
HYOSCYAMUS

PLATE CL.

HYPECOON, *Tourn. Inſt. R. H.* 230. *Tab.* 115. *Hypecoum, Lin. Gen. Plant.* 157.

THIS Genus of Plants is placed in the Fifth Section of *Tournefort's* Fifth Claſs, which includes the Herbs with a Roſe-ſhaped Flower, whoſe Pointal becomes a jointed Pod, and ripens in the Second Month. The Fourth Claſs, intituled, *Tetrandria Dygynia*, the Flowers having Four Stamina, and Two Styles.

The Species here repreſented are

Fig. 1. HYPECOON *laciniis foliis, Tourn. Inſt. R. H.* 230. Hypecoon with a broader Leaf. This is the *Hypecoum ſiliquis arcuatis compreſſis articulatis, Hort. Upſal.* 31. Hypecoum with arched compreſſed Pods, which are jointed. *John Bauhin* titles it *Hypecoum ſiliquoſum, Hiſt.* 2. 899. Podded Hypecoum.

This is an annual Plant, which grows naturally in the Iſlands of the *Archipelago*, and alſo in the South of *France* and *Spain*. It ſends down a long taper Root into the Ground, which hath many Fibres coming out the whole Length. The Leaves near the Root are broad, jagged, and ſpread on the Ground; between theſe ariſe the Stalks, which are near a Foot long, branching toward the Top, and garniſhed with fine cut Leaves at the Joints. The whole Plant is of a greyiſh Colour, and abounds with a yellow Juice like *Celandine*; the Flowers are produced at the End of the Branches; theſe are yellow, and compoſed of Four jagged Petals, which are divided into Three Parts, as is repreſented at *a*, *b*, *c*, and *d*, of unequal Size and Shape; theſe fit in the Empalement *e* out of whoſe Centre ariſes the double Style *f*, which afterward become a jointed bending Pod, as is ſhewn at *g*. One of which Joints is repreſented at *h*, which is ſplit longitudinally at *i*, to ſhew the Seed therein, which is Kidney-ſhaped, and repreſented at *k*.

This Plant flowers in *June*, and the Seeds ripen in *Auguſt*. If the Seeds of this Plant are not ſown in the Autumn, they will not grow the Firſt Year.

Hypecoum foliolum L.

Fig. 2. HYPECOON *tenuiori folio, Inſt. R. H.* 231. Narrow-leaved Hypecoon. This is the *Hypecoum ſiliquis cornuis teretibus cylindricis Hort. Upſal.* 31. Hypecoum with taper cylindrical Pods, which hang downward. It is alſo called by *Lobel*, *Cuminum ſilveſtre ſiliquoſum*. Wild podded Cumin.

This Sort hath very ſlender Stalks, which bend to the Ground, and are garniſhed with very narrow fine Leaves of a greyiſh Colour, like the former; the Flowers are very ſmall, of a pale Yellow, compoſed of Four Petals, which are ſlightly indented. When the Flower decays, the Style turns to a taper cylindrical Pod, not jointed as the former. This grows naturally in the ſame Countries as the [illegible], and flowers at the ſame time.

yet teen ; but the Title which it bears among Fiorifts we do not know, nor i it very **material.** Since many ofthefeFi owers have feveral D : ruinations in different Cou lll r i t:s, fo we have g i v e nj the fol lowing Ti tl e:

HYAI :INTHUS *Oi>n:* . ***jam-***
.? purpuree.* **i iruh,**
with a vt'r i **Ɓ ek-**
gant!) i gated with a Rofe and [Surple Colour,

The Root of this Flower is tuberous, round, and covered with **;i |jurple Skin j I** long, an **~h broad,** and very **M art near a Foot** rifes about Fourteen Inches high, is very thick **lent : The Stalk** tops, leffening all the Way to the Top : **it Hot-** tt is very

lent, and of a deep Green. The Flowers come out on *tivcty* Side the Stalk, riling above each other in Form of a Pyramid, each (Voiding on a fhort cUiUnft Foot-ftalk . thefs an- naked, ha \ing no Empilemctu ; hut the Petals are clofed at i!ic Bottom, in a ibrt of Tube, tun fprcad open at the Top, where they **are** as IJI ge and double as **fmall** Rofrs : The Ground of the Flower it **white** ; **bot** on the LniiJe it is curtoufiy variegated with Hufe-colour and Purple: So ihat a more beautiful Flower tan fcarce be fcen than this. It lowers in *April*, and if it is fcreened *torn* die Sun in the **Heat** of the **Day,** and alfo fr m Rain and t-roft, if any fluuiltt happen at the 3'ime of >t^ flowering, it may be pfefti.ed in Beauty ntar *3* **Month.**

T E CXLIX.

HYOSCYAMUS, *Lin. Gen. Plant. 219. Tourn. Inft. R- It,* I 17. *Tab.* 42. Henbane, in *French, Jufquiame.*

rpn i s Genus of Plants is ranged in the Firft Sec- tion of *Linnæus*'s Fifth Claſs, intituled, *Pentandria Monogynia,* the Flower having Five Stamina and One Style. *Tournefort* places it in the Firft Section of his Second Claſs, which includes the Herbs with a Fun- nel-ſhaped Flower of One Leaf, whole Pol **Dial becomes** the Fruit.

M out any Funs Hi Ik. 1 ! ottom i • .buious, !

The Species here repreſented is, *Mtt — * ,S_*
>f *+4f4&F> 4***# ^flfiPM '••*

I at * *i* the Greater Henbane, like the white, with a green Bottom to the Flower.

The Seeds of this Plant were ſent by Doctor *Jaſſier* to the *Cheljea* Garden ; but no mention of the Country where it grows naturally, came with it. This is gene- rally taken for the true *White Henbane* of the Antients, the Seeds being whiter than thoſe of any other Species, and the Plant agrees to the deſcriptive Title given by Doctor *Linnæus* to the *White Henbane* of *Caſpar Bauhin*, which is, *Hyoſcyamus foliis petiolatis, floribus ſeſſilibus, Hort. Cliff.* 56. Henbane with Leaves having Footſtalks, and Flowers ſitting cloſe to the Branches. But there is another Species which approaches near to this, whole Flowers have a black Bottom, and may have probably been confounded with this, by ſuppoſing them to be the ſame Species. But I have cultivated both **near Thirty** Years, and have never obſerved either to vary : For they do not only differ in the Colour of their Flowers, but their Leaves are very different, and the Plants are alſo different in their Growth. This is an annual Plan **t,** which periſhes ſoon after the Seeds are ripe, whereas th

otbti ;ve Two Years. The lower tew Indenci Ihort loſt Hair* , Suilc and B onnel Ihat : icwn ar : • Celts, IU *h*

leaves of this are ſhorter and rounder, and I have but ſeveral obtuſe Indentures on their Sides, and ſtand upon ſhort Footſtalks : Theſe are very ſoft, thick, and ſuc- culent. The Flowers are produced at the End of the Side-branches, which are alſo hairy, and are garniſhed with oblong Leaves, having , are covered high, lending out a ſt- Side-branches, fitting very cloſe in Cluſters, with- theſe have but One Petal, whole upper Segment being larger than the others they are all obtuſe. The Empalement of the Flower *c* is ſmall, and is cut at the Top into five acute Segments. In the Centre is ſituated the Germen, ſupporting a ſlender Style, crowned by a round Stigma, as is repreſented at *d*. The Germen afterward becomes a Fruit, as is ſhewn at *b*, incloſed in the Empalement, and is ſhaped like a Pot, with a Lid or Cover repreſented at *e*, having Two ſhewn at *f*, divided by a longitudinal Partition, repre- ſented at *g*. Theſe are filled with ſmall roundiſh Seeds adhering to the Placenta. The Roots, and every Part of our common *Black Henbane*, are ſuppoſed to have a poiſonous Quality ; the bad Effects of the Roots have been already mentioned under the Article *Geneva* ; and an Account of ſome Children which were poiſoned by eating of the Seeds a few Years ſince, is publiſhed in the *Gardeners Dictionary*. But we have no Account of any noxious Quality in this *White Henbane*, nor has it ſo offenſive a Scent as the black ; ſo that when the Seeds are ordered for medicinal Uſe, it ſhould be thoſe of the white, and not the black : But as the white is not a Na- tive of this Country, the Seeds of the black are more commonly uſed.

rLA T E

PLATE CXLV.

HELLEBORUS, Tourn. Inft. R. H. 436. Tab. 2[illegible]

wsdirstm. i ... *Gen. Plant.* 904. Baftard Helle[illegible]

fraui, Hlb&sT ...

>+9- Li- bore \ ifi

THIS Genus of Plants is rang-ed in ibe. Third Section of *Tournefort's* Flcventh Clafs, which ineiisdrs the Herbs with a [X>lypetaloi« anomalous Flower, who[illegible] Empalement become* thi[illegible] Fruit.

JUWK.I .it tti

CUts, **intituled, i this Se to the** F lower* *oi* Style. The particular C hmflers of this i Genus are exhibited tn the *Qardaurs Dittionary.*

The Specie* here reprefenttd is,

rlJltLEliORiKE *A* ... *raUt* tuitrefa i ... *Mgwj.* **U, fieribut <x rmtre* ... *ttmi* ... *Martyn. Cent. Pl.* 50. *Americus* Baftard Helleborc, with a tuberous Root, long narrow Leaves, a naket Stalk, and Flowers from a red to a pale purplith I colour. This is the *Helleborus purpurea, tuberfa radio, Plum. Cat.* 9. Purple Helleborine, with a lubcroiii Koot, sod the *IJmetkn.* ... *Prod. Leyd.* 16.

This i[illegible] grows naturally in *America.* I have re- ci•ed i[illegible] Roots of this from *Penfylvania,* which were ent me i[illegible] *irjm,* and from the *Bthm»* *Ijlaidi •,* an<S a'lio irtam **)«m6usi,* where the late Do&oc *Hciiftmn* found it growing jJrmi/uJly ontheMounrupl;' fo (hat it is *a* Nitive of *tU* rliole CountriM.

