. Coreopsis with linear intire Leaves, and an erect Stalk.

The Charadlers of this Genus are,

The common Empakment is double; the outer one a is rough, and the inner fcaly; the Flower is composed of Female tongue-shaped Half-Florets b, which form the Rays, and Disk of hermaphrodite Florets d \ the Female Half-Florets have a Germen c, but no Style or Stigma; the hermaphrodite Florets

have Five JLcrt hair-like Stamina, terminated by cyli, Summits, and a compressed Germen, supporting a j Style, crowned by a bifid Stigma -, the Germen aftc, «³⁰⁹ turns to a fmgfour-cornered Seed f, having a membranaceous Sheath e furrounding it.

This Genus of Plants is ranged in the Third Section of *Linneus's* Nineteenth Clafs, which includes those Plants whose Flowers are composed of female barren Flower and hermaphrodite Flowers, which are fruitful.

This Plant grows naturally in *Virginia* and other Parts of *North America* \ the Root is fibrous, but does not continue long, seldom surviving Two Years. The Stalk is erect and smooth; it rises a Foot and half high, dividing upward into many smaller Branches - it is garnished with narrow rough Leaves g, which are Three Inches long, set opposite without Footstalks. The Branches divide again at the Top into long slender erect Footstalks, each sustaining One yellow radiated Flower, composed of Female Half-florets, which are the Ray or Border of the Flower, and a convex Disk or F of a dark purple Colour, composed of hermaphrodite Florets. This Plant flowers in August and September but unless the Season proves very favourable, the Seed will not ripen in England.

P L A T E CCXXV.

SALVIA fctum. Lift. R. H. 180. Tab. 83. *Raii Meth. Plant.*-58. *Lin. Gen. Plant.* 36. Sage; in *French, Sauge.*

The Characters of this Genus are,

The Empakment of the Flower a is tubulous, of One Leaf which enlarges upward, and is cut into Four Parts at the Brim. The Flower is of One Petal, divided into Two Lips b and c 5 the upper Lip b is concave, compressed, incurved, and a little indented at the Point. The lower Lip c is broad, reflexed, and for the most part trifid. It hath Two Stamina terminated by prostrate Summits d, and a quadrifid Germen supporting a long slender Style e, crowned by a bifid Stigma. The Germen afterward become Four naked Seeds f, fitting in the Bottom of the Empakment g. These Seeds are represented at h, taken out of the Empakment.

JTTMIS Genus of Plants is ranged in the First Section of *Tournefort's* Fourth Clafs, which includes the Herbs with a lip Flower of One Petal, whose upper Lip is hollow like a Helmet, and arched. Mr. *Ray* places it in the First Section of Fourteenth Clafs, which contains the Plants with woody perennial Stalks whose Flowers grow in Whorles. Doctor *Linneus* ranges it in the First Section of this Second Clafs, which includes those Plants, whose Flowers have Two Stamina and One Style. This is an Example of one Imperfection in his System •, for by ranging the Plants according to the Number of Stamina in their Flowers, he has separated a Clafs, which by all former Systems was judiciously kept intire, a Part of which are here placed in his Second Clafs; and the greater Part of the Genera compose the First Section of his Fourteenth Clafs; the Flowers of those having Two long and Two shorter Stamina.

The Species here represented are,

Fig. 1. *SALVIA foliis subrotundis ferratis, basi truncatis dentatis Hort. Cliff.* 18. Sage with roundish fawed Leaves/ whose Base is truncated and indented. This is the *Salvia Africana frutescens, folio scorodonU, flore violaceo Hort. Amft.* 2. p. 18 x. Shrubby African Sage, with a Wild Sage Leaf, and a Violet Flower.

This grows naturally at the *Cape of Good Hope*, from whence it was brought to the Gardens in *Holland*, about Fourcore Years ago, and hath since been dispersed into the curious Gardens in *Europe*. It rises with a shrubby Stalk, Four or Five Feet high, dividing into many Branches, which are garnished with oval fawed Leaves, which have One or Two indentures at their Base, which appear as if they were torn. The upper Leaves are more intire and much smaller, fitting close to the Branches; they are greyish, and have small Leaves coming out just above their Footstalks. The Flowers come out toward the End of the Branches, at each Joint, in the same Manner as the other whorled Flowers; but there is seldom more than Two at the same Joint, One on each Side the Stalk, and often but One: These are shaped like those of the common Sage, having a hooked upper Lip, and a recurved lower Lip, which is broad, and indented in Three Parts at the End, the middle Segment being larger than the other. The Flowers are of a bright blue Colour, having Two long Stamina, which are terminated by oblong Summits lying prostrate fattened in the Middle to the Stamina; these lye under the upper Lip of the Flower •, and with these arises a long hooked Style, crowned by a slender Stigma. After the Flower is past, the Four Germen become Four naked Seeds fitting in the Bottom of the Flower-cup. This Plant continues flowering from June to October; and the early Flowers are often succeeded by Seeds, which ripen in the Autumn.

Fig. 2. *SALVIA foliis oblongo-ovatis integerrimis, calycibus patulis coloratis.* Sage with oblong-oval intire Leaves, and spreading coloured Empalements to the Flower.

This Sort I received from *Holland* without any Title, but that of a *new Sage from the Cape*. It has a great Resemblance of the First, but the Shoots are stronger, the Leaves longer, and not so broad; the Flowers grow chiefly at the End of the Branches, and the principal Stalks terminate in a Sort of loose Panicle of Flowers. The Empalement of the Flower is large, intire, and of a pale blue Colour, spreading open flat; so that after the Flowers are fallen, there have the Appearance of a small Distance of a bell-shaped Flower. This Plant continues



Fig. 1. SALVIA, foliis pubescentibus serratis, basi truncatis dentatis Hort. Cliff. 50.
 Fig. 2. SALVIA, foliis glabris ovatis serratis, calycibus parvis lobatis.

Printed and sold by J. Roberts in the Strand 1734.



6 m 4 D



SANTALUM cath. herbaceum compe. fl. luteo. latic.

Spices. Santalum. Linn. Sp. Pl. 1043. t. 10. f. 1.



Salvia latifolia

Fig. 1. *Salvia latifolia* var. *purpurea*, folia lanceolata confusa.
 Fig. 2. *Salvia latifolia* var. *purpurea*, folia ovata, folia lanceolata. Ann. 1791, p. 267.

Printed and sold by J. G. Smith, at the Royal Botanic Garden, Edinburgh.

Edinburgh 1791

in Flower great Part of the Summer; but it has not the *Cape of Good Hope* a few Years past, as a new Sort; and also, that I have frequently raised Plants of the first Sort from Seeds, but have never found any Variation in them.

P L A T E CCXXVI.

SAMBUCUS *Tourn. Infi. R. H. 606. Tab. 376. Rail Meth. Plant. 145. Lin. Gen. Plant. 311.* Elder; in French, Oureau.

The Characters of this Genus are,

The Flower hath a small permanent Empalement a, which is of One Leaf cut into five Parts at the Top. The Flower b is of the concave Wheel Shape, of dne Petals which is obtuse, five-pointed, and reflexed. It hath Five awUJhaped Stamina c, which are terminated by roundish Summits d, and an oval obtuse Germen e, situated under the Flower, having no Style? but a bellied Glandule crowned by Three obtuse Stigmas. The Germen afterward turns to a roundish Berry f, with One Cell, inclosing Three angular Seeds g, which are convex on their outer Side.

THIS Genus of Plants is ranged in the Sixth [Section of *Tournefort's* Twentieth Class, which includes the Trees and Shrubs with a Flower of One Petal, whose Empalement turns to a Berry. Mr. *Ray* places it among the Trees with an umbilicated Fruit or Berry, inclosing several Seeds. *Dodor Linnaeus* ranges it in the Third Sediton of his Fifth Class, which includes those Plants whose Flowers have Five Stamina, and Three Styles.

The Specie here represented is,

SAMBUCUS *caule herbaceo ramofo, foliolis dentatis.* Elder with a branching herbaceous Stalk, and the Lobes of the Leaves indented. This is the *Sambucus humilis* *vide Ebulus. C. B.P. 456.* Dwarf Elder or Ebulus. *John Bauhin* titles it, *Ebulus Jive Sambucus herbacea, Hift. JU 546.* *Dodtor Linnaus* calls it in his Species of Plants, *Sambucus cymis tripartitis, Jlipulis foliaceis. 269.* Elder whose Tops divide in Three Parts, and a leafy Stipula. It is titled in the Shops *Ebulus* and *Cham<caefie.* In English, Dwarf Elder, Danewort and Walwort.

This Plant grows naturally in *England*, particularly in *Bedfordshire, Northamptonshire, and Leicestershire*, where it is frequently a troublesome Weed in the Corn-fields. It hath a creeping Root, which spreads far under the Surface of the Ground. The Stalks rise from Three to Five Feet high, according as the Soil is where it grows. These are garnished with winged Leaves, composed of Six or Seven Pair of Lobes, terminated by an odd one; they are about Four Inches long, and One broad near their Base, but end in acute Points; they are of a deep Green, indented a little on their Edges, and stand by Pairs. The upper Parts of the Stalks branch out, and are terminated by large Umbels of white Flowers tipped with Purple; they have One Petal, which is cut into Five obtuse Segments; these are reflexed backward, and Five Stamina, which spread open upon the Segments, with an oval Germen in the Center, which afterward turns to a roundish Berry, which when ripe is black, and filled with a purple Juice. At the setting on of the Leaves, there are several small Leaves set close to the Footstalks represented at *h*, which *Dodtor Unnous* titles *Stipulae*. The Plant flowers in *July*, and the Seeds ripen in *September*. This Plant is used in Medicine; it purges ferous watery Humours by Stool, and is therefore much recommended for the Dropsy, in which Disorder I have known the Juice of it taken Three times a Week, Two Spoonfuls at each Time, perform Wonders. It is also esteemed good for the Gout, and scorbutic Disorders.

The tender Shoots of the *Common Elder Tree* are frequently sold in the Markets for this, from which it may be easily distinguished by the Number and Shape of the Lobes on each Leaf. The common Elder having rarely more than Two Pair of Lobes, which are broad and short when compared to this, which has seldom less than Five, and frequently Seven Pair of Lobes terminated by an odd one.

P L A T E CCXXVII.

SANTOLINA *Tournef. Infi. R. H. 460. Tab. 260. Berridoriae Vahl. Att. Par. 1719. Coma aurea Com. Hort. Amst. 2. p. 99.* Lavender Cotton, or Goldyllocks; in French * *Gardrobe.*

The Characters of this Genus are,

It hath a common hemispherical Empalement a, which is scaly. The Flower is composed of many hermaphrodite Florets b, which are uniform and longer than the Empalement. These are of the Funnel-shaped c, and cut into Five Parts at the Top, which spread open; they have Five very short hair-like Stamens, terminated by cylindrical Summits, and a three-



THIS Genus of Plants is ranged in the Third Section of *Tournefort's* Twelfth Class, which includes the Herbs with a Discoidal Flower, whose Seeds have a Down. *Dodtor Linnaeus* places it in the First Section of his Nineteenth Class, which contains those Plants whose Flowers are composed of Hermaphrodite Florets only.

The

The Species here represented are,

Fig. 1. *SANTOLINA torymbisfimplicibusfaf. Igiaii, foliis tinearibus confertis*. Lavendar Cotton with fingle Heads of Flowers gathered in Bunches, and linear Leaves in Clusters. This is the *Coma aurea Abrotani folio annua Ponted.* Annual Gpdylocks with the Leaf of Southernwood.

This Plant grows naturally on the *African Side* of the *Mediterranean* -, it is annual -, the Stalks rife about Two Feet high; they are stiff, but herbaceous, fending out many fide Branches their whole Length; thofe from the lower Part of the Stalks are Four or Five Inches long, but they are gradually fhorter to the Top. The Leaves come out in fmall Clusters from the Joints; they are very narrow and fhort; fome of thefe end in Three Points, others are fingle: The Branches are terminated by Clusters of Flowers of a bright Yellow, each Corymbus ftanding on a fhort Footstalk -, the common Empalement is oval and fcaly -, the Flowers are compofed of a great Number of hermaphrodite Florets, which are longer than the Empalement; they are equal in Size, and have each Five fhort Stamina. Thefe Flowers appear in *Auguji*, and continue till the Froft

deftroys them; but the Seeds do not ripen in *England*. The whole Plant has a fine aromatic Scent.

Fig. 2. *SANTOLINA corymbisfimplicibusfaf. Igiaii, foliis femhrifidis linec.ribus*, *Lin. Sp. Plant.* 843. Lavendar Cotton with fingle Heads of Flowers in Bunches, and linear Leaves, which are half their Length trifid. This is the *Coma aurea Africana fruticans, foliis crithmi rncrmi Hort. Amjh* 2.p. 99. Doftor *Plukenet* titles it, *Jacob/eq MthiGpica, foliis abrotani trifidis, fummo caule capitulis pa?vis glomeratis. Aim.* 194, *Ethiopian Ragwort*, with trifid *Southernwood* Leaves, and fmall Heads in Bunches at the Top of the Stalks.

This Sort grows naturally at the *Cape of Good Hope*, but has been long an Inhabitant of the curious Gardens in *Europe*. It riles with a fhubby Stalk Five or Six Feet high, clofely garnifhed the whole Length, with narrow Leaves about Two Inches long, which are divided half their Length into Three Parts, as is represented at *h* \ they are of a grey Colour, and are a little fucculent. The Flowers, grow in large Clusters at the End of the Branches, as is fhewn at *g*; thefe are of a deep yellow Colour, and are continued in Succetion moft of the Summer Months \ but the Seeds do rarely ripen ia *England*,

P L A T E

CCXXVIII.

KALMIA Lin. Gen. Plant. 482. *Chamarhododendros. Tourn* Inf. R. H.* 604. *fab.* 373. The *Rofe Laurel*, or *Mountain Laurel*.

The Characters of this Genus are,

*The Empalement of the Flower is finally permanent^ and cut into Five roundifh Segments a, which fpread open; the Flower is of One Petal, with a very fhort Tube, fpreading open, and cut into Five roundifh Segments b •, it hath Ten awl-fiaped Stamina c, which fpread and rife upward, terminated by roundifh Summits d. In the Center of the Flower is fituated an oval Germen, fupporting a Style longer than the Petal e, crowned by an obtufe Stigma. The Germen after- * ward becomes an oblong Capfule f, having Five Cells g, which are filled with fmall Seeds h.*

THIS Genus of Plants is ranged in the Firft Sedtion of *Linn<eus's* Tenth Clafs, which includes thofe Plants whofe Flowers have Ten Stamina, and One Style. *Tournefort* places it in the Fourth Section of his Twentieth Clafs, which contains the Trees and Shrubs with a Flower of One Petal, whofe Pointal becomes a Capfule with feveral Cells.

The Specie here represented is,

KALMIA foliis lanceolato-ovatis nitidis fubtus ferrugineis, floribus corymbisfterminalibus. *Kalmia* with neat fpear-shaped oval Leaves, of a rufty Colour on their under Sides, and Flowers in round Bunches terminating the Branches. This is the *Cbamarbodcdendros laurt foliofempervirens, floribus bullatis corymbis Catefb. Can* 3. p. 17. Dwarf *Rofe Bay*, with a Bay-leaf Evergreen, and fudded Flowers in round Bunches. Doctor

Linnaus titles it, *Rhododendron foliis nitidis ovalibus, margine acute reflexo Sp. Plant.* 392. *Rofe Bay*, with neat oval Leaves, whofe Borders' are acutely reflexed. Commonly called in *America*, *Rofe Laurel* or *Mountain Laurel*.

This grows naturally upon Rocks and barren Soils in many Parts of *North America*, where it riles with a fhubby Stalk, Fifteen or Sixteen Feet high, fending out a few Branches toward the Top, which are garnifhed with stiff, fsmooth Leaves, Six Inches long, and Two broad, of a lucid Green on their upper Side, and pale on their under Side while young; but afterward change to a rufty iron Colour: They have fhort thick Footstalks, and are placed without Order; at the End of the Branches between the Circle of Leaves, the Buds for flowering are formed, which fwel during the Winter and Spring Months, till the Beginning of *June*, when, the Flowers burft ouc from their Covers, and form a roundifh Bunch (or Corymbus) fitting clofe to the Branch; the Flowers have but One Petal, which is cut almoft to the Bottom, into Five obtufe roundifh-Segment, One of which hath many Protuberances or Studs; fome of thefe are yellow, others green, and fome are purplifh and hairy; the Petal is of a pale Colour. When the Flowers are paf, the Germen becomes an oblong VefTel with Five Cells -, but thefe do not ripen here. This Shrub, in its native Country, continues flowering great Part of the Summer, and is a great Ornament to the barren Rocks; and if it could be got to thrive well in *England*, it would be one of the greateft Ornaments here. As this was the Firft Shrub of the Kind which has flowered in *England*, we have given a Representation of it, though it is out of the Order we have obferved in this Work.



Handwritten notes in the upper right corner, possibly identifying the specimen or its origin.

Handwritten notes in the lower right corner, likely a collector's or artist's signature.

Handwritten botanical description at the bottom of the page, possibly including the species name and its origin.

Handwritten text at the bottom center, possibly a date or location of collection.



Carduus pycnanthemus L. f. *carduus* L. f. *carduus* L. f.

Carduus pycnanthemus L. f. *carduus* L. f. *carduus* L. f.

1793

Handwritten notes in the top left corner, partially illegible.



Handwritten notes in the bottom left corner, partially illegible.

SCAPHISOMA parvula filiflora hibernica variegata (pars hibernica) var. alba 27. 1820. (L.)

Specimen sent by a Mr. G. from Dublin on 12. 1820.

W. G. Smith del.

P L A T E CCXXIX.

SCOLYMUS, *Tourn. Inf. R. H.* 480* *Tab.* 273. *Rail Meth. Plant.* 31. *Lin. Gen. Plant.* 826. Golden Thistle.

The Characters of this Genus are,

// bath a Flower composed of several Florets, included in One common oval imbricated Empalement a, the Scales of which are loose, and end in acute Points: The Florets are equal and hermaphrodite; they have One Tongue-shaped Petal b, which is indented at the Top; and Five Short Hair-like Stamina included in the Tube, terminated by cylindrical Summits. The Germen c is situated under the Floret supporting a slender Style d, which is longer than the Stamina, crowned by Two reflexed Stigma's. The Germen e afterward becomes an oblong single Seed pointed at the Base f, inclosed in a convex Chaff g, which is roundish, ending in Three Points.

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Thirteenth Class, which includes the Herbs with a femiflocculous Flower, whose Seeds have no Down.

Mr. *Ray* places it in the Second Section of his Sixth Class, which contains the Herbs with a compound Flower, having solid Seeds without Down.

Doctor *Linnaeus* ranges it in the First Section of his Nineteenth Class, which includes those Plants whose Flowers have only fruitful Florets, and their Stamina are connected with the Style.

The Specie here represented is,

SCOLYMUS *foliis margine incrassatis, Lin. Sp. Plant.* 813, Golden Thistle with the Borders of the Leaves thicker than the Middle. This is the *Scolymus Chrysanthemus, C. B. P.* 384. *Scolymus* with a Golden Flower. *Cluflms* titles it *Scolymus Theophrasti Hispanicus, Hist.* 2. p. 153. *Theophrastus's* Spanish *Scolymus*. *John Bauhin* calls it *Spina lutea, Hiji.* 3. p. 84, Yellow Thorn. And *Dodonaeus* titles it, *Carduus Chrysanthemus, Pempt.* 725. Golden Thistle.

This Plant grows naturally in *Spain, Italy,* and the *South of France*. It has a perennial Root, which is composed of many strong Fibres, which strike deep in the Ground, from which arise many long narrow Leaves, which are finuated on their Edges, each Sinus ending with a very sharp Spine. They are of a whitish Green, and firm Texture; their Borders being the thickest Part, they turn backward toward the Ground. From between the Leaves the Flower-Stalks arise, which grow from Three to Four Feet high, they are garnished their whole Length with Leaves of the same Form with those at the Bottom, whose Bases run along the Stalk, forming leafy Borders or Wings which run from one to the other these are also indented, the Sides of each Indenture being armed with Spines. The upper Part of the Stalk divides into Two or Three herbaceous Branches, which are closely garnished with the same long prickly Leaves, and each is terminated by a large golden Flower, composed of several Florets which are tongue-shaped, and very like those called by *Tournefort* and others Half-florets, which are generally female; but these are hermaphrodite, each having both Sexes, and are fruitful. The Flowers fit very close to the End of the Branch, and are so closely guarded by long Leaves, which are armed with strong Spines, that it is very troublesome to reach the Flower. The Scales of the common Empalement do also end with Spines, so that it is difficult to get the Seeds when they are ripe.

This Plant flowers in *July* and *August*, and, if the Season proves dry, the Seeds will ripen the End of *September* but if much Rain happens during the time of its Flowering, the Wet lodges in the Empalement about the Germen, and causes them to rot, and become abortive. The Roots of this will continue several Years, and may be propagated by Offsets from the Root.

The Leaves, Stalks, and Root, of this Plant, abound with a milky Juice. The People of *Salamanca* eat this Plant, in the same manner as *Chardon*; and the *Spaniards* sophisticate their Saffron with the Flowers of this Plant.

P L A T E CCXXX.

SCORPIOIDES, *Tourn. Inf. R. H.* 402. *Tab.* 226. *Rail Meth. Plant.* 106. *Scorpiurus, Lin. Gen. Plant.* 792. Caterpillar, in French, *Chenille*.

The Characters of this Genus are,

The Empalement of the Flower is erect, of One Leaf and blown up, lightly compressed, and cut into Five Points, which are acute a. The Flower is of the Butterfly Kind, having a roundish Standard indented at the Top b, and the Edges reflexed and spreading. The Wings c are almost oval, loose, and have a blunt Appendage. The Keel is Half-moon-shaped, the Belly gibbous, the Point erect, and divided in Two Parts below, it has Ten Stamina, Nine of which are joined together e, and One stands separate f, which are rising upward, and terminated by small Summits. It hath an oblong taper Germen, which is reflexed, supporting an inflexed

NUMB, XXXIX.

Style g, terminated by a pointed Stigma. The Germen afterward becomes an oblong, taper, leathery Pod, which is channeled, rough, and twisted round h, divided lengthways into several Cells i, and on the Outside contracted into Joints slightly, each Cell containing One Kidney-shaped Seed l.

THIS Genus of Plants is ranged in the Third Section of *Tournefort's* Tenth Class, which includes the Herbs with a Butterfly Flower, whose Pointal becomes an articulated Pod.

Mr. *Ray* places it in the Second Section of his Twenty-first Class, in which he places the Herbs with single Leaves which have a Butterfly Flower.

Doctor *Linnaeus* ranges it in the Third Section of his Seventeenth Class, which includes those Plants whose Flowers have Ten Stamina joined in Two Bodies.

The Specie here represented, is,

SCORPIURUS *pedunculis subtrifloris, leguminibus extrorsum spinis distinctis acutis*, *Lin. Sp. Plant.* 745. Caterpillar with Three Flowers on a Footstalk, and the Outside of the Pods armed with acute Spines which are distinct. This is the *Scorpioides bupleuri folio*, *C. B. P.* 287. Caterpillar with a Hare Veal Leaf. *Dodonaus* titles it, *Scorpioides prius*, *Pempt. yi*. The first Caterpillar.

This Plant grows naturally in *Spain, Sicily*, and other warm Parts of *Europe*; but has been cultivated in the *English Gardens* by way of Curiosity, rather than any Beauty; the Pods, when green, having in much the Appearance of Caterpillars, that many People have taken them for such, feeding upon the Plant.

It is an annual Plant, the Root is composed of many

Fibres, which are long, slender, and of a yellowish Colour. The Stalks are herbaceous, and spread on the Ground; they are a Foot and Half long, succulent and thick, and are garnished with pretty thick Leaves* having long Footstalks which are bordered; the Leaves are Two Inches long and Three Quarters broad, ending with an obtuse Point, and have short Hairs over their Surface. From the Wings of the Stalk come out the Footstalks of the Flowers, which are Eight or Nine Inches long, very slender, subtaining at the Top Three yellow Flowers of the Butterfly or Pea-bloom Kind, which are succeeded by slender contorted Pods, which have a few distinct short Spines on their outer Side. They are first green; and, before they are twisted, have the Appearance of green Caterpillars, so that they have been frequently taken for those Insects feeding upon the Plants.

It flowers in *June* and *July*, and the Seeds ripen in the Autumn. It is called *Scorpiurus*, from the Pod having the Resemblance of a *Scorpion's Tail*

P L A T E CCXXXI.

SCROPHULARIA, *Tourn. Itift. R. H.* 166. *Tab.* 74. *Rait Method. Plant.* 89. *Lin. Gen. Plant.* 674. Figwort, In *French, Scro/ulaire*.

The Characters of this Genus are,

The Empalement of the Flower is permanent, of One Leaf cut into Five Parts a, which are short and roundish; the Flower hath One, unequal Petal, having a large globular Tube which is swollen: The upper Part is cut into Five Segments; the Two upper Segments b are large and erect, the Two Side-ones c are spread open, and the lower is reflexed; it hath Four short slender Stamina, which are deflexed, Two being shorter than the other, terminated by twin Summits, and an oval Germen d, supporting a slender Stylet, crowned by a single Stigma. The Germen afterwards turns to a roundish, acute, pointed Cap/ule f, having Two Cells g, opening at the Top with Two Valves, and divided by an intermediate Partition, filled with small Seeds /aftened to the roundish Receptacle i.

THIS Genus of Plants is ranged in the Third Section of *Tourne/orfs* Third Class, which includes the Herbs with an anomalous Flower of One Petal, spreading on both Sides.

Mr. *Ray* places it in the Second Section of his Nineteenth Class, in which is contained the Herbs with an irregular or difformed Flower of One Petal, whose Seeds are included in Capfules.

Doctor *Linnaeus* ranges it in the Second Section of his Fourteenth Class, which includes those Plants whose Flowers have Two long and Two short Stamina, and the Seeds are included in Capfules.

The Specie here represented is,

SCROPHULARIA */oliis difformibus glabris, pedimculis axillaribus aggregatis*. Figwort with difformed Leaves which are smooth, and Footstalks growing in Clusters from the Wings of the Stalk. This is the *Scrophularia Hispanua, Sambuci folio glabro, Tourn. Injt.* 166.

Smooth Alder-leaved Spanish Figwort. And the *Scrophularia Sambuci /olio, Park. Theat.* 611. Alder-leaved Figwort. Doctor *Plukenet* titles it, *Scrophularia Sambuci /olio, /lore rubro luteo vario pulchro, Aim.* 388. Figwort with an Alder Leaf, and a red-yellow and variable Flower.

This Plant grows naturally in *Spain* and *Portugal*; and in the latter there is another Sort like this, but it is much larger, the Leaves and Stalks are hairy, and the Flowers of a paler Colour, which has been often confounded with this; but I have cultivated both Sorts more than Thirty Years, and have not found them alter.

The Roots of this Plant grow very thick at their Crown, and have many strong Fibres of a dark Colour, which strike deep in the Ground, from which arise several four-corned Stalks about Two Feet and a Half high, sending out a few short Side Branches toward the Bottom. They are garnished with Leaves at each Joint, placed opposite, which are of irregular Figures: They have several Lobes like winged Leaves, of different Sizes, terminated by an odd one; these are irregularly fawed on their Edges, ending in acute Points: Their Surface is smooth, of a lucid green, but their under Side is paler. They have pretty long Footstalks, and, when they are bruised, have a strong Scent of Alder. The Flowers come out from the Side of the Stalk at each of the upper Joints in Clusters, each standing upon a separate slender Footstalk, and have the Appearance of whorled Flowers. They have some Resemblance to the Lip Flowers, having a short swelling Tube, of an irregular Shape, cut at the Top into Five irregular Segments; the Two upper are the longest, these stand erect; the Two Side ones are broad and spread open, and the lower is short and reflexed. They are variable, having some red, yellow, and green Spots in each; so that when the Plants are strong and thriving they make a good Appearance. This flowers the latter End of *May* and the Beginning of *June*, and the Seeds ripen in *August*. The Roots will last Two or Three Years with Care.



SOPHORA foliis oppositis pinnatis pubescentibus aggregatis

Sophora japonica Linn. Sp. Pl. 1258. Fig. 1501.



Securidaca burseri C.B.P. 256

Spinae unius et alterius speciei hujus generis C.B.P. 256

1827-28

Handwritten notes in the upper left corner, possibly identifying the plant or artist.



Handwritten notes in the lower left corner, possibly describing the plant's characteristics or the artist's observations.

BRUCEA, African plant near Shoreland

Painted by J. Smith in the year 1815

P L A T E

CCXXXII

SECURIDACA, *Tourn. Inji. R. H. 399. Tab. 224. Rail Meth. Plant. \o\$. Coronilla, Lin. Sp. Plant. 743. Hatchet-Vetch.*

The Characters of this Genus are,

The Flower has a Jhort permanent Empalement of One Leaf indented in Four Parts at the Brim a; the Petal is of the Butterfly Kind b; the Standard is Heart-Jbaped > and but little longer than the Wings; the Two Borders are reflexed. The Wings are oval, ereEt > and draw toward each other; the Keel is comprjfed^ and a little JJoorter than the Wings. The Flower has Ten Stamina Nine of which c are joined^ and One dftands feparate. They rife almoft in a right Angle\ and ere terminated by obtufe Summits. It hath a taper Germen e, fupporting a floort Style crowned by an obtufe Stigma. The Germen afterward turns to a long comprjfed Podi^ having a plain Suture on one Side, but narrow on the other, ending in an acute Pointy opening with Two Valvesff, having a longitudinal Partition g, and divided into Joints h, each containing One fquare Seedi.*

THIS Genus of Hants is ranged in the Third Section of *Tourwffit's* Tenth Clafs, which includes the Herbs with a Butterfly Flower, whole Pointal turns to a jointed Pod.

Mr. *Ray* places it in the Second Section of his Twenty-first Clafs, which contains the leguminous Herbs with fingle-jointed Pods. Dodtor *Linnaus* joins this Plant to his Genus *Coronilla*, which is ranged in the Third Section of his Seventeenth Clafs, which includes thofe Plants whose Flowers have Ten Stamina joined in Two Bodies.

The Specie here reprinted is,

SECURIDACA ~~lutea~~ ~~major~~ C. B. P. Greater yellow

Hatchet-Vetch. This is the *Securidaca vera*, *ClufJ Hijl. 236.* The true Hatchet-Vetch. *John Bauhin* titles it, *Securidaca fiore luteo > filiqua latd oblongd, Hijl. 2. 245.* Hatchet-Vetch with a yellow Flower, and a broad oblong Pod. Do&or &nn*us titles it, *Coronilla herbacea^ legumibus fakato-gladdtatis, Hort. Clifff. 363.* Herbaceous jointed-podded Colutea, with Sickle Sword- fliaped Pods.

This is an annual Plant which grows naturally amongfl: the Corn in *Spain*, but is frequently cultivated in Gardens for the fake of Variety. The Root is compofed of a few flender Fibres, which run pretty deep in the Ground, from which come out feveral Stalks a Foot and a Half long, which divide into feveral Branches, and lie upon the Ground. Thefe are garnilhed with fmooth winged Leaves, compofed of Seven or Eight Pair of Lobes, terminated by an odd one; the innermoft Lobes are the largeft, the other dioiinifhing in their Size to the End; thefe are oval, obtufe, and indented at their Points, and clofe together every Evening, or in wet Weather. The Footftalks of the Flowers arife from the Wings of the Leaves •, they are flender, Four or Five Inches long, and fuffain feveral yellow Flowers, growing in a Kind of Umbel at the Top; they are of the Pea-bloom Kind, and appear in *July*. They are fucceeded by comprjfed Pods near Four Inches long, having a plain Suture on one Edge, but the other is fharp; ending in an acute Point; thefe are a little bent like a Sickle, but are fhaped like a Broad Sword. They have feveral Joints, which are feparated by thin Partitions, in each of which is lodged One fquare Seed; the Pods open with Two Valves lengthways. It has this Title from the Shape of the Seeds, which are like the *Sturis* of the Antients.

P L A T E

CCXXXIII

SENECIO, *Boerh. Ind. alt. 117. Conyza, H. L. 661. Tourn. Inji. R. H. 455. Tab. 259. Groundfel.*

The Chara&ers are,

The Empalement of the Flower a—a is concealed and fealy. The Scales are placed over each other, like thofe of Fifth, and have no Spines at their Ends. The Flower is compofed of feveral Floretsh, which are longer than the Empalement. Thefe are tubukus and FunneLJhaped c and d, and their Brim is cut into Five Segments which jpread open i. The hermaphrodite Florets have an oval Germen d, crowned V&th Down t, fupporting Two flender Styles the Length of the Petal, crowned by oblong erett Stigma's. They have Five very Jhort Stamina h, fiituaied within the Tube of the Flower•, terminated by oblong Summits. The Germen afterward turns to an oval Seed d, crowned with long Down.

THIS Genus of Plants is ranged in the Second Section of *Tourneforfs* Twelfth Clafs, which includes the Herbs with a flofculous Flower, whose Seeds are crowned with Down.

Mr. *Ray* places it in his Seventh Clafs, which contains the Herbs with a difcous Flower and downy Seeds,

Indeed this Plant, by its Chara&ers, feems to be yj^^-neris^ for it differs in feveral Things from the *Senecio* according to *Linnaus's* Syftem, tho' it comes the neareft to that and the *Baccharis* of any of his Genera, which induced me to place it there; but as moft of the Flowers are hermaphrodite, and thefe have Two Styles, the few that^ are male are very fmall, and are intermixed with the hermaphrodite Florets, fo in thefe refpedts it differs from the *Senecio*.

The Plant here reprinted is,

SENECIO *Africanus, folio retufo, H. Cath.* African Groundfel with a blunt-pointed Leaf. This is the *Conyza Africana^ Senecionisfiore\ reuijis foliis* H. L. Tourn. Inft.R. H. 455.* African Fleabanejwith a Groundfel Flower and blunt-pointed Leaves; and is probably the *Pfeudohelichryfum frutescens, Africanum, retufis foliisviridibus, fiore luteo nudo, Mor. Hifi. 3. 90.* Shrubby African bafnard Goldyllocks, with green blunt-pointed Leaves and a naked yellow Flower.

This Plant grows naturally at the *Cape of Good Hope*, but has been long cultivated in the curious *European* Gardens.

Gardens. It is a perennial Plant, having a thick fibrous Root, from which arise several herbaceous hairy Stalks, near Four Feet high, which put out several Side Branches, and are garnished with hairy Leaves about Two Inches long, and a Quarter of an Inch broad toward their Points, where they are broadest, diminish gradually to their Base, where they are narrowed, and fit close to the Stalks. They come out from the Side of the Stalk and Branches in Clusters, several of them rising from the same Point, and without Order on every Side. They are of a deep Green on their upper Side, and pale on their under, continuing all the Year. The upper Part of the Stalk divides into several Footstalks, each of

which is terminated by a Sort of Umbel composed of golden Flowers, these are of the compound Kind, having many hermaphrodite Florets, included in One common Empalement which is fealy: These appear late in the Autumn, and continue in Beauty all the Winter, fading in the Spring, and are sometimes succeeded by oval Seeds crowned with Down, which ripen in *England*.