It hath a cuberoet Root, which is of* yellowifh Co- itHir, covens with a ro«gh btown St[illegible] compreffiij « the *Top* anti Bwiom, The I[illegible] from the upper Part of the H"ft, whi[illegible] grown R[illegible] • commonly Four. Theft- i»ng, nritr 'I hrte (^turtrrs uf an Inch broad in the MidtJir, being i[illegible] minatinf; in Potoi* They I[illegible] *torn*,* **fo** somewhat like the young Leaves **of** *t'aimi.* **Thefe come** out in the Spring, and decay **in the Autumn.** The Flower-Stalk arifes on one Side of the Leaves, immediately from the Root; and is naked, taper, and rifes a Foot and half high; the upper Part terminating with a long loofe Spike of Flowers of a reddifh purple Colour, compofed of Six diffimilar Petals, repreferited at *g* and *i.* [illegible] ive of which are placed orbicularly, and the lower one is hollowed like a Gutter. The Empalement afterwards becomes a Fruit, *d,* opening with Two Valves, *e* and *e*; and fome few of the Fruit were lengthened in the manner as is repreferited at *f.* This Plant flowers in *June* and *July,* and the Seed fometimes ripen in the Autumn.

Although this Plant is found growing naturally in feveral Parts of *North America,* yet it will not thrive in *England, uakh* it ii kept in the'Stove.

PLATE CXLVI.

HIERACIUM, *Tourn. Inft. R. H.* 469. Tab. 267. [illegible] *marytm, Lin. Gen. Plant.* 820. Hawkweed.

THIS Genus of Plants is ranged in the Firft Section of *Tournefort's* Thirteenth Clafs, which includes the Herbs with femiflofcular [illegible] Seeds hive Do[illegible]

•lowen, win.;:

Linnaus places it in the Firft Section of his Nineteenth Clafs, intituled, *Syngenfia Polygamia Æqualis.* The Flowers of this Section are compofed of hermaphrodite Florets, which are fruitful.

Tin Species here [illegible] **fwefemed are,**

Fig. •• H ... ***metHMwm ttmm*** ... *Mor. H. R.* Woolly Mountain Hawkweed.

The [illegible] Seeds of this Plant were fent me from the Royal Garden at *Paris* by Doctor *Bernard de Juflieu,* Demonftrator of the Plants. This hath a thick fibrous Root, which fends out many broad obtufe woolly Leaves, which are irregularly indented on the Edges, as is repreferited at *a*: Thefe lie near the Ground, and between them rifes a branching Stalk near Two Feet high, which hath a fingle Leaf at each Joint, of the fame Form with the lower, but are lefs as they advance toward the Top, it ii repreferited at *b.* The Flowers terminate the Stalks; thefe are compofed of feveral hermaphrodite Florets, as is fhewn at *c*; which are included in a common fcaly Empalement, repreferited at *d* and *e.* The Florets are tubular below, and fit upon a common downy Placenta, as is repreferited at *f.* Each of thefe have a fingle Seed crowned with Down.

The Plant is bienni[illegible]li, ii flgwrri in 7«rn#, *utd* the Seeds ripen in *Augujt.*

Fig. 2. HIERACIUM *incanum lanuginofum Regienfium, pilofella flore. H. L.* 673. Hoary woolly Hawkweed of *Regis,* with a Flower of Moufe-ear. This is the ARNOPALA *folio dentato-hifpido, Lin. Sp. Plant.* 808.

Afls: [illegible]ryala with Spear-fhaped indented L**rave*.**

This Plant hath a perennial Root, which will creep under the Surface of the Ground, **»nd multiply** The

lower Leaves are about Four Inchts long, and little moroi than half an Inch broad, very hoary, and indented o* finuated on their Edges, ending in acute Points. From the Hoot come out fevcral weak Stalks, which rift about Nine Inches high, dividing toward the Top i»to Two or Three I'maller Branches; thefc are gamifhed wit!) fmaJl Leaves at each Joint, which are aJmoft intire. The Staiks are terminated by yellow Flowers compofed of fevcral Florets, which are hermaphrodite, their lower Part being tubular and cylindrical, but the upp: is plain, fprcadopen, and is cut into Three Parts. There are feveral of thefe Florets included in one common fcaly Empatement, and each of them is fucceeded by a finglc Seed crowned with Down.

Every Part of this Plant is very hoary, fo it makes i pretty Variety when intermixed with Plants whofe Leaves are green : It flowers in *June* and *July ;* but unlefs the Autumn is wjim and dry, the $i-«i will not ripe.n 'in this Country j nor will (ho Plane live abroad in the Winter, unlefi they are planted in • dry Soil, and a warm Situation.

T'hc S«d* of this Plant were lent me by *Rsfort Mtrt,* Efcjj from *Spam,* where he found the Pt.int | turally : And fince] I *ttdfomtol* from the *Cap* if Gad llept,* where 1 am afTured it grows i and 1 alto hate received it from *sUgitrt* j Jo r'--* it ii fbuiiLi in leveraj Countries.

P L A T E CXLVII.

litM- *us. Par. Sal.* 185. Gre; a black Midd the]

THii Plant grows naturally in fcvera! Parts of -nee the Seeds have been brought to moft ot the curious Gardens in *Jitlia*d* and *England;* but of late Yean it has been generally propagated in mo ft of the Pieafure Gardens near *L$nd«n,* Tnii is an annual Plant, which perifhes in the Autumn, foort after the Seed* *re ripe •, which if permitted to fcatter, the Plants will come up without farther Care.

The Jowtr Leaves of this Plant are near Six Inches long, and are regularly Ibmtrd on their F.dges, is is reprefemed at'»i thei- are of a pale Green, and Iprrad near the Ground. Between the Leam come out if Two branching Stalks winch rife upward of feed with a

fm6le 1 • i» is imire and obtufr. Thf Stalks are rs, wiih a bi^ck Mi thtfc «« compofed of many hermaphrodirc Fl wh,ch are „ , briflly fcaly Km^lem^t, *tor** ^ondt V y 'OOP' th»» rfw Kays of the Flower.

ere azi Two or Three Varwties of r dif- fcmg in tl I with a I fame Bottom or .' pofed to be Hut thefe an in Mi

Doftor *Litmu* iy hit *Specus PUntarm-* f of Genus of *Crtfii,* Bui Ptinu, which nt

P L A T E CXLVIII.

HrACiMTHvs, *TMTM. hfi. R. h* •. *Oai. Pit*. 315,* H)

THIS Genut of I'! *O** , the „ , « ;Of OwPet*!, the Fruit. *Lamtm* *Twr»*fw:*

: KehajpfOicrilc *Ttmrnftft* WK) *Bur**** d tw g<

Variety of thefe Species *in-* other j : pf*f»» f'om the all ir diflinft

^i-LtaJlS. J j H . nl


Pl. CXXXII
Hieracium

ACHILLEA *foliis pinnatis foliolis linearis lanceolatis basi sursum auctis.* Hort. Lugd. p.

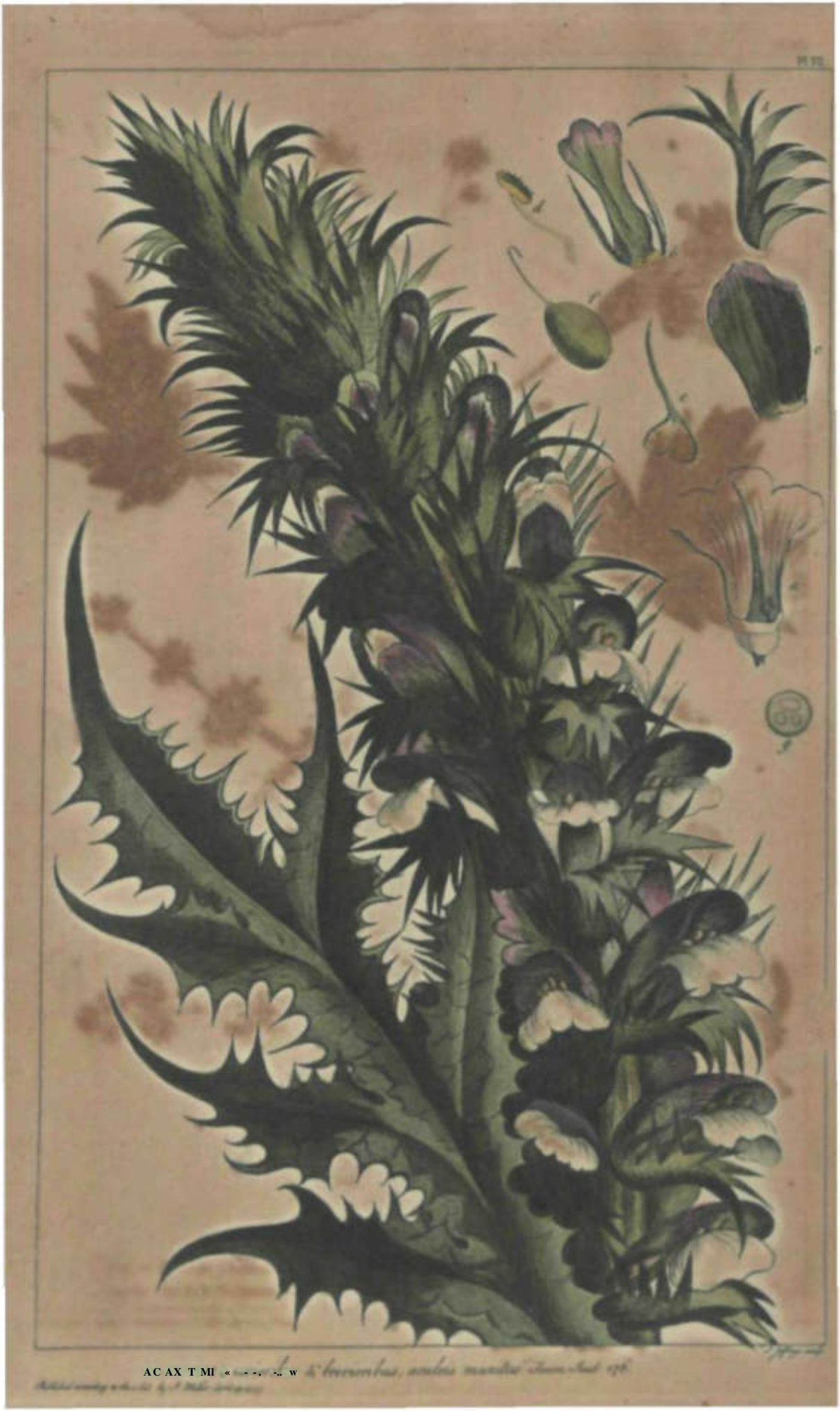


Fig. 1 ACER *platanoides, Munt. Phyt. fig. 10.*
Fig. 2 ACER *Virginianum folio majore subtus argenteo, supra viridi splendente, Pluk. Phyt. tab. 2. fig. 4.*

Fig. 1 HIERACIUM montanum tomentosum H. R. Bles.
Fig. 2 HIERACIUM minimum lanuginosum Rapifolium, pilosellae flore H. L. 671.

Publish'd according to Act of Parliament by P. Miller March 20 1757

The Species here repreſented are,

Fig. i. ARUM *vulgare, Gcr. Emac.* 83+. Common Arum, Wake-Kubin, or Cut[illegible]ow-Pint. *c,* reprc- ſents the Cowl, or H[illegible]hwd t *i.* th e Poi rtta! of the Flowe r, in which are inferteti the Germen, with (lie Stamina collected, *M* it were, in *t* Body fhiped like a Club.

This is tlir Firft Species mentioned in the *Card[illegible]ner's Dittionary.* It grows r•Muraity on the Sidos of Banks, and in fhitly Places, in nwft Parts of *Expand;* tlwre- fore is not permitted to have a Place in Gardens ; it flowers in *Ipnl,* and the Sireds arc ripe in *Jufy,* when they are of a deep orange i.olour. The Roots - ^^Bare u! ' art full oi Acrimony; ^^^•K if ..Perſon taſte it when it is in Vigour, it wilt bite the Tongue the whole Day ; and in this Acrimony conſiſts the Virtue of the Root ; therefore thoſe who make uſe of it ſhould take up the Root ſoon after the Seeds tie ripe, -when t!;y are inactive and firm ; and the Ro[illegible] 3?(which are at th[illegible] Seaſon taken up, will retain their Pungen[illegible]ole Year ; whereas thoſe which are gathered in the Spring, when the Leaves are freſh, will ſhrink up in a few Days, and loſe all their Virtue.

Fig. 2. ARUM *Cylanicum humile latifolium, piſtillo pur- pureo.* Broad-leav'd Dwarf Cuckow-Pint, with a purple Piſtil. *a,* repreſents the Cowl of the Flower, which is always reflexed, and twiſted at the Point like a Screw; *l>,* the Poiiitii, *hicti h* long, ſlender, of > deep | urple Colour.

This Specie* ap; roaches near to one which is figured by lioftor C«»r[illegible], in the *Hortus Anglicanus* ; but the Leaves of his are not ſo much pointed, and have much longer Foot-ſtalks than this, and grow more erect. The Cowl of his Flower is alſo erect, and not pointed, or fprcjd open. as this is; fo we tn^ determine them to be different Plants, tho' from the ſame Country : The Colour alſo of his Pointal is ſcarlet, and this is deep purple; but that would not be admitted as a ſpe- cific Difference, was there not a manifeſt Difference in the Shape of the Leaves and Flower.

The Root of this Plant was brought from *Ceylon,* with ſome other Plants, in the Year 1732 ; but this was the only Plant which came alive in the Parcel : It ha! flowered the'l aro hi iiiuil Tinie of iu fiat i Years in the *Chelſea* Garden. The flowering is in *April;* the Cowl of the Flower is about Six Inches long, but inclines toward the Ground, the long Point being always twiſted like a Screw. The Inſide of the Cowl is of a deep purple Co- lour ; but the Outſide is of an herbaceous Green , the Piſtil is long, ſlender, of a fine purple Colour, *:tnd-* ing out of the Cowl, turning upward ; the Flower hath a very fetid Scent, approaching to Carrion, or to that of the Flower of common *Dragon.* The Root is tu- berous, like thoſe of the common Arum. The Leaves of this Sort remain moſt Part of the Year. It is very tender, ſo requires to be kept in the Bark-ſtove, other- wiſe it will not live thro' the Winter in *England.*

P L A T E Lffl.

Fig. 1. ASARUM, *Tourn. Inſt. R. H.* 501. 3**. 286. *Raii Meth. Plant.* 25. *Liu. Gen. Plant.* 522.

ASARABACCA, *in French,* CABARET.

DOctor *Tournefort* ranges this Plant in the Firſt Sec- tion of his Fifteenth Claſs, intituled, *Herbs with a flamineous Flower, the hinder Part of which Cup becomes the Capſule.* Mr. *Ray* places it in his Fifth Claſs of Plants, with flamineous Flowers having no Petals, but the Ca- lix ſurrounds the Stamina and Pointal. Doctor *Linnæus* ranges it in his Eleventh Claſs, which includes thoſe Plants which have from Eleven to Nineteen Stamina in- cluſive in their Flowers. He titles this Claſs *Dodecan- dria.*

The Species here repreſented are,

1. ASARUM, *Dod. Pemp.* 358. Common Aſarabacca. *By Parkinſon, Aſarum vulgare.* Doctor *Linnæus* titles it, *Aſarum folia reniformibus obtuſis binis, Spec. Plant.* 441.

2. ASARUM, *Canadenſe Cornut.* 22. *Canada* Aſarabacca. This Doctor *Linnæus* titles, *Aſarum folia reniformibus acuminatis, Spec. Plant.* 441. And Doctor *Gronovius, Aſarum folia ſubcordata petiolata, Flor. Virg.* 52.

The firſt Sort is found growing naturally in ſome Parts of *England,* but very rarely ; it is pretty much cultivated in the Gardens about *London,* where they propagate medicinal Plants for Sale. It is a very hum- b!e Plant, ſeldom riſing more than Three Inches high ; the Leaves and Flowers have ſhort Foot-ſtalks, which riſe immediately from the Root ; ſo that the Flowers are ſeldom ſeen, unleſs look'd for between the Leaves. The Flowers are of an herbaceous Colour on the Out- ſide ; and within they are of a worn-out purple Co- lour ; ſo they make but a ſmall Appearance. The Time of their flowering is in *April* or *May* ; but their Leaves remain thro' the Year. This Plant delights in 4 muitl Soil, and a ſhady Situation. The Roots and Leaves of this Sort are uſed in Medicine, to purge off thick Phlegm, but particularly in the green Pottage for Mad- neſs.

The other Sort differs from this, in having the Leaves more pointed, and being of a darker Green. This is a Native of *North America,* from whence it hath been brought to *Europe* ; and is preſerved in the Gardens II Uf thoſe Perſons who are curious in collecting rare Plants. It will live in the open Air in *England,* being rarely hurt by Cold ; but muſt t*ΠC A iII ſhady Situation.

Fig. 2. ASCLEPIAS, *Tourn. Inſt. R. H.* 93. *Tab.* 22. *Raii Meth. Plant.* 78. *Liu. Gen. Plant.* 270. Swallow- wort, or Tame Poiſon, in *French, Dompte-venin.* Dr. *Tournefort* places this Genus in the Fifth Section of his Firſt Claſs of Plants, intituled, *Herbs with a Baſ- ſhaped Flower of One Leaf, whoſe Pointal turns to a Fruit compoſed of ſeveral Huſks or Sheaths.*

Mr. *Ray* ranges it in his Eighteenth Claſs of Plants with regular Flowers, which are each ſucceeded by Two Pods. Dr. *Linnæus* places it in his Second Diviſion of the

the Fifth Class of Plants, intituled, *Pentandria Digynia*, the Flowers having Five Stamina and Two Germina.

The Species here represented is,

Asclepias, albo flore, C. B. P. 303. Swallow-wort with a white Flower. This is by *Dodonaeus* called *Vincetoxicum*, *Pempt.* 407. And by Dr. *Linnaeus*, *Asclepias foliis ovalis basi barbatis, caule erecto, umbellis proliferis*, *Spec. Plant.* 216. This Plant is found growing naturally in rough uncultivated Places in *France*, *Italy*, and *Germany*; and, being a medicinal Plant, is kept in the English Gardens. The Root is perennial, but the Stalks die away every Autumn, and fresh Shoots are put out in the Spring; and in June the Flowers come out from the Joints toward the upper part of the Stalks, in small Umbels, upon slender Foot-stalks, hanging downward. The Flower is composed of One Leaf, deeply cut into Five Parts, as represented at *a*; these Flowers are succeeded by long taper Pods, as at *b*, which are filled with flat Seeds, having a soft Down fastened to their Top, as represented at *c*. The Root of this Plant is sometimes used in Medicine; it is esteemed a good Counter-poison against pestilential Fevers.

PLATE LIV.

Ascyrum, *Tourn. Inst. R. H.* 256. 209. *Hypericum*, *Lin.* (

St. Peterswort.

Doctor *Tournefort* ranges this Genus in his Sixth Class of Plants, intituled, *Herbs with a Rose-flower, whose Pointal turns to a Fruit with many Cells*. Mr. *Ray* places it in his Twenty-second Class of Plants, with Flowers of Five Leaves, which are succeeded by Capsules filled with angular Seeds. Dr. *Linnaeus* puts this Plant under the Genus of *Hypericum*; but *Tournefort* has separated from that Genus this and some other Species, because they have a pyramidal Capsule with Five Cells; whereas the *Hypericum* hath an obtuse Capsule with but Three Cells; and *Linnaeus* has given this Title to another Genus of *Tournefort's*, called by him, *Hypericoides*.