The Stalks of this Plant generally decay the Second Year, which are supplied by new which come from the Root; so that until the young ones are grown to a good Height, the old remain with their green hairy Leaves in Vigour.

P L A T E CCXXXIV.

SERRATULA, *Bill. Nov. Gen.* 8. *Hort. Elth.* 261—264. *Raii Meth. Plant.* 40. *Lin. Gen. Plant.* 831. Saw-wort.

The Characters of this Genus are,

The common Empalement of the Flower is imbricated, cylindrical, and bellied. The Scales are Spear-shaped, acute-pointed and unarmed. The Flower is composed of several hermaphrodite Florets, which are uniform and equal; these are of One Petal Funnel-shaped, and the Brim is cut into Five Segments, which spread open they have Five short Hair-like Stamina, terminated by cylindrical Summits, which coalesce. The Germen is oval and crowned, supporting a long slender Style, crowned by oblong Stigma's. The Germen afterwards turns to a single Seede crowned with Down fitting in the Empalement.

THIS Genus of Plants is ranged in Mr. Ray's Ninth Class, which includes the Herbs with a compound Flower collected into Heads, whose Florets are long, and cut into Segments.

Doctor *Linnaeus* places it in the First Section of his Nineteenth Class, which contains those Plants whose Flowers are composed of hermaphrodite or fruitful Florets, and their Stamina and Style are connected.

Tournefort places the Species of this Genus under his Genus of *Jacea* or Knapweed, which is ranged in the First Section of his Twelfth Class, which includes the Herbs with Flowers composed of several Florets.

The Species here represented is,

SzRKATVLAfoliis lanceolatis Oblongis ferratit patentibus Siftibus bifutis, Lin. S. Plant. 818. Saw-wort with Spear-shaped oblong fawed Leaves, which spread out, and

are hairy on their Under-side. This is the *Serratula praeda, angustifolia plantaginis aut perfoliata, Bocch. Musc.* 2. p. 45. Tab. 32, called Saw-wort with a narrow Plaintain or Peach-tree Leaf. *Tournefort* titles it, *Jacea nemorensis altissima, Perfoliata, Inft. i. H.* 444. Tallest Wood Knapweed with a Peach-tree Leaf, p. 1. Doctor *Dillenius* calls it, *Serratula Virginiana, perfoliata foliis fubtus incano, Hort. Elth.* 356. Virginia Saw-wort with a Peach-tree Leaf, hoary on the Under-side.

This Plant grows in *Virginia, Carolina, Pennsylvania,* and most other Parts of *North America*. It hath a large perennial Root, composed of many strong Fibres, which strike deep into the Ground; the upper Part of the Root is formed into Heads, which become ligneous, and are closely joined together, and by Age grow to a large Size, from which come out several strong herbaceous Stalks of a purplish Colour, which in good Ground rise to the Height of Seven or Eight Feet. These are garnished with Spear-shaped oblong Leaves, about Three Inches long, and One broad in the Middle, drawing to a Point at each End. They are of a deep Green on their upper Side, and a little hoary on their under, fawed a little on their Edges, and fit close to the Stalk, (landing on every Side without Order, and spread open horizontally. The Stalks are terminated by loose Bunches of Flowers (landing erect, almost in Form of an Umbel, each (landing upon a slender Footstalk Two or Three Inches long. They are composed of several hermaphrodite Florets of a purple Colour, fitting in One common fealy Empalement. These appear in *August*, and, if the Autumn proves warm and dry, they are succeeded by Seeds which sometimes ripen in *England*. The Stalks decay in Winter, and new arise in the Spring; but the Roots will continue several Years, and, as they increase in Size send up a greater Number of Stalks.

/'L./yrur/r



VIXADO



SERRATILIA, foliis lanceolatis... jarrj* pti/timij stufa, i stit-... Lin. sp. plant. 818.

L. Miller delin. et sculp.

Sp. plant. in herb. Mus. Mart. May 22. 1758.

[Faint handwritten notes in the right margin, possibly including the name 'Serratilia']



Fig. 1. *GLADIATA*, foliis linearibus setosis, floribus albis, pediculis erectis.

Fig. 2. *GLADIATA*, foliis linearibus setosis, floribus variegatis, pediculis erectis, tubo floribus longioribus.

Tab. 100. 100.

Descriptio auctoris a. 1753. p. 100. Tab. 100. 100.

In this Number we have taken the Liberty to exhibit the Figures of some Plants which have been lately introduced into the English Gardens from the Cape of Good Hope. As these Plants are new, and have not been figured in any of the Botanic Books, so we hope, their Representation here will be agreeable to our Subscribers; and although they break into the Order we proposed at our first setting out, yet we are in hopes we shall be excused in this Digression.

P L A T E CCXXXV.

GLADIOLUS, *Tourn. Inf. R. H. 365, Tab. 190. Raii Meth. Plant. 117. Lin. Gen. Plant. \$\$\$* Cornflag; in French, Glaieul.

The Characters of this Genus are,

The Flower is inclosed in a vague Sheath a; // hath One Petal, which is cut into Six Parts at the Top b; the Three upper Segments are near together c; the Tube is incurved*, and the Three under spread open. It has Three Stamina, represented at d, terminated by oblong Summits. The Germen is situated under the Flower, supporting a long tender Style e, crowned by a trifid Stigma. The Germen afterwards becomes an oblong Capful, which is bellied in the Middle, represented at i; which is Three-cornered, opening with Three Valves, as at f, having Three Cells, represented at g, which are filled with roundish-bordered Seeds h.

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Ninth Clafs, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whose Empalement becomes the Fruit.

Mr. *Ray* places it in the Second Section of his Twenty-third Clafs, which contains the Grass-leaved flowering Plants of One Petal, cut into Six Parts, which fit on the Top of the Fruit.

Doctor *Linnaeus* ranges it in the First Section of his Third Clafs, which includes those Plants whose Flowers have Three Stamina and One Style.


The Species here represented 

Fig. 1. GLADIOLUS, *foliis linearibus fulcatis, floribus alternis details acutioribus*, Cornflag with linear furrowed leaves, and acute segments to the Petals of the Flower.

This Plant hath a bulbous Root, represented at k, from which come out Two or Three narrow Leaves, a Foot and half long, having a longitudinal Furrow in the Middle, and ending in acute Points. They are of a deep Green, and stand erect. Between these arise a slender taper Stalk, about the same Length as the Leaves, having One or Two short acute-pointed Leaves on the lower Part, whose Base embraces the Stalk. The upper Part is garnished with Flowers, which are placed alter-

nate, at a Distance from each other* coming out of a Spatha, or Sheath, which also embraces the Stalks with their Base. These Spathae are permanent, drying upon the Stalk, and inclosing the Capful after the Flower is past. The Tube of the Flower is curved downward, and not so long as most of the other Species. The upper Part is cut into Six acute Segments, which are nearly equal in their Size. The Flower is of a pale yellow or sulphur Colour; the Stamina are long, erect, and are terminated by long pyramidal Summits of a dirty White; the Style is slender, and terminated by a trifid reflexed Stamina. The Germen, after the Flower fades, swells to an oblong bellied Capful with Three Corners, having Three Cells, which open with Three Valves, filled with roundish bordered Seeds. It flowers the End of *May*, and the Seeds ripen about Six Weeks after.

Fig. 2. GLADIOLUS *foliis linearibus fulcatis, floribus unis versu difpositis, tubo floris longiore*. Cornflag with linear furrowed Leaves, and Flowers ranged on one Side the Stalk, which have longer Tubes.

This hath a bulbous Root like the former; the Leaves have also a great Resemblance to those of the other Sort; the Stalk is slender, and has more Leaves upon it than the former, and is embraced by their Base. The Flowers are ranged on one Side the Stalk towards the Top, standing pretty far asunder. The Spathae, or Sheaths, which inclose the Flowers, are long, of One Leaf opening on one Side, and are permanent. The Flower is curved; the Petal is cut almost to the Bottom into Six Parts or Segments, which are almost of equal Size, and end in blunt Points; the lower Segments turn downward, the upper are erect and spread open. The Flower is of a pale bluish Colour, approaching to White; each Segment is marked with a broad purple Line in the Middle, which is divided. The Three Stamina are situated near the lower Segment of the Petal; these are terminated by purple oblong Stamina, which are erect. The Style is of the same Length with the Stamina, and is crowned by a trifid reflexed Style. The Flowers of this Sort have an agreeable Odour. They appear the latter End of *May*, and the Seeds ripen in *July*. Both these Plants were raised in the *Chelsea* Garden, from Seeds which came from the *Cape of Good Hope*, and have this Year produced their Flowers.

P L A T E

GCXXXVL

Fig. 1. GLADIOLUS *foliis linearibus phnis, fpatha glabra acutiore*. Cornflag with plain linear Leaves, and a smooth acute-pointed Sheath to the Flower.

THIS hath a flattened bulbous Root, covered with a netted Skin, represented at *k*. The young Bulbs, or Offsets, are formed at the Extremity of the Fibres, which is contrary to all the other Species of this Genus. The Leaves are Fifteen Inches long, but are very narrow and plain, ending in acute Points. They are of a light Green, and (land erect) The Stalk rises between the Leaves, and is nearly of the same Length. This is crooked at each Joint, where there is situated a short plain acute Leaf, embracing the Stalk with its Bafe. The Flowers come out of smooth acute pointed Sheaths, marked *a*, which are permanent, and cover the upper Side of the Tube of the Flower; and, when that decays, become a Cover to the Capfule. The lower Part of the Tube is narrow, the Chaps are swollen, and the upper Part is cut into Six Segments; the Three outer Segments are long, and broader than the other, as is represented at *b*. These form the Standard, and are reflexed backward, spreading from each other. The Two Side Segments *r*, are narrow and spread open; they have a yellow Mark at their Bafe, tipped with a bright Purple. The middle or lower Segment is broader than the Two Side, and in the Bottom of this is situated the Stamina and Style. The Three Stamina, shewn at *d*, are crooked in the same Form as the Tube of the Flower; they are short, of a pale Flesh Colour, and are terminated by oblong Summits, represented at *e*, which are fattened in the Middle to the Apex of the Stamina. The Style is longer, and is crowned by a trifold reflexed Stigma, shewn

at *f*. The Flower is of a pale Flesh Colour, and appears in *May*; when that decays, the Germen falls to an oblong Three-cornered bellied Capfule, represented at *b*, having Three Cells, as is shewn at *g* filled with roundish bordered Seeds *z*, which ripen the End of *June*. This Plant is also a Native of the *Cape of Good Hope*, and was raised from Seeds in the *Chelsea* Garden.

Fig. 2. *Ixia A foliis linearibus glabris, caule foliolo bulbifero*. *Ixia* with smooth linear Leaves, and a leafy Stalk bearing

The Characters of this Genus, and the Class in which it is ranged, having been exhibited in a former Number, we shall not repeat it here.

The Root of this Plant is bulbous, and has a netted Coat; the Stalk rises a Foot and half high, and is garnished with plain smooth Leaves at each Joint, whose Bafe embraces the Stalk. They are of a lucid Green, and differ greatly in their Size. The Flowers are produced toward the Top of the Stalk, each having a short withered Spatha, or Sheath, which divides on both Sides, and is permanent. The Flower has Six Spear-shaped Petals, of equal Size, which spread open, and end in acute Points; they are white within, having a pale purplish Stripe down the Middle, but they have broad deep purple Stripes on their Outside. Their Bafe is marked with a yellow Spot. There are Three Stamina in the Middle, which are terminated by oblong yellowish Summits, and a trifold Style, which is reflexed. The Stalks have Bulbs formed at each Joint at the Bafe of the Leaves, which, when planted, becomes a new Plant. It flowers in *May* and the Stalks decay in *June*.

P L A T E

CCXXXVII.

Fig. 1. *Ixia A foliis gladiolatis nervosis fpatha lacera*. *Ixia* with sword-shaped veined Leaves, and a torn Sheath to the Flower.

THIS hath a bulbous Root, with a fibrous Cover, from which rises a Stalk about Five or Six Inches high, garnished with sword-shaped Leaves, about Four Inches long and half an Inch broad, having several longitudinal Veins. They are of a pale Green, broad at the Top, and end in acute Points. These embrace the Stalks with their Bafe. The Stalk is bent at each Joint, and is terminated by Two or Three Flowers Handing at a little Distance from each other. These have a permanent Emplacement, which seems torn into several narrow Segments, as is represented at *#*, which wither, and lie over the Seed Vessel after the Flowers fade. The Flower is composed of Six obtuse Petals, equal in Size, as is shewn at *b*. They are of a beautiful Purple on their Outside, but are white within. They have Three short Stamina, represented at *r*, terminated by oblong Summits fattened in the Middle to the Apex of the Stamina, and a long Style, marked *d*, crowned by a trifold reflexed Stigma *e*. After the Flower is past, the Germen turns to an oval Capfule *l*, having Three Furrows, and divided by Partitions into Three Cells, as is shewn at *k*, which open with Three Valves *h*, and are filled with roundish Seeds, *i* and *k*. This flowers the Beginning of *May*, and the Seeds ripen in *June*.

Fig. 2. *Ixia A foliis gladiolatis glabris, fpatha brevior quinquefido*. *Ixia* with smooth sword-shaped Leaves, and a short five-pointed Sheath to the Flower.

The Root of this Plant is bulbous and smooth; the Stalk rises Four Inches high, and is garnished with

smooth sword-shaped Leaves near Four Inches long, whose Bafe embraces the Stalks. They are broad at the Top, but have an acute Point at the End. The Stalk is terminated by Two large Flowers, composed of Six Petals, equal in Size, which spread open, and are obtuse. The Outside of the Petals is of a Violet Colour, edged with White; the Inside is of a pale Blue. They have Three Stamina and One Style, like those of the other Sorts. It flowers in *May*.

Fig. 3. *Ixia A unifloro*. *Ixia* with smooth sword-shaped Leaves, and a Stalk with One Flower.

This hath a flattened bulbous Root, covered with a rough Coat, from which come out Five or Six sword-shaped smooth Flowers: Some of these are Five or Six Inches long, but others are not more than Three; they are narrower at their Bafe, but broader toward their Ends, which are acute pointed. The Footstalk of the Flower is naked about Four Inches long, arising immediately from the Root, and is terminated by One Flower, whose Sheath is torn, withered, and situated at a small Distance below the Flower, encompassing the Germen. The Petals of the Flower are spear-shaped, ending in Points. They are of a most beautiful purple Colour both within and without. The Stamina are short, but the Summits, which are fattened to their Apices, are long, and of a dirty white Colour. The Style is much longer, and is crowned by a trifold Stigma, which is reflexed. It flowers towards the End of *May*.

These Plants were raised from Seeds in the *Chelsea* Garden, which were brought from the *Cape of Good Hope*.



Fig. 1. GLADIOLUS foliis lanceolatis planis apicibus glabris acutis.
 Fig. 2. IXIA foliis lanceolatis glabris acutis foliis bulbiferis.

Illustratio in herb.

Specieses narrantur a Dr. J. P. Miller. Icon. 27. 1738.



Fig. 1. *Folia glaberrima* variegata speciosa linn.
 Fig. 2. *Folia glaberrima* glaberrima speciosa linn. quadrifida.
 Fig. 3. *Folia glaberrima* glaberrima, cauli proflera.

L. Koenig del. & sculp.

procedit auctoritate et studio Joh. J. de Ponce, anno 1774.



Fig. 1. *MOXA*, *Sp. liliiflora*, var. *plumbea*, floris. *MOXA*, *Sp. liliiflora*, var. *plumbea*, floris.

MOXA, *Sp. liliiflora*, var. *plumbea*, floris. *MOXA*, *Sp. liliiflora*, var. *plumbea*, floris.



*Pyramnia frutescens foliis glaberrimis calice florum
 Pyramnia frutescens calice florum longioribus*

quod in ...

P L A T E

CCXXXVIII.

MORE A.

The Characters of this Genus are,

It hath an oblong acute pointed Spatha, or Sheath, which is permanent and composed of Two Leaves a. The Flower has Six spear-shaped Petals, which spread open, plain, and are connected at the Base. These are alternately larger than the other c, It has Three erect bifid Petals, which encompass the Stamina and Style d; and Three very short Stamina terminated by oblong Summits, which are erect. The Germen is fixated under the Flower b, and supports a short Style e, crowned by Three bifid Stigmas f, f, f. The Germen afterwards becomes an oval Capsule g, having Three longitudinal Furrows, and divided into Three Cells h, which open with Three Valves i and k, and are filled with roundish Seeds l.

I have taken the Liberty of constituting this Genus of Plants, and applying of this Title to it, in Honour of Robert More, Esquire, of Shropshire, who is a very teamed Gentleman, and well acquainted with most Branches of Natural History, particularly with Botany.

This Genus, according to Linnæus's System, must be ranged in the First Section of his Third Class, which includes those Plants whose Flowers have Three Stamina and One Style: And, by Tournefort's Method of classing the Plants, it must be placed in the Second Section of his Ninth Class, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whose Emplacement becomes the Fruit.

The Species here represented are,

Fig. i. MORE A *spatha biflorâ, caule planifolio, floribus minoribus.* Morea with Two Flowers in each Sheath, plain Leaves on the Stalk, and smaller Flowers.

This Plant hath a bulbous Root* flipped like that of the *Crocus*, represented at *m*, which is renewed annually; the young Root being formed on the Top of the old one; which decays when the Stalk and Leaves die away. The Stalk rises about a Foot high; it is taper, is of a Purple Colour at the Bottom, and is garnished with narrow plain Leaves, which embrace the Stalk with their Base.

They are more than a Foot long, and Half an Inch broad at their base, ending in acute Points, represented at *n*, of a deep green Colour, and flaccid. The Flowers are produced at the Top of the Stalks** coming out of a Two-leaved Sheath, flown at *a*, which is smooth and acute-pointed. Two Flowers are contained in each. The Footstalk of the Flower rises above the Sheath, sustaining an oblong Germen *b*; upon which fits the Flowery which is composed of Six Petals, marked *c*, or of One Petal cut into Six Parts to the Bottom, where they seem corine&ed. These are spear-shaped, every other being larger than the intermediate ones. They are of a faded blue Colour, and the Tail of each has a spatule-shaped yellow Spot, with several dark Points. These Petals spread open flat, and in the Middle of the Flower there are Three small Petals or Flower Leaves, (standing erect) which are cut at the Top into Two acute Segments, as is shown at *d*. They encompass the oblong Germen *e*, upon which is a short Style, crowned by Three bifid Stigmas, represented *f, f, f*. These spread out from each other, and are almost of the same Colour with the Petals. After the Flower is past, the Germen becomes an oval Capsule *g*, having Three deep longitudinal Furrows, and divided into Three Cells as is shown at *h*, which open with Three Valves *i*, and are filled with roundish Seeds *k* and *l*. The Flowers appear the Beginning of *May*, and the Seeds ripen in *June*.

Fig. 2. *Morea spatha uniflorâ, caule planifoliâ, floribus majoribus.* Morea with One Flower in each Sheath* a Stalk with a plain Leaf, and larger Flowers.

The Root of this is like that of the former; as are also the Stalks and Leaves; but the Stalk is green to the Bottom; The Flowers come out single from each Sheath, and are larger than those of the other Sort. They are of a worn-out Purple Colour, and each Petal has a large yellow Spot near the Tail. In these Particulars their Difference chiefly consists. It flowers about the same time with the former.

Both these Plants grow naturally at the *Cape of Good Hope*, from whence their Seeds were brought, which succeeded in the *Chelsea Garden** where the Plants have lately flowered.

P L A T E

CCXXXIX.

Fig. i. MOREA *spatha uniflorâ, foliis gladiolatis, radice fibrosa.* Morea with one Flower in each Sheath, sword-shaped Leaves, and a fibrous Root.

THIS Plant also grows naturally at the *Cape of Good Hope*. The Seeds of it were brought from thence by the Title of *White Water Lilly*. These succeeded in the *Chelsea Garden*, where the Plant has flowered.

The Root of this is composed of many thick Fibres, which run downward; from which arise sword-shaped Leaves, which embrace each other at their Base, but spread out above. They are disposed, like those of the common *Flag Iris*, into flat Heads or *Offsets*, and are of a deep Green, about Six or Seven Inches long, and Half an Inch broad at Bottom, terminating in acute Points, as is shown at *h*. The Stalk rises about a Foot high, and is garnished at each Joint with One small acute-pointed

Leaf, which embraces the Stalk with its Base, and grows erect, as is represented at *l*. The Stalk is terminated by a single Flower, coming out of a smooth sharp-pointed Sheath *a*. It is composed of Six oval spear-shaped Petals or Segments, which are equal in Size, and spread open flat. They are of a dirty White, with a Shade of Sky-blue, and have a sulphur-coloured Spot near their Tail, represented at *b, c*, and *d*. In the Centre of these arise Three forked Petals, which stand erect, as *e, f, g*, of a bluish Purple Colour. These encompass the Stamina and Style, which are fattened to their Tails, as is shown at *e*; Two of which are represented spread out at *l*, to show them distinctly. There are Three of these Stamina, which are short, slender, and are terminated by oblong Summits. The Germen, which is situated below the Flower, supports a very short Style, which is crowned by a trifid erect Stigma. After the Flower

fades, the Germen becomes an oblong Three-cornered Capfule, having Three Cells, which are filled with roundish Seeds. It flowers in *June*, and the Seeds ripen

Fig. 2. IXIA *plamfolia, caule multifloro, spatha breviffima.*
Ixia with a plain Leaf, a Stalk with many Flowers, and the shortest Sheath to the Flower.

This Plant was raised in the *Chelfea* Garden from Seeds which were brought from the *Cape of Good Hope*. It hath a small compressed bulbous Root, having a smooth dark-coloured Coat, from which arise several plain smooth Leaves of different Lengths; some are Four or Five Inches long, others Seven or Eight; their broadest Part is near Half an Inch, but they are narrow at both Ends, and terminate in Points. The Stalk rises between the Leaves to about Five Inches high. It is crooked at the Joint, where there is a small Leaf, whose Base embraces it. The Flowers are produced at the Top

of the Stalk. They have each a very short withered Spatha or Sheath, which divides into Two Parts, as is represented at *a*. The Tube of the Flower is short and swelling; the Petals are broad and obtuse, as is shewn at *b*; these spread open, and are equal in Size and Position. They are of a bright Orange or Gold Colour, and are connected at their Base. When the Sun shines on the Flowers, they reflect strongly the Rays; so that the Sight is thereby dazzled. In the Centre of the Flower; is situated the Stamina and Style, as is represented at *c*. There are Three slender Stamina in each, as is shewn at *l*, which are terminated by oblong cylindrical Summits *g* which stand erect, and their Base fits upon the Top of the Stamina. The Style is longer than these, and is crowned with a trifid Stigma, which spreads open Three Ways. The Germen, which is situated under the Folyer; is afterwards changed to an oval Capfule with Three Cells, filled with roundish Seeds. It-*fc*¹.ve^Wⁿ *June*, and the Seeds ripen in *July*.

P L A T E CCXL

BITLBOCODIUM* *Tourn. Cor. Inft. 50. Crocus Lin. Gen.*
53.

The Charadlers of this Genus are,

The Flower has a small one-leaved Empalement, which soon falls off. The Flower is of One Petal, cut into Six Segments almost to the Bottom; these are acute-pointed b, equal in Size, and spread open like a Star. It has Three short Stamina c and d, which are terminated by oblong erect Summits, and a roundish Germen a, situated under the Flower supporting a slender Style, which is longer than the Stamina, crowned by Three bifid reflexed Stigmas e. The Germen afterwards becomes an oval Capfule with Three Cells, filled with roundish Seeds.*

THIS Genus of Plants belongs to the Second Section of *Tournefort's* Ninth Clafs, which includes the Herbs with a Lilly Flower of One Petal, cut into Six Parts, whose Empalement becomes the Fruit.

Dofor hinnaus has joined this Genus to the *Crocus*, which is placed in the First Section of his Third Clafs, which contains those Plants whose Flowers have Three Stamina and One Style: But the Flowers of this Genus fitting upon the Germen, and the Petal being divided to the Bottom, having no Tube, are sufficient Characters to separate this Genus from the *Crocus*.

The Specie here represented is,

BULBOCODIUM *pedunculis nudis unifloris, foliis subulatis linearibus longiffimis.* Bulbocodium with naked Footstalks, having One Flower, and linear awl-shaped Leaves, which are very long.

The Seeds of this Plant were brought from the *Cape of Good Hope*, where it grows naturally. These have succeeded in the *Chelfea* Garden, and the Plant has there produced Flowers. The Root is bulbous, of an oval Figure, and covered with a smooth Skin, as is represented at *h*. The Leaves are very long and narrow; they are Three-cornered, but their upper Surface is flat, and the under has an acute Angle running longitudinally through the Middle. They stand erect, and between them come out the Footstalks of the Flowers, which are about Two or Three Inches long. They are taper, erect, and naked, terminated by One Flower fitting upon the Germen *a*, which is oval and smooth. The Flowers are of One Petal, according to *Mr. Ray* and *Tournefort*, because they are joined together at the Bottom; but they are cut into Six Segments almost to the Bottom, which end in sharp Points, as is shewn at *b*. These spread open in the Day, but (hut up every Afternoon, when the Sun leaves them. They are of a light Purple Colour, with a blue Circle within on the Top of their Tails, which are of a pale Yellow within, represented at *£*. In the Centre of the Flower are situated the Style and Stamina. There are Three of these Stamina, which are represented at *d, d, d*. They are short, and are terminated by oblong erect Summits of a yellow Colour. These are magnified, but at *c* is One of the natural Size. The Style, which is longer than the Stamina, is crowned by Three bifid Stigmas, which are reflexed \ One of which is represented, of the natural Size, at **-*, and at *l, l*, they are magnified. After the Flowers fade, the Germen becomes an oval Capfule, with Three Cells filled with roundish Seeds. The Flowers appear in *May*, and, before they decay, they turn of a faded blue Colour.



Elyogonum pulchellum var. *inflorifolium* foliis longioribus.

Herbarium of the University of Cambridge, June 27, 1798.



Saxifraga folia gelata Hort. Cliff. 237.

prosp. univ. in the Herbarium of J. B. de Jussieu



CYPRIPEDIUM *pubescens* (L.) Link.

Spores and seeds of the genus Cypridium, July 18, 1840.

P L A T E CCXLI

SARRACENA, *Tourn. Inft. R. H. 65j. Tab. 476. Lin. Gen. Plant. 578.* Sidefaddle-flower.

The Characters of this Genus are,

The Flower has a double Empalement: The under one a, is composed of Three fmall Leaves', which fall off the upper b, is composed of Five large coloured Leaves, which are almoft oval, and drop off. It has Five oval inflexed Petals c, which cover the Stamina, whose Tails are oblong-oval, and a great Number of fmall Stamina e, terminated by Jingle Summits, with a roundish Germen f, fupporting a fhort cylindrical Style, crowned by a target-floaped five-cornered Stigma d and g, which covers the Stamina, and is permanent: The Germen afterwards turns to a roundiffo Capfule, divided into Five Lobes h, having Five Cells, filled with fmall roundifh Seeds i, which end in acute Points.

THIS Genus of Plants is ranged in the Firft Seftion of *Linnæus's* Thirteenth Clafs, which includes thofe Plants, whose Flowers have many Stamina, and One Style. The Title of this Genus was given to it by *Dr. Tournefort*, in Honour of *Dr. Sarrazin*, a curious Botanift, who fent this, and many other curious Plants, from *Canada* to the Royal Garden at *Paris*.

The Species here reprefented is,

SARRACENA *foliis gibbis Hort. Cliff. 472.* Sarracena with gibbous Leaves. This is the *Sarracena Canadensis, foliis cavis et auritis, Tourn. Inft. R. H. 657,* Canada Sarracena with hollow and eared Leaves. *Cajpar Bauhin* titles it *Limonium peregrinum* foliis formâ fior is *Aristolochia pin.* 192. i.e. Foreign Sea-Lavender with Leaves fhaped like the Flowers of Birthwort. And *Clufats*, in his Hiftory of Plants, calls it *Limonio congener* i. e. A Plant near of Kin to Sea-Lavender. *Morrifon* titles it *Coilophyllum Virginianum breviorifolio, fiore purpurafcente. Rift. 3. p. 533.* Virginia Hollow-Leaf with a fhorter Leaf and purplifh Flower. *Mr. Catefby*, in his Hiftory of *Carolina*, calls it *Sarracena foliis brevioribus latioribus, Vol. 2. p. 70.* Sarracena with fhorter and broader Leaves.

This Plant grows naturally on moift Bogs in moft Parts of *North America*. The Structure of every Part of this Plant is very fingular. The Root is composed of ftrong Fibres, which ftrike deep into the foft fpongy

Earth where they naturally grow; from which come out Five, Six, or Seven Leaves, in proportion to the Strength of the Plants. Thefe are about Five Inches long, and are hollowed like a Pitcher, as is reprefented at *l* and *n*: They are narrowed at their Bafe, but are fwelled out and bellied above, rounded on their outer Side, but are a little compreffed on their inner Side, having a broad leafy Border running longitudinally the whole Length of the tubulous Part. At the Top, or Neck, of the gibbous Part of the Leaf is fixed an Appendage or Ear, reprefented at *m*, which is bluntly indented, and ftands ereft. The hollow Parts of thefe Leaves have always Water (landing in them; and this Top or Ear is fupped in hot dry Weather to fhrink, and fall over the Mouth of the Tube, and ferve as a Lid, to prevent the Exhalation of the Water: So that, in the greateft Droughts, Birds and other Animals repair to thefe Plants, where they always find Water to refrefh them. The Leaves, in Spring, are of a dark-green Colour, but gradually change to a purplifh Colour; and toward Autumn are of a dark brown. From the Center of the Leaves comes out a naked Footstalk which rifes a Foot high, fupporting at the Top One large Flower, which nods on one Side, by the Footstalk being recurved. The Outside of the Flower is of a dark purple Colour, and the Inſide green. The Petals turn inward, and cover a great Number of fmall Stamina, which furround the Style, and are terminated with Summits of a pale Sulphur-colour. The Style fupports a broad buckler-shaped Stigma, which ſpreads over, and clofely covers the Stamina; whereby they are fecured from the Injuries of the Weather: For the inflexed Petals meet, and cover the Borders of the Stigma fo clofely, as that the Stamina do not appear, unlefs the Flower is nearly viewed on the Side, where there are Perforations to admit the Air; which is abſolutely neceffary for the ripening of the *Farina fecundans*, and alfo to affift the Conveyance of it, when fitted to the proper Matrix.

The *Englifoi* who firft fettled in *North America*, gave to this Plant the Title of *Sidefaddle-flower*, from the Reſemblance of the Stigma to a Woman's Pillion; and ſome of the firft Writers, who defcribed the Country, have given imperfect Accounts of this Plant* They have taken particular Notice of the Leaves always having Water in them; and one of them mentions his being often refrefhed with this Water in great Droughts, when he was at a Diſtance from any other Supply.

P L A T E CCXLII.

CYPRIPEDIUM, *Lin. Gen. Plant. 906. Calceolus, Tourn. Inft. R. H. 436. Tab. 249. Calceolus Marine, Rail Meth. Plant. 121. Ladies Slipper. In French, Sabot.*

The Characters of this Genus are,

It has a fingle Stalk, with a Sheath a, at a Diſtance from the Flower. The Germen fupports the Flower, which has no Empalement. It has Four Petals reprefented at b, which are long, narrow, and ſpread open. Within the Petals is ſituated a large, fwoln, flipper-ſhaped Neftarium c, which is obtuſe and "hollow, with a fmall oval plain inflexed Lip. The Flower has Two port Stamina fitting upon the Pointal, terminated by ereft Summits hid under the upper

NUMB. XLI.

Lip of the Neftarium. It has a long flender contorted Germen, ſhewn at d and e, fupporting Two fhort Styles faſtened to the upper Lip of the Neftarium, crowned by an obſolete Stigma. The Germen afterzward becomes an oblong-41)al Capfule f, having Three obtuſe Corners, as is ſhewn at g, with Three Seams, opening under each Angle, with Three Valves in One Cell h, i, including a great Number of fmall Seeds k, which adhere to the longitudinal Pericarpium.

THIS Genus of Plants is ranged in the Second Seftion of *Linnæus's* Twenty-firft Clafs, which includes thofe Plants whose Flowers have their Stamina and Style connected together* and the Flowers have Two Stamina. *Tournefort* places it in the Third Section

T t

tion

tion of his Eleventh Clafs, which contains the Herbs with an anomalous Flower of many Petals, whose End palement becomes the Fruit*

The Specie here represented is,

CYPRIPEDIUM *radicibus fibrofis, foliis ovato-lanceolatis caulinis, Atl. Upjal.* 1740. Ladies Slipper with fibrous Roots, and oval fpear-shaped Leaves on the Stalk. This is the *Calceolus Marianus Dod. Pempt.* 180. Our Lady's Slipper. *Cajpar Bauhin*' titles it *Helleborine flore rctundo, feu Calceolus, Pin* 187. Baftard Hellebore with a round Flower or Slipper. *Gerard* calls it *Calceolus Maria, p.* 359. Ladies Slipper. And *Parkin- fon, in his Theatre of Plants, p.* 217. *Elleborne major; feu Calceolus Maria, Greater Baftard Hellebore, or Ladies Slipper.*

AS the Structure of this Plant is of a fingular Form, fo we have chofen to place it near the former, altho' it is not in the Order we propofed to obferve: But as both thefe Plants produced their curious Flowers in the *Chelfea* Garden in great Perfection fo we were defired, by feveral of our Purchaiers, to give their Figures; which were drawn as near to Nature as poffible.

The Plant here represented grows naturally in fome Parts of *England* -, particularly in *Helkwood, by Ingleborough* in *Torkjhire* •, and in the Park of the late *Robert*

Fenwick, Efq; at *Borough-hall, near i'irDy-Lonfdaie, H Lancajhire.* The Root of this Plant is compofed of flefhy black Fibres, which fspread obliquely near the Surface of the Ground, fending out fmall Fibres every Spring. The flefhy Part of the Root retains the Mark of the Stalk of the former Year; for there is annually a new Root formed on the Side of the old one, on the oppofite Side of the Stalk, as in other Bulbs. The Stalk rifes a Foot high, is a little hairy, and garnifhed with oval fpear-shaped Leaves, whose Bale embraces the Stalks: They are from 1 hree to near Four Inches long, and near Two Inches broad at their Bafe, having feveral longitudinal Veins, like thofe of Baftard Hellebore: They are of a deep Green, and end in acute Points. There are Four or Five of thefe Leaves placed alternately along the Stalk, which is terminated by a fingle Flower, whose Bud is covered with a Sheath but before the Flower opens, the Footstalk advances above the Sheath. The Flower is naked, having no Empalement: It has Four narrow acute pointed Petals, of a dark purple Colour, which fspread open; within which is fituated a large hollow Nectarium, fhaped fomewhat like an old-fashioned Slipper, of a yellow Colour, having a fmall Lip or Cover at the Tail -> under which are fituated the Stamina and Style. This Plant flowers in *May*, and the Seeds ripen the Beginning of *Augufi*. The Stalk decays to the Root in Autumn, and a new one rifes the following Spring.