The Species here represented is,

Ascyrum *Balearicum frutescens, maximo flore luteo, foliis minoribus subtus verrucosis*, Salvad. *Boerh. Ind. Alt.* 242. Shrubby St. Peterswort, with a large yellow Flower, and small Leaves, which are warted. *a*, represents the Flower expanded; and *b*, the Stamina, which are spread open every Way in the same manner as the Petals. This Plant was discovered in the *Balearic Islands*, by Dr. *Pena*, who sent it to *Lobel* and *Clusius*, in the Year 1580, from *Majorca*, by the Title of *Myrto-Cistus*, from the Resemblance of the Leaves to Myrtle, and the Flowers to those of *Cistus*. *Clusius* has given a Figure of it in his History of Plants, which is but indifferent; but from that Time, till about the Year 1714, this Plant was unknown to all the Botanists, otherwise than by the Figure and Description given of it by *Clusius*; not any of them having seen the Plant, till Mr. *Salvadore*, an Apothecary at *Barcelona*, who was a very expert Botanist, went into that Island, in search of Plants, where he found this growing in Plenty; and sent dried Samples of it to some of his Correspondents in *England* and *Holland*, some of which having ripe Seeds upon them, they were taken off and sown; and from these, One Plant was raised in the *Chelsea* Garden, and another by Dr. *Boerhaave* at *Leyden*, in the Year 1717. From these many Plants were raised from Cuttings, and distributed to most of the curious Gardens in *Europe*. It seldom grows much more than Two Feet high in *England*, spreading out its Branches on every Side, so as to form a bushy Head. At the Extremity of the Branches the Flowers are produced, which are of a fine Yellow, tinged a little with a gold Colour, which fades off after the Flowers have been long open. These Plants are seldom destitute of Flowers, which renders them the more valuable. They will not live in the open Air thro' the Winter in *England*; therefore they must be kept in Pots, and placed in a common Greenhouse; where, if they have not too much Wet in Winter, they will thrive, and continue flowering most Part of the Year.

Dr. *Linnaeus* titles this Plant, *Hypericum floribus pentagynis, caule fruticoso, foliis ramisque cicatrisatis*, *Spec. Pl.* 783.

Fig. 1 ASARUM Dod. pempt. 358

Fig. 2 ASCLEPIAS albo flore C. B. P. 303

Fig. 1. HYPECOUM *laciniis foliis Tourn. Inst. R. H. 231.*

Fig. 2. HYPECOUM *laciniis foliis Tourn. Inst. R. H. 231.*

Pl. CXXVIII

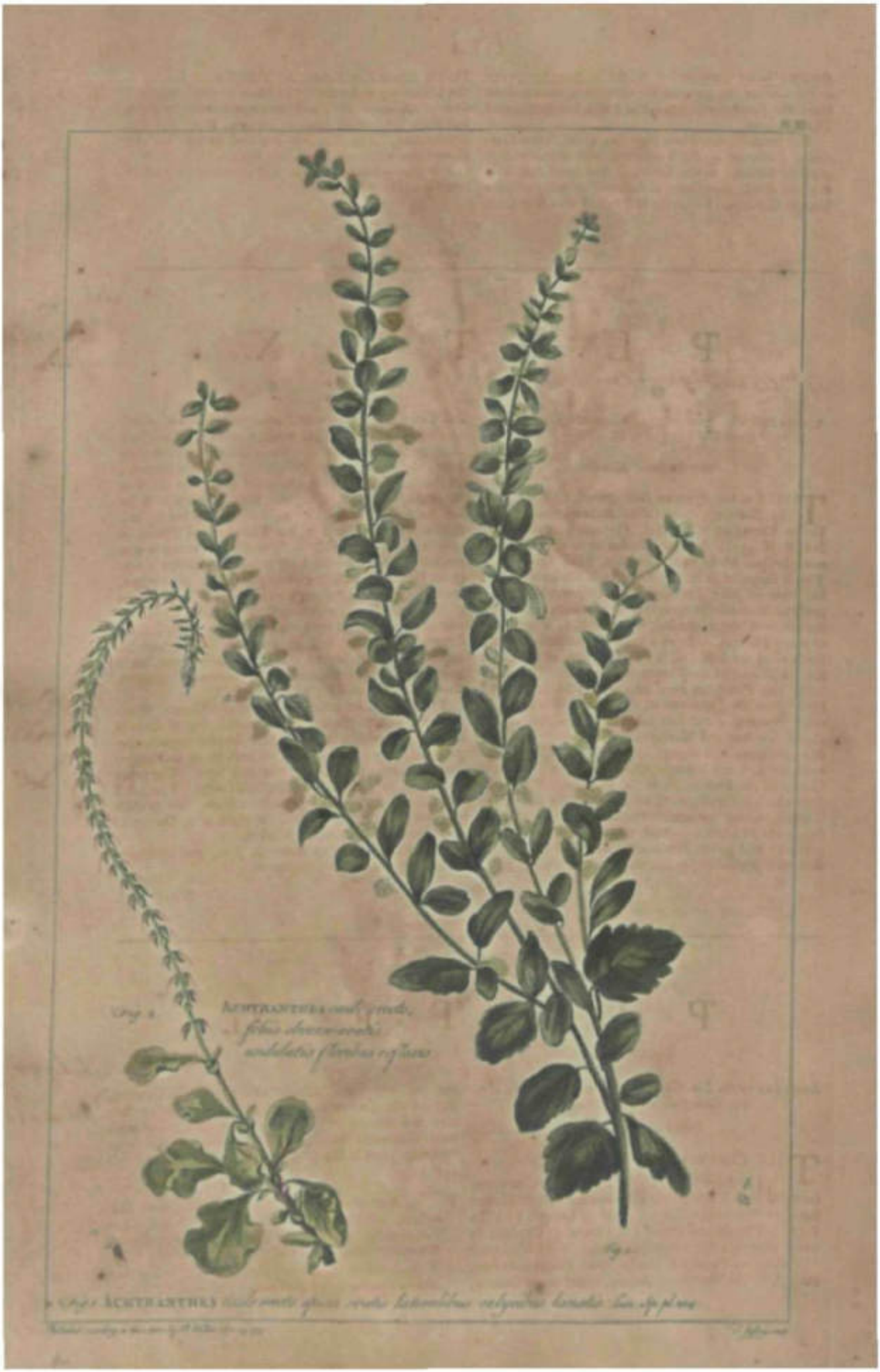
HYACINTHUS, orientalis, flore pleno, ex albo, intus elegantur roseo & purpureo variegato.

Win

Fig. 1 ARUM vulgare non maculatum C. B. P. 195

Fig. 2 ARUM Ceylanicum humile latifolium petiolo purpureo

delin. — *Published according to the Act* — *sculp.*



Botany j *Co* we imagined it might be more acceptable to die Curium to give the Figure of this, thin to have taken the *Tarro*-*jhich is a ram ndl k:mwn to ever)' Ilk rli-woman.

The Seeds of chit *Pi^r* were 1 .toyal" Gar den at *Paris,* hi Doctor ifeovetcd it guving naturally in (he *Levant.* And Ironi that Gar* ^^ the Seeds hare been diltrib.itcd co many curious Botanic Garden*. I received, a Plant ol" this Sort irom Doftor ^ifr/ax r« *iirrtn,* late Profeflbr of Botany in the Univcrlky at *Ij-rtk*.* The Plant IN very hardy, will live in the open Air, and propagates talily by Slips, but doth nut jicrtrct Seeds ih *England,* unldi in tinn dry Scafoni. The Plant i* low and builiy, but the F'lower-ftems rife nrar Two Feet high.

It begins to flower in *Ju«t,* and continue* to produce new Flowers till *H&*

P L A T E X.

Achillea Ageratum L...

Achillea *foliis bipinnatis eblufii awt pmtfis. ten. Hurt. Citf* 413. *Sf. Pltnt.* 897,

Common or *Swtt MmJJm.*

THIS ii the */Igermttm ftliis frrratti, C. B- P.;* *nd by *Dede**K>* it it calleti *Hatftmtij* »iW*; by* Doctor *Tnmeftrt* it it titled, *Ptanmt* l*tts furw>!t*s< l»fl- R, II. 4*97.*, by *Jek* B*ub,x* it *a* titled, *jhtr*-turn pitiyqtu, Htrba Jutti jiUm/dam,* Hift. Vol.j. 141. Thi<; is fuppofcdto be the *tMpattrium Mt/uti oS-i* and bai been of long ftj DifpenCihcs, but at prclrnt felciom uk rt ienti a Flower of the comtn*Sort maamified, whole Dilk, *, it compared ot miny fioirtj, „ Jhewi j [ingle Floret fitting on the Embryo of (he Seed *; d,* .1 a Hilf-Horct, of which the Rayi or Bjrdcr *a(* the Flower it compofed.

A* this Plant hat been long i ine, (b I have given the Figure of it, to diQmguifh it from another Species, which has taken Place of thit in ihc *Engljh* Gardens and Markets t»t *h* that wltocTer aDti lor Mau iin now, will alwayt hjve tiie OI!KT Ph:u fitbfti- tutrd for it, which is very different in Form, Smell, and Colour of the Flower, from n ll»e Maudlin, Nor it (he Sort which is here figured, to be found in any oi rite propagated to PP: the Markets, fo that the Plant which it now generally fold in the Markets for *Maudlin,* is the *Ptar- *its fib/ f refundius ferratis, lati viridibus elatior, H. L.* i. «, 7WJW- 5awz«<«r/, with dark-pren leaves, whith are deeply frrratud Thit being a much hardier 1'U^ than the other, ind pro[>ag*tinu eafsly hy ia creeping Kuou, theGariiicnen t ted tile other mnrelyi Co that utiler* the Perfont who ire CO uir the Kerb in Mediciw, Jrr wtll *u* «;th it, (hey will be furc (t> have the other impoled on then); but by any Perfon wh- • nowlcge 0f" 1'ijjiH, it may be eililt ililtinguifhed. For thcSort which is now vended in *the* Markets hath very long narrow d«p- green I .ravel, which are deeply fa»fd on their edget, 'iliiigtliufnifiiv Cl» Flown of thin Sort do aifo tefeml'. -.*mE«trt,* being white, and the Rays »re fpread open like themi Uit the Leave* ire looMT, Jhd of a drrper Green, and the Stalkt rtfe much higher. Yet ihr whole Plant has a much greater Refcmblatirc *v* the totnmon iV««wrr, than of the *Maudlin* for whuh it u

There arc Two other Specif* 1 in, which approach near to the <ommon Maudlin, one *ttt* them it titled *by Tevwfvt, Ptarmttfili: ferratis mjmUt Um- fifrtlmt* y *mtps tmpatiu.* Thii hath clofet and longer Meidt of Flower* than the common Sort. The .irher hath broader Lraves, and fmaller Flowers: The laft] <*>(&' from Seeds, which came from *Spe* „« But J* (hde art not common in */ nx'ttJ, (o* there i> no Danger oj (heir being brt»ught 1 luo.