P L A T E GCXLIII.

SAXIFRAGA, *Tourn. Inft. R. H. 252. Tab. 129. Rail Meth. Plant. 111. Lin. Gen. Plant. 494, Saxifrage,*

The Charadlers of this Genus are,

The Flower has a fhort acute-pointed permanent Empalemeni, of One Leaf cut into Five Parts: It has Five plain Petals, which are longer than the Empalement; and Ten awl-shaped Stamina, terminated by roundifh Summits. It has a roundifh acute-pointed Germen, fitting upon Two Styles crowned by obtufe Stigmas. The Germen afterward becomes an Oval Capfule, with Two Horns opening between their Tops, filled with fmall Seeds.

THIS Genus of Plants is ranged in the Third Section of *Tournefort*'s Sixth Clafs, which includes the Herbs with a Rofe Flower, whose Pcintal becomes the Fruit, for the mofi part, with Two Capfules. *Mr. Ray* puts it in the Second Section of his Twenty-fecond Clafs, which contains the Herbs with a Flower of Five Petals, difpofed either alternate, or without Order, along the Stalks, and the Seeds are in Capfules. *Dr. Unnaus* ranges it in the Second Section of his Tenth Clafs, which includes thofe Plants whose Flowers have Ten Stamina and Two Styles.

The Specie here represented is,

SAXIFRAGA *foliis radicatis aggregatis lingulatis cartilagineo-ferratis? /caule pyramidaio.* Saxifrage with tongue-shaped Leaves gathered together at the Root, which have cartilaginous Saws on their Edges, and a pyramidal Stalk. This is the *Saxifraga montana, pyramidalis* folio longiore, Tourn. InJL* 253. Mountain py-

ramidal Saxifrage with a longer Leaf. *Boerhaave* places it in his Genus of *Sedum* j and titles it, *Sedum pyramidale elegantiffimum, H. L. 1. p.* 287. The molt elegant pyramidal Houfeleek.

This Plant grows naturally upon the Mountains in *Italy*. The lower Leaves are gathered into a circular or Rofe Form, lying over each other in Three or Four Series: They are flat, fhaped like a Tongue, and fit clofe to the Root: They are about Two Inches long, and half an Inch broad, of a whitifh-green Colour, and have rough fawed Edges. The Stalk rifes a Foot and a Half high, branching out near the Bottom: The lower Branches are pretty long, and grow horizontally: Above thefe, the Branches are fhorter to the Top, forming a large pyramidal Spike of Flowers. The Branches come out alternately from the Stalk, and divide into feveral fmaller: Thefe are garnifhed with white Flowers having an acute Empalemerit of One Leaf, cut at the Brim into Five Segments, as is fhewn at *a*. They have Five obtufe Petals, represented at *b* and Ten Stamina, which are about half the Length of the Petals, fhewn at *^* which are terminated by roundifh red Summits *d*. In the Center of the Petals is fituated a roundifh acute-pointed Germen *d*, fitting upon Two Styles crowned by obtufe Stigmas *l*. The Germen, after the Flower is paff, turns to a Capfule with Two Horns *g*, opening at the Top, as is fhewn at *h*, and filled with fmall Seeds *l*.

This Plant flowers the latter End of *May* or the Beginning of *June* -, and, during its Continuance in Flower, is a very ornamental Plant to place in Halls or Chimnies.



SAXIFRAGA, foliis oppositis aggregatis linguatis succulentis - ferrata, caule pyramidato. - Linn., s. p. 298.

L. Miller del. et F. Cuv.

Spalding's account is that of Spalding's sp. - taken July 21. 1798.



Fig. 1. *DIOSCOREA* foliis ovatis serratis, pediculis sub fructibus pendulissimis longioribus. *DIOSCOREA* foliis lanceolatis serratis. *DIOSCOREA* foliis lanceolatis serratis. *DIOSCOREA* foliis lanceolatis serratis.

DIOSCOREA foliis ovatis serratis, pediculis sub fructibus pendulissimis longioribus.

P L A T E CCXLIV.

ROBINIA, *Lin. Gen. Plant, jgg. Pseudoacacia, Tourn. Jnji. R. H. 649. Acacia Americana, Rail Meth. Plant. 164. Falfe Acacia.*

The Characters of this Genus are*

The Empalement of the Flower is of One Leaf cut into Five Segments at the Brim, as jhewn at a. The Flower is of the Butterfly Kind: The Standard b, is large * roundish, and open, Jlanding errett: The Keel c, is roundish, compreffed, obtufe, and is as long as the Wings d, d, which are oval, and have Appendages which are obtufe. It has Ten Stamina, represented at e> Nine of which are joined together, and the Tenth f, is Jeparated: Thefe are terminated by roundish Summits g. The Germen is oblong and cylindrical, which fupporis a Jlender Style h, crowned by a fimple Stigma i. The Germen afterward turns to an oblong compreffed Pod k, which opens with Two Valves l, inclofing One Row of compreffed kidney-fhaped Seeds m*

THIS Genus of Plants is ranged in the Third Section of *Linneus*'s Seventeenth Clafs, which includes thofe Plants whofe Flowers have Ten Stamina in Two Bodies. *TGurnefort* places it in the Third Section of his Twenty-fecond Clafs, which contains the *Jrees and Shrubs with a Butterfly Flower, whofe Leaves are for the moft part placed by Pairs along the Midrib*. Mr. *Ray* places it among the Trees bearing Pods, of the Butterfly Kind, whofe Leaves are winged, and the Branches are armed with Spines.

The Specie here repreftented is,

ROBINIA foliis impari-pinnatis, foliolis ovatis, famis pedunculifque hispida, *Ditt. Hort.* Robinia with unequal winged Leaves, having oval Lobes, and the Branches and Footstalks armed with briftly Hairs. This is the *Pseudoacacia hispida, floribus rofeis, Catefb. Carol 3. ^ . 20.* Prickly Baftard Acacia with rofe-coloured Flowers.

This Plant has been of late Years introduced into the *Englifh Gardens* from *Carolina*, where it naturally

grows. In its native Soil it rifes with a woody Stalk to the Height of Twenty Feet: But in *England* it appears not to grow fo large; for the Plants produce their Flowers very near the Ground; and, fo far as a Judgment can be yet formed by their manner of growings it has more the Appearance of a Shrub than a Tree; and as fuch will be more ornamental: For fhould this rife as high as the common white *Falfe Acacia*, the Flowers would be fo far diftant from the Sight, as that their great Beauty would not be fo confpicuous.

The Stalk of this Plant is woody and fmooth; but the young Branches are clofely armed with ftiff brown briftly Hairs, as are alfo the Footstalks of the Flowers* and their Empalements: Thefe Spines are very like thofe on the young Shoots of *Rafpberries*; which has given Occafion to the Inhabitants of *Cornwall* and *Devonfhire*^ where the Plants are in greater Plenty than about *London*, to give it the Title of *Rafpberry Plant*. The Leaves of this Sort refemble thofe of the common *Falfe Acacia*^ but the Lobes are larger, and nearer to an oval Form: They are fmooth, and of a light green Colour, and are compofed of Six or Seven Pair of oval Lobes terminated by an odd one. The Flowers are produced in long Bunches from the Side of the Branches, like thofe of the common Sort -, but the Bunches are longer, and the Flowers much larger: They are of a bright Purple or Rofo Colour *, in which Particular they greatly excel thofe of the common Sort; but they have no Scent* fo that the common Sort is preferable to it on that Account. The Flowers ftand each upon a fhort Footstalk, and make a fine Appearance during their Continuance, This flowers early in *June*, and is fucceeded by fiat oblong Pods of Seeds, which, in the natural Places of its Growth* ripen in *September*. But in *England* they have not, as yet, produced any Pods.

As this Plant is not very common at prefent in the Gardens about *London*, and having produced its beautiful Flowers in the *Chelfea Garden*, we were tempted to infert it here*

P L A T E CCXLV.

OTHONNA, *Lin. Gen. Plant. 888. Doria Raii Meth. Plant. 53- Jacobaa Tourn. Inf. R. IL 485. Tab. 276. Foreign Ragwort.*

THE have in a former Number exhibited Two W Species of this Genus *, where we have given the Characters of the Genera: But as the Two Plants, here exhibited, have been by fome Botanifts fuppofed to be the fame Specie, fo we have been prevailed on to give their Figures and Defcriptions from Nature, as we had an Opportunity of doing it from the Plants which flowered the laft Spring in the *Chelfea Garden*, when we had an Opportunity to examine their Characters more nicely than before.

The Species here repreftented are,

Fig. 1. OTHONNA foliis cuneiformibus integerrimis feffilibus, caule fruticofo procumbent e^ pedunculis longijjimis,

Eift. Hort. Othonna with intire wedge-fhaped Leave? fitting clofe to the Stalks, a fhubby trailing %allf and very long Footstalks. This is the *Calthoides Africana, glafti folio ^ Jujf.* African Baftard Marigold with a Woad Leaf.

The Seeds of this Sort were brought to *England* by the late Dr. *Shaw*, who difcovered the Plants growing naturally in *Algiers*. This has a ftrong fibrous Root, which fhoots deep in the Ground, and fends out many fhubby Stalks, which fpread on every Side, and trail upon the Ground: Thefe are garnifhed with wedge-fhaped Leaves of a grey Colour* and a pretty thick Confidence, which are intire) and fit clofe to the Stalks, ftanding without Order on the Branches. The Flowers ftand upon long fucculent Footstalks, which come out from the Wings, and at the Top of the Stalks: They have a fingle Empalement of One Leaf cut into Eight equal Segments at the Top, as is repreftented at a. The Flowers

Flowers are yellow, and are composed of many hermaphrodite Florets, which form the Disk : These are tubulous, and indented in Five Parts at the Brim, as is shewn at *b* : They have in each Four or Five Stamina, which are the Length of the Tube, represented at *d*, which fit upon the Germen *c*, and have a Style longer than the Stamina, to which it is connected, as is shewn at *e*. The Female Half-Florets compose the Border or Rays : These are tongue-flapped, and indented at the Point in Three Parts, as is shewn at *h* : These have an oblong Germen *g*, with a slender Style crowned by a bifid reflexed Stigma. The Germen afterward turns to a single oblong Seed, naked at Bottom, but crowned with a pappose Down. This Sort flowers in *May*, when the Plants make a fine Appearance -, but the Seeds seldom ripen in *England*. The hermaphrodite Florets are rarely succeeded by Seeds.

Fig. 2. OTHONNA *foliis lanceolatis integerrimis*, Hort. Cliff. 419. Othonna with spear-flapped intire Leaves. This is *xhijacobtea Africana, frutescens, crassifolia, etjuc-*

culentis foliis, Hort. Amfi. 2. p. 147. Shrubby African Ragwort with thick succulent Leaves.

This Sort grows naturally at the *Cape of Good Hop*. It has round Stalks, which at first are herbaceous and succulent; but by Age become ligneous. They rise Three or Four Feet high, and divide into many Branches from the Bottom, which are garnished with thick succulent Leaves, which are spear-shaped, about Two Inches long, and One broad in the Middle, of a grey Colour, and their Edges intire: They are placed without Order, and fit close to the Branches. The Flowers are produced toward the End of the Branches, upon succulent Footstalks about Four Inches long, each sustaining One yellow Flower, shaped like those of the former Sort, but smaller.

This Plant begins to shew its Flowers in *August*; and there is a Succession of Flowers on the same Plant till the Middle of Winter, during which Time it makes a good Appearance in the Greenhouse.

P L A T E CCXLVI.

SCHINUS, *Lin. Gen. Plant.* 479. *Molle Tourn. Inji. R. H.* 661. Indian Mastick Tree.

The Characters of this Genus are,

The Flower has a small Empalement indented in Five Parts, represented at a : It has Five Petals, which spread open, as they are shewn magnified at b and c, and Ten Stamina, represented at d and e, terminated by thick Summits. In the Center is situated a roundish Germen f, supporting a short thick Style g, crowned by a bifid reflexed Stigma. The Germen afterward turns to a roundish Berry, with One Cell containing One Seed of the same Form.

THIS Genus of Plants is ranged in the first Section of *Linnaeus's* Tenth Class, which includes those Plants whose Flowers have Ten Stamina and One Style. *Tournefort* has placed it in the Appendix to his *Institutions of Botany*; but it properly belongs to his Twenty-first Class, which includes the Trees and Shrubs with a Rose Flower, whose Pointal Turns to a Fruit with One Cell.

The Specie here represented is,

SCHINUS *foliis pinnatis, foliolis ferratis, impari longifimo, petiolo cinguli*, *Lin. Sp. Plant.* 388. Schinus with winged Leaves whole Lobes are sawed, the terminating Lobe being longer than the other, and the Footstalks equal. This is the *Lentifcus Peruviana* *C. B. P.* 399. Peruvian Mastick Tree; the *Molle Cluf Monard.* 322.5 and the *Arbor Molle*, or Indian Mastick Tree.

This Tree grows naturally in *Mexico* & *Peru*, and in *Brazil*, where it rises to the Height of Twenty-five or Thirty Feet; but in *England* it seldom rises half so high. The Stalk is woody, and, while the Trees are young, has a smooth brown Bark; but as they grow old the Bark becomes rugged, and is cleft asunder, like that of many other Trees. From the Cracks of the Bark, in very hot Weather, there sweats out a strong Balsam or Turpentine, which, in the Countries where the Trees grow naturally, is collected, and used for the same Purposes as Mastick: And there the Inhabitants wound the Bark of the Trees, to cause it to flow, more plentifully, as the *Greeks* do the Mastick Trees in the *Levant*. The young Branches of the Trees are covered first with a green Bark; but by Age this becomes of a brown or purplish Colour. The Leaves are placed alternately on the Branches: They are composed of Eight or Ten Pair of Lobes or Wings, which are terminated by an odd one much longer than either of the other: They are of a lucid Green, ending in acute Points; and are flightly sawed on their Edges, having very short equal Footstalks. These continue green all the Year. The Flowers are produced in loose Panicles at the End of the Branches: They are very small and white, having Ten Stamina, which are terminated by golden Summits. The Figure *a* exhibits the Flower of its natural Size \ the other are magnified, to shew their Characters more distinctly. That at *h* shews a Flower cut thro* the Middle; and *i* represents One of the Petals enlarged. After the Flowers are past, the Germen swells to a Berry about the Size and Shape of a Peppercorn, whose Pulp, when fresh, has a strong balsamic Odour.



Handwritten notes in cursive script, likely a Latin description or reference.

Handwritten notes in cursive script, likely a Latin description or reference.

Faint line of text at the bottom of the page, possibly a Latin description or reference.

Second faint line of text at the bottom of the page, possibly a Latin description or reference.



SYMPLOCOS foliis ellipticis ovatis obtusis, nervis parvis, calycibus tubulosis, corollis 5-lobis, tubo
 pediculis brevibus, &c. *Symplocos tinctoria* Linn. *Indica*
 pediculis brevibus, &c. *Symplocos tinctoria* Linn. *Indica*

P L A T E

CCXLVII.

SERRATULA, *Dillen. Nov. Gen.* 8. *Liu. Gen. Plant.* 831.
Rail Meth. Plant. 40. *Jacea, Tourn. Injl. R. H.* 4+4-
 Saw-wort.

The Characters of this Genus are,

It has a compound Flower, made up of many hermaphrodite Florets, contained in one common cylindrical bellied Empalement a, a, whose Scales are speer-Jh^ed and acute-pointed. The Florets are equal, fannel-Jhaped, and of One Petal: Me Tube is inflexed, the Brim is bellied, and cut into five Segments: They have Five short hair-like Stamina terminated by cylindrical Summits; and an oval crowned Germen b, supporting a slender Style c, crowned by Two oblong reflexed Stigma's d. The Germen afterward turns to a vertical oval Seed e, crowned with a hairy Down, which ripens in the Empalement.

HIS Genus of Plants is ranged in the First Section of Linn^us's Nineteenth Clafs, which includes those Plants whose Flowers are composed of only fruitful Florets, and their Summits are connected together.

The Specie here represented is,

SERRATULA/*&* *oblongo-ovatis obtuse dentatis, caulera-mofo patulo, calycibus subrotundis mollibus, Ditt. Hort.*
 Saw-wort with oblong-oval Leaves which are bluntly indented, a spreading branchy Stalk, and roundish soft Empalements.

The Seeds of this Plant were given me by John Browning Esq; of Lincoln's-Inn, who received them from the northern Parts of China, where the Plant grows naturally. It has a taper herbaceous Stalk, which rises a Foot and Half high, covered lightly with a mealy Down, and branches out almost the whole Length:

The Branches are slender, and spread out almost horizontally, turning upward toward their Ends: They are garnished with oblong oval Leaves, which are soft, and bluntly indented on their Edges. The lower Leaves on the principal Stalk are about Four Inches long, and Two Inches and a Quarter broad in the Middle, where they are broadest, ending in Points: They are of a hoary green Colour on their upper Side, and of a pale green on their under, having a strong pale-coloured Midrib. The Leaves on the Branches diminish in Size upward, but are nearly of the same Figure with the lower. The Flowers are produced at the End of the Branches upon short Footstalks, which for the most part contain Three Flowers, whose Empalements are soft, scaly, and swollen in the Middle: The Scales are small, lying over each other like those of Fifth, ending in acute Points. Each of these Empalements contain a great Number of hermaphrodite Florets, which are funnel-shaped, having a pretty long Tube, which spreads open at the Top, where it is cut into Five Segments, as is shewn at/*, which is one of the Florets magnified, and split down longitudinally, to shew its Structure, which in their natural Size is difficult to express. Each of these are of One Petal, and of a purple Colour: They have Five very short Stamina fitting within the Tube; and at the Bottom is situated an oval Germen, represented magnified at g, which is crowned with a long hairy Down, and supports a Style the Length of the Tube, which is crowned by Two oblong reflexed Stigma's. After the Flower is past, the Germen becomes a single oval Seed crowned with hairy Down, and ripens in the Empalement. The Flowers appear in July, and there is a continued Succession of them till the Cold in the Autumn puts a stop to them. Those Flowers, which appear early in the Season, are generally succeeded by good Seeds, if the Season proves favourable; but the late Flowers are always abortive.

P L A T E

CCXLVIII.

CNICUS, *tourn. Injl. R. H.* 450. *Tab. 257** *Rail Meth. Plant.* 41. *Lin. Gen. Plant.* 833.

The Characters of this Genus are,

It hath a compound Flower, made up of many hermaphrodite Florets, which are equal, and are included in one common imbricated Empalement a, whose Scales are reflexed, and end in acute Spines. The Florets are funnel-shaped, and oblong, and the Brim is cut into Five equal Parts, as is represented at the Bottom a: They have Five short hairy Stamina terminated by cylindrical Summits, and a port Germen crowned with Down, represented under a, supporting a long Style crowned by an oblong Stigma b. The Germen afterward becomes a single oblong Seed d, which is crowned by a hairy Down, and ripens in the Empalement.

THIS Genus of Plants is ranged in the Second Section of Tournefort's Twelfth Clafs, which includes the Herbs with a few-folious Flower, whose Seeds are crowned with Down. Mr. Ray places it in his Ninth Clafs, which contains the Herbs with compound Flowers willeeted into Heads, whose Florets are long-folious, and

cut into Segments. Dr. Linn^eus ranges it in the First Section of his Nineteenth Clafs, which includes those Plants whose Flowers are composed of all fruitful Florets and their Summits are connected together.

The Specie here represented is,

CNICUS *foliis cordatis, petiolis crispis spinosis amplexicattibus, floribus cernuis, Hort. Upfal.* 253. Cnicus with heart-shaped Leaves having curled prickly Footstalks which embrace the Stalks* and nodding Flowers. This is the *Car duns foliis ex cordato lanceolatis, margin? ferratis et spinosis, frumamis calycum membranaceis, lateris spinosis, capitulis nutantibus, Flor. Siber.* 47. Thistle with Leaves from heart to spear-shaped, with fawed prickly Borders, and membranaceous Scales to the Empalement, whose Cuts are prickly, and nodding Heads.

This Plant grows naturally in Siberia, from whence the Seeds were sent to the Imperial Garden at Peterburgh, and have since been communicated to the several Botanic Gardens in Europe. The Root of this Plant is large and rough, sending out many thick black Fibres, which

trike deep in the Ground. The Leaves, which rise immediately from the Root, are near a Foot long, and Six Inches broad in the Middle, diminishing gradually toward the Point; but toward their Base they swell out almost heart-shaped: Their Footstalks are bordered; and the Borders are cut and curled, ending with Spines, which embrace the Stalks half round: They are of a deep green on their upper Side, but white on their under, and are sharply fawed on their Edges. The Stalks rise Six or Seven Feet high, sending out on each Side a few small Branches: They are streaked, and of a brown Colour; and are garnished below with heart-flipped Leaves, which embrace the Stalk half round; but those Leaves toward the upper End of the Stalk are long and

narrow, ending in acute Points. Each Division of the Stalk is terminated by One large nodding Head of Flowers, whose Empalement is made up of Scales lying over each other like those of Fifth, each ending with a fine Spine. The Flower is composed of many hermaphrodite Florets, which are funnel-shaped, and cut into Five Segments at the Top; They are of a pale yellow Colour, and have an agreeable Scent. The Flowers are succeeded by naked Seeds, which ripen in the Empalement.

This Plant flowers the Second Year from Seed, in July; and the Seeds ripen in the Autumn, when the Plant decays.

P L A T E CCXXIX.

BUPHTHALMUM, *Lin. Gen. Plant.* 876. *Ajerifcus, Team. li. J. R. H.* 497. *Tab. 283. Vaill. Acl. Par.* 1720. *Dillen. Hurt. Ekb.* 3S. Ox-eye.

The Characters of this Genus are,

The Empalement of the Flower is imbricated, and Varies in the different Species; in some the Circle of Leaves is left, as at a, in others they are joint and prickly. The Flower is composed of hermaphrodite Florets, which form the Jijik b, and of Female Half-florets c, -which make the Border or Rays. The hermaphrodite Florets are funnel-shaped, and cut into Five Segments at the Top, -which spread open as at h: these have Five very short hair-like Stamens, terminated by cylindrical Summits, and an oval compressed Germen e, supporting a long Style f, crowned by a thick single Stigma. The Germen afterward becomes a single oblong Seed, having several Cuts at the Top k, which ripens in the Empalement. The Female Half-florets, -which compose the Border, are tongue-shaped, and cut into Three Points d: these have a Germen with Two Sides e, which supports a long Style crowned by two oblong Stigma's, but no Stamens: the Germen afterwards turns to a single Seed, whose Crown is bordered.

XHIS Genus of Plants is ranged in the Second Section of JHHJK'S Nineteenth Class, which includes those Plants whose Flowers are composed of hermaphrodite and female Florets, which are all fruitful, and their Summits are connected. Tournefort places it in the Third Section of his Fourteenth Class, which contains the Herbs with a radiated Head having many Heads, whose Seeds have no Down.

The Species here represented are,

Fig. 1. BUPHTHALMUM *calyribus scute foliois, ramis alternis, foliis lanctolati amplexicatilibs integerrimis, Hort. Cliff.* 414. Ox-eye with acute Leaves to the Empalement, the Branches alternate, and spear-shaped entire Leaves embracing the Stalks. This is the *Jlerifcus aivuus, foliis ad florem rigidis, Town. botl. R. ti.* 497. Annual Eastward Starwort with stiff Leaves to the Flower. *Caspar Baubin* titles it *Jler luteus folidis forem rigidis, C. B. P.* 2C6. Yellow Starwort with stiff small Leaves. It is also titled *Asther Alticus, Majilicicits, Tab. Icon.* 861. Attic Starwort.

This Plant is annual, and grows naturally in the South of France, in Spain, and Italy. The lower Lewes

are oblong, hairy, and round pointed: They are about Four Inches long, and One broad, and are narrowed at their Base. The Stalk rises Two Feet high; it is hairy and stiff, dividing into Two or Three Branches alternately toward the Top: These are garnished with spear-shaped Leaves, which embrace the Stalks with their Base. The Flowers are produced at the End of the Branches, their Empalements are composed of Nine stiff Leaves, which end with Prickles: These spread open immediately under the Flower, like the Points of a Star. The Border or Ray of the Flower is composed of many female Half-florets, whose Petals are stretched out on One Side in the Shape of a Tongue, and are cut into Three Segments at the Point; They are of a bright yellow Colour. The Disk or Middle of the Flower is composed of a great Number of tubular Florets, which are hermaphrodite, having a Germen, Style, Stigma, with Stamens and Summits in each: These are of a Gold Colour. These Flowers appear in July and August, and the Seeds ripen in the Autumn.

The Leaves of this Plant are sometimes used in Medicine; In the Plant is mentioned in most of the Dispensaries: But the Ancients held it in great Esteem for Virtues which the Moderns have little notice of.

Fig. 1. BUPHTHALMUM *calyribus obtuse foliis, ramis axillaribus, foliis oblongis obtusis, Hort. Cliff.* 414. Ox-eye with obtuse Leaves to the Empalement fitting close to the Wings of the Stalk, and oblong blunt Leaves. This is the *Ajerifcus annuum, Lusitanicus odoratus, Bierh. lad. Alt. t. p.* 105. Sweet-scented Portugal annual Bath asid After,

This is an annual Plant, which grows naturally in Portugal, in low moist Places, where there is standing Water in Winter. The Branches of this Sort spread near the Ground: They are about a Foot long, and are garnished with oblong Leaves, which are of a light green Colour, and hairy: They are an Inch and Half long, and Half an Inch broad, fitting close to the Branches. The Flowers grow at the Wings of the Stalks, to which they fit very close, having no Footstalks. The Leaves of their Empalements are oblong, blunt pointed, and soft. The Flowers are composed of hermaphrodite Florets and female Half-florets, as like those of the Former: They are of a bright yellow Colour, and have an agreeable sweet Scent.

This Sort flowers in July and August, and the Seeds ripen in the Autumn.



Fig 1 DELPHINIUM acaule aplylla lobata nigroflora foliis lanceatis Compositis laciniatis Multiplex Hort. Vindob. 1751.
 Fig 2 DELPHINIUM acaule aplylla lobata bifida spec. ha. latifolia lobata nigra com. 1751.

Tab. 100. 1751. *Præparatum a G. G. Schimper by J. J. Müller August 22. 1751.*



SYMPLOCARPA *Sp. Pl. Linn. 1753. p. 103. n. 1.*

Sp. Pl. Linn. 1753. p. 103. n. 1.

P L A T E C C L.

DELPHINIUM* *Tourn. Inf. R. It. 426. Tab. 1^{ta}. Ran Meth. Plant. 79, Lin. Gen. Plant. 602. Larkspur or Larkshee* In French, *Pie d'Alouette*.

The Characters of this Genus are,

The Flower has no Empalement: It has Five unequal, Petals placed circularly; the upper, which is obtuse and indented a, is extended behind in a long obtuse Horn b, the other are oval-shaped, and nearly equal c, the lower open. It has a bifid Nectarium a l, situated in the lower Part of the Circle of Petals, whose d, e, f, g, h, i, k, l, m, n, o, p, q, r, s, t, u, v, w, x, y, z, behind, and involves the Tube of the Petals. It has many small Stamina d, which are broad at their Bases, and inclose the Petals, terminated by small erect Summits; and Three or One oval Germen fitting upon Styles the Leth of J^a Stamina e crowned by single reflexed Stigmas. The Germen afterward become oval awl-shaped Capsules r, of One Cell g, which open behind, and are filled with angular Seeds n.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Eleventh Class, which includes the Herbs with an anomalous Flower of *Jussieu's* Mr. *Ik, W* es it in his Eighteenth Class which contains the Plants with many Capsules, whose Leaves are fleshy succulent, and their Flowers irregular. *Vr. Linnæus* ranges it in the Third Section of his Thirteenth Class, which includes those Plants whose Flowers have many Stamina and Three Styles.

The Species here represented are,

Fig. 1. DELPHINIUM *nettaris diphyllos, labellis bifidis, floribus subclitariis, foliis compositis hinc* Hort. Upsal. 150. Larkspur with a two-leaved Nectarium whose Lips are entire, the singly, and compound linear Leaves having many Points. This is the *Delphinium elatum* *foeniculifolium* *fenne, floribus amplis azureis, Amman. Ruth 132. 1* a perennial Larkspur with Leaves a little hoary, and large blue Flowers. This Plant grows naturally in *Siberia*. The Root is

fibrous and perennial. The Stalk rises near Two feet high: It is garnished with Leaves composed of many linear Lobes or Segments* which end in many Points; they are of a light Green on their upper Side, a little hoary on their under, and spread open like those of Wolfsbane. The Stalk divides into Two or Three Branches upward, and at each Joint is garnished with One small Leaf, cut into narrow Segments like those below •, and the upper Part of the Branches are garnished with large Flowers of a fine azure blue Colour, which come out singly from the Sides of the Branches upon pretty long Footstalks: These appear in June and July, and the Seeds ripen in August.

Fig. 2. DELPHINIUM *nettaris diphyllos, labellis bifidis, apice barbata, foliis trilobis incis, caule erecto*. Larkspur with a two-leaved Nectarium having a bearded Point, Leaves with Three Lobes which are cut into Segments, and an upright Stalk.

This Plant grows naturally in most Parts of *North America*, where, when the Cattle happen to feed upon the Leaves, it occasions great Disorders in them. The Seeds of this plant were sent me by Mr. *John Bartram* from *Philadelphia*: It has a perennial Root, from which arises an upright Stalk Five or Six Feet high, branching out on the Sides. The lower Leaves are large, and divided into Three Lobes to the Footstalk: These are cut on their Borders into acute Segments: They are a little hairy, and of a greyish Colour, hanging upon pretty long Footstalks. Those which grow upon the Stalks are smaller, and not so deeply divided. The principal Stalk is terminated by a long loose Spike of Flowers, which is often a Foot and Half long. The smaller Side-branches, which grow erect, have smaller Spikes. The Flowers are not much larger than those of the common Larkspur, and are of a pale blue Colour: These have a two-leaved bearded Nectarium fitting in the Center of the Petals, which has at first Sight the Resemblance of a large Fly in the Tube of the Flower. This Plant flowers in June; and in cool Seasons there is frequently a Succession of Flowers till the End of August. The Seeds ripen in the Autumn,

L A T E C C L I.

HYDRANGÆA, *Flor. Virg. 50. Lin. Gen. Plant. 49**

The Characters of this Genus are,

The Flower has a very small permanent Empalement of One Leaf indented in Five Parts a, and Five roundish, Petals, which are equal, and a little larger than the Empalement b. It has Ten Stamina, which are longer than the Petals, and are alternately longer than each other c, terminated by roundish Twin Summits d. It has a roundish Mated Jder the Flower, with Two short Styles which are at a Bijlance from each other e, crowned by obtuse permanent Stigma's. The Germen afterward turns to a roundish Twin Capsule, having many angular Veins, and the Two Styles like Two Horns on the Top f, having Two Cells g,

which open transversely h, and are filled with small angular Seeds i.

THIS Genus of Plants is ranged in the Second Section of *Linnaeus's* Tenth Class, which includes those Plants whose Flowers have Ten Stamina and Two Styles.

We know but One Species of this Genus, which is here represented.

HYDRANGÆA, *Flor. Virg. 50.* We have no English Title for this Plant.

It grows naturally in *North America*, from whence it has lately been introduced into the *Englifo* Gardens. This

This has many flirubby Stalks arising from the same Root, which rise Three or Four Feet high : They are four-cornered when young, and have a green Bark •, but as they grow older they become taper, and have a light brown Bark. The Leaves are almost heart-shaped •, they are Three Inches long, and Two and a Half broad near the Base, where they are broadest, having many transverse Veins, which run from the Midrib to the Borders, of a deep Green on their upper Side, and pale on their under, slightly fawed on their Edges, and ending in acute Points: These are placed by Pairs flanding upon long Footstalks. The Branches are each terminated by a Corymbus of Flowers, which

is compounded of many smaller. The Flowers are very small, white, and have an agreeable Odour : They are composed of Five small Petals of a roundish Form, which spread open, and are a little larger than the Empalement, to make no great Figure singly; but the whole Corymbus, which is large, makes a tolerable good Appearance at a small Distance : And as every Branch is terminated by one of these, so when the Plants are large, and have many Stalks, they make a Diversity in the Garden among Plants of equal Growth.

This Plant flowers in July; but the Summers are seldom warm enough to ripen their Seeds in England.

P L A T E CCLII.

As AKIN A, *Tourn. Lift. R. H. 171. Tab. 76. Chelone*[^]
Lin. Gen. Plant. Penstemon[^] *Mitch. Gen. 14. Baftard*
Afarum.

The Characters of this Genus are,

The Empalement of the Flower is composed of Five short acute-pointed leaves a. The Flower is of One Petals and of the hip Kind b, having a long cylindrical Tube, which is extended at the Chaps^ convex on the upper Side, but almost plain below. The under hip c is cut into Three obtuse Segments at the Point •, the upper is obtuse^ and divided flightly into Two obtuse Parts at the Top d : // has Four Stamina ; the Two inner^ which are opposite^ e and f, are almost the Length of the Petal; the Two outer are shorter: These are terminated by oblong Twin Summits. In the Bottom of the Tube is situated an oval Germen supporting a single Style g, crowned by an oblong Stigma h. The Germen afterward turns to an oval Capsule crowned by the Style i, having Two Cells k and l, which are filled with small Seeds m and n.

THIS Genus of Plants is ranged in the Fourth JI[^] Sediton of *Tournefort's* Third Class, which includes the *Herbs with an anomalous Flower of One Petals which is tubulous and perforated.* Dr. *hinn<eus* ranges it in the Second Section of his Fourteenth Class, which contains the *Plants whose Flowers have Two long and Two shorter Stamina^ and the Seeds are included in a Capsule.*

The Specie here represented is,

ASA R IN A *caule erecto, foliis lanceolatis amplexicaulibus, panicula dichotoma.* Baftard Afarum with an erect

Stalk, and spear-shaped Leaves embracing the Stalk, This is the *Chelone foliis amplexicaulibus, panicula dichotoma*[^] *hin. Sp. Plant. 612.* Chelone with Leaves embracing the Stalks, and dichotomous Panicles of Flowers.

This is a biennial Plant, which grows naturally in Virginia, The Root is composed of many thick fleshy Fibres, which spread out on every Side. The lower Leaves are about Three Inches long and Half an Inch broad, smooth, intire, and of a deep green Colour, ending in acute Points. The Stalk rises upright a Foot and Half high, dividing into several Branches, which are garnished with narrow spear-shaped Leaves placed opposite, whose Base embraces the Stalk: These are narrower. The Branches are terminated by loose Panicles of purple Flowers, which arise at the Division of the Branches: These have very short Empalements, which are composed of Five acute-pointed Leaves* The Flower is of One Petal, having a long Tube: The Bottom of this is contracted, but swells gradually upward, and at the Chaps is large : There it is divided into Two Lips ; the upper is convex, and ends in Two blunt Segments; the under is almost plain, and is cut into Three obtuse Segments at the Brim: They have Four Stamina, which are hid in the under Lip, Two of which are as long as the Tube of the Flower, the other Two are a little shorter. At the Bottom of the Tube is situated an oval Germen fitting in the Empalement, supporting a slender Style the Length of the Stamina, crowned by a single Stigma. These Flowers appear in Jun% and July, and the Seeds ripen in the Autumn, soon after which the Plants decay.



MIMOSA, sub. var. foliis hirsutis, capitulis globosis, siliqua

Pl. Cl. p. 161. t. 1. f. 1.



SIPHOCAMPYLUS, Cav. & Donnell. 1825.

Spencerian copy in the possession of the British Museum

1825



Pl. 1. *Sorbus* ...
 Pl. 2. *Sorbus* ...
 Pl. 3. *Sorbus* ...

fruitful. *Toumefort* places it in the First Section of his Fourteenth Class, which contains the Herbs with a radiated Flower, whose Seeds are crowned with Down. Mr. Ray ranges it in the First Section of his Seventh Class, which includes the Herbs with a radiated discous Flower, whose Seeds have Down.

The Specie here exhibited are,

Fig. 1. SOLIDAGO *paniculato*, *racemis recurvatis*, *floribus erectis*, *foliis lanceolatis integerrimis glabris*. Paniculated Solidago with recurved Spikes, having erect Flowers, and smooth spear-shaped Leaves, which are entire.

This Plant grows naturally in *New Jersey* in *America* from whence the Seeds were sent me by Mr. *John Bartram* in 1756. This rises with an upright herbaceous smooth Stalk near Three Feet high, garnished with smooth spear-shaped Leaves, ending with acute Points: They are about Three Inches long, and One broad in the Middle, drawing to a Point at each End, and fit close to the Stalk. They are of a light-green Colour. The upper Part of the Stalk branches out into a Panicle, and these Branches have long Spikes of Flowers coming out from their Wings, which are recurved. The Flowers are ranged on one Side of the Footstalk, and stand erect. They are of a bright yellow Colour, each Flower being composed of Five or Seven Half Florets, which form the Ray or Border, and several hermaphrodite Florets placed in the Centre or Disk. The First have short Tubes, which end in One Segment shaped like a Tongue, as is represented at *h* \ the latter have Tubes about the same Length, which are funnel-shaped, the Petal being equal, and cut into Five acute Segments at the Top,

which spread open flat, as is shown at *d*. Both these are succeeded by single oblong Seeds, which are crowned with a hairy Down.

This Sort flowers the Beginning of *August* and, if the Autumn proves favourable, the Seeds will ripen the End of *September*.

Fig. 2. SOLIDAGO *canle paniculato*, *racemis inferioribus simplicibus*, *summis confertissimis*, *foliis glabris integerrimis* *Didl. Hort.* Solidago with a paniculated Stalk, the lower Spikes of Flowers single, the upper growing in Clusters, and smooth entire Leaves.

This Sort grows naturally at *Philadelphia*, from whence the Seeds were sent me by Dr. *Benfel*. This rises with a branching herbaceous Stalk Three Feet high, which is garnished with smooth Leaves. Those on the lower Part of the Stalk are Five Inches long, and Two broad in the Middle, drawing to a Point at each End. These stand upon pretty long Footstalks, and are entire. They are of a deeper green Colour than those of the former Sort. Those Leaves on the upper Part of the Stalk are much smaller, and have shorter Footstalks. The Flowers are produced in single loose Spikes from the lower Part of the Stalk at the Wings of the Leaves: but, toward the Top of the Stalks, they are in shorter Spikes, which come out in Clusters from the Wings of the Stalk, and also at the Top. The Flowers are of a bright yellow, and are composed of hermaphrodite Florets, and female Half-Florets, as those of the other Specie.

This Sort flowers the latter End of *August* and the Beginning of *September* and, in warm Seasons, the Seeds will ripen in *England*.

P L A T E C C L V .

SOLIDAGO *foliis lanceolatis*, *subcarnosis*, *glaberrimis*, *margine scabriusculis*, *panicula corymbosa*, *Lin. Sp. Plant.* Solidago with spear-shaped almost fleshy Leaves, which are very smooth, having rough Edges, and the Panicle of Flowers disposed in a roundish Bunch. This is the *Solidago maxima* *Cornut. Canad.* 168. The largest Woundwort of *Cornutus*. Dr. *Tournefort* titles it *Virga aurea Canadensis*, *latissimo folio glabro*, *Injl. R. H.* 485; and, in the *Historia Oxoniensis* it is titled *Virga aurea Canadensis*, *foliis carnosis non ferratis latioribus*, *p. 3* 124. Canada golden Rod with broader fleshy Leaves not fawed.

THIS Sort grows naturally in many Parts of *North America*, but, being first brought to *Europe* from *Canada* it was titled from that Country. This Plant has been long an Inhabitant in the *English* Gardens, and is One of the latest in Flower of any Sorts yet known, seldom shewing its Flowers till late in *October*; so that, unless the Autumn proves favourable, the Stalks are pinched by the Frost before the Flowers blow.

It has thick fleshy Stalks of a purplish Colour, which frequently rise Six Feet high in good Ground, and are

garnished with spear-shaped Leaves, which are thick, fleshy, of a deep green Colour, and very smooth; but their Edges are a little rough to the Touch. They are Ten Inches long, and an Inch and half broad, drawing to a Point at each End. The Flowers terminate the Stalk in a roundish Panicle or Corymbus. The common Impalement of the Flower is longer than of most of the other Species of this Genus; and the Scales are smoother, as is represented at *a*. The Rays of the Flower are much narrower in proportion to their Size. The Florets, which form the Disk, are large, and their Segments are not so acute as in the former. The Germen is situated at the Bottom of the Floret, supporting a slender Style, crowned by a forked Stigma. The Female Half-Florets have their Petals extended in Length on one Side in Shape of a Tongue, and, at the Bottom of the Tube, is situated the Germen, crowned with hairy Down, which afterwards becomes an oblong Seed, crowned with hairy Down; but these scarce ever ripen in *England*, unless the Plants are sheltered from Frost.



BORZANO, *folia lanceolata, pubescentia, nervis distinctis, venis reticulatis, nervis* - *Lin. sp. 1753.*

L. 1753. 1753.

Sp. pl. 1753. 1753.



Scilla pinnatifida (L.) Spring. *Scilla pinnatifida* (L.) Spring. *Scilla pinnatifida* (L.) Spring. *Scilla pinnatifida* (L.) Spring.

1840

Printed and Published by J. G. & J. S. B. at the University Press, Cambridge.



Syringa vulgaris, foliis lanceolatis ovatis serratis, panicula terminali densa, corolla tubulosa, lobis 4. *Syringa*
Syringa, foliis lanceolatis ovatis serratis, panicula terminali densa, corolla tubulosa, lobis 4. *Syringa*

Tab. 111. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

P L A T E CCLVI.

SPIRAEA, *Lin. Gen. Plant.* 554. *Turn. Inft. R. H. 619.*
Tab. 389. Raii Meth. Plant. 158.

The Characters of this Genus are,

The Flower has a permanent Impalement of One Leaf,*
 cut half-way into Frée acute Segments. It is a Tree or Shrub
 Petals 10, which are inferted in the Impalement above
 Twenty flender Stamina c, which are shorter than the Petals,
 and are inferted in the Impalement terminated by roundish
 Summits. It has Five or more Germina d, each supporting a
 flender Style the Length of the Stamina represented at e,
 crowned by headed Stigmas f. The Germen afterwards be-
 comes an oblong acute-pointed Capful g, which is compressed
 and opens with Two Valves h; one of which is shewn Sepa-
 rateati, and is cut transversely atk, inclofing small oblong
 Seeds, represented at l.

THIS Genus of Plants is ranged in the Fourth
 Section of Linnæus's Twelfth Class, which in-
 cludes those Plants whose Flowers have about Twenty Sta-
 mina, which are inferted in the Impalement. Tournefort's
 Genus of *Spiraea* is placed in the Fifth Section of his
 Twenty-first Class, which contains the Trees and Shrubs
 with a Rose Flower, whose Pointal becomes a Pod. Mr.
 Ray places it among his miscellaneous Trees and Shrubs,
 in his Appendix.

The Specie here represented is,

*SPIRAEA foliis tematis ferratis subquadrilobis floribus sub-
 paniculatis, Lin. Sp. Plant.* 490. Spiraea with trifol-
 iate fawed Leaves almost equal, and Flowers almost
 difposed in Panicles. This is the *Filipendula foliis
 tematis, Hort. Cliff.* 191. Dropwort with trifoliate
 Leaves. Doctor Plukenet and Mr. Ray title it,
Ulmaria major trifolia, flore amplo pentapetalo > *Virginiana*

Jim. 393. *Raii Sp.* 330. Greater Three-leaved
Virginia Meadowweet, with a large Flower of Five
 Petals. Doctor Morrifon titles it *Ulmaria Virginiana
 trifolia, floribus candidis, amplis, longis, et acutis* > *Hijt.*
p. 323. Three-leaved *Virginia Meadowweet* with
 large white Flowers, which are long and pointed.

This Plant is common in the North America, W^{est}
 now pretty common in the English Gardens. It has a
 perennial Root, but the Stalks are annual* and decay
 every Autumn. When the Roots are large, they fend
 Up Three, Four, or more branching Stalks, which rise
 a little more than a Foot high which are garnished at
 each Joint with One or Two Leaves, composed of
 Three oval spear-shaped Lobes ending in acute Points.
 These are strongly fawed on their Edges. They are near
 Two Inches long, and Three Quarters of an Inch broad
 in the Middle, of a bright green on their upper Side*
 but pale on their under, and lit clofe to the Stalk. The
 Flowers are difposed in loose Panicles at the End of the
 Branches, each standing upon a pretty long (flender Foot-
 stalk. They have Five long spear-shaped Petals, whose
 Tails are inferted in the Impalement, as is represented
 in the Figure c, d, which is One of the Impalements
 with the Germen and a Petal magnified, and cut through
 lengthways. Within the Petals are fituated about
 Twenty short Stamina, terminated by roundish Sum-
 mits, and Five Germina at the Bottom of the Tube
 supporting fo many (flender Stiles, crowned by headed
 Stigma's. After the Flowers are past, the Germen
 turns to a Fruit, composed of Five acute-pointed Cap-
 fules, represented at g, each opening with Two Valves*
 as is shewn at h. These contain a few oblong Seeds, re-
 presented at l.

* This Plant flowers in July & August and the Seeds
 ripen the End of September*

P L A T E CCLVII.

Ulmaria lanceolata.

Fig. 1. *SPIRAEA foliis lanceolatis inaequaliter ferratis sub-
 tomentosis floribus duplicato racemosis* > *Lin. Sp.*
Plant. 489. Spiraea with spear-shaped Leaves, which
 are unequally fawed, and downy on their under Side*
 and flowers in double Spikes. This is the *Ulmaria
 pentacarpos, integris ferratis foliis parvis fubtus incams,
 Virginiana, Plukn. Aim.* 39. *Virginia Meadowweet*
 with Five Capfules, and small intire fawed Leaves
 hoary on their under Side.

THIS grows naturally in several Parts of North
 America, particularly at Philadelphia. It is a low
 shrubby Plant. The Stalks are flender, and have a
 purple Bark. They fend out flender Branches from
 their Side almost to the Ground. These are garnished
 with small oval spear-shaped Leaves, about an Inch
 and half long, and Half an Inch broad in the Middle.
 They are of a light green on their upper Side, but downy
 on their under. Their Edges are unequally fawed.
 The Branches are terminated by branching Spikes of
 Flowers of a bright red Colour. They have a small

Impalement of One Leaf, represented at a, which is
 cut at the Brim into Five small Segments, which spread
 open. The Flower has Five small roundish Petals,
 represented at b, which expand in Form of a Rose
 and within are fituated a great Number of short Sta-
 mina, represented at c, which are terminated by roundish
 Summits d. In the Centre is fituated the Five-pointed
 Germen, supporting fo many Styles, represented at A
 Which are magnified in the adjoining Figure. The
 Germen afterwards becomes a fruit composed of Five
 acute-pointed Capfules g, which is magnified at l. These
 open with Two Valves h, in the same manner as the
 other Species, containing several small Seeds.

It flowers in June and July, and the Seeds ripen in
 Autumn.

Fig. 2. *SPIRAEA foliis lanceolatis acute ferratis floribus
 paniculatis, caule fruticoso, Ditt. Hort.* Spiraea with
 spear-shaped Leaves, which are acutely fawed,
 flowers difposed in Panicles, and a shrubby Stalk.

This has a shrubby Stalk covered with a bright brown Bark, and rises Five or Six Feet high, sending out many slender horizontal Branches on every Side, which are garnished with spear-shaped Leaves of a thin Confidence, and a bright green Colour on both Sides. They are sharply fawed on their Edges, (landing upon flort Footstalks". The Flowers are disposed in Panicles at the End of the Branches, They are composed of Five small

roundish white Petals, with many flort Stamina, un-nated by roundish red Summits, and Five Styles, like the other Species, with which this Sort agrees in its Fru&ification,

It flowers in *July* and *August* but rarely produces good Seeds in *England*. This Sort grows naturally in *North America*, from whence I have received it.

P L A T E C C L V I I I

STAPELIA, *Lin. Gen. Plant.* 271. *Afclepias*, *Tourn.* *Itift. R. It.* 94. *Tab.* 22. Swallow-wort, or *Ftilla-via crqffhk*

The Characters of this Genus are,

The Empelement of the Flower is permanent, of One Leaf cut into Five acute Segments, as is represented at a. The Flower has One large plain Petal, which is deeply cut into Five acute Segments b, and a five-pointed flarry Neftarium c, with narrow torn Segments, which furround the Parts of Generation. It has Five plain, broad, ereEl Stamina, with linear Summits d, fastened on each Side the Stavina, and Two oval flain Germina having no Style, crowned by a blunt Stigma. The Germina afterwards turn to Two oblong taper Pods, filled with compressed Seeds, crowned with a feathery Down, lying over each other like the Scales of Fih.

THIS Genus of Plants is ranged in the Second Section of *Linnæus*'s Fifth Clafs, which includes the Plants whose Flowers have Five Stamina and Two Germina, or Styles. *Dr. Tournefort* places it in the Fifth Section of his First Clafs, which contains the Herbs with a bell-shaped Flower of One Petal, whose Pointal becomes a Fruit composed of several little Sheaths or Hujks. *Dodder Linnaeus* Separates this from the Swallow-wort, for the Difference of the double flarry Neftarium, which the Flowers of this Genus have.

The Specie here represented is,

STAPELIA *denticuliflora* *ereBis, Hort. Cliff.* 77. *Stapelia* with ereEt Indentures on the Branches. This is the *Afclepias Africana aizoides, flore pulchre fimbriato, Com. Rar.* 19. *African* Swallow-wort like Houfeleek, with a fine fringed Flower. *Tournefort* titles it *Afclepias Africana, aizoides, longioribus foliis, minus denia-tis, Inft. R. H.* 94. *African* Swallow-wort like Houfeleek, with longer Leaves less indented.

This Plant grows naturally upon the Rocks at the *Cape of Good Hope*, from whence it was first brought to

the Gardens in *Holland**, but is now become common in soil: *Parrs of Europe*.

The Root is composed of many strong Fibres, from which arise several Tuocule. The four-cornered Stalks, which feed out other Branches of the same Shape from their Side, which have Indentures on each Angle their whole Length; whose Points are erect. The Stalks or Branches are of a deep green Colour; but the Angles and Points of the Indentures are inclining to brown, especially if the Plants are exposed in the open Air in Summer. The Flowers come out from the Side of the Stalks, (landing upon long fleshy Footstalks. They have small permanent Empelements, which are cut into Five Segments; and One large plain Petal of a thick leathery Substance, which is deeply cut into Five acute Points. The Inside of the Petal is variegated and hairy, and the Borders of the Segments are closely furnished with long brown Hairs. In the Centre is placed the double flarry Neftarium, whose Points seem as if they were torn, which covers the Stamina and Germen, and is of a purple Colour. The Outside of the Petal is of an herbaceous pale Colour, and smooth. The Flowers of this Sort are not succeeded by Pods in *England*, but the smaller Sort has sometimes produced Pods here, which are long, taper, and pointed, agreeing perfectly with the Characters before given. This Plant flowers during great Part of the Summer.

The Flower, when fully expanded has a very foetid Odour, so like that of Carrion as to deceive the common Fleth Flies, who deposit their Eggs all round the Neftarium in great Plenty. These do frequently come to the Life, * & f > J v e f % ! H t e ^ u n d e r t h e f o r m o f P r o v i f i o n . I have very frequently watched them to see their Progress; and, unless the exact Time of their Hatching is taken, their Time of Life is so short as not to be observed. There have been some so hardy as to assert, that the Maggots hatched from these Eggs have eaten the Petals of the Flower, and have changed to the State of Flies; but, from more than Forty Years Observation on this Plant, I have not been able to discover the least Sign of their attempting to eat it, nor has any other Person of Credit among all my Acquaintance,



Passiflora ...

... of ...

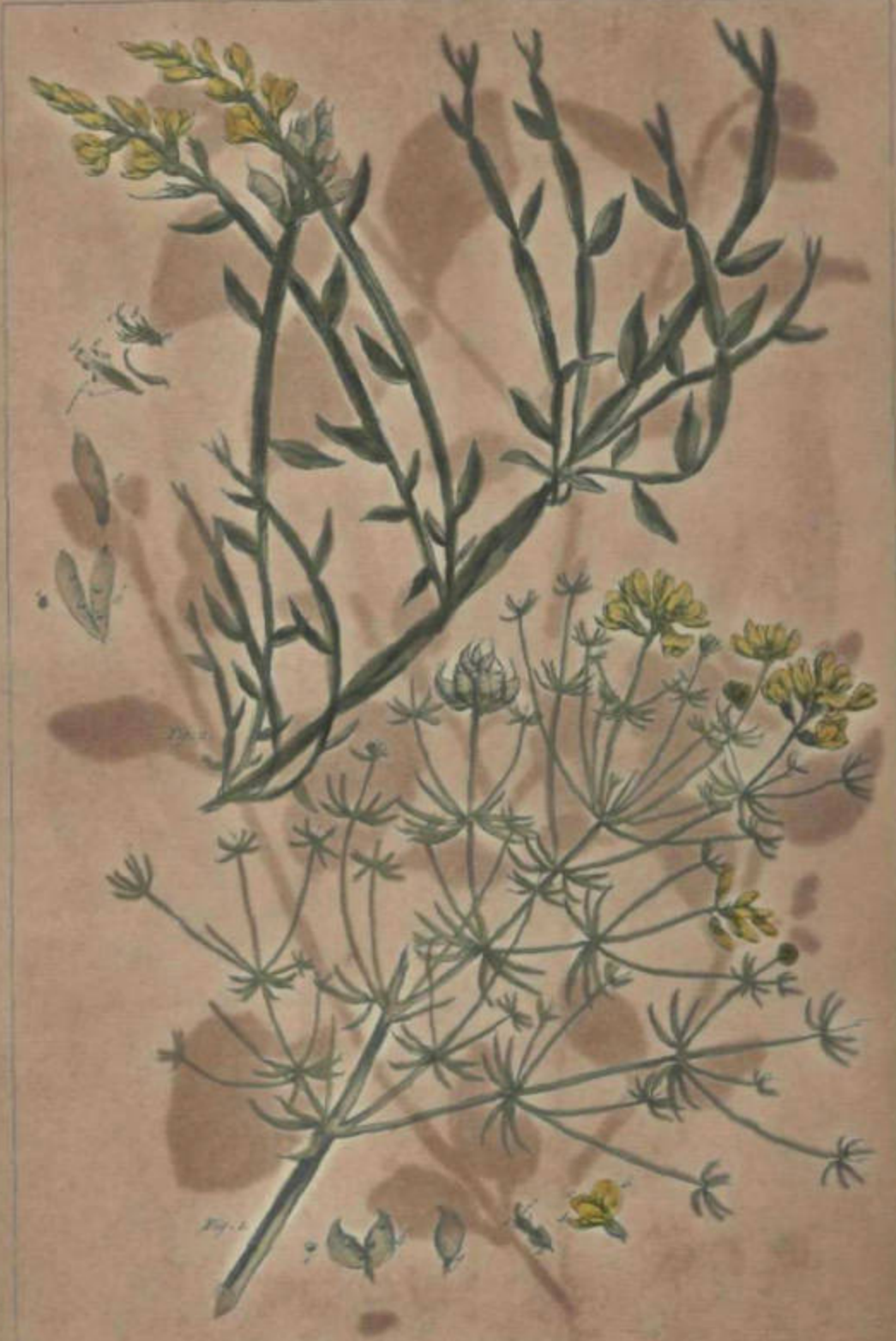


Fig. 1. SPARTIUM, una opposita opposita folia opposita foliata. Her. 17. pl. 100.
 Fig. 2. GENISTA, una opposita opposita folia una. Savat. Her. 17. pl. 100.

J. B. de Lame.

procuravit et pinxit J. P. de Lame.



Syringa vulgaris

Syringa vulgaris a leafy branch with flowers by J. G. Smith del. 1818

fonder & ... by a truncated Sljgaa f 5 to Gormix afterward turns id e rctmdijh BUT: ... Cell k, iichfixg One cr <£-SE0 rcundijh Ni

/"T^HIS Genus of Plants is ranged in: the Second J] S'rtion of •Tourtujert's Twentieth (Jaff), which includes the Trees •<ud Shrubs *xilh a Fkwer </Oi Petal, Pdntal turns (a a l ... Seeds. Mr. Ray places ic among the Trees nni Shrms which brar Berries including feveial S e t d s j ^ ^ ^ which in the Firll Se'ion of his WmmmR3?k, which in- cludes thole Plac B -aiiw/i l-/*.. MilimHfiamina M • (H • , ;' of Our Styl.

The Specie here repretnted is,

STYKAX, lint. Cliff. The Sronix-Tref. Tliis is the 5/jra* l/w -• • C i'. P. 452- Storax with a Quince-tree Leaf; ami the fi'ran arber, J. I 34t. Scorix-Tree.

This Sliri:; grows plentifully in the Neighbourhood of Rame\ and alib 'mfaUfine, in several of the Islands in the r- ...

This is a low ftirubby Tree, whose Stalk is •. It rises Twelve or Fourteen Feet high, ...

spreading Branches on every Side, which are covered with 3. fmooth grey Uirk, and are garnished with oval Leaves about Two Inches long, and One and a Half broad, of a ! eld Green in their upper Side, but hoary on their under: They are placed alternately, ft; smiling upon short Footfalks j and their Edges are entire. The Flowers are produced in L ... in iliori Fooks, which (prifig from the Wings of the Stalk: These branch into Five or Six fmallr, cae'i fuftaining One white Flower having Ont Pel ... ply cue' into Si^ of Seven fpear-fhaped Seg. riits, which spread open: \ \tulin these are fixated Nine or Ten ftiori erect Stamina, placed circularly, an J. Lie terminated by oblong er-ett yellow Srinil: And in the Tube of the Petal is inclosed a roundish Germen, ... iipporting n (ender Style crowned by a r (>un) S tigm a. The GcrtDe n afterwards turns to • Berry with ? flclly Covering, including a Nut • the fane Shape, which coitains One or Two Kermis. This Shrub flowers in •ac, but is not fucceeded by Berries in England.

The Gum of this Tree is used in Medicine, -viiich is obtained by making Incisions in the Tree. It is 'u-ought from Turky, but is To adulterated with Dirt, that it is very difficult to rnet: wit! any that is pure. It has 3 mod pica fan r ... and is called Stjrex Colanica - becaufe it was brought over in hollow Canes.

P L A T E CCLXL

TACAMAHACA, C.B.P. Populus, Lin. Gen. Plant. ... 4.SjH¥?i5^m > ^hl;[£] lighter, and of a pleafant The Tacamahac Tree;

The Charaflers of this Genii- arc,

Black Male and Hermaphrodite Flowers upon the fane Tree. The Male Flowers a are produced in One oblong cylindrical Katkin. There is One Finger under each Scale. The Scales are ovate-fifed, and the ones Five Wings e. The Flowers have no Petals, but have an Enlargement of One Leaf e, divided into Two Parts, with a great Number of short Stamina d, unequal in Length, which are terminated by beaded Summits o. The Hermaphrodite Flowers, which are produced at remote Distances from the Male of the fane Tree, are difpofed in long Katkins p, which are long: The Scales are oval, whole, and entire n. The Enlargement of the Flower s are triangular, and covered on both Edges. They have no Petals, but have Two Stamina k, which are terminated by pyramidal Summits. The Germen supports a large Style l, which is crowned by an oblong fuperior m. The Germen afterward turns to an oblong unilocular Capsule, very glutinous.

This Plant is included in D. Linnæus's Genus ci Pnphrs, •• which, by its outward Appearance, - has great Affinity: !"E SS thr i opier is Male and Female in distinct Plants, and this has both Scars in the fane Plant; fo, by his own System it must be rctioined from that Genus, and placed in the I ighth Section of his Twenty-firft Class, "which inch:!" thofe Plants which have Flowers of both Sexes, and the Male Flowers have many Stamina.

This Tree is a Native of Canada, and some other Parts of North America; from whence the Refill w'us brought to Europe, and used in Medicine. It is doubtful whether there are not Two Species of this Tree, One of which grows naturally at Mexico. The Resin of this Tree was brought over in dry Lumps, and would crumble at firft between the Teeth; but that of the Tree growing in Canada came over in Shells; and was smooth, of One Texture, and in Colour like

lighter, and of a pleafant

This Tree was brought from Canada to the IfUnd of Jersey, where it was propagated; and Six of the Plants were sent from thence to the late Queen Caroline, in the Year 1731, as a L Vefent, by Vic Title of Duc de la Rivier, with an Account how they should be propagated. One of these Trees was by the Queen given to the late Sir Hans Sloane, Bart. and is now growing in the Chelsea Garden. This has produced Male Katkins several Years; but till this Year there was no Appearance of any Female or Hermaphrodite Flowers; and these being the first which have appeared in Europe, so far as I can learn, were thought worthy of being exhibited to the Public.

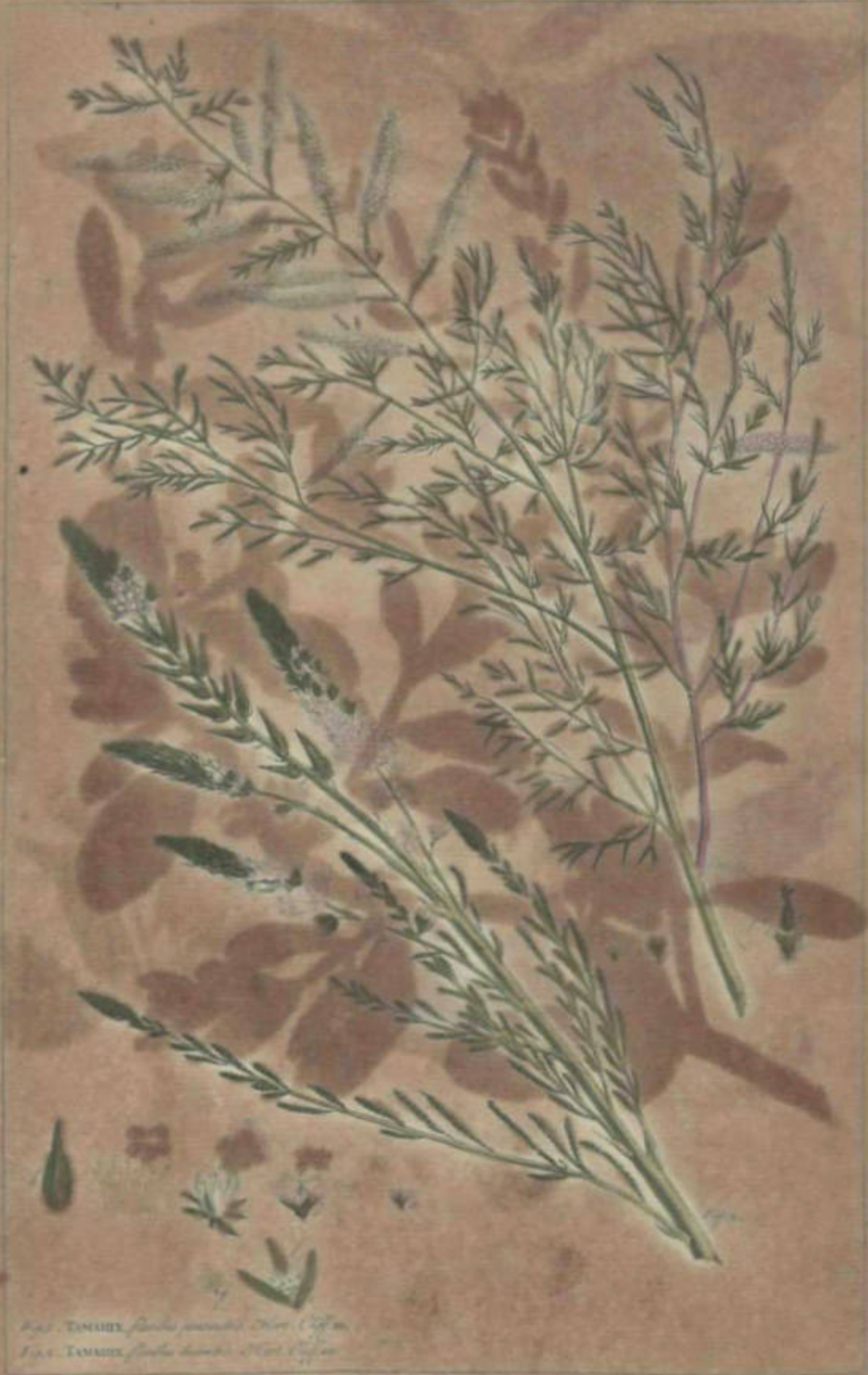
By the Growth of this Tree in Europe, it seems rot to be one of a very large Size; for that which is now growing in the Chelsea Garden is not more than Sixteen Feet high, and the Seem is not larger than the Calf of a Man's Leg. The Bark is smooth, like that of the Black Poplar • and the young Branches are much the lame l. Their appearance, but their annual Shoots are hollow more than a Foot in Length. The Leaves resemble those of the Pear-tree: They are about four Inches long, and an Inch and Half broad in the Middle, drawing towards the Point into a narrow Point. Their Edges are serrated, and of a deep Green; and their under Side is hoary. They stand upon long fender Footfalks, and are placed without Order upon the Branches.

The Male Flowers come out from the Side of the Branches in long Katkins, as is represented at e; these have numerous Stamina, which are irregular in Height, and crowned with beaded Summits of a purple Colour: These appear in April and May, and fall all loose short. The Hermaphrodite Flowers are produced at the End of the Shoots, upon long fender Footfalks, in very long Katkins, having a fleshy involucrum under each, as is represented at g, which is oval and pointed from the Bottom of which arises the Footstalk of the Flower, which is very short. Upon the Top is placed the Petal, according to time, or the Employment, according to

Styrax officinalis L.

Styrax officinalis L.

Populus balsamifera L. ft**



No. 1. TAMARIX, *fruticosa* Pers. (Linn.)
 No. 2. TAMARIX, *fruticosa* Pers. (Linn.)

Illustration of Tamarix fruticosa Pers. (Linn.)

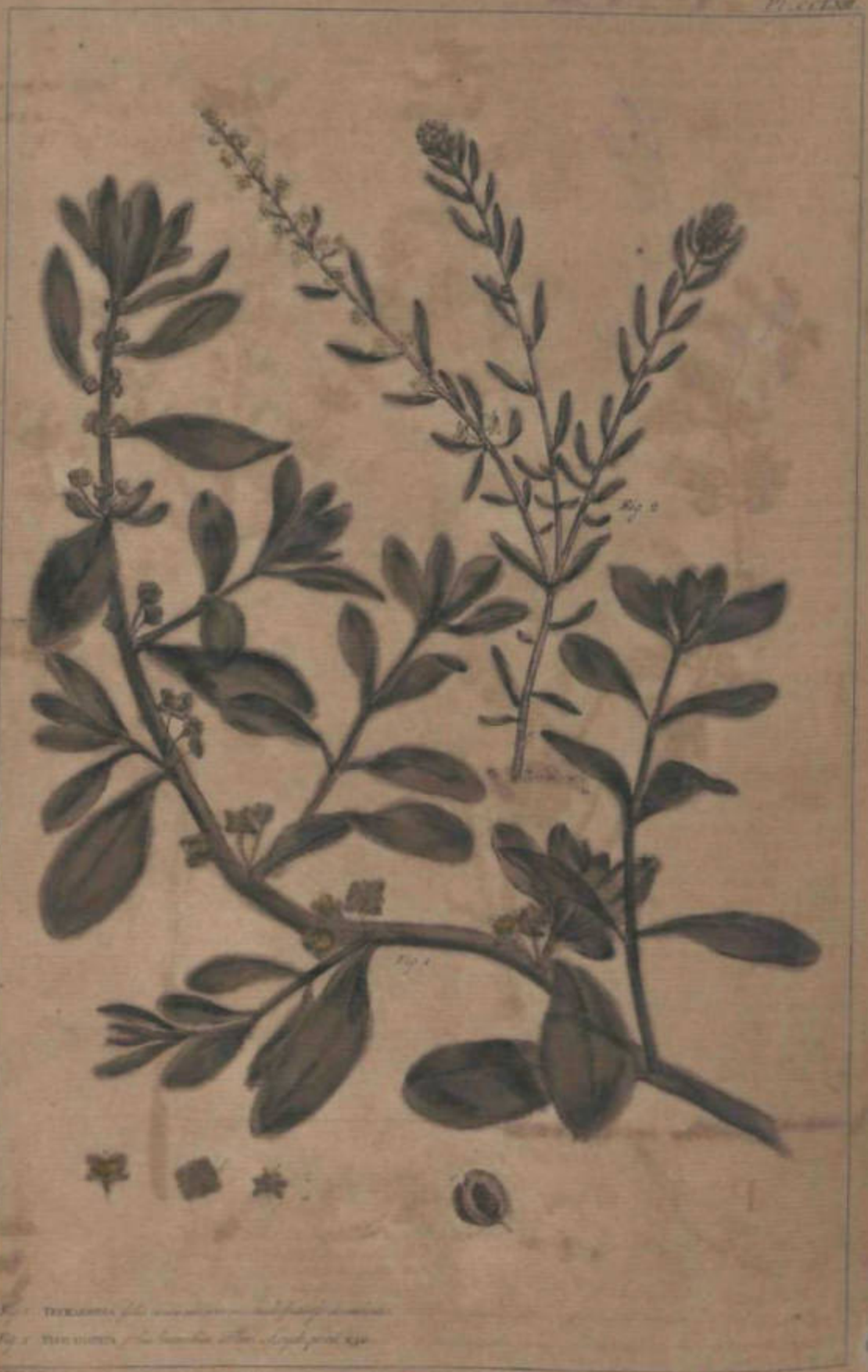


Fig. 1. *TEKASIA* foliis oppositis serratis, inflorescentia racemosa.
 Fig. 2. *TEKASIA* foliis oppositis serratis, inflorescentia racemosa.