This Plant begins to flower in 7*w, and continue! produ September. ungnew J-Towcii ti!

P L A T E XI.

Achyranthes, *Lin. Gen.* Amaranthus, *Plak. Am.*

17. *CitaeftJftm Barm, Zql.* **60.**

*Sfhd Am**uku.*

t

THE Chan Om of thi» Onu* art, I iiow^cfjnftil'. 1 armmdifh Ctpt'uk, in

The (in[1] which was brought into the *Engljh* Gardens, wa» titled, *.inte* and the others which have been fince introduced, were differently titled; fo that neither of them were *P^0**1* ly placed, till Doctor *Linnaus* conftituted this Genus.

Fig. 1. Achyranthes *caule erecto, fpicis ovatis lateralibus, calycibus lanatis. Lin. Spe. Plant.* 204. i. e. Achyranthes with an upright Stalk, oval Spikes of Flowers coming on the Side, with woolly Cups. This is called by Doctor *Burman, Chenopodium racemum racemofum, foliis oblongis minori appofitis, Plant. Zeyl.*60. i. e.

i. e. Hoary branching Goofefoot, with large and fmall Leaves oppofite. And by Doctor Plukenet it is called, *Amaranthus indicus vulgaris foliis latis integris incanis*, Alm. 26. i. e. Indian Amaranth, with white Ticks, and hoary Leaves.

a, reprefents the oval Spike of Flowers coming out from the Wings of the Leaves, which are fo fmall as fcarce to be difcovered with the naked Eye; b, fhews the Seed taken out of the Cover.

This Plant is tender, fo muft be raifed on a Hot-bed, and afterward kept under Glaffes, otherwise it will not perfect its Seeds in England.

Fig. 2. AMARANTHUS *caule erecto, foliis obverfo-ovatis undulatis, floribus reflexis*. Spiked Amaranth, with an upright Stalk, oval waving Leaves, and reflexed Flowers.

This Plant approaches near to one which is figured by Doctor Burman, in his Zeylan Plants, which he titles *Amaranthus fpicatus Zeylanicus foliis oblongis, Amaranthus viridis, Schedolites. Tab. 5. f. 3*, But the Leaves of his Plant are fmooth and plain, whereas thofe of ours are hairy and waved, and are larger than thofe of his; the Spike and Flowers of both are very like, both of them agreeing in this with the common Sort; a, reprefents a fingle Flower taken from the Spike, with the Seed-veffel joined at the Bottom, which is inclofed in the permanent Empalement.

This Genus of Plants is ranged in Linnæus's Fifth Clafs of Plants, intituled, *Pentandria*, from the Flowers having Five Stamina, and in the Sixth Divifion of that Clafs which he calls incomplete Flowers.

The firft Sort here figured grows naturally in feveral Parts of *India*, and alfo at the *Cape of Good Hope*, from whence I received the Seeds, in the Year 1752.

The Seeds of the fecond Sort I received from *Monf. Faff.* in the Year 1751, which has flourifhed at *Chelfea* and perfected Seeds annually, which have always produced the fame Plants, never varying from the original, fo may be efteemed a diftinct Species.

This is too tender to thrive in the open Air in England, fo muft be raifed in a Hot-bed in the Spring, and the Plants muft be kept under Glaffes, otherwife they will not perfect their Seeds.

They both flower in July, and if the Plants are placed in a Stove, they will continue flowering moft part of the Winter, and will perfect their Seeds very well.

PLATE XII.

ACONITUM, *Linn. Hort. Cliff.* 214. *Tourn.* Inft. *Tab.* 139, 140. *Raii Method.* 79. Linn. Gen. Plant. 603.

MONKS-HOOD, or Wolfs-bane.

THIS Genus of Plants is ranged by Doctor *Tournefort* in his Eleventh Clafs, which includes *Herbs and Under-Shrubs with an anomalous Flower, compofed of feveral Leaves*. Mr. *Ray* places this Genus in his Clafs of Plants with *irregular Flowers*, which are fucceeded by *feveral Seed-veffels*; And Doctor *Linnæus* ranges it in the Third Divifion of his Thirteenth Clafs of Plants, intituled, *Polyandria Trigynia*, whofe Flowers have many Stamina, and Three Styles.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*, under the Article *Aconitum*.

The Species here figured is,

ACONITUM *falutiferum five Anthora. C. B. P.* 184. Wholfome Monks-hood, or Counter-poifon to Wolfs-bane. This is the Fourth Species in the Gardener's Dictionary. By *John Bauhin* it is titled, *Anthora flore luteo Aconiti, Vol. 3. p. 662*. By *Tabernæmontanus, Anthora Zedoaria, Aconitum falutiferum, Icon.* 112.; and by Doctor *Linnæus, Aconitum floribus pentagynis, Spec. Plant.* 532.

a, reprefents a fingle Flower feparated, which is compofed of feveral diffimilar Petals; b, fhews the horned Styles, which were hid in the upper Petal of the flower c, which is fhaped like an Helmet or Cowl; d, reprefents the membranaceous Seed-veffels, which are collected together; e, fhews the Seed out of the Cover.

This Species of Monks-hood is that which is made ufe of in Medicine, and is efteemed as an Antidote to thofe which are poifonous, fo when *Aconite* is prefcribed, this Sort is always intended. It is the Root only which is ufed, and at prefent is never prefcribed alone, although formerly it was accounted a good Antidote to expel the Poifon of the *Napellus*, or Wolfs-bane, and alfo to be of Service against the Plague; but as the other Species are a deadly Poifon not only to Men, but to Brutes alfo, fo few Perfons care to make ufe of it in Medicine upon fo flender Authority, efpecially as there is Danger of having one of the other Species fubftituted for it.

This Plant flowers in *July* and *Auguft*, and is an ornamental Plant in Gardens.

PLATE

ADHATODA, [illegible]

Fig. 1 **ADONIS** *Hellebori radice Buphthalmi flore H. R.*
Fig. 2 **ADONIS** *sylvestris flore luteo, foliis longioribus C.B. P. 178.*

PLATE XIII.

ADHATODA, *Raii. Method. Plaxi. g i* *t. R. H.* 175, *Borrb. btd. Alt.* lj<j. *j PUr.i* 26.

The MALABAR-NUT, or SNAP-TREE.

THIS Genus is by Mf. *Rjy* ranged IT Clafs of Plants, with a I By Docl'ir *Tciirtuftri,* it i&filacM 1: Section of hij Thirteenth Clafs, Hi anomalous or hooded I'*h Limtsit)* hat joined the Sprur' *is* a Genus 1 !:fferni trt • *hid* been before rl? *Ml-.'.)* Flower, Mid 1 from th ... 'I:. : the *.Idhdtcda* are ilm *Gi my.*

The Specici here reprefentci;

ADHATODA *loJua, fefrt faJitiw. Jbrt e!i*. Bstrb. M. All. ijg.* The Wiltow-lcav'd MiUb^r

: Flower, commonly called the *Snaf-trtt.* i >ottor *Pluk/r.tt* tided *t'.steb; am'stit fisribui tentuia thfttpifelit, tx Inj'xlis fortuttatn. A/mag. Bet.* 13a. 1 to which Nimt Doctor *Mtnifcx,* \r\ ••' • <>u me of his *I!:fiiTj ef PLau;,* p. 6ti+. hu fubjoinrd */fiiittibodti iqffipi iaticrij ftli* Cimaruitfit.* DoVtor *Ijiwsiu* his titled it *"Jufiia* fru~ UmcttUtit inlrgrrrimii, ptihautdit trijltrit irrailtis (abet brKierifat. Sp. Plant.* 15. I Clifj of 1'lirits, itititled *Di-* the under Lip of die Flower, |^H|^^|qMMrut into Three Segments, *i,* fhewi dr»wo tu 1 Point « die Top. itil. 1 his Plant doth not produce Seeds in *! ngUmd;* but i$ iiropa- Summer Monthi. the Summer Monthi; • tin 1 moderate Warmth rl very r frlowm make b^t in The Leaves continue ill hen die Hinti arc regularly trim) K ihc) kid -i) the Varirty in Winter, when exotic Pbiui in ihe Store. TO the Height of Three or cafily trained tit'

This Plant was raiftd from Seeds, which were brought from the *Canary Iflands,* about the Year 1690. in the Gardens of *Hampton-Court,* in which Time there was a noble Collection of curious Plants there preferved.

PLATE XIV.

ADONIS, *Dillen. Hort. Gen.* 4. *Linn. Gen. Plant.* 613. *Ranunculus* ijf. *R. H.* 201. *Hellebrus, C. B. P.* 186. *Tat. km.* ;si. *iU*

ADONIS FLOWIH, HitM-1.1 t, or PHEASANTS-EYE.

THIS Gtnui '•: Ptu 1 i bj Doctor *Linnaus* ranged in ttfif Seventh Sr&ion <•: his Thirteenth Clafs, intitled *Polyandria Polygynia, i.e.* Plants whole Flowers have many Stamina and Germina. I^jftor *Tournefort* has ranged the Plants of this Genus under the Article *Ranunculus;* as he alfo hath the leffer *Celandine,* the *Hepatica,* and *Spurwort;* whereby the Number of Species in ti: t Genus are multiplied fo greatly as to occafion fome Confufion, and renders it difficult for a Learner to reduce the Plants to their proper Genus. Doctor *Linnaus* has made the principal Character of *Ranunculus* to conlift in the *Nectarium,* which is fituated at the Bafe uf th< Petals; whereby this Genus of *Adonis* muft be feparated from *Ranunculus.*

Tbe bpecki here tcprdenttJ *re,

g f, *BufiftMiB fart, SI I,,* abuut tf *Bttri. in..* bore rtxjtcd ADON:I, of PHIA- Atttumr tANTI-IY - N»iivc given

, J, tmubUntcd t tod 1 10 oiituit) or • fHl their nt hu t • but HIM hit been difpraved by moft of the later Writers on thofe Subjects.