Handwritten text at the bottom of the page, possibly a signature or date.

other Botanists, which is of One Piece, shaped like a wide Cup, having a large Style in the Center and Two Stamina on one Side, which are terminated by pyramidal purple Summits. These Hermaphrodite Flowers appear in July, and are succeeded by oval Canute terminated in a Point, inclining downy Seeds. The soft Covers of the Buds of this Tree abound with a tenacious Balsam or Turpentine in the Spring, which becomes liquid by Heat. It is of a yellowish Colour, and fragrant Scent.

In the *Gardeners Visionary* the *Tit J P* Genus of Poplar, to which, by its Male Flowers,

seemed to belong; but since the Hermaphrodite Flowers have appeared, which flew it is not of that Genus, nor of the Class in which that is ranged; so I have at present applied the *Indian* Title to it, as the Refin of the Tree has been many Years called by that Name in the *Shyre*.

It does not appear that this Tree has been long in *France*, for *Monfieur Du Hamel*, in his Book of hardy Trees and Shrubs, mentions it to have been lately planted in the Gardens there; where it had supported the Winter in 1754, which had killed many other Trees.

P L A T E C C L X I I .

5 T >> S. Gen. Plant. 237. *Tamariscus*, *Forst.*
t. *Bot. Mart. Plant.* 158. *Tamariscus*;

in French, *tomans*.

The Curate of the Genus are, *Tamarix* which is cut into Five equal Segments and in one blunt concave Petals, slender Stamina, Specie there are Five, *Zs* an acute-pointed terminated by round Summits, is crowned

Stems, joint with small Seeds

crowned with a feathery Down.

HIS Genus of Plants *g g f* *h* *J*

I Section of *Urnieu s* && " *md free re-*
t 14 Plants *Whole Forshave f* *dx to his*
*? : ££' • *TutLf Places* * among his *Miscella-*
Tree's and Shrub *g g g g*

The Species here represented are;

Fig. 1. TAMARIX floribus decandris. Hort. Cliff. 177. *Tamarix* with Five Male Parts. Flower. This is the *Tamarix* with narrow Leaves, which is the *Tamarix* with a narrower Leaf, or *Tamarix*.

This Tree grows naturally in the South of *France*, in *Spain*, and *Italy*, where it rises to a middling Stature; in *England* it is rarely seen, and is about Sixteen or Eighteen Feet high. The Bark is reddish, and the Colour of the Branches is dark brown. The Branches are slender, and are generally declined; they are every Side, are reddish Bark, and are garnished with very small, which are finely cut into many

Segments. The Flowers are produced in close taper Spikes, which come from the Side of the Branches toward their upper Part: They are very small, of a whitish Colour, with a Blush of Red on the Inside of their Petals, as is represented at *l*, Fig. 1. The Flower *l* is about the natural Size. That at *a* and *b* is magnified, to show the Parts more distinct. The Flowers of this Specie have but Five Stamina, which are terminated by roundish red Summits. The Flowers appear in July, and there is generally a Succession of them on the same Plant till Autumn.

The Wood, Bark, and Leaves, of this Tree are used in Medicine.

Fig. 2. TAMARIX floribus decandris. Hort. Cliff. in *Tamarix* with Ten Male Parts in the Flower. This is the *Tamariscus Germanica* *Lob. Icon.* 218. German *Tamariscus*. *Caspar Bauhin* titles it *Tamarix fruticosa, folio crassiore* *Jive Germanica, Pin.* 485. Shrubby or German *Tamariscus* with a thicker Leaf.

This grows naturally in moist places in *Germany* and is rather a Shrub than a Tree. It generally rises with many woody Stalks from the Root, which grow more erect than those of the former. They have a smooth pale-green Bark when young, which afterward changes to a yellowish Colour. These send out slender Side-branches, which grow erect, and are garnished with pale-green Leaves placed alternate: These are shorter and closer than those of the former; and the small Leaves of which they are composed appear like Scales at a Distance, and lie over each other like those of Fifth. The Flowers terminate the Branches in long loose Spikes: They are larger than those of the former, and have Five spreading Petals of a Blush-colour; and within are Ten Stamina, Five of which are alternately longer than the other: These adhere to the Base of the Petals, as is shown at *d*, where they are magnified; the Figure *a* being the natural Size of the Flower. This Sort flowers at the same Time as the former.

P L A T E C C L X I I I .

TETRALOMIA, Lin. Gen. Plant. 551. *tetragonecarpus*, *Com. Mart. Sep.* 2. 205.

The Characters of the Genus are'

has a woman Empalment, composed of The Flower has a r... upon the Germen: It has no Petal, is fo... is fo called y but has

more than Twenty floort slender Stamina crowned by oblong prostrate Summits c. // has a roundish Germen situated under the Flower supporting Four awl-shaped recurved Styles d, which have hairy Stigma's of the same Length as the Styles, the Germen afterward turns to a four-corned Capsule with a thick r... Cover, inclining One hard four-cornered Seed.

The

*The Species here reprinted are,

Fig. i. TETRAGONIA *foiis ovatis integerrimis, caulefruticosa decumbente, Diff. Hort.* Tetragonia with oval intire Leaves, and a fhrubby trailing Stalk.

THIS Plant grows naturally at the *Cape of Good Hope*. The Stalks are thick, and very fucculent when young, but afterward become ligneous: They are as thick as a Man's little Finger -, but, if they are not fupported, they trail upon the Ground. The Leaves are oval, thick, and fucculent: They are Two Inches long, and One broad; and are for the moft part placed oppofite. Thefe, and alfo the young Branches, are covered with fmall pellucid Drops. The Flowers come out from the Wings of the Stalk, each ftanding upon a (hort flendet Footstalk: There are Two, Three, or Four,, of thefe rifing from the fame Point. They have Four yellowifli green Leaves, which fome call the Empalement, and others the Petals: Thefe fpread open, and within are fituated a great Number of fhort yellow Stamina, terminated by oblong profrate Summits, One of which is reprinted at *a*. The Flowers appear during moft of the Summer Months, and are fucceeded by thick flefhy Capdiles, having Four Corners or Wings, inclofing One hard Seed.

Fig. 2. TETRAGONIA *foiis Innearibus; Flor. Leyd. Prod.* 250. Tetragonia with linear Leaves. This is the *Tetragonocarpus Africana, fruticans, foiis longis & anguftis, Hort. Amft. 2 p, 205.* Shrubby African Tetragonocarpus with long and narrow Leaves.

This is alfo a Native of the fame Country with the former, but has been much longer in *Europe*. The Stalks of this are flender, and when young are fucculent •, but afterward become ligneous, and have a whitifh Bark: Thefe divide into many Branches, which trail upon the Ground if they are not fupported. They are * garnifhed with narrow fucculent Leaves, an Inch long, and Half a Quarter of an Inch broad: They are placed alternate, and have no Footstalks; and are covered with pellucid Drops, like thofe of the former Sort. The Flowers are produced from the Wings of the Stalks, towards the Top, and terminate the Stalks in loofe Spikes, ftanding upon very fhort Footstalks. Their Structure and Colour are the fame as' thofe of the former Sort, but are fmaller; and are fucceeded by Capfules of the fame Form. This Plant flowers great Part of the Summer, and in warm Seafons the Seeds will ripen in the Autumn.

P L A T E C C L X I V .

TEUCRIUM, *Lin. Gen. Plant. 615. Cham<edrys, Tourn. Infi. R. H. 204. Tab. 97. Rail Meth. 60.* Germander j in French, *Germandrée*.

Leaves. *Cafpar Bauhin* titles it *Botrys Chamadryoides*, p. 138. Jerufalem Oak-like Germander.

The Characters of the Genus are,

The Empalement of the Flower a is of One Leaf, cut into Five equal acute Segments at the Top, and is permanent. The Flower is of One Petal, and of the Lip Kind b. The Tube is very fhort. The lower Lip c is divided into Five Segments, the middle one being hollowed like a Spoon. It has Four Stamina, which occupy the Place of the upper Lip d, Two of which are longer than the other, terminated by fmall Summits; and a four-pointed Germen, fituated in the Empalement b, fupporting a flender Style e, e, crowned by a flender Stigma f. The Germen afterward turns to Four Seeds g, which ripen in the Empalement.*

THIS Genus is ranged in the Firft Section of *Linnaeus* Fourteenth Clafs, which includes thofe Plants whofe Flowers have Two long and Twofhorter Stamina, and the Seeds ripen in the Empalement of the Flower. *Tournefort*, who keeps thefe Plants under the Genus of *Cham<edrys*, places it in the Fourth Section of his Fourth Clafs, which contains the *Herbs with a Flower of One Petal, having One Lip*. Mr. *Ray* places it in the Firft Section of his Fourteenth Clafs, which includes the Plants with whorled Flowers, which have perennial ligneous Stalks.

* The Species here reprinted are,

Fig. 1. TEUCRIUM *foiis multifidis, fioribus verticillatis utrinque ternis, Lin. Sp. Plant. 562.* Germander with many pointed Leaves, and Flowers in Whorles, Three on each Side the Stalk. This is the *Cham<drys laciniatis filiis, Lob. Icon. 385,* Germander with cut

The Title of this Plant on the Plate was, by Miftake, tranfposed from another Figure, and printed off before it was obferved by the Author •, and he therefore hopes the Reader will alter it. This Plant grows naturally in ^{an ^ a t u M H ^ r ^ a T j ^ a n d Germany,} on arable Xanfc It is anfual, and Decay? foon after it has perfected Seeds. The Stalks are four-cornered and hairy: They rife a Foot high, and are garnifhed at every Joint by Two hairy Leaves placed oppofite, which are cut into Three Segments almoft to the Midrib, and thefe are nightly indented in Three Parts. The Flowers ftand in Whorles round the Stalks, Three rifing together on-each Side, ftanding upon (hort Footstalks: They are of a pale Blufh-colour, and fhaped like thofe of the other Species. It flowers in *June* and *July*, and the Seeds ripen in the Autumn.

Fig. 2. TEUCRIUM *foiis ovatis, fuperne ferrato-dentatis, fioribus racemofis, Flor. Leyd. Prod. 307.* Germander with oval Leaves pointed at both Ends, and indented like a Saw at their upper Part, and branching Flowers. This is the *Chamadrys multiflora^ tenuifolia Hispanica, Tourn. Infi. R. H. 205.* Many-flowering Spanifh Germander with

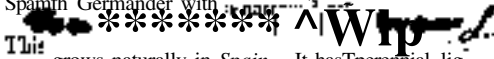

This grows naturally in *Spain*. It has Tperennial ligneous Stalks, which rife a Foot high, and are ereft, fending out flender Branches from the Side. The Leaves are oval, and fmooth on their upper Side, but hairy on their under, and end in fharp Points: Their upper Part is fawed. The Flowers come out in branching Whorles round the Stalks: They are of a bright red Colour, and appear in *June, July,* and *Augufi j* and in warm Seafons the Seeds will ripen well in *England*.



Fig. 1. *Thymum* *sp.* *herba subarvensis* - in *Herb. Cliff. bot.*
 Fig. 2. *Thymum* *sp.* *herba arvensis* - in *Herb. Cliff. bot.*

Printed according to the original by G. Kneller del. et sculp.



Fig. 1. *TRILICITUM* *fruticosa* *pubula* *trigynalobus* *radix* *caulis* *herb.* *L. in alp. plant. 247*
 Fig. 2. *TRILICITUM* *fruticosa* *pubula* *trigynalobus* *radix* *caulis* *herb.* *L. in alp. plant. 247*



TORMENTILLA *radix officinalis* L. *tormentilla* L. *tormentilla* L.

tormentilla L. *tormentilla* L. *tormentilla* L.

P L A T E CCLXV.

TUALI TRAM, *Urn. Inji. R. H. 270. Tab. 14.3. Bmi A&tb. Plant.]30. Lin. Gen. Plant. 617. Meadow Rue, or Feathered Columbine,*

THIS Genus of Planrs is ranged in the Sixth Section of *Toarxefs'n'i* Sixth Clafs, which includes the *Serbs* with a *Siefe Flower, isbaf* *Potual becomes a Fruit tempofid of fever al Cap/ales.* Dr. *Liimsus* places it in the Smjgnth Sefliun of his Thirteenth CJaiv which contains the *Flowers ba* *dijl'mi't Sittumna, and Jemeral Si*

The Characters of this Genus are,

'B& Flower'has no'Smpalemmt: It has hour rcunijih Pen::, are concave, and drip cfffioti b, and many Stamina c; which are head, compred, and longer than the Petals, terminated by oblosig twin Summits, with Jhveral Jbort Styles, each fitting upm a fipirradi Germtn, and are CTK:- by thin Capfuls d. The Cover of .be Germet afterward i... Capfule e, baling One Cell f, epmitig... isclafing One oblong Set.

The Plants of this Genus differ from each other in some of their Characters; for although mod of the Species have but Four Pctais to their Flowers, yet ther are iv/o or Three which have Five: Others diffi in the Number of their Stamina; and there is One or Two which have Male and Female Flowers indifferent Plants,

The. Specct(here reprinted are,

Fig. 1. THAI. ICTS. QM frulVthns pmdttlis triangularibus *tereti, Lin. Sf>. Plant. ; 17. Meadow Rue with triangular pendulous fruit, and a taper Stalk.*
• This is the *TbaJiiTram majus* *Staminibus ferum purpura titibits, C. B. P. 337. Greater Meadow Rue purple Stamina to :he Flowers, 'fckrnesfort titles. a&Srum Alpimtm ap&legia feliiis, fitrmifim>mha Lift. R. If. 270. Alpipe Meadow Rue with Columbine Leaves, and Flower - wkh purpleish Stamens. common!)*

This Plant grows nati-ally on the Alps and Helvetic... ssfemLjjite^9pJgg^cui tii*... generally known by the... Feathered Columbine, which was given it from the Refembla... to those of Coltiinbinc; but as the IV... of the Flowers soon

dropped off; and the numerous Stamina were left without Cover, so they called it *Feathered*.

There are Two Varieties of this (if not did in fit: Species), which are common in the Gardens; One of which has purple Stalks, and pile purpiifh Stratpina to the Flowers, which is here reprefered; the other has green Stalks and whitift Stamina to the Flowers; but whether theft are accidental Varieties, or difbinct Species, I cannot determine.

The Root is compofeti of many fleshy Fibres of a yellowifh Colour. The lever Leaves are branched into feveral Divifions, and have bread Lobes of a lucid green, refembling thofe of *Columbine*. The Stalk is taper, fmooth, and of a beautiful purple Colour: It rife about Three Feet high, branching out on the Side, and is terminated by a loofc Panicle of Flowers, which have each Four Petals j thefe soon fall off, leaving the numerous Stamina and Styles naked. Thefe Flowers appear in *June*, and are fucceeded by thin Capfulcs, each containing a fingle oblong Seed, which ripens in *Augujl* -, after whicli the Stalk dies to the Root, which is perennial, and fends out new ones the Spring foliovi ng.

Fig. 2. THALICTRUM fiaribxs pentapetalis, radice tuberosa, *rofil, H&I. Cliff. 227. Meadow Rue with Flowers havi:: Five Petals, and a tuberous Root. This is the TealiSrum minus cfbodeU radice, magno fieri, tfoxrn. Inji. R. H. 2-ji. Smaller Meadow Rue with an Aphodel Root, and a large Flower. The Author of the Hijioria Liigduatijii titles it Oea... Mycoriie's Wnier Dropwort.*

This Plant grow; naturally on the Moun::: in *Spain*. The Rout is compofed of feveral fleshy Fibres, like thofe of the *Garden Ra'Aumuhis*. The Stalk is (lender, and rifes about a Foot high, or fotnewhst more, in moift Ground: It fends out One or Two Side Branches, and is :... compound Leaves at the Joint, whose Lobes are mod of them re... They are of a light green Colour. The Stalks are terminated by fmaif Panicles of Flowers, which have each Five white Petals, refembling as... Thefe four fall off; but within are a great Number of Stamina b, which are of a yellowifh Colour; and between thefe are (hveral Jhort Styles, crowsVd b; about Aug-; mas. c. The It: Flowers appear in *June*, and are fucceeded by thin Capfulcs, each indofmg One oblong Seed, which ripens in the Autumn,

P L A T E CCLXVI.

Towrn. *hijl. R. II, 320. Tal>. 170. R... Plant. 47. Lin. Gt. Plant. 21 j. Harewort,*

« - ^ H I S Genus of Plant's is ranged in the Fifth Section of *Toarmfcr't* Seventh Clafs, which includes the *Harewort* with... *ixt becomes Tv?o large c: ... Mr. Kay* places it in the Firit Section of his Eleventh Clafs, which contains the *Pkitts* with *imbeUattd Fiewert, being fuf Seeds vilb things ; ; ... Dr. Linnæus Novæ. XLV.*

ranges it in the Second Secti... of his Fifth Clafs, <n>... in clafks... *Plan,*... *Five Stem:...*

The Characters of the Genus are,

It has an umbelfattd Flower: The gner... of many fueil Olm h, which are called Rays: Neither if tbeft ha: any l... The Flwvers have l'VC IIS:'.<d P... which are equal: They have each five...



Fig. 1. TRIFOLIUM repens, vulgare, foliis trifidis, papilionibus floralibus hirsutis. Hort. Cliff. 374.
 Fig. 2. TRIFOLIUM spars. oblongis, vulgare, oblongis, apiculatis, foliis trifidis, papilionibus. Hort. Cliff. 374.



Fig. 1. TURNERA foliis lanceolatis hirsutis, stipulis serratis, cymis axillaribus. Desf. Flor. Atl.
 Fig. 2. TURNERA foliis ovatis lanceolatis serratis rugulosis. Desf. Atl. Flor.

Paris, chez la Citoyenne Lesclapart, Palais National, au Salon de Botanique, le 27. An 5. de la Liberté.



CRATAEGUS. *Crataegus phaeocephala* var. *crataegus* Nutt. 1794

Painted according to the specimens of Dr. M. B. ...

P L A T E CCLXVIII.

NERAI Plum. Ntv. Gtn. Plant. 15. Tab. 12. Lin. Gen. Pmt. 338.

THE Title of this GCJIUS was given it by Father Plussier, who found One Specie growing natu- in the French Islands in the IVEll India, in Honour of the Memory of Sir William Turner, a very learned Physician, who published a History of Plants in the Year 1528, with the Figures for the <JJJ> from Father Plussier's History.

It consists of One Class, which includes chofe Plants vers hato Free Male and Female Fm&U Parts.

Characters of the Genus are,

It has a funnel-shaped Empalement of One Leaf a, 4 into five Parts at the Edge, but has Two oblong

one on each Side, which terminate in Points. The Petals are five heart-shaped plain Petals b, which have narrow Veins, and are inserted in the Empalement. It has two oval-shaped Stamens c, which are shorter than the Petals, and are inserted in the Empalement d, and terminated by acute pointed Summits e. It has a conical Germen, supported by Three slender Styles f, which are crowned by three-pointed ending, in many Points. The Germen afterward grows to an oval Capsule, which is divided into Three Valves, and is furnished with several Seeds g.

The Species here represented are,

Fig. 1. TURNERA foliis lanceolatis serratis, abtufe serratis, commutis, Dill. Hort. Turnera with narrow spear-shaped hairy Leaves, which are bluntly indented, and end in acute Points. This is the Turnera lycopifolia, Rad. Hort. Cliff. Turnera with a larger Horchound Leaf. Sir James Smeaton, in his History of Jamaica, 1, titles this Plant Capia urtica folia, hirsute, radice trifida, Vi. I p. 201. Ciliat with a Nerle Leaf, yellow Flower and a three-cornered Capsule.

This Plant grows naturally in many of the Islands in the West India, from whence the Seeds were first sent to Europe. It rises with a woody Stalk to the Height of

Eight or Ten Feet, covered with a dark brown Bark; and sends out Branches on every Side, the whole Length: These are garnished with narrow spear-shaped hairy Leaves, about Three Inches long, and Three Quarters of an Inch broad in the Middle, drawing to a Point at both Ends: They are bluntly fawed on their Edges, have very short Footstalks, and, when rubbed, emit a disagreeable Odour. The Flowers are fattened to the Footstalks of the Leaves, to which they fit very close, and have Two leafy Appendages to their Empalements: They are composed of Five large heart-shaped Petals of a pale yellow Colour, whose Bases are narrow, and are inserted to the Empalement: They spread open, as is represented in the Figure. When the Flowers fall off, the conical Germen divides to a three-cornered Capsule, fitting between the Two leafy Appendages; and when the Seeds are ripe, it opens in Three Valves at the Top, and discharges the Seeds. It flowers great Part of the Year, and the Seeds ripen all the Summer.

Fig. 2. TURNERA foliis wato-lanceolatis, serratis, abtufe serratis, commutis, Dill. Hort. Turners with oval spear-shaped Leaves, which are rough and fawed on their Edges. This is the Turnera frutescens ulmifolia, Plum. Gen. Nov. 15. Shrubby Turners with an Elm Leaf.

This has a woody Stalk like the Fir-tree, and rises to the same Height; It is also branched on every Side from the Ground upward, but the Branches are tender and soft. The Leaves are oval spear-shaped: They are Two Inches and a Half long, and almost Two broad, in the Middle, having several deep Furrows; and are rough on their upper Side, of a lucid green Colour, but are smooth on their under; They are fawed on their Edges; and have longer Footstalks than those of the former Sort. The Flowers are very like those of the former, and fit close on the Footstalk of the Leaf. The Segments of their Empalements are broader than those of the former Sort, as is (shown at m, but, in other Respects, the Two Sorts are so like, as that many Botanists have supposed they were the same Specie. But the Differences before-mentioned are constant from Seeds, so there can be no Doubt of their being distinct Species.

Handwritten note: wato-lanceolatis

Handwritten note: Turnera ulmifolia

Handwritten note: Turnera

P L A T E CCLXIX.

CRATAGUS, Tourt. Inf. S. H. 633. Pym, Lin. Gen. Plant. 550. Wild Service-tree in France, Mifler.

THE Genus of Cratagus is ranged in the fifth Section of Younger's System, which includes the Trees and Shrubs with a soft Flower, and woody Seeds; and he distinguishes it from the Pear, Apple, and Quince, by the hard Seeds which are lodged in the Cells; and from the Service, by its having double intire Leaves. Dr. Linnæus separates the Cratagus from the Mespilus and Sorbus, by the Number of Styles; ranging those which have Two Stamina under Cratagus, those with Three under Sorbus, and such as have Five he places under Mespilus; but, according to his System, the Plant here represented should be placed under the Mespilus. But as the late Dr. Smeaton, Professor of Botany

at Peterburg, has ranged it under Cratagus, I have followed him, though the Characters do not agree well with those of either Genus.

The Characters of Cratagus, according to Linnæus, are,

The Flower has an Empalement of One Leaf, which is entire, and cut into five segments at the Edge, and is permanent: It has five rounded petals, which are inserted in the Empalement, and have broad Stamina c, which are inserted to the Empalement, terminated by rounded Summits. The Germen, which is situated under the Flower, supports Two slender Styles (in it is there are Five) terminated by three-pointed Summits. The Germen afterwards becomes a roundish fleshy uniloculated Fruit, with Two oblong hard Seeds (in this there are Five) lodged in many thin Cells.

the

The Specie here represented is,

CRATJEGUS cerasi folio, floribus magnis, Amman. Ruth.
274. Wild Service with a Cherry Leaf, and large Flowers.

This Tree grows naturally in *Siberia*, from whence the Seeds were lent to *Peterburgh*, by the following Title, *Mains Daurica montana magno fore albo, fructu ceresi exiguo, luteo ex rubro variegato, austero, petiolo prtelongo tenui. i. e.* Mountain Apple of *Dauria* with a large white Flower, a small Fruit like a Cherry, of a yellow and red Colour variegated, having an austere Taste 3 and a long {tender Footstalk.

It has a strong woody Stem, sending out many Side Branches, covered with a smooth brown Bark. The Leaves are shaped like those of the Cherry-Tree: They are of a deep green on their upper Side, but are paler on their under, and are lightly fringed on their Edges, (landing upon long Footstalks. The Flowers come out in Bunches from the Side of the Branches, Hanging upon long (tender Footstalks: They are composed of Five oval white Petals, in Shape like those of the *Pear-Tree*,

which are inserted in the Empalement; and have vñ Number of Stamina, about Half the Length of the Style, terminated by roundish yellow Summits; and Styles rising in the Center, which are as long as Petals, crowned with headed Summits. These appear in *April*, at the same Time as those of the *Tree*, and are succeeded by roundish Fruit, above. Size of large *Duke Cherries*, which change to a yellow Colour variegated with red, indented at both Ends an *Apple*; but of a very austere Taste \ decaying into Fruit of *Medlar*, and is then more palatable; has Five hard Seeds lodged in distinct Cells. This has been by some intitled *Ceraso-Mali*, and by < j *Malo-Cerasi*, from the Resemblance which it bears to both. But it is certainly much nearer related to *Apple*, than any of the other Genera, though the Flowers are more like those of the *Pear-Tree*.

As the last Summer this Tree produced its Fruit the *Chelsea* Garden, for the first time, for many of the Subscribers to this Work desired a Figure of it might exhibited therein, though it was not inserted in the Order which we first proposed.

P L A T E CCLXX.

RHUS, Lin. Gen. Plant. 331. Cotinus. Tourn. Inst. R. H. 610. Tab. 380. Raii Meth. Plant. 158. Venice Sumach; in French, Fujet.

THIS Shrub is by Dr. *Linnaeus* placed in his Genus of *Rhus*; but, by former Botanists, it has been kept in a separate Genus. It is ranged in the Third Section of *Linnaeus's* Fifth Class, which includes those Plants whose Flowers have Five Stamina and Three Styles. *Tournefort* places it in the first Section of his Twenty-first Class, which contains the Trees and Shrubs with a Rose Flower, whose Pointal turns to a Fruit with One Capsule. Mr. *Ray* places it among his miscellaneous Trees and Shrubs.

The Characters are,

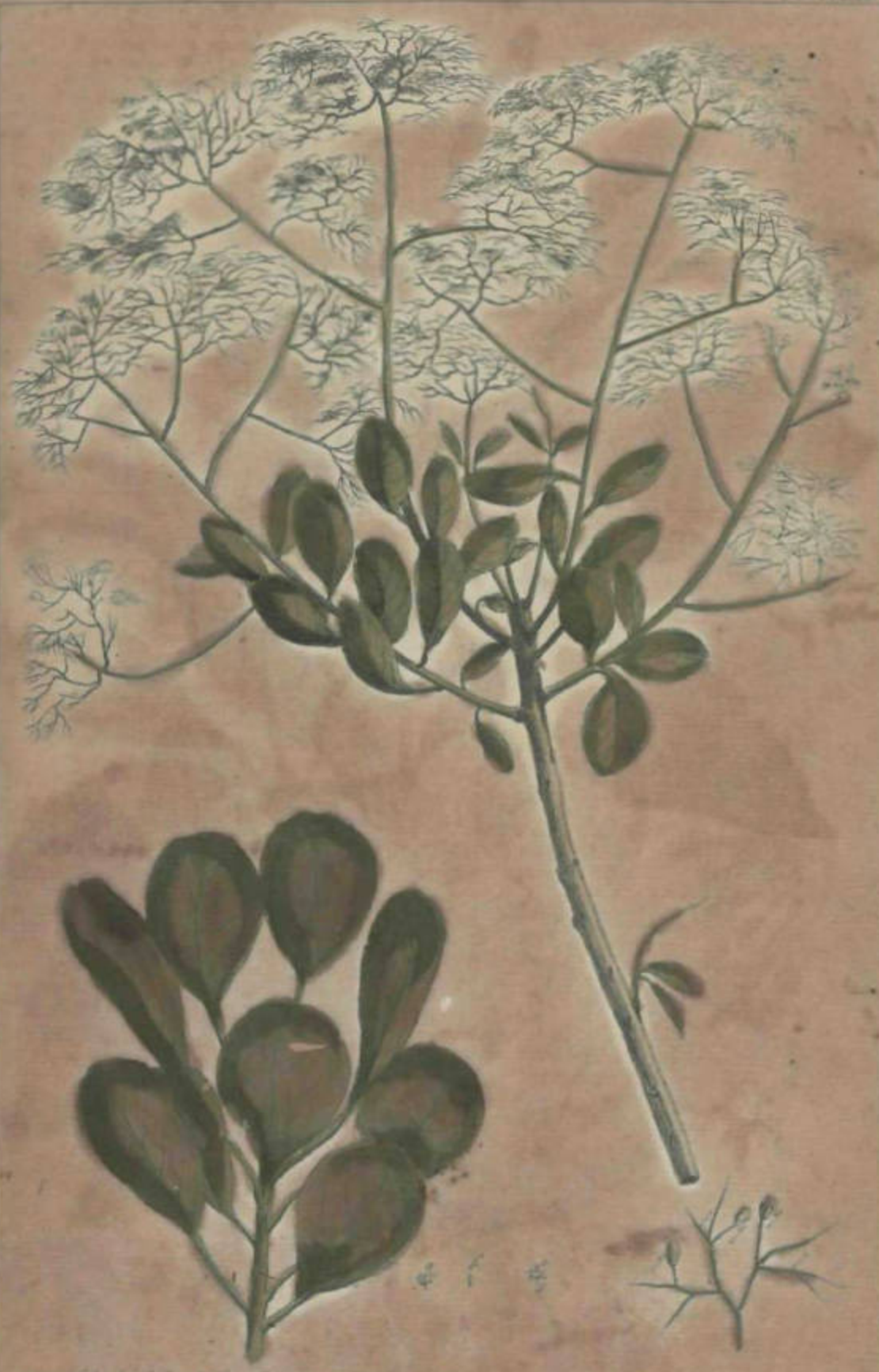
The Flower has a permanent Empalement, divided into Five Parts 2L It has Five Petals, which spread open; and Five short Stamina, crowned by small Summits. It has a roundish Germen, having scarce any Style, terminated by Three small Stigmas. The Germen afterward turns into an oval Berry, green, green. The Fruit stands singly upon hairy Branches, and incloses One hard Seed.

The Specie here represented is,

RHUS fchu simplicibus obovatis, Lin. Sp. Plant. 267
Sumach with single oval Leaves. This is the *Cotinus Conarja, Dod. Pempt. 780. Venice Sumach. Joh Bauhin* titles it *Coccigria Jhe Cotinus putata, Hist. 1 P. 47- Coccigria* or Sumach.

This is the *Rhus officinalis* in the South of *France*, and in *Italy*, but has been long cultivated in *England*, and rises ten or twelve feet high, covered with a light brown Bark, sending out many irregular Branches, which have a copious Juice, and are furnished with roundish oval Leaves of a light green Colour, which are entire. The Flowers are produced upon feathered Branches, which come from the Ends of the Shoots of the same Year: These Branches are of a rufous brown Colour, and frequently spread over the whole Shrub, making a singular Appearance. The Flowers are very small, and grow sparingly on the Branches: These appear in July; but are seldom succeeded by Seeds in England.

The Wood of this Shrub is used for dyeing a yellow Colour. The Leaves and young Branches dye black; and the Bark is used for tanning of Leather.



Umbelliferae

Umbelliferae



VERATRUM, *racem papillosum* in the parasitic *fructibus longioribus*

fructibus longioribus of *fructibus* of *fructibus* 1810

P L A T E CCLXXI.

VERATRUM. *Tourn. Injt. R. H. 272. Tab. 145. Lin. Gen. Plant. 1013. Helleborus albus, Rait Meth. Plant. 77. White Hellebore j in French, Ellebore blanc.*

The Chara&ers of the Genus are,

It has Hermaphrodite and Male Flowers intermixed in the fame Spike. The Flowers have no Empalement, according to fome Syjiems, or no Petals, according to others. They have Six oblong fpear-fhaped Pétals a, which are permanent. The Male Flowers b have Six awl-fhaped Stamina, which fpread a/under, and are terminated by quadrangular Summits, as is represented at c. Thefe have no German; but have a withered Style. The Hermaphrodite Flowers have the fame Number of Petals and Stamina as the Male, and have Three oblong Germina fitting upon the Style, which is fcarce vifible, crowned by a trifid fpreading Stigma d. The Germina after-ward turn to Three oblong erett compreffed Capfules e, which open on the Injide f, having but One Cell g, which includes feveral compreffed Seeds h.

THIS Genus of Plants is ranged in the Sixth Sedlion of *Tdcrneforfs Sixth Clafs*, which includes the *Herbs with a rofe-fhaped Flower, whose Pointal turns to a Fruit compofed of feveral Capfules*. Dr. *Linnaeus* places it in the Firft Section of his Twenty-third Clafs, which contains thofe Plants, *whose Flowers are of different Sexes in the fame Plant*. Mr. *Ray* ranges it in the Firft Section of his Eighteenth Clafs, which includes the *Plants with a regular Flower, fucceeded by feveral Capfules*.

The Specie here represented is,

VERATRUM *racemo fupra decomposito, corollis ereflis, Lin. Sp. Plant. 1044. Veratrum, whose Spikes are de-*

compounded above, and the Petals of the Flower erett. This is the *Veratrum fore fubviridi, Tourn. Injt. R. H. 273. White Hellebore, with an almoft green Flower. Caffar Bauhin titles it Helleborus albus, flore fubviridi, Pin. 186. White Hellebore with a green Flo wen*

This Plant grows naturally on the Mountains of *Austria Helvetia, and Greece*. The Root is perennial, and compofed of many flefhy Fibres, gathered into a Head at the Top, which ftrike deep in the Ground. The Leaves are of an oblong oval Form, they are Ten Inches long, and Five broad in the Middle, ending in roundifh Points, having feveral longitudinal Plaits, like thofe of *Gentian*. The Stalks rife from Three to Four Feet high, the lower Part being girmifhed with Leaves of the fame Form with thofe below-, but are fmaller. The upper Part branches out in feveral clofe Spikes of greenifh Flowers, as is represented in the Figure; undef each of thefe is fituated a very narrow-pointed fmall Leaf, which is plaited. The Flowers are compofed of Six Petals, which do not fpread open flat. They are of a whitifh green Colour, and have Six Stamina, which fpread afunder, terminated by four-cornered yellow Summits. The Hermaphrodite Flowers have Three oblong Germina, which, after the Flower is paffed, turn to Three compreffed Capfules, containing Ond Row of flat Seeds.

This Plant flowers in *June and July*; the Seeds ripen in Autumn. It is this Sort which is ufed in Medicine, The Root purges violently upward and downward; for which Reafon it is feldom prefcribed, but in Madnefs, or to Perfons of robuft Conftitutions. The Powdef of itj mixed with Snuff, is a ftrong Sternutatory,

p L A T E CCLXXII.

VKRATRUM, *Tourn. Injt. 272. Lin. Gen. 1013. White Hellebore.*

THIE Charafters of this Genus having been described above, we fhall not repeat them here.

The Specie here represented is,

VERATRUM *r a cento fimpliciffimo, corollis patentibus, ftaminibus longioribus*. White Hellebore, with a fingle Spike of Flowers, whose Petals fpread open, and longer Sifemina. This is titled by Mr. *John Bartram, v. 1* • jvcred the Plant growing naturally in *North Veratrum fempervirens-, i.e. Evergreen \ bore.*

It has a peicnmai Root, cor of many *Atfhy* Fibres, from which {prins on . . .:iil oblong oval ; Leaves of a light >ur, which fpread near the ; Ground, and fit cioie to the Root at their Bale. They are from Four to Five Inches long; and from Two to Three inches, bioad.in the Middle, leffening at both Ends, where they are blunt-pointed. They hav€ Six

NUMB. XLV L

longitudinal Veins, which appear frongeft on their Under-fide* Thefe continue green all the Year. In the Centre of the Leaves arifes a fingle naked Stalk, about a Foot high, as is represented in the Figure/and £, which is terminated by a clofe conical Spike of purple or dark-red Flowers, compofed of Six Petals, which fpread open flat, as is represented at c. Thefe have each Six Stamina, which are twice the Length of the Petals, represented in the Two Flowers a and c, terminated by oval Summits. They have no Style -, but the Germen is crowned by a trifid Stigma. Some of the Flowers have no Stigma. Thefe are barren, having no Capiule fucceeding them. Others are hermaphrodite^ and are lucedded by an oval Capfule, represented at d, which has Three feparate Cells, each containing feveral compreffed Seeds.

I his Plant, on the Firft Examination, appeared to belong to *Linnaeus's Sixth Clafs*, having Six Stamina in each Flower, and the Three Germina, which feemed joined in One Capfule, which is three-cornered, has the Refemblance to the Fruit of that Clafs, but, on nearer Infpection, there were found many male Flowers intermixed with the hermaphrodite Flowers in the fame Spike,

A a a

Spike,

Spike, which were not succeeded by Seed Vessels •, and as this is the principal Character given by Dr. *Linnaeus*, to distinguish this Genus from those which approach near it, therefore it is here properly referred to *ksCiafs*, according to its *Syftem*.

I was first favoured with a Plant of this Sort by Mn

Peter Collinson, F. R. S. and afterwards received a Plant, with a Drawing of it, made in the Country where it naturally grows, by Mr. *John Bartram* junior; and have since been furnished with more Plants by Dr. *Benfel* of German Town in *Philadelphia*, who found it growing plentifully in shady moist Places.

P L A T E O C L X X I I I

VERBASCUM, *Linnaeus*, R. IL 146. Tab. 61. *Rail Meth. Plant.* 85. *tin. Gen. Plant.* 217. *Mullein** in *French, Bouillon blanc.*

The Characters of the Genus are,

Leaf a cut into Five Segments at the Top. It has One wheel-shaped Petal b, having a port cylindrical Tube, which is ad into Five large obtuse Segments, spread open flat. It has Five awl-shaped Stamina c, which are shorter than the Petals, terminated by roundish erect compressed Summits; and a roundish Germen, supporting an inclining Style e, crowned by a thick obtuse Stigma d. The Germen afterwards turns to an oval Capsule g, having Two Cells, which open at the Top h, filled with angular Seeds i, which are fastened to the Placenta.

THIS Genus of Plants is ranged in the Sixth Section of *Tournefort's* Second Class, which includes the Herbs with a wheel-shaped Flower of One Petal, whose Pointal turns to a dry Fruit. Mr. *Ray* places it in the Third Section of his Nineteenth Class, which contains those Plants which have uniform Flowers of One Petal, cut into Five Parts to the Bottom, and the Seeds are included in a Capsule with Two Cells. Dr. *Linnaeus* ranges it in the First Section of his Fifth Class, which includes those Plants whose Flowers have Five Stamina and One Style.

The Specie here represented is,

VERBASCUM foliis radicalibus ovatis petiolatis, caulinis oblongis sessilibus subtus tomentosis ferratis, BiSt. Hort. *Mullein* with oval lower Leaves upon Footstalks •,

those upon the Stalks oblong, fitting close, downy on their Under-side, and fawed on their Edges. This is the *Verbascum blattariæ foliis nigrum, amplioribus foliis alutis, apicibus purpurascens, Boerh. Ind. alt. 1. p. 228.* *Mullein* with a black Moth *Mullein* Leaf, large yellow Petals to the Flower, and purple Stamina.

The Seeds of this Plant were given me by the late Dr. *Boerhaave*, Professor of Botany at *Leyden*, who informed me that he had received them from *Vienna** The lower Leaves of this Plant are oval. They are about a Foot long, and Six Inches broad in the Middle, ending in round obtuse Points standing upon Footstalks, of a soft downy Texture, their Upper-side being of a green Colour, and their Under-side downy, and of a hoary White, having some strong longitudinal Veins. The Stalk rises from Three to Four Feet high. The lower Part is garnished with oblong Leaves of the same Texture with those below, but fit close to the Stalks* They are longer, and end in Points; in which they differ from the lower Leaves. The Flowers are disposed in a loose Spike on the upper Part of the Stalk, having One very narrow Leaf under each. The Flowers are of a brimstone Colour, and are larger than those of the common *Mullein*. They have One Petal, which is cut into Five roundish obtuse Segments almost to the Bottom. The Stamina are hairy, and of a purple Colour. The Flowers have an agreeable Scent at a small Distance; but if smelt to long or too near, it becomes less pleafant.

They appear in *June* and *July*, and the Seeds ripen in the Autumn; and then the Plant decays, being biennial.



VERBASCUM foliis cordatis, caulis pubescente, albae floris, foliis pubescentibus, ovata...

Handwritten text at the bottom of the page, possibly a signature or date.



Viburnum, folia ovato-lanceolata, marginibus serratis, ciliatis, etc.

Spinescentia in ciliis, glandulis, etc. etc.

shaped Lobes, spreading like the Fingers of a Hand, ending in acute Points. These are regularly cut on their Edges in Form of winged Leaves. The largest of these Lobes are about One Inch and a Half long, and Three Quarters of an Inch broad in the Middle. They are of a dull green on their Upper-side, and are grey on their Under. The Branches are terminated by Spikes of Flowers, which are Three or Four Inches long. The Flowers are disposed in Whorles round the Stalks. They are of a blue Colour, and are divided into Two Lips, the upper Lip being much broader than the lower. They are both cut into Three Segments, the middle One being the largest.

The First Flower, marked *a, b*, is of the natural Size -, the others are magnified, and *g* is One of the Stamina, *h* the Summit magnified.

Fig. 2. *VifEX foliis ternatis quinatifque-pinnato-incifis, verticillatis terminalibus, floribus alb is.* Grafted Tree with trifoliate and quinquefoliate Leaves cut in Form of winged Leaves, and whorled Spikes of white Flowers terminating the Branches.

This seems to be only a Variety of the former Sort* from which it only differs in the Colour of the Flowers. There is also another Variety with red Flowers.

P L A T E OCLXXVI.

The 'A' luc of this Genus is given to it in Honour to my learned Friend Dr. *William Vafcyi*, F. R. S. whose Knowledge of Natural History, and particularly in the Science of Botany, justly demands this Tribute.

The Characters of the Genus are,

The Flower has a permanent Spatha, or Sheath a, which divides longitudinally into Two Parts almost to the Bottom. It has One Petal, which has a long curved Tube swelling toward the Top. The Rim is cut into Six obtuse Segments b, which spread open. It has Three slender Stamina c, which are terminated, by oblong prostrate Summits, and a roundish three cornered Germen e, supporting a long slender Style f, crowned by Three bifid Stigma's d. The Germen afterwards turns to a roundish three-cornered Capsule, inclosed in the Spat ha g, having Three Cells, each containing Three or Four roundish Seeds.

THIS Genus belongs to the First Section of *Linnæus* Third Class, the Flower having Three male Parts and One female. It differs from *Gladiolus*, in having a tubulous Flower of One Petal; and from *Crinum*, in having but One Stamen.

As we know but One Species of this Genus, so it requires no specific Epithets.

WATSONIA.

In the former Edition of the *Gardener's Dictionary* has the following Title: *Watfonia foliis enfiformibus, floribus alternis.* *Watfonia* with sword-shaped Leaves and alternate Flowers. This has been since titled by Dr. *Trew*, *Meriana fiore rubello.* *Meriana* with a reddish Flower. But he was not then acquainted with the Title which I had given to it; so he has since informed me by Letter, that, as I had raised the Plant from Seeds, he would suppress his Title, and adopt mine, as he thought I had the best Right to name it; and he the rather chuses so to do, because his Figure was drawn from

the Picture of *Chelfca*, and he had not seen the Plant growing.

This Plant has a compressed bulbous kidney-shaped Root, marked *z*, which is covered with a fibrous brown Skin, from which spring out several sword-shaped Leaves about a Foot long, and One Inch broad, whose Edges are thin; but in the Middle, where the Midrib runs, they are thicker, and the Jlib is prominent on both Sides. These embrace each other at their Base, and end in acute Points. They are of a deep green, resembling those of the *Iris*. The Stalk comes out between the Leaves. It rises a Foot and Half high, and the lower Part of it is garnished with One Leaf at each Joint, of the same Shape and Colour as those below; but are small, and embrace the Stalk with their Base. The Flowers are produced on the upper Part of the Stalk, coming out alternately from the Sides, each having a Sheath or Cover, which splits open longitudinally, for the Flower to advance. These Covers are of the same Colour with the Leaves before the Flower appears, but afterwards they wither and become dry. The Tube of the Flower is an Inch and an Half long, narrow at the Base, but enlarges upward, where it is a little curved. The Top is cut into Six obtuse Segments, which spread open. The Flower is of a copper red Colour on the Outside, but of a brighter red within. They have each Three Stamina, which are a little longer than the Tube, and are terminated by oblong prostrate Summits of a brown Colour; and from the Germen, which is situated at the Bottom of the Tube, arises a Style which is longer than the Petal, and is crowned by Three bifid Stigma's. The Flowers of this Plant appear in *April* or *May*, and are succeeded by roundish three-cornered Capsules, which are closely wrapped by the withered Sheaths. They have Three Cells, in each of which there are lodged Three or Four roundish Seeds, which ripen in *July*.

This Plant grows naturally at the *Cape of Good Hope*. The Seeds were sent me, with those of several other curious Plants, by my learned Friend Dr. *Job Bajier*, F. R. S. *Zirkzee*.

Anthylyza Meriana



WATSONIA.

Watsonia

Watsonia floribunda (L.) Gussone. *Watsonia floribunda* (L.) Gussone. 1841.



VERHASCUM, foliis lanceo-rotundatis, pappo nudo. — Linn. & Sp. pl. 1759.

Painted according to a set of specimens by J. K. & Co. from the 1759.



Fig. 1. *BOPOCHERIS* *lymanches* - *Spizella pictaria* - Hort. Cliff. 364.

Fig. 2. *BOPOCHERIS* *lymanches* *pictaria* *capitata* *capitata* *capitata* *capitata* *capitata* - Hort. Cliff. 364.

P L A T E CCLXXVII

VERBASCUM, *Tourn. Injl. R. H.* 147- ^{Raii Meth. Plant.}
85. *Lin. Gen. Plant.* 217. Mullein; *mFrench^ Bouil-*
lon blanc.

TH E distinguishing Characters of this Genus having been exhibited in the former Number of this Work, we shall not repeat them here.

The Species here represented is,

VERBASCUM *foliis lanatis radicalibus % capo nudo, Lin. Sp. Plant.* 179. Mullein, with downy Leaves near the Root, and a naked Stalk. This is the *Verbajcum humile, Alpinum, villosum, Borriginis folio i£ flore, Tourn. Inft. R. H.* 147. Low Hairy Mullein of the Alps % with a Leaf and Flower like Borrage. *Cafpar Baubin* titles it, *Sanicula Alpina, foliis Borriginis villosa, Pin.* 243. Alpine Sanicle, with hairy Borrage Leaves: And *John Baubin* calls it, *Auuciua Urfi Myconi pilofa* carulea, Rift.* 3. *App.* 869, Hairy Blue Bear's-ear of *Myconi'*, commonly called, *Bear's-ear Sanicle.*

This Plant grows naturally upon the Alps and Pyreman Mountains. The Root is fibrous and perennial: The Leaves spread flat on the Surface of the Ground, and are but few in Number. They are of a thick fleshy Substance, of an oval Shape, indented on their Edges, and hairy, as is represented at /. They are rough, and

of a dark green Colour, having scarce any Footstalk; but embrace the Crown of the Root, and lie over each other. These continue in Verdure all the Year; but in the Winter they change to a much darker green than they are in the Summer.

Between these Leaves arise several naked Footstalks, about Four Inches high, which divide into Three or Four smaller Footstalks towards the Top. v* They are hairy, and of a brown purplish Colour. Each of these smaller Divisions is terminated by a single Flower, composed of One Petal of a fine blue Colour, which is deeply cut into Five Segments, so as to have the Appearance of a Flower with Five Petals •, but as the Segments are connected at their Base, and fall off without dividing, they are termed One Petal, according to *Tournefort* and *Ray*. The Segments of the Petal are oval, and end in obtuse Points, as *a* *b*. They spread open flat, like those of the Auricula; and in the Center is situated a single Style, represented at *d*, which fits upon an oval Germen, included in a one-kaved Empalement, *a*; which is funnel-flaped, and cut into Five obtuse Segments at the Top. Round the Style there are situated Five Stamina, which are erect, and have flat Summits, which are connected to the Stigma, as is shewn at *c*. The Flowers of this Plant appear in *May*; and are succeeded by oval Capsules filled with small Seeds, as at *e*, which ripen in *August*.

P L A T E CCLXXVIII.

HIPPOCREPIS, *Lin. Gen. Plant.* 791. *Ferrum Equinum**
Tourn. Injl. R.H. 400. *Tab.* 225. *Raii Meth. Plant.* 106.
Horfe-hoe Vetch ^ in *French**, *Fer de Cheval*.

The Characters of this Genus are*

The Flower has a permanent Empalement of One Leaf cut into Five Parts, as is shewn at *a*; the Two upper being joined. The Flower *b* is of the Butterfly kind. The Standard *b* is heart-shaped at the Point; but is narrow at the Base. The Wings *d* are oval, oblong and blunt. The Keel *c* is compressed, and Moon-shaped. It has Ten slender Stamina \ Nine, of which are united in One Body, and the Tenth stands separate. In the Center is situated an oblong narrow Germen *f*, fitting upon an awl-shaped Style *e*, crowned by a single Stigma. The Germen afterwards turns to a long plain compressed Pod *g*, which is divided into several Marts *h*, from the under Seam to the upper; each Part firming a roundish Sinus with obtuse Joints connected *fi* > the upper Seam •, each Joint being shaped like a Horfe-floe *i*, inclosing a single Seed.

THIS Genus of Plants is ranged in the Third Section of *Linnæus's* Seventeenth Class, which includes the Plants with a Butterfly Flower^ having Ten Stamina in each •, Nine of which are joined in One Body, and the other stands separate. *Tournefort* places it in the Third Section* of his Tenth Class, which contains the Herbs with a Butterfly Flower, whose Pointal turns to a jointed Pod. *Mr. Ray* ranges it in the Third Section of his NUMB. XLVII.

Twenty-first Class, which includes the leguminous Herbs with a Butterfly Flower^ which are not trifoliate^ and have jointed Pods.

The Species here represented are*

Fig. 1. HIPPOCREPIS *leguminibus fejilibus felt tar Us* Hort. Cliff.* 364. Horfe-(hoe) Vetch, with single Pods fitting close to the Stalks. This is the *Ferrum Equinum • Jiliquid Jitigulari, C. B. P.* 349. Horfe-hoe Vetch with a single Pod. *Fabius Columna* titles it, *Ferrum Equinum vulgare, p.* 1. 300. Common Horfe-hoe Vetch* And *John Baubin* calls it, *Solea Equina, Hijl.* 2. 347.

This Sort grows naturally in Italy, Spain, and the South of France. It is an annual Plant, with several trailing Stalks about a Foot long, which divide towards their Top into a few small Branches. They are garnished with winged Leaves, composed of Four or Five Pair of oblong Lobe?, terminated by an odd one. They are obtuse, and highly indented at their Points* From the Wings of the Sulk are produced singly small yellow Flowers of the Butterfly kind, which make no great Figure; but are succeeded by compressed Pods about Two Inches long, and a Third of an Inch broad, a little bending inward in Form of a Sickle, divided into many Joints; each being shaped like a Horfe shoe, and inclosing a single Seed of the same Form. The Flowers appear in *June* and *July*^ and the Seeds ripen in the Autumn.

B b b

Fig.

FIG. 2. HIPPOCREPIS *leguminibus pedunculatis cœnfertis, margine altero lobatis*, Hort. Cliff. 364. Horfe-fhoe Vetch, with clustered Pods upon Footstalks, whose outer Border is divided into Lobes. This is the *Ferrum Equinum filiqua multiplici*, C. B. P. 394. Horfe-fhoe Vetch, with many Pods. *Fabius Columna* titles it, *Ferrum Equinum alter um, polyceaton*, p. 1. 300. Another Horfe-fhoe Vetch, with many Pods.

This is also an annual Plant, which grows naturally in the South of France, in Germany, and Italy. It hath

trailing Stalks like the Former, to which the whole Plant has great Resemblance; but the Flowers of this are produced upon long Footstalks, which arise from the Wings of the Leaves. They are small, of a yellow Colour, and many of them are clustered together. These are succeeded by narrower Pods than those of the former Sort, which are more incurved, and their outer Border is divided into Lobes, as is represented at g; the inner Border being hollowed in Shape of Horie-fhoes. This flowers and ripens its Seeds about the same time with the former.

P L A T E CCLXXIX.

XERANTHEMUM, Town. Infl. R. H. 499. Tab. 284. *Raii Meth. Plant. 36. Lin. Gen. Plant. 851.* Eternal or Immortal Flower.

The Characters of the Genus are,

The Flower is composed of Hermaphrodite and Female Florets which are included in One common scaly Empalement a. The Hermaphrodite Florets, which form the Dijk, are funnel shaped, and are cut into Five Points c. The Female Florets, which compose the Border or Rays e and f, are tubulous, and cut into Five lefs equal Parts. The Hermaphrodite Florets have Five port Stamina d, terminated by cylindrical Summits, and a short Germen Supporting a slender Style, crowned by a bifid Stigma. The Germen afterwards turns to an oblong Seed crowned with a hairy Down, which ripens in the Empalement. The Female Florets have no Stamina*, but their Germen, Style, and Seeds, are the same as the Hermaphrodite Floras.

This Genus of Plants is ranged in the Second Section of Tournefort's Fourteenth Class, which includes the Herbs with a radiated Flower, whose Dijk is composed of plain Petals. Mr. Ray places it in the First Section of his Eighth Class, which contains the Herbs with a radiated corymbiferous Flower. Dr. Linnaeus ranges it in the Second Section of his Nineteenth Class, which includes those Plants whose Flower is composed of Hermaphrodite and Female Florets, which are both fruitful.

The Species here represented is,

XERANTHEMUM *foliis lanceolatis patentibus*, Lin. Sp. Plant. 857. Eternal Flower, with spear-shaped spreading Leaves. This is the *Xeranthemum flore pleno purpureo, majore*, H. L. Eternal Flower, with a larger double purple Flower. It is by *Clufius* and *Dodonæus* titled, *Parmica Auftriaca*. And by *Caspar Bauhin* it is called *Jacea oleifolia, capitulis simplicibus*, Pin. 272. Knapweed, with an olive Leaf and single Heads.

This Plant grows naturally in Austria, Bohemia, and in some Parts of Italy, but in its natural State the Flowers are single: The double Flowers have been obtained by Culture. There are Two Varieties of this

Species: one with white, and the other with purple Flowers; and of both with single and double Flowers. This Difference in the Colour of the Flowers is constant, where there is Care taken to save their Seeds separate.

It is an annual Plant. The Stalk is slender, fluff, and branching. It is covered with a white Down, and is channelled the whole Length. It rises about Two Feet high, and is garnished with spear-shaped Leaves an Inch and Half long, and One-third of an Inch broad in the Middle, drawing to a Point at each End. They are hoary, and fit close to the Stalk with their Base, having no Footstalks. They are disposed singly, at a Distance from each other. The Branches or Divisions of the Stalk are also garnished toward their Bottom with smaller Leaves of the same Shape; but their upper Part is naked, and each is terminated by One Flower, composed of the Hermaphrodite Florets in the Middle or Dijk; and the Border or Rays are made up of Female Florets. These lie over each other in the double Flowers, like the Scales of Fish, and are very dry; so will continue fresh to Appearance, and retain their Colour many Months after they are separated from the Plants. All these Florets are contained in One common scaly Empalement of a silvery Colour, and very dry. These Florets of both Sorts are succeeded by an oblong Seed, which ripens in the Empalement; each Seed being separated by scaly Chaff.

This Plant flowers in June, July, August, and September; and some Years will continue much longer, if the Season proves favourable; but especially those Plants which arise from Seeds sown in the Spring. These do frequently continue till the Frost or Wet of the Autumn destroy them. The Seeds ripen in about Six Weeks after the Flowers decay; so that those Flowers only which appear by the Middle of August, or ibener, will be early enough to perfect their Seeds.

These Flowers were formerly much more cultivated in the Gardens near London than at present; and were brought to the Markets in great Plenty during the Winter Season, to adorn Rooms. The Gardeners had a Method of staining them of a deep red and blue Colour, by dipping them into different Liquids. So they brought them to the Markets in Bunches of four different Colours; white, purple, blue, and red: And when their Stalks were put into Glasses with Sand, the Flowers would continue in Beauty till the Spring.



DEKANTHENE, folia lanceolata parvula. Linn. Sp. plant. 337.

W. G. Smith del.

Specimens sent by a Mr. of Padua to P. de la Saussure in 1758.

W. G. Smith del.

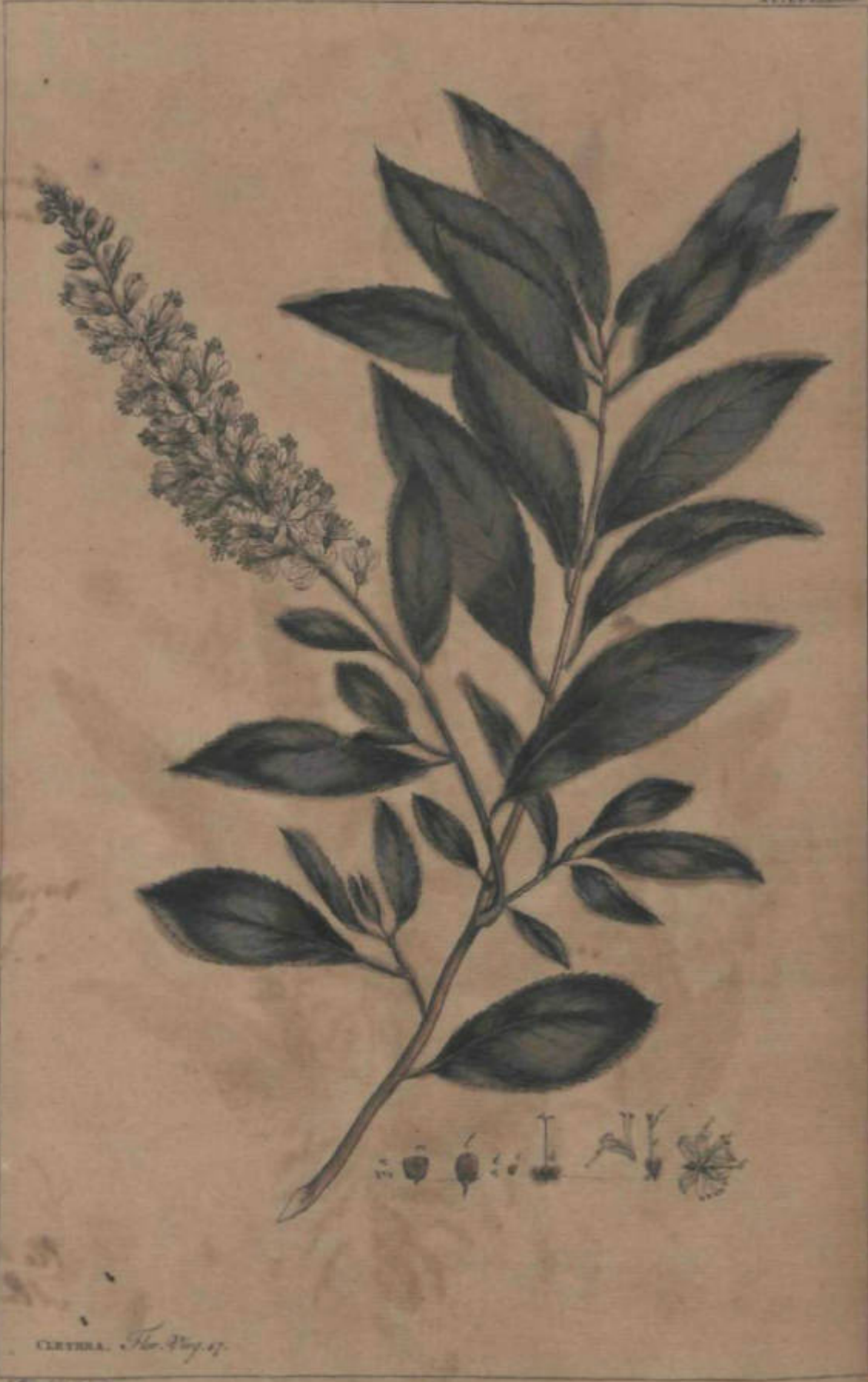
Handwritten notes in the upper right corner, partially obscured and illegible.

Handwritten notes in the middle right area, partially obscured and illegible.



Fritillaria *sp.* 11cm.

Plant showing a set of specimens of *Fritillaria* January 18, 1910



CLETHRA. Flor. May 17.

[Faint handwritten text]

[Faint handwritten text]

P L A T E CCLXXX.

FERRARIA, Burman. His Species, Ferr. Flor. Cult. 170.

The Characters are,

It has a double keel-shaped Spatha (or Sheath) a, which fur rounds the Flower-bud, and is membranaceous alternate, each incloftng a Jingle Flower. The inner is shorter, and Jlands oblique to the outer. The Flower has Six oblong acute pointed Petals \ Three larger, and Three alternately smaller, whose middle Parts are raised and fwelling. Their hinder-Parts are smooth and lucid in the Middle -, but their Tails are joined and contraaed. Their Borders are fringed, filky, and reflexed. It has a roundish three-cornered Germen] fituated under the Flower b, with Three Stamina c, which rise above the Petals, and have roundish twin Summits - fituated below the Bivifion of the Stamina. The Style is ereft, and crowned with a trifid hairy Stigma d, whose jingle Parts are bifid and hairy. The Germen afterwards becomes an oblong fmdoth Capfule, prejfed together at Bottom, bellied above, and three- cornered, having Three Cells, which open in Three Valves, filled %vith very fmall roundish Seeds e fafened to the middle Axis.

THIS Plant muft be placed in the Firft Sedion of Linn^{us}'s Third Clafs, which includes thofe Plants whose Flowers have Three Stamina and One Style,

The Species here reprefted is,

FERRARIAfoliiflancoelatis, Burman.Tab. FeWaria with fpear-shaped Leaves. This is the Flos Indicus e violaceofufcus, radice tuberofo, Ferr. Flor. Cult. 170. Indian Sflower of a tawney violet Colour, on a tuberous Root. It has alfo been filed, by fome of the old Botanifts, Flos Tygridis, Tyger Flower.

This Flower grows naturally at the Cape of Good Hope. The Root is a tuberous, roundish,

of Cod Hop. The Root is, taberous, roundish, and compressed in Shape like chat of the Indian Cowfif the but » Urger: And in the Center of the Upfer-side

the Root there is a Hollow like a Navel, from whence comes out the Stalk. The outer Skin (or Cover) is of a light brown Colour; the Inside is white. The Stalk rises a Foot and a Half high. It is taper, and about the Thickness of a Wood-bone. The Root is furnished wkh fpear-shaped Leaves the whole Length, Which are placed alternate, and embrace the Stalks with their Bafe. The lower Leaves are from Four to Five Inches long, and One Inch and a Half broad toward their Bafe, ending in obtufe Points. They are a little keel-shaped, and of a light green Colour. The upper Part of the Stalk is garnifhed with Flowers, which fpring from the Wings of the Stalk singly, and are wrapped up in a double Sheath, out of which the Flower-bud riles about an Inch. The Sheath is compofed of a double Row of keelfhaped Leaves; the inner Row being fhorter than the outer, and are fituated oblique to them. The Flower is compofed of Six Petals, Three of which are alternately larger than the other. Thefe fpread open, and their Borders are fringed, and reflexed backward. Their Inside is of a pale fky-Mn^{us} Colour* and their Out/ide of a dirty White. The yellow Stamina with their Scurms, fpring below the Divifion of the Stamina, and are terminated by small filky Germen, having Three obtufe Angles fupporting a taper Style, crowned by bifid Stigma. The Germen afterwards becomes a three-cornered Capfule with Three narrow Cells which contain the middle Seeds, but the Seeds do not ripen here.

There is a great Sr^{ucture} in the Root of this Plant: It does not vegetate annually, as most others do; but on the contrary, lies inactive every feveral Years; and sometimes it will remain Two Years without putting out either Leaves or fibres; and during that Time it will be perfectly found and fair.

P L A T E CCLXXXI.

CLETHRA, Flor. Virg. Lin. Gen. Plant. 489. We have no English Title for this Genus.

The Characters are,

TheEmpalement of the Flower is permanent, of One Leaf, cut into Five Parts at the Top a. The Flower has Five oblong Petals b, which are much longer than the Empalement. It has Ten Stamina c, which are of equal Length with the Petals* and are terminated by oblong ereft Summits. In the Center is fituated a roundish Germen fupporting a permanent ereft Style d and e, crowned by a trifid Stigma f. The Germen afterwards becomes a roundish Capfule h and i, inclofed in the Empalement, having Three Cells, which are filled with fmall angular Seeds i.

THIS Genus of Plants is ranged in the Firft Sedion of Linn^{us}'s Tenth Clafs, which includes thofe Plants whose Flowers have Ten, Stamina and One Style.

There is but One Species of this Genus at prefent known,

CLETHRA Flor. Virg. 47. The Clethra. This is titled by Dr. Plukenet, stiridfolia Americana Serrata, fioribuspentapetalii albis in fpicam difpofitis > Almcg. 1 8. American Shrub wih a fawed Alder Leaf, and white fJowers difpofed in a Spike, which have Six Petals,

This Shrub grows naturally in moft Parts of North America by the Sides of River?, and in other moft

Places j

Places^w, where it rises to the Height of Eight or Ten Feet; but in *England* it rarely rises to more than half that Height. The Roots of this spread far on every Side, and send up many Stems, which are covered with a greyish Bark, and divide into small Branches. These are garnished with spear-shaped Leaves about Three Inches long, and an Inch and a Quarter broad in the Middle, drawing to a Point at each End. They are fawed on their Edges, are of a deep green on their upper Side, and of a whitish green on their under \ (landing upon very short Footstalks, and are placed alternate on their Branches. The Flowers are produced from the Wings and at the Extremity of the Branches, disposed in long Spikes. They are composed of Five oblong white Petals, which spread open at the Top, each

having an Empalement of One Leaf, cut at the Brim into Five Segments, which are permanent, and cover the Capful after the Flowers are fallen. Within the Petals are situated Ten Stamina, which are of equal Length with the Petals, and spread afunder every Way. These are terminated by oblong Summits. In the Center of the Flower is situated a roundish Germen fit importing a taper Style, crowned by a trifid Stigma. The Flower *b*, *f*, and *d*, is a little magnified, to show the Parts more distinctly; as is also the Germen with the Style at *h*; and the Capful with the Seeds *l*, *m*, and *n* but *i* and *k* are of the natural Size.

This Shrub flowers in *July* and *August*; and in mild Seafons they frequently produce some Spikes of Flowers in *October*.

P L A T E CCLXXXII.

ASTER, *Town. Inft. R. H.* 481. *Tab.* 278. *Raii Meth. Plant.* 33. *Lin. Gen. Plant.* 858. Star wort.

THIS Genus of Plants is ranged in the First Section of *Townefort*'s Fourteenth Class, which includes the *Herbs and Under-Shrubs with a radiated Flower, and Seeds crowned with Down*. Mr. *Ray* places it in the First Section of his Seventh Class, which contains the *Herbs with a difcous radiated Flower, and downy Seeds*. *Xylinnaeus* ranges it in the Second Section of his Nineteenth Class, which includes the *Plants whose Flowers are composed of Hermaphrodite and Female Florets*.

The Species here represented is,

ASTER *cauk totymbofo* foliis lanceolatis reflectis > fioribus folitariis) *calycibus patulis*. *Flor. Leyd. Prod.* 168. Starwort with a corymbose Stalk, reflexed spear-shaped Leaves, flibitary Flowers, and spreading Scales to the Empalement. This is the *After Virginianus pyr amidatus*, *Hyffopi fo Bis a peris*, *fquamis calycis foliaceis*, *Aff. Reg. Lond. Martyn. Cent. Tab.* 19. Virginia pyramidal Scarwort with rough Hyflbp Leaves, and leafy Scales to the Empalement, Dr. *Dillenius* has titled it, *After grandiflorus a per*, *fquathis reflexis* * *Hort. Elth.* 41. *Tab.* 36. Large flowering rough Starwort with reflexed Scales. And Dr. *Gronovius*, in the *Flora Virginica*, titles it, *After foliis lanceolatis Jemiamplexicaulis crenatis fcabris* * *ramis unifloris foitofis*, 99. Starwort with spear-shaped Leaves, which are rough, trenated, and half embrace the Stalks, and leafy Branches with One Flower.

This Plant grows naturally in *Virginia*, from whence it was brought by the late Mr. *Mark Cateby*, about the Year 17th, and given to Mr. *Fair child*, Gardener at

Hoxton who propagated it in great Plenty; so that, in a few Years, it was distributed into most of the curious Gardens near *London* and is now become common in most Parts of *England*.