Fig., tllkt 1 flklZnii *H*

Fig. 2. represents the ADONIS [illegible] *foliis longioribus. C. B. P.* 178. Wild Adonis, or Birds eye, with a Yellow Flower, and longer Leaves. This is titled by Doctor *Tournefort* [illegible] *Chamaemeli, flore Citrino. Inst. R. H.* 291. *a*, shews the Flower, with its Petals expanded; *b*, the Stamina, with their Apices, which occupy the Middle of the Flower; and between these are placed the Germina, which afterward become the Seeds. Doctor *Linnaeus* supposes this to be only a Variety of the common *Adonis*, with a Red Flower, which is frequently sown in Gardens, and is known among the Gardeners and Seedsmen by the Name of *Flos Adonis*, or Adonis Flower; And sometimes it is called *Birds-eye*, or *Pheasant's-eye*. But there can be no doubt of these being Two distinct Species. The Leaves of the Yellow Sort, which is here figured, being longer and finer cut than those of the Red Sort, and the Plants do grow much taller, which differences are constant, and never vary, as I have found by sowing the Seeds of both for more than Thirty Years; during which Time I never could observe that there was the least Variation in either of the Species. The Yellow Sort was brought into *England* from *Germany*, where it grows naturally, and has been many Years preserved in some of the *English* Gardens; but the Red Sort grows naturally in the Corn Fields near the River *Medway*, in *Kent*; from whence, of late Years, there hath been great Quantities of the Plants in Flower brought to *London*, and sold about the Streets, by the Name of Red Morocco. These flower the Beginning of *June*.

Doctor *Linnaeus* having joined these Two Species, [illegible] Title of *Adonis radice annua* to them, in the Catalogue of Mr. *Clifford's* Garden, p. 231. But in his Catalogue of the Garden at *Upsal*, as also in his Enumeration of the Species of Plants, he has altered the Title to *Adonis* [illegible] *petalis, fructibus subcylindricis.*

These Two Sorts are annual, so their Seeds should be sown in Autumn, soon after they are ripe; for if they are sown in the Spring, the Plants seldom come up till the following Spring, and many Times fail; or if the Seeds are permitted to fall when ripe, if the Ground is not disturbed, the Plants will come up in the Spring, without any farther Care: And when the Seeds happen to be buried in the Ground for a Year or Two, and are afterward turned up to the Surface again, the Plants will come up. So that in the Places where the Red Sort grows naturally, all those Fields which are sown with Wheat and Rye are generally full of this Plant; whereas those Fields which are sown with Grain in the Spring, have seldom any of it appear that Season.

The First Sort, with perennial Roots, is also propagated by Seeds, which should always be sown in Autumn; for when they are sown in the Spring, they seldom succeed, which has occasioned this Plant to be so scarce in the *English* Gardens as at present, most People having kept their Seeds out of the Ground till the Spring before they sowed them; and the Plants not coming up the same Year, they have given over the Hope of their growing, and turned up the Ground the following Winter, which if they had not disturbed, some few Plants might probably have come up the following Spring.

PLATE XV.

AGRIMONIA, *Tourn. Inst. R. H.* 301. *Tab.* 151. *Lin. Gen. Plant.* 534. *Raii Meth.* 45. *Eupatorium. C. B. P.* 321.

AGRIMONY, *or* EUPATORIUM *of the* Greeks.

THIS Genus of Plants is placed by Doctor *Tournefort* in the Ninth Section of his Sixth Class, [illegible] with a *Rose Flower, whose Cup changes* [illegible] *dry Fruit*. Doctor *Linnaeus* places it in the Second Division of his Ninth Class of Plants, intitled *Dodecandria Digynia*, i. e. Plants whose Flowers have Twelve Stamina, and Two Styles. Mr. *Ray* places it in his Tenth Class of Plants with perfect Flowers, which are succeeded by single naked Seeds.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here represented is,

AGRIMONIA *odorata Camer. Hort. Inst. R. H.* 301. Sweet-scented Agrimony. This is by *Caspar Bauhin* titled *Eupatorium odoratum. Pin.* 321. There is also another Species of Sweet Agrimony mentioned by Doctor *Morison* in his History, by the Title of *Eupatorium odoratum* [illegible], *Agrimonia* [illegible] *odorata*. Vol. II. p. 614.; and by Doctor *Tournefort* it is titled *Agrimonia* [illegible] *odorata. Inst. R. H.* 301. If this is a different Plant from that which is here represented, I have not had the good Fortune to meet with it as yet; for the Plants which I have raised from Seeds, which were sent me from the Royal Garden at *Paris*, and from other Gardens, have always proved to be the same with that here figured: And Doctor *Morison*, and those other Authors who have mentioned the Sort which grows near *Blois*, make no Difference in the Habit of the Two Plants, but only say the Sort here figured has a stronger and more agreeable Scent than that of *Blois*; therefore that is not sufficient to make a specific Difference between them. Doctor *Linnaeus* has joined this Species, and also that with White Flowers, and the oriental Agrimony of Doctor *Tournefort*, to the common Sort, making them only Varieties of the same Species. But there are Four distinct Species of them, which do never vary when raised from Seeds, as I have [illegible] of the Seeds of each Sort [illegible] Years; and the Plants so raised have always proved the same with the Parent Plants. The Leaves of the Sort here figured are much longer, the Wings are also longer, and much narrower, and the Incisures on their Edges ending in sharper Points than those of the common *Agrimony*. The Flower-stems of this Sort do generally branch out on every Side, and the Flowers [illegible] footstalks; whereas the common Sort runs up with a single long Spike of Flowers, which grow pretty close to the Stalk, and are smaller than those of the sweet Agrimony; so that the Plants may be easily distinguished at a Distance; and when near, the Scent of this is much more agreeable than that of the common Sort. *a*, represents the Flower expanded, with its Five Leaves; which is encompassed by an Empalement consisting of one Leaf, deeply divided into Five acute Parts, upon which the Embryo sits, which afterward becomes a Seed, which is represented at *b*, with its Covering having a Burry-top, whereby it will fasten itself to the Cloaths of Persons, who pass close to the Plants when the Seeds are ripe.

This is the second Sort mentioned in the *Gardener's Dictionary*. The common *Agrimony* is well known by all the Herb-folks, so will need no Description; therefore I have omitted it here. It grows wild upon Banks near Woods and Hedges in most Parts of *England*, and is there gathered and brought to the Markets: The Difference between that, and the Plant here represented, is not so great, but that by the Figure any Person, who is unacquainted with Plants, may easily distinguish the common Agrimony from any other Plant which is found growing naturally in the Fields.

The Virtues of the common *Agrimony* have been fully set forth by all the Writers on the *Materia Medica*. The whole Plant has been recommended for Use. A distilled Water of the Leaves and Flowers of the Plant has been long established as a Shop Medicine; and a

Syrup


AGRIMONIA odorata Linnæi

Fig. 1. ALATERNUS v. Clus. Hist. 2.
Fig. 2. ALATERNUS fru. Phyllicis folio
angustiori et profundius serrato. M. L.

Up ma f Of til: Irs arm the *Liver.* 1 it warms, dries, cleanles, binds, and ftrengthens, it is alfo eſteemed as a good vulnerary Herb.

The ſweet Agrimony makes a very pleaſant Tea; and ſi a little of the *Round-leav'd Sorrel,* or of the common *H'coi fcrrtl, a* added to ir, theft will *a* nt. *me Drink,* ior tiiof't; who harcaThlrft; as 1 can, Iro.ii long locpencncc, myiri' certily.

This bowera in *"jam* and *'Jxh,* **and** the Scrtfs are ripe in *Stftcmicr:* The Roots arc perennial, but (he Leavas **caj in Autumn.**

PLATE XVI.

itATES *fit*

The STAFF-TREE.

THIS Genus is by 1 \i in hij Twentieth Claſs of Trees and Shrubs with a r of One Leaf, whoſe Pointal become« a fuſt Fruit or Berry, including hard Seeds. Mr. *Ray* place i it in his Claſs of Trees and Shrubs bearing Berries including ſeveral hard Seeds. Doctor *Lonicer* has joined • this, the *Berry bearing Alder,* the *Paliurus,* id *7A~ phus,* to the *Rhamnus,* including them all in the ſame Genus: But if we allow the Fruit to be a characteriſtick Note of the *Genera,* theſe cannot, with any Syſtem, be joined together; nor indeed can it be well done by thoſe who take their Diſtinctions from the Flowers only, for the *Rhamnus* is Male and Female in different Plants. The Berry-bearing Alder hath its Flowers divided into Five Parts, and each Berry contains Two Seeds. The *Paliurus* hath Three Styles in the Flower, and a compreſſed bordered dry Fruit. The *Zizyphus* hath Two Styles in the Flower, and the Fruit hath Two Cells. The *Alaternus* hath a tubid Flower, and Three Seeds in each Berry; therefore it muſt be kept in a ſeparate Genus from the other.

The Chaudrra o liibited in the *CanUntr't DiUknt* y.