It has a perennial Root, and an annual Stalk, which rises Three or Four Feet high, according to the Goodness of the Soil in which it grows. It is hairy, and branches out on the Sides pyramidally. The Stalk and Branches are garnished with small spear-shaped Leaves, about the Size of the Common Hyflbp. They are hairy and rough to the Touch, (landing alternate, and have no Footstalks. The Branches are each terminated by One large Flower, composed of many Florets and Half Florets, which are included in One common fcaley Empalement, represented at *a*, whose Scales are reflexed. The Center (or Disk) of the Flower *b* is composed of Hermaphrodite Florets, One of which is shown at *d*. These are funnel-shaped, and cut into Five Parts at the Top, which spread open. At the Bottom of the Tube is situated an oblong Gergaeh *r*, with Five slender Stamina joined at their Bottom to the Style, which fits upon the Germen, and is crowned with a bifid Stigma. The Border or Rays of the Flower is composed of Female Half Florets, represented at *e* and *l*. These are tubulous at the Bottom; but above they are stretched out plain like a Tongue; and are beautiful blue Colour, spreading open like Rays. One fits upon a hairy Germen *g*, and has a Style crowned with a bifid Stigma; but have no Stamina. Germen of both turn to oblong Seeds crowned with a hairy Down.

This Plant flowers in *October*, and, in mild Seafons, often continues in Beauty Two Months; making a fine Appearance in the Garden, when there is a Scarcity of other Flowers.



ASTER multiflorus foliis lanceolatis multifloris foliis oppositis pediculis longioribus.

J. Tournefort

Sp. Pl. t. 1. p. 100. n. 1. f. 1. 1754.

J. Tournefort



CALENDULA foliis ovato-lanceolatis obtusis, saepe serratisve decumbentibus.

W. Miller del. & sculp.

Published according to the order of Parliament by E. Miller Junr. 1750.



f 'LE.M.ITJ S foliis ovato-pinnatis & decompositis foliolis ternatis serratis Gmel.

J. B. Miller del.

Published according to the Act by S. Miller in. Garden Lane Covent Garden June 25th 1789

P L A T E CCLXXXIII.

CALENDULA, Lin. Gen. Plant. 88; Raii *Metb. Plant.* 36. *Caltha, Town. Inf.* R. H 408. Tab. 284. *Mary.* gold; in French, *Souti*.

Professbr of Botany in the Univerfity of *Leyden*, to ti. Botanic Garden at *Chelfea*; and has been from thence communicated to several other curious Gardens.

This Genus of Plants ranged in the Fourth Section of Linnatt's Nineteenth Class

The Stalk of this Plant becomes ihubby, and will rise to the Height of Six or Eight Feet, if it is supported; otherwise it will trail on the Ground. It sends out many Side-branches, which grow diffbed if they are not trained to Supports: They are garnished with fleshy oval spear-shaped Leaves, about Two Inches and a Half long, and almost an Inch broad in the broadest Part, which is toward the Top, the Tail next the Stalk being narrow. Most of the Leaves are intire; and their upper Surface is rough to the Touch. The Flowers are produced singly from the Side of the Stalk: The lower Part of the Footstalk is garnished with a few final Leaves of the same Shape with those on the Branches; but the upper Part is naked, and terminated by a single Flower. Each Flower is composed of Fourteen or Fifteen Half-Florets, which form the Border of the Ray; one of which is represented at *a*: These have a short Tube at their Base; but are stretched out to a considerable Length on one Side in Shape of a Tongue, which is slightly indented at the Point in Three Parts. At the Bottom of the Tube is situated the Germen *b*, supporting the Style, which is bifid, *c* and *d* represent the Hermaphrodite Florets, which are tubulous, and cut into Five Parts at the Brim; These have an imperfect Germen situated at the Bottom, supporting a club-shaped Style *e*; one of which is magnified at *f* having a Sheath or Cover of a purple Colour, *g* shews the Five Stamina, which are connected at the Top; and *h* represents One of them magnified, *i* shews the simple Empalement intire, which contains the Florets and Half-Florets, *k* is the same cut open longitudinally and *l* shews the Germen separated from the Style.

is in the Hermaphrodite are barren. To the Fourth Section of his Fourteenth class which contains the

Eight Class, which is the first of the radiated Flower, whose Seed has no

The Characters of the Genus are,

It is a radiated Flower, composed of Fourteen or Fifteen Half-Florets, included in One in the Female Half-Floret or Ray: These are stretched out to a considerable Length on one Side in Shape of a Tongue, which is slightly indented at the Point in Three Parts. The Germen is situated at the Bottom of the Tube, supporting a club-shaped Style, crowned by a bifid Style, which is cut into Five Parts at the Brim; these have an imperfect Germen situated at the Bottom, supporting a club-shaped Style; one of which is magnified at *f* having a Sheath or Cover of a purple Colour, *g* shews the Five Stamina, which are connected at the Top; and *h* represents One of them magnified, *i* shews the simple Empalement intire, which contains the Florets and Half-Florets, *k* is the same cut open longitudinally and *l* shews the Germen separated from the Style.

The Specie here represented is,

CALENDULA *M& ovato-lanceolata* *Metb. Plant.* 36. *Caltha, Town. Inf.* R. H 408. Tab. 284. *Mary.* gold; in French, *Souti*. This is the same as the *CALENDULA* of the *Botanic Garden*, by the Title of *Caltha* *Mary.* gold; in French, *Souti*. This is the same as the *CALENDULA* of the *Botanic Garden*, by the Title of *Caltha* *Mary.* gold; in French, *Souti*.

This is the same as the *CALENDULA* of the *Botanic Garden*, by the Title of *Caltha* *Mary.* gold; in French, *Souti*. This is the same as the *CALENDULA* of the *Botanic Garden*, by the Title of *Caltha* *Mary.* gold; in French, *Souti*.

The Outside of the Rays of the Flower is first of a purple Colour, which changes to blue as they decay; but their Inside is white. The Florets which compose the Disk or Middle are of a purple Colour; so that when the Rays are expanded, the Flower at a small Distance appears white with a purple Bottom. The Plants produce their Flowers at all Seasons of the Year so make a pretty Appearance in the Greenhouse during the Winter and Spring.

P L A T E CCLXXXIV.

CLEMATIS, Lin. Gen. Plant. 6x. *Clematith.* *Tourn. Inf.* R. H. 293. Tab. 150. *Raii Metb. Plant.* 69. *Mary.* gold; in French, *Souti*.

are shorter than the Petals, and the Stamina are fixed to the Side. It has many roundish compressed Germens, an oval-shaped Style, crowned by simple Stigma's, which afterwards become such a roundish compressed Seed, and are collected into a

This Genus of Plants is in the Fourth Section of Linnatt's Nineteenth Class. The Flowers have many Stamina, and several Styles.

The Characters of the Genus are,

Clematis foliis oppositis *Metb. Plant.* 69. *Mary.* gold; in French, *Souti*. This is the same as the *CALENDULA* of the *Botanic Garden*, by the Title of *Caltha* *Mary.* gold; in French, *Souti*.

The Flower has no Empalement, and is composed of Four or Five Petals, and several Stamina, which are fixed to their Bases.

naturally in *Tamary*, where it was first discovered, and in *j75*, I was favoured with some of the Seeds from that

that Garden, which have Succeeded at *Chelfea*; and the Plants have flowered there some Years, but do not as yet perfect their Seeds.

The Stalks of this Plant are slender and weak, so must be supported, or they will fall to the Ground: Their lower Parts become ligneous, like some of the other Species: The Bark is brown and thin. At the Joints of the Stalks come out several Filaments, which have the Appearance of Roots, and are ranged between the Footstalks of the Leaves. When the Plants are in a strong Soil, and their Branches trained against a Wall, the Stalks will rise to the Height of Six or Eight Feet. The Leaves have long Footstalks, which generally divide into Three smaller *, each of which sustains Three oblong Lobes, or small Leaves, about Two Inches long, and near One broad in the Middle, drawing to a Point at each End. They are of a deep green Colour, and are slightly fawed on their Edges. The Footstalks of the Flowers arise from the Joints of the Stalk: They are naked, Three or Four Inches long, and sustain One Flower at the Top. The Flower is composed of Four oblong Petals represented at *a*, which

are of a yellowish white Colour within: These spread open wide; and in the Center are situated the Germina, With their Styles collected into a Head, as is shewn at *h*: Between these rise the many Stamina which are connected to the Styles. At *c* is represented the Clufter of Germina separated from the Petals; and at *d* is shewn a Stamen separated from the Clufter. A Germen with its Style is represented at *e*. After the Petals of the Flower are fallen, the Style becomes feathery, and serves as a Wing to transport the Seeds, when ripe, to distant Places.

The Flowers appear in *March* and *April*; and, if the Season proves favourable, they make a handsome Figure: But as the Plant is apt to put out Leaves very early in the Spring, so they are frequently nipped by the Frosts in *March*, as are many other Plants and Trees of *Siberia* and *Tartary*; for these do generally begin to shoot with the first Warmth of Spring -, and when there are Returns of Frost afterward, their young Shoots are killed, and the Plants appear as dead till the Warmth of Summer brings out new Shoots.

P L A T E CCLXXXV.

WARNERIA. Yellow Root.

THIS Plant has been lately introduced from *North America*, by the Title of *Tellow Root*: And the Characters of its Flower and Fruit being different from those of all the established Genera of Plants, I have given it the Name of *Warneria*, in Honour to *Richard Warner*, Esq; of *Woodford* in *Effex*, who is a very curious Botanist, and a great Collector of rare Plants; of which he is very communicative to all Lovers of Gardening.

This Plant should be ranged in the Seventh Section of *Linnaeus's* Thirteenth Class, which includes those Plants whose Flowers have a great Number of Stamina, or Male Parts, and many Styles. And according to *Tournefort's* System, it must be placed in the Seventh Section of his Sixth Class, which contains the *Herbs with a Rose-flower*, whose Pointal turns to a Fruit composed of many Seeds collected into a Head. By *Ray's* Method, it must be placed in his Fifteenth Class, which includes the *Herbs with a naked Flower succeeded by many Seeds*.

The Characters of this Genus are,

The Flower has no Empalement: It has Three roundish Petals, which fall off very soon; and a great Number of club-shaped Stamina terminated by oval Summits, with several roundish Germen supporting a very short Style crowned by a permanent bifid Stigma. The Germen afterward turns into a Berry composed of many roundish Acini collected into a Head each having One Cell including a single Seed.

We know but One Species of this Genus at present; which is here represented.

^ WARNERIA. Called in *North America* *Tellow Root*.

This Plant grows naturally in *Pennsylvania*, from

whence the Roots have been sent to *England*, and are preserved the Gardens of the Curious. The Root is fleshy, of an irregular Form, having a yellow Skin or Cover -, from whence it received its Title of *Tellow Root*: This sends out many Fibres, which spread on every Side. From the Root arise Two, Three, or more Footstalks, in proportion to their Strength: These are from Four to Nine or Ten Inches high; and at their first Appearance are of a light Green; but afterward change to a purplish Colour, and are hairy toward the Top. Each Footstalk sustains One or Two Leaves; the lower of which have Footstalks, but those above embrace the Stalk. The Flower is situated at the Top of the Stalk, a little above the upper Leaf, as is represented at *a*. The Leaves are Six or Seven Inches Diameter: They are deeply cut into Three, Four, or Five Lobes, which are irregularly fawed on their Edges: They are of a light Green in the Spring; but change afterward to a deep Green, with some dark Spots or Marks, and after the Flower is decayed they turn to a purplish Colour. The Flower is composed of Three roundish Petals, represented at *b*, which are of an herbaceous white, with Borders of a red Colour; and are of very short Duration, seldom remaining longer than Three or Four Hours after they are expanded. The Middle of the Flower is occupied by a great Number of Stamina, represented at *c*; one of which, separated from the Flower, is shewn at *d*, having its Summit at the Top. *e* shews one of the Germina, with its Style and bifid Stigma, of the natural Size; and *f* is one magnified, *g* shews the Fruit when ripe, which is composed of several Acini like the Strawberry, of a bright red Colour, and is succulent: Each of the Acini have One Cell including an angular Seed.

The Flowers of this Plant appear in *May*, and the Fruit ripens the latter End of *July*. The Leaves decay in the Autumn; and new ones arise in the Spring.



T. S. L. S.

WATERBURY.

V



J V

MIMOSA, ... » w s Atim jiwBfr tvalu iuirj.



GERDILLA folia pinnatifida spinosa capite sphaerico lanugine albida.

1733

Illustration made by J. G. Smith for the Botanical Garden of the University of Cambridge, 1733

P L A T E

CCLXXXVL

MARTYNIA, *Hotift. MSS. Lin.Gen. Plant. 67i. Martyn. Dec. 5. 4²-*

THIS Genus of Plants is ranged in the Second Section of Linnæus's Fourteenth Class, which includes the Plants with ringent Flowers, which have Two long and Two shorter Stamina, and their Seeds are inclosed in a Capsule.

The Characters of the Genus are,

*The Empalement of the Flower is cut into Five acute tomen's • three of the upper are erect, the Two under are Jitwd • The Flower is of One Petal, which is bell-shaped, rmmni and divided into Five large obtuse Parts at the Brim where it spreads open wide, in Form of a Lip-flower: Vbe Two upper and Two side Segments are nearly equal in /.;. thse have their Edges reflexed: The lower Segment is shorter and crenated at the Point. It has Four Stamina, Two lower and Two shorter, with the Rudiment of a Fifth between the Two upper: These are terminated by oblong Summits which join-, but on their being handled separat immediately. It has an oblong Germen situated in the Em- Lhmet Supporting a single Style the Length of the Stamina, h- N ū biHStigma. The Germen afterward turns ZM oblong? Capsule including a ligneous Nut shaped like a ZSe 3 *TM incurved Horns, divided into Four Cells, which include Three or Four Seeds in each.*

The Specie here represented is,

MARTYNIA caule ramafo, foliis tordato-ovatis pilosis. Martynia with a branching Stalk, and oval heart-shaped hairy Leaves.

The Seeds of this Plant were brought from Missippi in the Gardens at Paris, where it was first propagated. A the Plants ripened their Seeds there, some of which were sent me by Mr. Richard, the King's Gardener at Versailles. These were sown in the Chelsea Garden, but they remained in the Ground a Year before they began to vegetate; so that I almost despaired of their growth. But in April following Two of the Plants made their Appearance: These were transplanted each into a separate Pot, and plunged into a moderate Hotbed, which brought them forward in 5 and in Six Weeks after which Plants produced their Flowers, and continued flowering a long Time.

The Stalk of the Plant is as thick as a Man's little Finger: It is soft, succulent, and covered with a soft hairy Down. It rises about Two Feet high, dividing into Two or Three Branches, and is garnished with oval heart-shaped Leaves, placed without Order. The Footstalks are from Two to Four Inches long: The Leaves are Four Inches long, and as much in Breadth at the Base, where they are divided at the setting on of the Footstalk into Two roundish Ears: The upper Part is narrower, and ends in a blunt Point: They are viscous and clammy to the Touch, of a soft green Colour, and covered with fine short Hairs. The Stalk is terminated by a loose Spike of Flowers, hanging upon Footstalks, which are Two Inches long. The Empalement of the Flower is divided into Five Parts almost to the Bottom, as is represented at *a*: The Three upper Segments are narrow, ending in acute Points; the Two lower are broad, and divided into Lobes. The Flower is of the Bell-shape, having a large spreading Tube which is smooth, roundish at the Base, and swelling upward: The Brim is large, and divides into Five obtuse Segments; the Three upper, *c, c, c* are nearly equal in Size, the Two under are larger, crenated on their Edges, and form the under Lip, as is shewn at *d*. The Inside of the Tube is marked with many purple Spots, but the Brim, or Lips* is of a dirty White. Each Flower has Four Stamina, represented at *e*, Two of which are longer than the other, terminated by oblong Summits which are corinated together, but on their being touched separate and spread asunder. Between the Stamina is situated the Style which is crowned by a bifid Stigma, and arises from the Germen, which fits in the Empalement at the Bottom of the Tube, as is shewn at *i* 5 and *k* represents the Style with its Stigma separated from the Flower. After the Flower is past, the Germen swells to a large hard Fruit, ending with Two long incurved Horns, represented at *l*, which has a thick Cover like the outer Shell of a Walnut: This splits and falls off when the Fruit is ripe, leaving the hard Shell bare; which is divided into Four Cells, each containing Two or Three oval Seeds, represented at *m*. At *n* is represented the Fruit cut through longitudinally, to shew how the Seeds are lodged. The Flowers appear in June and July, which have a fragrant Scent, and the Fruit ripens in the Autumn; soon after which the Plants decay.

P L A T E

CCLXXXVII

GUNDELIA, *Tourn. Cor. Inf. 51. Tab. 486. Lin. Gen. plant. 828.*

THIS Genus of Plants belongs to the Fifth Section of Tournefort's Twelfth Class, which includes the Plants with a fasciculous Flower collected into a Head. Linnæus ranges it in the First Section of his Nineteenth Class.

The Characters of the Genus are,

The Head is composed of many Florets, which are Herma-phrodite having a Circle of small Leaves under, which

serve as a common Empalement. The Florets are of One Petal, bellied and cut into Five Segments at the Brim: They have each Five short hair-like Stamina, terminated by long cylindrical tubulous Summits, and an oval Germen immersed in the Receptaculum, supporting a Style, which is longer than the Petal, crowned by a bifid Stigma. The Germen afterward becomes a Fruit pregnant with Seeds which ripen in the Receptacle.

The Specie here represented is,

GUNDELIA foliis pinnatifidis spinosis, capite araneosa lanugine obfita. Gundelia with wing-pointed prickly Leaves, and a webbed woolly Head.

This Plant was discovered

Jicjan. The Name is /& *£. The R... Perennia... TM<* rims deep into the Ground. The Leaves decay in Autumn, and new ones come out in the Spring: Thefeare a Foot and Half long: are, re... it and flafhed on the Edges, and armed with naftiff Spines... Coloure, with a broad MidrCffom'whene'e areTnt out many, ftrong Veins on each Side. B<w> n Z Leaves <,fa, the Fflower-ftalk, which is af S< as a Man's Thumb, about Two Feet high frZ; Side-Branches fromtheGroumdu^aT^2feach terminated by an oval Head of Flowers, bavin?TW0

which rife above a bifid reflexed Stigma... fituated under the Tul-... is Crowned... represents the... how the Five Stamens... represents the... prevent the Five Cells, which are... for there are more than Two or Three Seeds which come to Maturity in each others are abortive. At k is fewn one of the Seeds separated from the Receptacl... the Flowers of this thnt are noc very... Leaves being... thdr Borders... good Appearance. The Seeds of this Plant were... by Dr. Alexander Haffel, of Cambridge, London, who procured them from Aleppo.

PLATE CCLXXXVIII.

FRAGARIA, Tourn. *Art. R.H. 295. Tab. 152. Lin. Cat.*, «t.F.55». Strawberry; in French, *Fraisier*.

THIS Genus of Plants is ranged in the Seventh Section of Temngwa's Sixth Class, which includes the Herbs with a High-stem, and six Pointed leaves to a Head consisted of many small... in the Seven...

of Strawberry has been of late Years incame into the English Gardens but from whence it is brought to know, Some Perfons have cam... Louifina; others, t... Kind from... But I received some Plants of...

in the Seven... whose Flowers have 25 and many Style J which are ferted in the Empalement,

of this, So have a %TM Refemblance to... p... L... ^ ^ ^ ^

The Characters of the Uenus are,

the Runners from the Sides of... are, which are hairy; The Footstalks of the Flowers are longer, the Flowers are much larger, and the Fruit approaches in Size, Shape, and Colour, to the Child Strawberry. Whether this is a distinct Species, or an accidental Variety which came from Sweden, I shall not take upon me to determine, since it has an Affinity to... her Species. But as this Sort... it is cre...

Empalement of the Flower is plain, of One Leaf which is cut deeply into Ten or Twelve acute Sgments which are alternately large and small, and is permen/ tk? Flower has Five or Six roundish Petals, which are ferted in the Empalement; and about Twenty awlZped Stamina, which are shorter than the Petals, terminate in lunular Summits; and a great Number J m.n.r. colMedinto around UhHeid, gaThZi*itk^Z to their Sides, crowned by single Stigma's. The Lmta afterward turn to an oval pulpose soft Fruit fitting in the Empalement, having many small Seeds.

pt dear from Runners, and the Fruit is very large, to it is worthy of Cultivation. deeX^P^cuf... The Empalement of the Fruit, which is S i d i t * * ? Segments, six of which

The Specie here represented is,

and Stylw... the numerous Stamina when f... h... and d represents the Fruit, natural Size. m... m... ina,

FRAGARIA foliosoyatis crenatis nervosis, calydbus maxims. Strawberry with oval crenated veined Leaves, and the Jargeft Empalement.

J^rmen, and h One of the Seeds Separated From the...

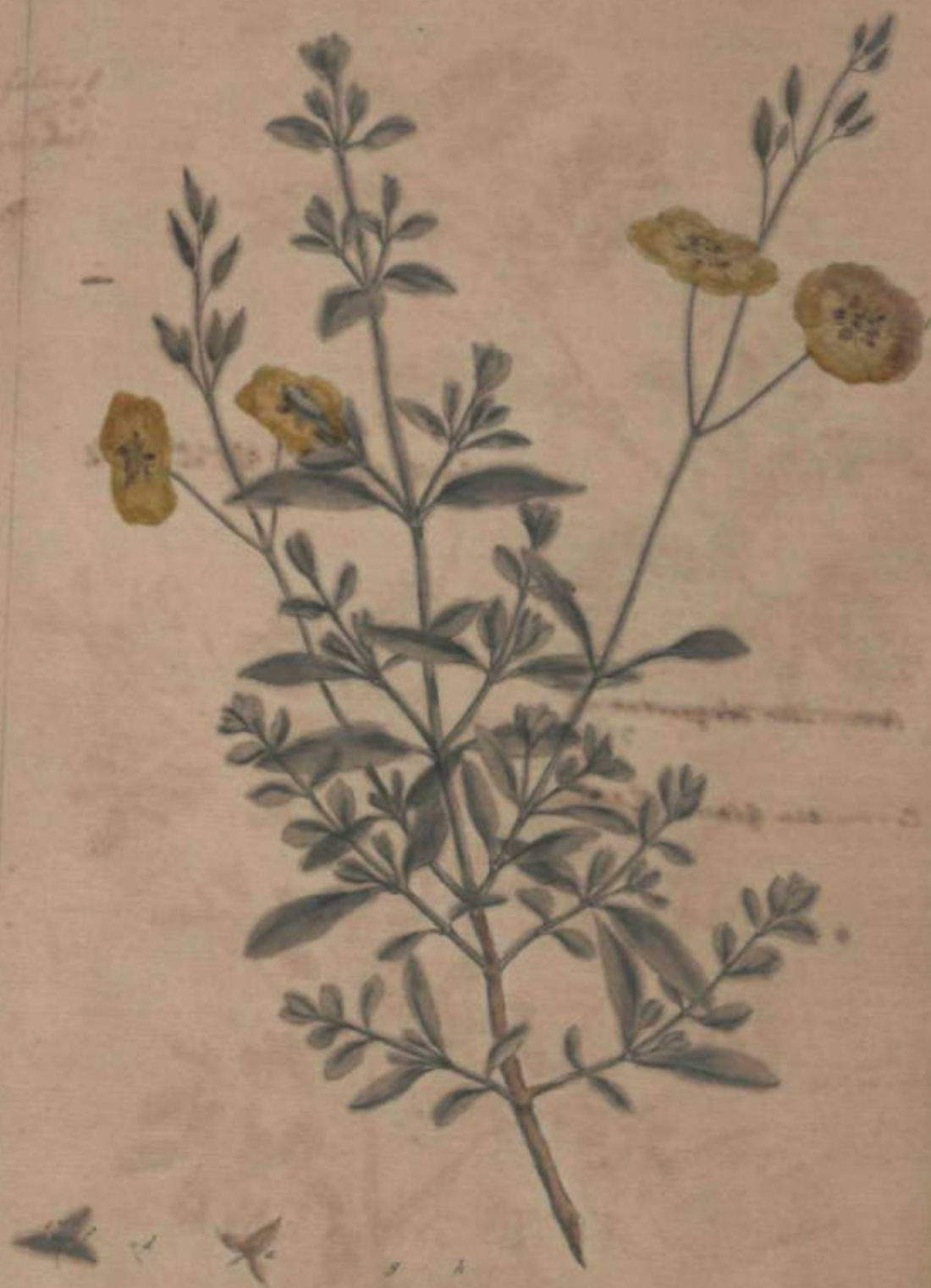


FRAGARIA folia ovata serrata nervis rubris, calycibus natis.

Planta in horto botanico Lipsiensi a J. G. Schumacher Jun. 22. 1790.



Fig. 1. CORONILLA fruticosa foliolis undatis actino majore. Ga. sp. plant. 745
 Fig. 2. CORONILLA fruticosa leguminibus crispioribus.



CISTUS fruticosus erectus foliis oppositis bipinnatis oblongis utrinque incanis calycibus triphyllis -

2. 1760. 11. 4. 1760.

Published according to Act of Parliament by J. Wallis Sep. 20. 1760.

P L A T E CCLXXXIX.

CORONILLA, #Wm Injl. R.H. 650. Tab 419-^{Rf} Ueth. Plant. 163. Lin. Gen. Plant. 789. Jointed podded Colutea vulgo.

THIS Genus of Plants is ranged in the Third Section of *Tournefort's* Twenty-second Clafs, which includes the *Trees and Shrubs with papilionaceous Flowers, whole Leaves are compofed of feveral Pairs of Lobes placed on each Side the Midrib.* Mr. Ray ranges it, in his Appendix, amongil the *Trees with papilionaceous Flowers and winged Leaves, whose Branches have no Spines.* Dr. *Linnaeus* places it in the Third Section of his Seventeenth Clafs, which contains the *Plants which have Butterfly Flowers with Ten Stamina* Nine of which are united together, and the other is feperated.*

The Characters of the Genus are,

The Empalement of the Flower is of One Leaf, fhort, nmwefled and erect, divided into Two Parts, which are derted in Five Parts at the Brim-, the Three under Segments arefmal, and the Two upper join together. The Mowerb is papilionaceous; the Standard c is heart-Jhaped, JreEl and larger than the Wings, d, d, are the Two Wings -\ ded- thefe are oval, and, in their natural State, con-ZTe toward} each other. The Keel e isfiorter than the wLs- it is compreffed, pointed, and turns upward. It ZlthFeñ Stamina f, Nine of which are joined at g, and OnZlfelcted ath; thefe rife to almojl aright Angle with th/r Bate and have broad yellow Summits. The Germen Ler daddbblogg, fupperfing a briffly Style, crowned by a nhtufe Stigma. The Germen afterwards becomes a (lnder Pod i, with One Cell, divided into feveral Joints,

1 CORONILLA fruticofa, folio Wundenis, extimo majore, Sp. Pl. 745. Shrubby-jointed podded Colutea, whose Leaves are compofed of Eleven Lobe\$, the outer larar than the inner.

This Plant rifes with a shrubby Stalk, from One to Three Feet high, dividing into many fmall Branches, which are garnifhed with Leaves placed alternately, each h or compofed of Eleven inverted heart-fhaped Lobes, which are of a fivery-green Colour, and fit clofe to the Midrib, each Leaf having Two large oval Stipulae at h. Safe, ending in a Point; which Chara&er diftinguifhes this Specie from the others of the Genus. The Flowers ftand upon long Footstalks, which arife from the Win⁰ of the Leaves, and are clustered together in Sort of Head at the Top; they are of a bright yellow Colour, and of the Butterfly Kind of Flowers, h⁰ Two Wings on the Side, a Standard which is

ere<St, and a compreffed Keel at the Bottom, as is represented in the Figure, with Nine Stamina joined, and One Handing feperate; thefe, with the Germen and Style, are (hut up in the compreffed Keel of the Flower, which turns upward at the Point. The Flowers appear in\ Aprils and, when they decay, the Germen fwells to * Pods about Two Inches long, divided into Three or Four Joints, each containing One oblong Seed, which ripen the latter Part of Summer.

Dr. *Linnaeus* has fuppofed this Plant to be the fame with that which is figured by *Proper Alpinus*, in his Book of Exotic Plants, in which he has been followed by feveral Authors; but whoever will examine the Figure and Defcription given by *Alpinus* will find his Plant has not thofe remarkable Stipule" to the Leaves, as has the Plant here represented, which is fo remarkable as not to have been omitted by an Author fo accurate as *Alpinus*. The Seeds of this Plant were fent me from *Paris*, and the Plants which arofe here have all this Character, and their Leaves retain the filvery Colour; fo that it is certainly different from the Plant which we exhibited in the 106th Plate, though we then fuppofed they were the fame. J,*. *L* ^^J^TJ^J

Fig. 2. CORONILLA fruticofa, leguminibus craffioribus foliolis feptenis aequalibus. Shrubby-jointed podded Colutea, with thicker Pods, and Seven equal Lobes to each Leaf.

This Plant rifes with a shrubby Stalk to the Height of Four or Five Feet, fending out Branches on every Side, which are taper, fsmooth, and of a light-green Colour, which are garnifhed with leaves placed alternately. Thefe are, for the moft part, compofed of Seven broad inverted heart-fhaped Lobes, of a light-green Colour on their upper Side, but are grey on their under Side, (binding upon very fhort Footstalks. Thefe Leaves have no Stipulse to their Bafe, as thofe of the former, but are naked. They are Three Inches long, and fufftain at their Top a Cluiter of yellow Flowers in a Head, which are fhaped like thofe of the former Sort, but are larger and of a lighter Colour. Thefe have an Odour like the Jonquil, but not fo ftrong. The Flowers of this appear the End of *ORober* and continue in Succelfion till *April*; fa that the Plants make a fine Appearance all the Winter Seafon, when there is a Scarcity of Flowers; and as the Plant is fo hardy as to live abroad in warm Situations, or may be kept with a little Shelter in Winter, fo it is worthy of a Place in every good Garden.

As this Plant has not been figured or defcribed by any Botanic Writer which we have met with, fo we thought it worthy of a Place in this Work.

P L A T E CCXC.

ELIANthemum Injl. R. H. 248. Tab. 128. *ihlianthemumjive Cbam&ditus, RaiiMetb. Plant. 109. Qjtus, Lin. Gen. Plant. 598. Dwarf Ciftus, or Dwarf Heliotrope.*

THIS Genus of Plants is ranged by *Tounefort* in the Second Section of his Sixth Clafs, which includes the *Herbs with a Rose Flower whose PointalorEm- NUMB. XLIX.*

palement becomes a Fruit with One Capfule or Cell. Mr. Ray places it in the Firft Section of his Twenty-second Clafs, which contains the *Herbs with Flowers having Five Petals whose Seeds are indofed in a Capfule.* Dr. *Linnaeus* ranges- it in the Firft Section of his Thirteenth Clafs, which includes thofe *Plants whose Floivers have a great Number of Stamina, and but One Style;* and joins the Plants of this Genus with the *Ciftus*, the Flowers of both agreeing

ing well together in their Characters; but as the Fruit of the *Ciftus* has Five Cells, which contain the Seeds, fo *Tournefort* feperated them, and has put them in different Sections of his Sixth Clafs.

The Specie here reprinted is,

CISTUS fruticosus erectus, foliis oppofitis jeffilibus cblengis utrinque incanis, calycibus iriphyllis. Shrubby erect Rock-rofe, with oblong Leaves growing oppofite, which fit clofe to the Branches, are hoary on both Sides, and the Flowers have a Three-leaved Empalement. This is the *Helianthemum Algarvienfe, Halimi folio, flore luteo, punk ante macula infignito, Tourn. Inf.* R. H. 250. Dwarf *Ciftus* of *Algarve*, with a Sea-purflain Leaf, and a yellow Flower, marked with purple Spots.

This Plant rifes to the Height of Three Feet; the Stalk is flirubby, and is covered with a brown Bark; the Branches come out oppofite, and crofs each other, fo as to form a Sort of Pyramid, the lower Branches being the longeft, and diminifh gradually to the Top; thefe are garnifhed with fpear-fhaped Leaves about One Inch long, and a Third of an Inch broad in the Middle, drawing to a Point at each End; they are of a hoary Whitenefs on both Sides, like thofe of the Sea-purflain. The Flowers are placed oppofite on the Branches. The Seed, which fuffain the Flowers, are a Continuation of the Branches, and

Length below the l-lowers, which come out upon fepa- rate Foot (talks near Two Inches long, which are ranged by Pairs oppofite, each being terminated by One Flower, compofed of Five heart-iliaped Petals of a bright yellow Colour, each having a purple Spot near the Tail or Bottom. Thefe have an Empalement compofed of Three Leaves ending with fharp Points, re- prented at *a*; at *b*, the Flower is reprinted fully ex- panded, *c* fhews the Buds of the Flowers, which are frequently produced by Pairs on the fame Footstalk, One of which falls off without fhewing the Flower; fo that there is but One Flower upon each Footstalk which opens. The Petals of this Flower continue but a very fhort time before they fall off: The Flowers, which are fully expanded in the Morning, at which time they make a beautiful Appearance, are over before Noon; by which time all their Petals will have fallen off. In the Center of the Petals is fituated a roundifh Germen, reprinted at *e*, which is attended by a great Number of Stamina, reprinted at *f*; One of which, with its Summit, is fhewn at *d*. This Plant flowers in *June* and *July* but the Seeds feldom come to Maturity in *Eng- land*. It grows naturally in *Spain* and *Portugal** from whence I have received the Seeds.

As the Characters of this Genus have been already exhibited under the Article *Ciftus* in this Work, fo we have not inferted them here. The Beauty of this Plant engaged us to give its Figure and Defcription, efpeci- ally as they have not been done in any Botanic Work yet extant.

P L A T E CCXCXI.

ACACIA, *Tourn. Inf. R. H. 605. Tab. 375. R. H. Metb. Plant. 161. Mimofa, Lin. Gen. Plant. 597.* Egyptian Thorn; in French, *Cafie.* TM⁷ ^ S P¹¹ TM

THIS Genus is ranged in the Fifth Section of *Tournefort's* Twenneth Clafs, which includes the *Trees and Shrubs with a Flower of One Petal, whofe Point becomes a podded Fruit.* Mr. 2[^] places it among the *Trees whofe Flowers are collected in globular Heads* Dr *Linnaus* has joined all the Species of this Genus to the *Mimofa*, or Sensitive Plant, which he ranges in the Firft Section of his Thirteenth Clafs, which includes thofe *Plants whofe Flowers have many Stamina and One Style.*

The Characters of this Genus having been already exhibited in this Work, we fhall not repeat them here.

The Specie herf reprinted is,

ACACIA *foliis bipinnatis conjugatis, foliolis aqualibus, fip- Us fpinofis* filiquis latis.* Egyptian Thorn with double winged Leaves, whofe Lobes are equal, the Stipulse thorny, and the Pods broad. The late Dr. *William Houftoun* fent the Seeds and Specimen of this Tree to *England* by the following Title: *Acacia fpinofa tenui- folia* filiqms lath* fpinis minimis recurvis folitariis.* Prickly Egyptian Thorn, with narrow Leaves, broad Pods, and very fmall recurved Spines ftanding fingly.

Tftt^ ffW ^RWB^S^a^STSnWpKI in *New Spain*, where it was difcovered by the Gentleman before- mentioned. It there rifes with a tender Stem to the Height of Twenty Feet, fending out many weak Braⁿ ^ or ~ ~ v ~ ~ Side, which are armed with ^ rrooked Saⁿ d | ^ ^ * ^ ? ^ r f W b u % l f a r n g e d ; they are compofed of Five or Six Pair of Wings placed oppofite, and thefe are each garnifhed with upwards of Twenty Pair of narrow oblong fmall Leaves or Lobes, placed along the Midrib, which is alfo armed with very fmall Spines. From the Wings of the Stalk come out the Footstalks, which fuffain the Flowers; thefe are from Four to Seven or Eight Inches long, and have fmall Footstalks branching from them, each being terminated by a globular Head of Flowers, reprinted at *a*, which are of a pale yellow Colour. The Flowers* which compofe the Head, are tubulous, and cut at the Brim into Four or Five fhort Segments, and inclofe a great Number of Stamina, crowned with oval Summits, reprinted at *c* c*. The Germen *b* is fituated at the Bottom of the Tube, fupporting a Style the Length of the Stamina, as is fhewn at *d*. The Germen afterwards becomes a long broad Pod, reprinted at *f*, having feveral oblong oval Seeds, marked *g*, which are alternately larger than the other.



ACACIA foliis pinnatis conjugatis foliolis aequalibus simplicibus spinosis, foliis latis.

Rehoboth according to list of Botanicus by J. Miller Nov 1758



ALOE. foliis linguiformibus variegatis floribus pedunculatis corvuis cor. inaequalis.

S. Hill del. Gou.

Published according to the order of Parliament by P. Collen & J. St. John.



CARDUS foliis pinnatis bipinnatis pinnis linearibus serratis ovatis angulatis glandulis utrisque. Flor. April. 1733

Bot. Tab. 1733

1733-1734

Illustration of a Carduus plant, showing the main plant and several detailed views of its parts.

P L A T E CCXCII.

ALOE, *Tourn. Inft. R. H. 366. Tab. 191. Raii Meth. Plant. 117. Lin. Gen. Plant. 389. Aloe.*

THIS Genus of Plants is ranged in the Second Section of *Tournefort's* Ninth Clafs, which includes the *Herbs with a Lily Flower of One Petal cut into Six Parts, whose Empalement becomes the Fruit*, Mr. *Ray* places it in the Second Section of his Twenty-third Clafs, which contains the *Plants with a Flower of One Leaf divided into Six Parts at the Top, whose Flowers fit upon the Fruit*. And he very juftly b^rndj^f Tournefort for the Loofenefs of his Charaders-, for, as M obferves, the Flowers have no Empalement, but fit upon the Embryo of the Fruit, and are naked. Dr. *Linnaeus* ranges it in the Firft Sedlion of his Sixth Clafs, which includes thofe *Plants whose Flowers have Six Stamina and One Style*.

The Characters of this Genus having been already exhibited in this Work, we fhall not repeat them here.

The Specie here repreftented is,

ALOE foliis linguiformibus variegatis, foribus pedunculatis cernuis, ore incequali. Aloe with variegated tongue-shaped Leaves, and nodding Flowers upon Footftaiks, whose Brims are unequal.

This Aloe was raifed from Seeds in the *Chelfea* Garden, which were brought from the *Cape of Good Hope* by Captain *Hutchinfon* of the *Godolphin Indiaman*, and the

laft Summer it flowered for the firft time in *England** which engaged us to give a Reprerentation of the Plant in this Work, as it is One of the mod beautiful Species of this Genus.

The Leaves of this Plant are thick, fucculent, and flat, fhaped like a Tongue, but terminate in a Point; the longeft Leaves are about Six Inches, but the lower-ones, marked *a*, are not more than Three, and their Breadth at the Bafe, where they are broadeft, an Inch and a Quarter. Thefe Leaves embrace each other at their Bafe. Their Surface is fmooth on both Sides. They are of a deep-green Colour, finely marbled with white on every Side. Between the Leaves come out the Footftaiks of the Flowers, repreftented at *b* -, thefe are naked, and rife a Foot and half high, their upper Part being garnifhed with Flowers, (landing upon fhort nodding Footftaiks, repreftented at *c*. The Flowers are tubulous and recurved, as is fhewn at *d*. The Mouth or Rim of the Tube is cut into Six unequal Parts, as is repreftented at *e*. The tubulous Part of the Flower is of a bright Coral Colour; but the Mouth is of a dirty-White. Within the Tube there are Six Stamina, terminated by headed Summits, as is fhewn at *f*. Thefe are fhorter than the Petal of the Flower; and between thefe is fituated a slender Pointal of the fame Length, crowned by a pointed Stigma. The Flowers of this Plant appear in *July*, but they have not as yet been fucceeded by Fruit in *England*.

P L A T E CCXCIII.

CARDUUS, *Tourn. Inft. R. H. 440. Tab. 253. Raii Meth. I Plant. 40. Lin. Gen. Plant. 832. Thirties in French, Chardon.*

THIS Genus is ranged in the Second Section of *Tournefort's* Twelfth Clafs, which includes the *Herbs with flofculous Flowers, whose Seeds are crowned with Down*. Mr. *Ray* places it in his Ninth Clafs, which contains the *Plants with compound Flowers, having many piped Florets collected in a Head*. Dr. *Linnaeus* ranges it in the Firft Division of his Nineteenth Clafs, which includes the *Plants with Flowers compofed of many hermaphrodite Florets whose Stamina and Style are connected at their Bafe*.

The Specie here repreftented is,

CARDUUS foliis feffilibus bifariam pinna^tfidis, laciniis alternis ereftis calycibus globofis villofis, Hort. Upfal. 249. Thiftle with Leaves fitting clofe to the Stalks, which are two ways wing-pointed, the Jags being alternate and ereft, and globular F.palements, which are hairy. This Plant is titled by *Cafpar Bauhin*, *Carduus capite rotundo tomentofo*, Pin. 382. Thiftle with a round woolly Head. *Tournefort*, and fome others, have adapted the fame Title 5 but *Parkinfon* calls it,

in his *Herbal*, *Carduus tottentofus, ccorona fratrum diclus*^ p. 978. Woolly Thiftle, called Friers Crown; the common &ngli(h Title is Woolly-headed Thiftle.

This Plant grows naturally in feveral of the middle Counties of *England*, as in *Warwickfhire*, *Northamptonfhire*, *Leicejterfhire*, and *Cambridgefhire*, but is not found any-where near *London*. It is biennial; the Plants, which rife from Seeds one Year, fpread out their Leaves very far on every Side, but do not rife to flower till the next Summer, when they produce their Flowers and Seeds, foon after which they decay.

The lower Leaves, which fpread on the Ground, are often Two Feet long; they are narrow, and have a leafy Border running along the Midrib -, the Segments of the Leaves are alternate, and point upward, each being terminated by a long brown Spine-, the Flower-ftalk arifes from the Center of the Plant, and grows to the Height of Four or Five Feet, fending out upward feveral Side Branches: Thefe are garnifhed with Leaves of the fame Form with the lower, but are fmaller gradually to the Top. The principal Stalk, and alfo the Side Branches, are terminated by globular Heads of Flowers; which are compofed of many Florets, included in one globular prickly Empalement, repreftented at *a*. This is curioufly wrought over with a fine webbed hairy Down be-

between the Spines, which makes a fine Appearance, and at the Top the Florets appear, which are of a beautiful purple Colour, as is shewn at *h*. These Florets are all hermaphrodite, each having along Tube, which fits upon the Embryo, as is represented at *c* and *d*, and an; cur at the Top into Five Segments. At *e* is represented the Seed taken out of the Empalement, crowned

with two *du* at the top; the five Stamina and the Style are represented, as they are connected, and shews the Tube of the Flower cut taken out of the Flower. — Is represented at *;*, being in full Length.

The Plant flowers the Beginning of July, and the Seed ripens in the Autumn.



P L A T E CGXCIV.

SOLANUM, *Toum Inf.* R.H. 148. *Tab.62. Raii Meth.* plant, 74. *Lin. Gen. Plant.* 224. Nightshade in French, *Mcrelle*.

Tournefort ranges this Genus of Plants in the Seventh Section of his Second *Chc*, which includes the Herbs with a wheel-shaped Flower of One Petal, whose Pointal becomes a soft Fruit. Mr. *Ray* places it in the Third Section of his Seventeenth Clafs, which contains the Herbs bearing Berries which grow sparsely. Doctor *Unnaus* ranges it in the First Section of his Fifth Clafs, which includes those Plants whose Flowers have Five Stamina and One Style.

As this Plant (hews the distinguishing Characters of the Genus very obviously, so we shall insert them here.

The Flower has a permanent Empakment of One Leaf, which is cut deeply into Five acute Segments, represented at *d*. It has One wheel-shaped Petal, shewn at *f*, with a very short Tube. The Brim is large, five-pointed, a little folded, and plain, represented at *b*. It hath Five small awl-shaped Stamina, supporting many oblong Summits, which naturally approach each other, represented at *h*, and a roundish Germen, supporting a slender Style, which is longer than the Stamina, crowned by an obtuse Stigma, represented at *e*. The Germen afterwards becomes a roundish smooth Fruit, shewn at *i*, having a convex fleshy Receptaculum, as is represented at *m*, filled with roundish Seeds, shewn at *n*.

This Plant has been very lately introduced into the English Gardens from India; and as it hath not been mentioned by any Botanic Writer, so we have exhibited its Figure in this Work by the following Title,

SOLANUM caule inermi subfruticosa, foliis oblongo-ovatis finuatis utrinque glabris, Jloribus alaribus. Nightshade with an unarmed almost (hrubby Stalk, oblong oval

finuated Leaves, the lower Part of the Stem is woody and Flowers coming from the Wings of the 5

The Stalk of this Plant is tapering deep-green Colour when young; the lower Part becomes lignous. It rises from Two to Three feet high, and Branches irregularly on every Side, which are with oblong oval smooth Leaves, Four or five long, and Three broad in the Middle. The Leaves are irregularly finuated on their Edges, and of a deep-green Colour, and stand upon stalks, placed without Order on the Branches. The Wings of the Stalk come out the Footstalks, which sustain the Flowers, these are short, and have frequently One or Two small Leaves below the Flower, which generally are clustered together at the Top, first being close to the Footstalks. The Flowers are of a fine blue Colour, having a very flat spread open almost flat above, having five or six Angles, as is represented at *a*, where the back Part of the Flower is (hewn closing inward; at *b* the Flower is (hewn fully expanded, with the Five oblong orange-coloured Summits fitting in the Tube of the Petal. After the Flower fades, the Germen swells to a roundish smooth Fruit, almost as large as a Walnut, with its outer Cover, of a deep-green Colour first, but, when ripe, changes to a pale yellow, filled with a soft Pulp, in which are lodged a great Number of oval Seeds.

It begins to (hew its Flowers in June, and there is a Succession of them on the Plants till Winter. The early Flowers will be succeeded by Fruit, which will ripen late in the Autumn, unless the Frost destroys the Plants before; but if the Plants are removed into a moderate Stove, they may be preferred through the Winter.



SOLANUM, *caulis inermis foliis oppositis ovatis fructu vru** - galeis floribus albis*

Printed according to the order of Parliament by J. Miller August 21 1773

PLATE



ARUM *suberosum* (L.) Schott. & Benth. *sp. plant. 1847*
arum



DRACONTIUM folios pectinatis, caule scandente Lin. Sp. plant. 472.

C. folios pectinatis

Plukch's drawing in the Sp. Pl. illustr. by Dr. Miller, 1753, p. 472.

P L A T E CCXCV.

ARUM, *Tourm. Inft. R. H. 158. Tab. 6g. Rail Meth. Plant. 74. Lin. Gen. Plant. 915. Wake-Robin, or Cuckow-Pint; in French, Pied de Veau.*

The Characters of this Genus are,

jtT H E Flower hath a large oblong Spatfap (or Sheath), - marked a, which is clojed at the Bottom, compreffed in the Middle, and open at the Top, as is reprented at b: The Spadix (or Stalk), which juft aim the heaves and Flowers, is fingle, marked n; upon the Top of which are fituated the Male Flowers, as is fbeivn at c-, and below thefe are the Germina, marked d. Thefe Flowers have no Petals, or Stamina. One of the Male Flowers is reprented of the natural Size at e, which is magnified at f: At g is Jhewn an Embryo of its natural Bignefs, and one which is magnified at h. The Embryo with its Cover is reprented of its natural Size at i, and another magnified at k; and at l is fnevn the naked Embryo of its natural Size; and at m is another magnified. Thefe Germina afterward become Berries, with One Cell, inclofing a fingle Seed.*

This Genus of Plants is ranged by *Tournefort* in his Third Clafs of Plants, which includes the Herbs with an anomalous Flower of One Leaf, fhaped like an Ear or Flood. *Mr. Ray* pUces it in his Seventeenth Clafs, which includes the Herbs bearing Berries. *Dr. Lannaus* ranges it in the Seventh Section of his Twentieth Clafs, which includes thofe Plants whole Flowers have many Stamina, which lie upon the Style or Pointal.

The Specie here reprented is,

ARUM *caulefcens, foliis fagittatis, Lin. Sp. Plant. 967. Scaiky Arum, with arrow-pointed Leaves. In the Gardener's Didtlonary it is titled, Arum caulefcens, foliis fagittatis, fpathd declinatd claudfy Stalky Arum, with arrow pointed Leaves, and a declining clofed Sheath. Plumier titles it Arum arborefcens, fagittaria foliis. Plant. Amer. 44. Tree-like Arum, with arrow-pointed Leaves: And Sir Hans Sloane, in his Hiftory of Jamaica, calls it Arum caule geniculato, canna Indies foliis. Cat. 63. Arum with a jointed Stalk, and Leaves like the Indian Cane. In the Weft-Indies it is commonly called Dumb Cane.*

This Plant rifes, with a jointed green Stalk, to the Height of Eight or Ten Feet, and is about the Size of a large Walking-ftick: The Leaves come out toward the Top, in an irregular Order; they are oblong, of a light-green Colour, and are from Seven to Ten or Eleven Inches long, and Five or Six bro^d in the Middle., having Two Ears at their Bafe, like the Beards of an Arrow. Their Footstalks embrace each other at their Bafe, and between thefe come out the Spathse, or Sheaths, as is reprented at a. They are Five or Six Inches long, of the fame Colour with the Leaves, fwelling at a fmall Diitance from the Footstalk, and compreffed again in the Middle, opening a little at the Top, where the Point of the Spadix appears, upon which the Flowers are irregularly placed: Thofe at the Top are formed into a clofe Spike, but thofe below are ranged fpardedly. The Sheath is clofely fixed on one Side to the Spadix, fo cannot be feperated from it without being torn; but on the oppofite Side it may be opened, fo as to fhew the Spadix, with its Embryo, as is reprented at d and it is only upon this Side of the Spadix that the Flowers are ranged, for the Sheath clofely adheres to the other. The Embrya on the lower Part of the Spadix have each a fmail Cover, compofed of Five very fmall white Leaves, which are fattened to the under Part, and feperate above, as is fhewn at i and k. The Embrya are green, kidney-fhaped, and have brown Covers. The Male Flowers, at the Top of the Spadix, are of an irregular fquare Figure, and are brown. The Embrya do not come to Maturity in *England*^ the utmoft Perfection they have yet arrived to is as that reprented in its natural Bignefs at l, and is magnified at m. The Time of its Flowering is in the Spring of the Year; the whole Plant is filled with a fharp acrimonious Juice, which will blifter the tender Skin, if applied to it; and, if a Part of the Leaf is broken and applied to the Tip of the Tongue, it occafions a very painful Senfation, caufing the Salivary Dufts to fwell, and brings on a great Defluxion of Saliva: The Inhabitants of the Sugar Iflands fometime rub the Mouths of their Negroes with the Juice of this Plant, by way of Punifhment; and as this fwells their Mouths, fo as to prevent their eating or fpeaking till the Swelling is afwaged, it is called by them *Dumb Cane*.

p L A T E CCXCVI.

DRACONTIUM, *Lin. Gen. Plant. 916. Arum Plum. Amer. 40. Tab. 56. Dracunculus, Tourn. Inft. 160. Tab. 70. Dragon; in French, Serpentaire.*

The Chara&ers of this Genus are,

jtT hath a large boat-fhaped Spat ha, of a leathery Confiftence, with One Valve, reprented at a, and a fingle cylindrical Spadix, on the upper Part of which the Parts of Fructification are fituated in a fingular Manner, each being clofely united, nor any Petals which can bepropfrlyjo called. In this Specie there are but Two Stamina in each Flower, which have fpate-fhaped Summits, reprented at c and d of their natural Size, and at c c magnified. The Germen e is Jhaped like NIMB, L.*

a Vafe, having a coloured Crown, which is fhewn magnified at d e, and at f there are Three of the Germina cut iranfrly, wherein are feen the Embrya of Two Seeds.

The Specie here reprented is,

DRACONTIUM *foliis pertujis^ caule fcandente, Lin. Sp. Plant. 968. Dragon with perforated Leaves and climbing Stalks. Plumier titles this Plant, Arum hederaceum, amplis foliis per for atis. Plant. Amer. 40. Tab. 56, 57. Climbing Cuckow-Pint, with large perforated Leaves.*

This Plant grows naturally in many of the Iflands in the *Weft-Indies*, where the Stalks fallen themfelves to
E e e A>~

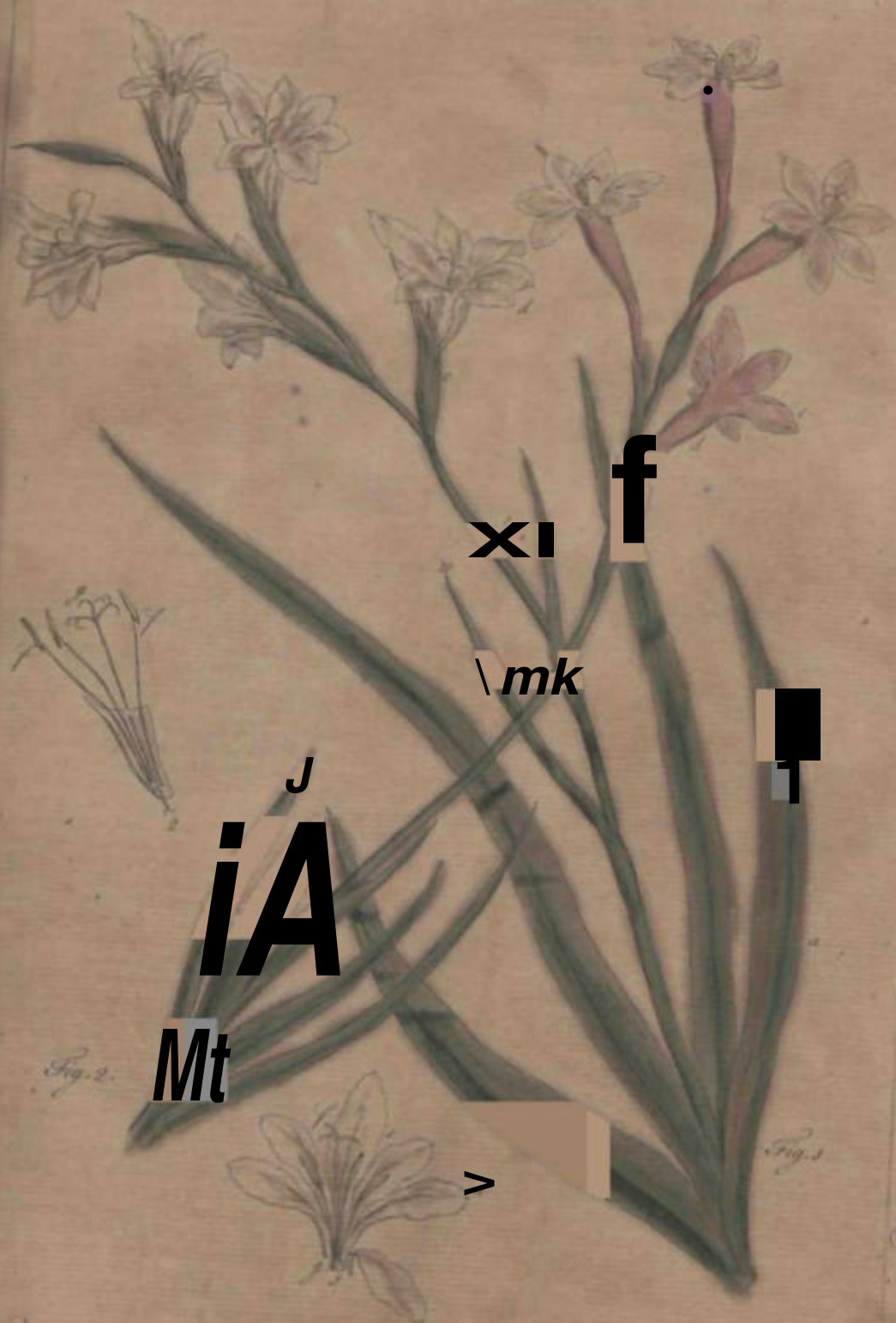


Fig. 2.

Fig. 3.

Fig. 1. GLADIOLUS foliis ensiformibus floribus divisis, corollis patentibus.
 Fig. 2. WATSONIA humilis foliis lineari-ensiformibus, tubi floris longissimo.
 Adhuc in herb. bot. de Tabern. by P. de la Roche.



TRUMPETTA foliis oblongo-ovatis obtusis serratis petalis longifloris

Chilodactylon (L.) DC. *Chilodactylon* (L.) DC.

INDEX PLANTARUM

Quae in hoc opere exhibentur.

A	Fig.	Pag.	B	Fig.	Pag.	C	Fig.	Pag.
A BIES						j Cucubalus	112	75
Abrotanum	2	1	Bal lamina	59	40	Cunonia	113	75
Abut'on	3	3	Bacteria	60	4	Cyanus	114	76
Acacia non fpi; >fa	4	4	Bauhinia	61	41	Cyclamen	115	77
»Americana	5	4	Belladonna	62	41	Cydonia	116	77
tenui folia	6	4	Berberis	63	42	Cypripedium	242	161
foliis bipinnatis	291	194	Bidens	64	43	Cytifus	117	78
Acanthus	7	5	Bignonia					
Acer	8	5	Biftorta	66	J			
Achillea	9	6	Blattaria	k?	45	D'ayena	118	79
Achyranthes	10	7	Borrago	68	45	Delphinium	119	79
Aconitum	11	7	Browallia	69	46	Dianthus	120	80
Adhacoda	12	8	Brunella	70	47	Didamnus	123	82
Adonis	13	8	Bryonia	71	47	Diervilla	124	83
Agave	14	9	Buglofium	72	48	Digitalis	125	83
Agrimonia	15	10	Bulbocodium	240	160	Diofma	126	84
Alaternus	16	11	Bupthalmum	73	49	Diofpyros	127	85
Alcea	17	11	Bupleurum	249	166	Dodonaea	128	85
Alchimilla	18	12		74	49	Doronicum	129	86
Aloe	19	13				Dracocephalum	296	197
Alyfibr	20	13	Calendula	75	50	Dracontium		
Amaranthoides	21	13		76	51			
Amaranthus	22	13	Cannabis	283	189			
Amaryllis	23	15	Capnoides	77	51			
Ammi	24	16	Caprifoliatum	78	52	Echinops	130	87
Amomum	25	17	Cardiaca	79	53	Ellichryfum	131	87
»morphia	26	17	Carduus	80	53	Emerus	132	83
»jnygdalus	27	18	Caryophyllus	293	195	Epimodium	133	89
»nchufa	28	18	Cassia	81	54			
»ndrofacea	29	19	Cassia	82	65			
»inemone	30	19	Caffeina	83	55	Fabago	134	89
Anguina	31	21	Caftanea	84	56	Ferraria	280	187
Anguria	32	21	Caucalis	85	57	Filago	288	192
Anil	33	21	Ceanothus	86	57	Fragaria	136	91
Anona	34	21	Celastrus	87	58			
Anonis	35	23	Celtis	88	59			
Anonis vifcofa	36	23	Cerafus	89	59			
Anthemis	37	23	Cereus	90	60	Crataegus	139	93
Whericum	38	24	Cerinthe	91	61	Cratichium	138	92
»cholyza	39	26	Chelidonium	92	61	Crantiana	139	93
»ithyllis	40	27	Chironia	93	62	Geranium	140	94
»itirrhinum	41	27	Chirifium	94	63	Geum	142	95
»haca	42	28	Clematis	284	189			
»ocynum	43	29	Clethra	281	187	Gladiolus	235	157
»ocynum erectum	44	29	Clinopodium	95	63			
»quifolium	45	30	Clymenum	96	64	Glaucium	297	198
»quilegia	46	31	Cneorum	98	65	Gundelia	143	96
»arbutus	47	31	Cnicus	248	165			
I r (Sotis)	48	32	Colutea	199	66			
wrgemone	49	32	Cpnvallaria	101	67			
wrifolochia	50	33	Convulvulus	102	68	Helianthemum	290	193
wrum	51	34	Conyza	103	69	Heliotropium	144	96
wrum	52	34	Cornus	104	69	Helleborine	145	97
»farina	53	35	Corona Imperialis	105	70	Hieracium	149	92
»farini	54	35		106	70	Hieracium majus	147	98
»feyrum	55	36	Coronilla	107	71	Hippocrepis	278	185
»iparapus	56	36		108	72	Hyacinthus	148	98
»phodelus	57	37	Crattula	109	73	Hydrangea	251	107
»fterO	58	38	Cratsegius	1269	179	Hyofeyamu*	149	99
»fter, caule corymbofo	59	39	Crinum	110	73	Hypecoon	150	100
»viragalus	60	40	Crocus	111	74	Hypericum	151	101



Stem foliis cordato-ovatis oppositis sessilibus pecunantibus, spicis crassis
 floribus confertis Pic. Herb. —

UX~~U~A* Act by P. Miller Jan 21 1768

The thorny Sort, -which is common in the *West-Indies*, also agrees with this, having Plants which bear only Male Flowers, Two of which have produced Flowers in the *Chelfea* Garden ; and Dr. *Houjloun* lent Specimens of the Male and Hermaphrodite Trees from *Jamaica* to the Author.

The Sort here represented is,

SIDEROXVLUM *mas inerme*. Male Iron-wood without Thorns.

This Tree grows naturally at the "*Cape of Good Hope*, where it rises to the Height of our Apple-trees in *England*. The Wood of it is so heavy as to sink in Water.

But in *Europe* the Trees do rarely riorc tL::
Eight or Ten Feet high, dividing into many Branches which are covered with a Ruffa Bark, and are garnished with pear shaped Leaves, about Three Inches long and an Inch and a Half broad in the Middle, ending in Points at both Extremities. They are placed with Order on the Branches, having Footstalks an Inch long. The Leaves are smooth, and of a lucid Green, continuing all the Year. The Flowers come out in Clusters from the Side of the Branches, Hanging upon short Footstalks, which branch out into several smaller, each supporting a single Flower, which is small and white, one of which is represented of its natural Size at *g* the other is magnified. This Plant flowers in *May* and *June*.

P L A T E C C G.

LYCIUM, *Lin. Gen. Plant. 232. Jafminoides Niffol Ac. Reg. Par. 1711. Rhannus C. P. B. 477.* Boxthorn.

THIS Genus of Plants is ranged in the first Section of *Linnaus's* Fifth Class, which includes those Plants whose Flowers have Five Stamina and One Style. As the Characters of this Genus have been already exhibited in the Course of this Work, it is needless to repeat them here.

The Species here represented is,

LYCIUM, *foliis cordato-ovatis, oppositis fessilibus perennantibus spinis crassis bigeminis, floribus confertis. Diél. Hort.* Boxthorn, with oval heart-shaped ever-green Leaves, placed opposite, fitting close to the Branches, thick Spines in Pairs, and Flowers in Clusters.

The Seeds of this Plant were brought from the *Cape of Good Hope* to the *Dutch* Gardens, where the Plants were first raised, and have since been communicated to the curious Botanic Gardens in most Parts of *Europe*. Some of the *Dutch* Botanists have ranged this Plant under the Genus of *Randia* from the Shape of the Flower, to which it has a near Affinity, if the Fruit is not admitted as a Character; but, if this be allowed, it must be ranged with the *Lycia*, for the Fruit of the *Randia* has but One Cell, which is filled with cartilaginous compressed Seeds, whereas the Fruit of this has Two Cells, each containing a single Seed. It is a low Shrub, which seldom rises above Four or Five Feet

high, sending out Branches from the Root which divide in Pairs, and spread asunder, which are covered with a green Bark, as is shewn in the Figure, and are garnished with oval heart-shaped Leaves, about an Inch long, and Three Quarters of an Inch broad at their Base, ending in acute Points, fitting close to the Branches, and are placed opposite; they continue green all the Year. At the Divisions of the Branches (and the Spines, which are forked and double: they are short and stiff, for the most Part growing erect. At the End of the Branches the Flowers are produced in Clusters, as is represented at *z*. The Cup of the Flower shewn at *z*, is small, erect, and (lightly indented at the Top in Five Parts; this is permanent. The Flower is funnel-shaped, the Tube *b* is cylindrical, and a little incurved at the Top, where it is cut into Five acute Segments, which spread open, represented at *c*. In the Tube of the Flower there are Five awl-shaped Stamina, terminated by erect Summits, as at *d*. The Germen is situated in the Flower Cup, supporting a single Style, which is longer than the Stamina, shewn at *e*, and crowned by a thick bifid Stigma, marked *f*. After the Flower is past, the Germen swells to an oval fleshy Berry, represented at *g*, which has Two Cells, as is shewn at *h*, where the Berry is cut transversely, in each of which is lodged a single oblong hard Seed, represented at *k*.

This Shrub produces its Flowers in *July* and *August*, which are of a clear White, and the Fruit ripens the Spring following, which is of a deep-red Colour when ripe.

This Plant is a Native of the *Cape of Good Hope*, from whence the Seeds were brought by Captain *Hutchinson* of the *Godolphin Indiaman* in the Year 1754. The Root is tuberous, compressed, and covered with a brown fillicium, from which come out Four or Five narrow sword-shaped Leaves, about Five or Six Inches long, and One third of an Inch broad in the Middle, ending in acute Points, of a dark Green, embracing each other with their Base, see Letter *a*. From between these comes out the Flower Stem *b*, which is naked, and rises a Foot high: Toward the Top the Flowers are ranged alternately, each having a Spatha (or Sheath) which is divided into Two Pans, as is represented at *c*. The

Tube of the Flower is long, narrowed at the Base, *by* is greatly enlarged above, as is shewn at *d*, is cut into Six equal Segments, as is represented at *e*: *c*, which spread open. Under the Flower is situated the Germen, supporting a slender Style, crowned by a trifid Stigma, each Division being bifid and reflexed, as is shewn at *g*. This Style is attended by Three slender-Stamina, of the same Length, represented *//*, terminated by moving Summits. The Flower is of a bright Red on the Outside, but is paler on the Inside. These appear the latter End of *May*, and continue in Beauty a Fort-night or Three Weeks, then the Leaves and Stalk decay, without producing Seeds here.

P L A T E CCXCVIII.

TRIUMFETTA, *Pin.* 40. *Tab.* 8. *Lin. Gen. Plant.* 529. *Bartramia Lin. Gen. Plant.* 480. We have the following Title for this Plant.

The Characters of the Genus are

The Empakment of the Flower is cut into Five linear Segments *a*, which soon fall off; it has, for the most Part Five narrow Petals *b* which are erect, and Ten slender Stamina *c*, which are terminated by roundish Summits *d*: In the Center of the Flower is situated a roundish Germen, supporting a hairy Style *e*, the Length of the Stamina, crowned by a trifid Stigma: The Germen afterward becomes a roundish prickly Fruit, whose Spines are crooked, having four or Five Cells *g*, each containing One Seed *h*.

The Species here represented is,

TRIUMFETTA, *foliisoblongo-ovatis, obtuse ferratis, petiolis longissimis.* Triumfetta, with oval oblong Leaves, bluntly fawed, Handing upon very long Footstalks.

This Plant grows naturally in *India*, from whence the Seeds were brought, which have succeeded in the *Chelsea Garden*, where the Plants have flowered and perfected their Seeds. It is annual, and perishes soon after

the Seeds are ripe, for is very different from that which Doctor *Linnaeus* titled *Bartramia*, in the former Edition of his *Genera*, but in the last Edition of his *System* he has joined it again to *Triumfetta*, from which it only differs, in having sometimes Ten Stamina, whereas the *Triumfetta* of *Punier* has rarely more than Eight. When the Flower of this Plant has but Four Petals (of Segments) then there are but Eight Stamina in the Flower; but when the Flower has Five Petals then there are always Ten Stamina in each.

The Plant rises about Two Feet and a Half height sending out several Branches on every Side, which are garnished with oval Leaves, ending in long acute Points, some of which are heart-shaped, and others have an Angle on each Side towards the Point. They are from Three to four Inches long, and almost as much in Breadth in their broadest Part, Ending upon very long Footstalks, and are crenated on their Edges.

The Flowers come out in long We Spikes at the Top of the Plant, being ranged without Order. They are small and yellow, some having Four Petals, and Eight Stamina, and others have Five Petals and Ten Stamina. After the Flower is past, the Germen turns to a roundish burry Fruit, with Four Cells, each containing One Seed. It flowers in *September*, and the Seeds ripen in *November*.

P L A T E CCXCIX.

HERMOPHYLLA, *fillets. Hort. Eltb.* 265. *Lin. Gen. Plant.* 234.

The Curators of the Genus are,

The Hermaphrodite Flowers on different Plants have an Empakment which is cut into five Segments *a*: The Flower is divided into five Parts *b*, almost to the Bottom: It has five Stamens *d*, which are terminated by oval Summer Centers *e*: The Center is placed a roundish com-

pressed pointed Body, resembling a Germen, *f*, which bears neither Style or Stigma, and falls away with the Flower without having any Appearance of Fruit.

This Genus is placed in the First Section of *Linnaeus's* Fifth Class, which includes the Plants whose Flowers have Five Stamina and One Style: But as the Male Flowers grow on separate Plants from the Fruit, so it should be referred to the Twenty-third Class. But as Doctor *Linnaeus* is not seen the Flowers of these Plants, (for he may be used for ranging them here) The



STUKRI'YYLU I *myrica*.

J. Miller del. Sc.

Published according to the Act by P. Miller June 20. 1760.