The Species hc^ re repreſented are,

Kg. r. A(.*Tt»>- Bro " leav'd Alaternus, commonly called by the Gardeners *Phillyrea. Caſpar Bauhin* ſtiles it *Phyllica elatior Fus.* 476. And *John Bauhin,* in his *Hiſtory of Plants,* Vol ,L p.j+i. calls it *Spina Borgi*

There is another Species of this, with a ſmaller : leaf, which is deſcribed by *Cluſius,* and the Two *Bauhins;* but this is not very common in the *Engliſh* Gardens at preſent; nor is the plain Green Sort, here figured, much cultivated in the Nurſeries, for the Blanched-leav'd (or what is commonly termed) the Strip'd *Phillyrea,* is what the Gardeners do chiefly propagate; but the Sale for **thrfe l' Tpai patt, t Nurfci** plants having greatly diminiſhed within a few years, in compariſon to what was ſome Years paſt, when **th« grr** Uſe of them was to cover Walls and Buildings; for their Branches require to **be fupportcd** otherwiſe they are frequently broken down by Snow, and ſtrong Wi iij| i n d u e Jtmuchclkctned for Plantations in open l-'xjwfures, a* they generally crow very rude, **and** fprcad their Branch:* to i great Diſtance from their Stem*.

Fig, i. repreſtntt t'li« ALATIUKI-S *fin Phlict ftHis mt* *gujl,* *i'.a* is the ALA- *Monſpeliaca foliis profundius inciſis. H. R. Par.* There is **a** Variety of I his Sort with Silver-ſtriped Leaves, which is pretty much cultivated in the Nurſeries of nrar *LmAt*\ ami it ulualiy [; of Buiidiv gs, to cover them; but this is not ſo hardy as the plain Green-leav' **i, the J'ljiiti being** frequently injured by ſevere Froſt, where they are expoſed to the North or Eaſt Winds.

The Second Sor ! I>ere figu **t thin** the Firſt, and the Branches grow more compact, whic **i** being fuller garniſhed with Leaves, make a much better Appearance than the other, therefore may be admitted into the Plantations of ever-gree i i'rwt; tho' thefr *rc* liable to have their Branches ^rokrn or difplaced, by great Snows in Winter, e •jnuallywhcn tt fills in a Calm(for if there is much Wind ſtirring at the Time wh •fnthe Snow falls, it will ſhake off the Snow •, and prevent itt lodging on the Branches, in ſuch Quantit i » ai by its Weight to ſplit off the Branches.

Some of the Dutch G m « i prei I'lint in their Greenhouſes, for the *Tea-tree;* and do frequently fell the Plants as ſuch to *Mm* **who are ignorant, or** *who* ſend to *Holland* for Tea Plants.

Both theſe Sorts grow nat rally in , •*, »n(i the South of *France;* and have been long Inhabitants of the *Engliſh* Gardens. They grow i -ht of Eighteen or Twenty Feet, and ſpread their B randw pretty wide on every Side; ſo that unleſs the lower Branches are pruned c 'it, tlK : Plants will be bulhy from the Ground upward.

The Berries of this Srrnivt <iirr in- - * in the South of *France,* and are ſent to *England* by the Name of *French* or *Avignon Berries,* which afford an excel icnt Yellow Dye or Paint.

Theſe Plants flower in *Wit* and their Berries **are** ripe the Beginning of *September.* The Birds are ſo fond of theſe Berries, as to devour them as ſoon as they are ripe, if they are not gathered **1» or protected from thcau**

PLATE XVII.

ALGEA, *Tourn. Inſt. K It* 57. *Tab.* 25. *Raii Meth.* 56. *Melia Lin. Gen. Plant.* 751.

Vi **iv* IN** MAI LOW.

THIS Genus of Plants is by >o&ir *Tmrwtfwt* ranged in his Sixth Section of his Firſt Claſs of Plants, intitled *Herbs with a Bell-ſhaped Flower of One Leaf, from the Bottom whereof there ariſe a Tube that receives the Pointal, which changes to a Fruit conſiſting of* D • *Linnæus* places it in his Sixteenth Claſs, intitled *Monadelphia,* from the Pointal and Stamina being joined in One Body. And Doctor *Van Royen* gives the Title of *Columnifera* to this Claſs of Plants, becauſe the Parts of Generation are joined in Form of a Column in the Center of the Flower.

The Diſtinction between *Melia* and *Melia,* according to *Caſpar Bauhin, Ray, Tournefort,* and moſt of the Botaniſts of the laſt Century, is in the Leaves of *Melia* being

toeing i >g?«J. iheJ-inwwj *nt! this. jut!) occafiostd Stm that mem U the I kmer beinff of O>>< I Part^ and U*. ft. ıh«, by bcpUcrdwith the *MtUnui »*, to cp;

The Characters of the Gcnui *ut* exhibited in the *Dilliouary.*

The Sp«;« here figuret; it,

Alcea, *'-i'io rrlwtdi,* *HP* : : o w . ^ l •'mci ci *ns ttxsfarmiiiv* «trr/j, r^ft, *biMi. fieri. Utfd,* 1 o ,

t "l r^{wlal»J; », me Fruit, im loi'cd by the i icment of i which it [^. Vc<d taken out o Covrr.

The */&<a vtdgtns major, C B. !* . is the Species which is ordered to be u!o.f i very . ^ j ^ *"^! 7- *B.* •> r. «n here, ; nem. ^ be the fcne with th« wi,

fs in Germany, a hit, b, Mr. *tUt* i Jf* ™ io much *» common Sort about *London*, fo that although Mr. *Ray* mentioning both Sorts, yet, by his Defcription of the Plants, it is doubtful if he had feen that of *Caſpar Bauhin*, becaufe he does not mention the Particulars in which that differs from the curled Narrow-leav'd Sort; for that Plant grows near twice the Height, the Leaves twice as large, as are alſo the Flowers, and the Divi- nc^' of the Leaves are few, and the S and the whole Plant is tougher than our ctnwmwi Sort. I have found that Species mentio *d bf *Caſpar Bauhin*, in *Warwickſhire* and *Staffordſhire*, but do not remember to have ſeen it growing naturally in any other County in *England*.

It is ſeldom uſed in Medicine; but the Virtues are generally ſuppoſed to be nearly the ſame as thoſe of the common Mallow, but leſs emollient.

The Sort here figured ſeldom grows MW^ thiis Foot and an half high; the Stalks grow erect, and do not branch out much on their Sides; the Leaves are finely cut; and the Flowers are larger, and of a deeper Colour, than thoſe of the common Sort: It grows naturally on the Mountains in *Italy*, and the South of *France*; and is only to be found in Gardens in *England*.

The *Alcea* flowers in *June* and *July*, and the Seeds are ripe in *September*: Their Roots will continue Two or Three Years, upon dry Ground; but in moiſt Places they ſeldom continue longer than One Year; for their Roots ſhoot deep into the Ground, and if they meet with Moiſture, they ſoon decay.

P L A T E XVIII.

a, repreſents a ſingle Flower, ſeparated from the Cluſter; *b*, ſhews the Four Stamina; *c*, the Empalement of the Flower

Fig. 1. Alchimilla vulgaris. *C. B. P.* 319. *Tourn. Inſt.* 658. *Cluſ. Hiſt.* 108. The common Ladies Mantle. *John Bauhin* calls it *Pes leonis, ſive Alchimilla. Hiſt.* 1. *Lib.* 17. p. 598. Doctor *Linnæus*, in the Catalogue of Mr. *Clifford*'s Garden, titles it *Alchimilla foliis palmatis*; and in his *Flora Lapponica*, *Alchimilla foliis ſimplicibus*; but in his *Flora Suecica* he calls it *Alchimilla foliis lobatis*.

In the North of *England* it is called *Bears-foot*: This Sort grows naturally on moiſt Meadows in many Parts of *England*, but eſpecially in the Northern Counties. It flowers in *May* and *June*: The Roots are perennial, and ſpread very wide, when they are in a moiſt Soil: The Leaves grow upon ſlender Pedicles, ariſing from the Root: The Flower-ſtems riſe about a Foot high, and are cloathed with Leaves of the ſame Shape with thoſe below, but ſmaller, one coming out at every joint of the Stalk: The Flowers are produced in Cluſters at the Top, which are green, but the Summits are of a yellow Colour.

This Plant is eſteemed MI * wtwd \'utMrt«i7, being drying and binding: It is frequently preſcrib 'nWound Drinks. The Leaves of the Plant are lieſly uſed; and their are brought over from *Switzerland*, mix'd with their common vulnerary Herbs.

Alchimilla, *Tourn. Inſt. R. H.* 503, *Tab.* 289. *Mich.* 23. *Alchemilla. Lin. Gen. Plant.* 353. Aui

Ladies Mantle.

T 1 i Genus of Plants is by . r Doctor *Tournefort* ranged in the Second Section of his Fifteenth Claſs, intitled *Herbs with ſtamineous Flowers, whoſe Points* :«:« « in h *Fievtrs, t-* Fifth Claſs of *Plants with ſtamineous* ing naked Seeds wrapped up in the Empale- ment. And Doctor *Linnæus* places it in his Fourth Claſs of Plants, intitled *Tetrandria Monogynia*, i. e. Plants whoſe Flowers have Four Stamina, and One Germen.

The Flowers of this Genus have no Petals, but the Pam of Gen ration are ſurrounded by the Empale- tn«nt, » hich, i fter the Seeds are formed, do cloſely ſur- round them; ſo theſe Sorts of Plants are generally termed Plants with *.if.* Flowers; and by ſome they are called *Blak Flowers*.

Tht Characters of this Genus are exhibited in the *Gardner's Dilliouary*.

The Specie* hece rrprcfcntni are,

Fig. 1. Alchimilla *Alpina pubeſcens minor. H. R. Par. Inſt. R. H.* 508. Smaller hoary Ladies Mantle of the *Alps*. This is the *Alchimilla minor hirſuta ſtellulis lucidis. Barrel. Icon.* Doctor *Linnæus* has ſuppoſed this Plant to be only a Variety of the *Alpine* Ladies Mantle of Jun im | hut It b Utiduu' - ' -, a diſtinct Species.

ALOE. *Africana, foliis planis latioribus, cuspidatis, carinatis flore rubro.*

PLATE XIX.

ALOE, [illegible] *Method*, [illegible] *J. Bauh.* [illegible] *Plat.* 389.

ALOES.

THIS Genus of Plants is by Doctor *Tour*[illegible] ranged in the Second Section of his Ninth Class, intitled, *He*[illegible] *Ou*[illegible] *Six Segments,* [illegible] *a Fruit,* [illegible] *Seed.* Mr. *Ray* places it in his Twenty-third Class of Plants, which is intitled, *Herbs with Grass* [illegible] *and a three-cornered Seed-vessel.* [illegible] in his Sixth Class, titled, *Hexandria Monogynia*, i. e. Plants whose Flowers have Six Stamina, and One Germen. Doctor *Boerhaave* ranges it under his Class of Plants which arise from Seeds [illegible].

Doctor *Linnæus* has divided [illegible] the Plants which [illegible] been included in this Genus, into Two different Genera: To one he continues the Title of *Aloe* [illegible] the other he calls *Agave*. Under the First he ranges all those whose Flowers are tubulous, and the Stamina are no longer than the Tube of the Flower: And those with a Funnel-shaped Flower, whose Stamina are stretched out beyond the Petals, he places under the Title *Agave*; so that the common great *Aloe*, and all those other Sorts, whose Center-leaves are closely folded over each other, and flower but once, come under this Genus.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here represented is,

ALOE [illegible], i. e. [illegible] with broad plain fleshy Leaves joined closely together, and a [illegible] Flower, commonly called the broad-leav'd *Turned Aloe*.

This Sort was raised from Seeds, which came from the *Cape of Good Hope* several Years ago; but I have not found it mentioned in any of the Catalogues of Plants yet printed. It is the Twenty-fifth Sort mentioned in the [illegible] and appears near to the Twenty-third and Twenty-fifth Sorts there mentioned; but the Leaves are much broader than either of them; and the Spots on the Leaves are very faint, and the Colour of the Leaves much paler; however, it is difficult to determine if it is a distinct Species from them, tho' there is great Probability of its being so; because I have twice raised the Plants from Seeds, which have always proved to be the same. Doctor *Linnæus*, in his Enumeration of the Species of Plants, supposes but Nine Sorts of Aloe, which are [illegible] Plants as [illegible] specific [illegible], many of which [illegible] as different in their [illegible] possibly be [illegible], some of them growing with tall Stems, while others are very humble Plants, [illegible] above Three or Four Inches high. The Leaves of some of the Sorts are very long, narrow, and greatly [illegible] on their Edges; others have broad thick succulent Leaves, with scarce any Spines on their Edges. Some have Spines on Both Sides their Leaves; others have no Spines; so there can be no doubt of their being distinct Species; [illegible] which have produced Seeds in *England*, which have been sown, have constantly produced Plants nearly in Shape to their parent Plants, having only differed in the Size or Thickness of their Leaves; and [illegible] so much in their Growth, as to render it difficult [illegible] their parent Plants.

The Doctor has joined the [illegible] from which the *Horse Aloes* is procured, with the *Succotrine Aloe*, making them one of the same Species, to which he has also joined the other Sorts, all differing greatly in Form, Size, and Make of their Leaves, as also in their Flowering; so that whoever considers these Plants with any Accuracy, must allow them to be so many Species.

The Two Sorts of *Aloe*, from whence the Shops [illegible] is extracted, are, I. [illegible] *Succotrina,* [illegible] *fore purpureo.* [illegible] p. 91. the narrow prickly-leav'd *Aloe* of [illegible] with a Purple Flower. From this Plant the best Sort of *Aloes* is extracted, which is done by cutting off the Leaves near the Stem, and suspending them by Threads, with the Part which is cut downwards, placing an [illegible] Vessel under them, to receive the Juice as it falls from the Leaves, which is of a yellowish Colour when it drops out first; but, as it dries and hardens, becomes much darker. This Juice which drops without Expression is the purest Kind of Aloes. After this they press the Leaves, and get out a great Quantity of Juice, which is generally mixed with the Pulp of the Plant, so produces a [illegible] coarse Sort of *Aloes*, which is known in the Shops by the Name of *Aloe Caballina*. This Sort is seldom used in Medicine, but is given to Horses, [illegible] that which is extracted from the other Sort of *Aloe*, called *Vulgaris* by *Caspar Bauhin*. This is a Native of the *West-Indies*, from whence the Aloes [illegible] in the Shops by the Title of *Barbadoes Aloes*, tho' it is common in most of the other Islands.

PLATE XX.

ALYSSON, *Tourn. Inst. R. H.* 216. *Raii Method. Plant.* 93. *Barb.* [illegible] 2. 3. *Alyssum, Lin. Gen. Plant.* 712.

MADWORT.

THIS Genus of Plants is by Doctor *Tournefort* ranged in the Fifth Section of his Fifth Class, intitled, *Herbs with a Flower in Form of a Cross, whose Pointal becomes a Fruit,* [illegible] *by an in*[illegible] *parallel to the Valves.* [illegible] places it in his Twentieth Class of Plants, which he titles, *Herbs with a Flower of Four Leaves, succeeded by Pods:* And Doctor *Boerhaave* places it in his Class, intitled, Herbs with a Flower of Four Leaves, succeeded by short Pods. Doctor *Linnæus* has altered the Name to *Alyssum*, and has placed it in his Fifteenth Class of Plants, intitled, *Tetradynamia Siliculosa*, i. e. Plants whose Flowers have Six Stamina, Four long, and Two shorter, which are succeeded by short Pods. To this Genus the Doctor has joined the *Alyssoides*, and *Vesicaria*, of *Tournefort*; but as the Seed-vessels of both these are swelled like a Bladder blown, and [illegible] should not be included in the same Genus.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here represented are,

Fig. 1. ALYSSON *Creticum saxatile, foliis undulatis incanis. Tourn. Cor.* Candy Rock Madwort, with waved hoary Leaves. *a*, is one of the Flowers separated from the Panicle, which represents the Four Leaves placed in Form of a Cross; *b*, the Seed-vessel, which is short and gibbose; *c*, the Seed taken out of the Vessel. This is titled by Doctor *Van Royen*, in the Prodromus to the *Leyden* Garden, *Alyssum caulibus fruticosis, paniculatis, foliis lanceolatis undulatis integris*, p. 331. i. e. Madwort with shrubby Stalks, Flowers growing in Panicles, and whole Spear-shaped Leaves, which are waved. Doctor *Linnæus* has continued the same Title to it in his Enumeration of the Species of Plants. This is the First Sort mentioned in the *Gardener's Dictionary*.

It was discovered by Doctor *Tournefort*, in the Island of [illegible], from whence he sent the Seeds to the *Royal Garden*

Gardens at Paris, where it was cultivated [illegible], and fince has been diftributed to moft of the curious Gardens in Europe; and is preferved as an ornamental Plant for Gardens. It flowers in April and May, and ripens its Seeds in June. It is very hardy in refpect to Cold, provided it is planted in a dry Soil; for in wet Land it is apt to rot in Winter; or if it is planted in rich Ground, it is apt to grow very rank in Summer; and being full of Sap, the Froft will fometimes deftroy thofe Plants in Winter; but where they grow upon Walls, or a rubbifhy Soil, they are rarely injured by Cold, and the Roots will continue many Years.

Fig. 2. ALYSSUM *Alpinum, hirfutum luteum. Tourn. Inft. R. H.* 217. Yellow hairy Madwort of the *Alps*. *a*, reprefents the Flower with Four Leaves, placed in Form of a Crofs; *b*, the Seed-veffel, which is divided into Two Cells by an intermediate Partition.

This Plant is by *Cafpar Bauhin* titled, *Sedum Alpinum hirfutum luteum. Pin.* 284. i. e. Yellow hairy Houfleek of the *Alps*, and by *Lobel* it is titled, *Sedum petræum montanum. Icon.* 381. Doctor *Linnæus* has feparated this, and fome other Species, from this Genus, and has placed them under that of *Draba*. The diftinguifhing Character of this Genus he makes to confift of the Flower having no Style; whereas thofe of *Alyffon* have a very perfect one. In his *Flora Lapponica*, and his Enumeration of the Species of Plants, he calls this, *Draba fcapo nudo fimplici, foliis lanceolatis integerrimis. Flor. Lap.* 255. *Spec. Plant.* 624. This is the Third Species mentioned in the *Gardener's Dictionary*. It begins to flower early in *March*, and continues moft Part of *April* in Flower, if it is planted in a fhady Situation. The Flower-ftem feldom rifes more than Two Inches high; the Plant fhoots out Heads on its Sides, fomewhat like the *Houfleek*; from whence I fuppofe the old Authors joined it with them. Thefe Heads [illegible], and form a clofe Bunch of Heads, each of them putting out a Flower-ftem in the Spring; fo that when there are many of the Heads in One Bunch, the Number of Flower-ftems being the fame, it makes a pretty Appearance when the Flowers are open; whereas when the Heads are feparated, being only fingle Flower-ftems, they make no Shew at a Diftance. It is a Native of the *Alps*, and has been long preferved in many curious Gardens, where, if it hath a fhady Situation, the Seeds will ripen well; but as it propagates very faft by Offfets, the Seeds are feldom regarded.

PLATE XXI.

AMARANTHOIDES, *Tourn. Inft. R. H.* 654. *Tab.* 430. *Raii Meth. Plant.* 25. *Amaranthoides. Boerh. Ind. Plant.* 2. 99. *Caraxeron Vaill. Act. Acad. Reg. Sc.* 1722. *Gomphrena, Lin. Gen. Plant.* 279.

GLOBE AMARANTHUS.

THIS Genus of Plants was conftituted by Father *Plumier*, and the Characters of it are exhibited by Doctor *Tournefort*, in the Appendix to his Inftitutions of Botany, p. 654; and, according to his Syftem, fhould be placed in his Twelfth Clafs of Plants *with flofculous Flowers, whofe Flowers are cut into equal Parts, each having a proper Empalement*. Mr. *Ray* places it in his Fifth Clafs of Plants *with ftamineous Flowers, whofe Seeds are included by the Empalement*. Mr. *Vaillant* has placed this under his Clafs of Plants which he titles *Dipfaceæ*, which is a confufed Jumble of Plants joined together, many of which have no Affinity. Doctor *Linnæus* places it in the Second Divifion of his Fifth Clafs of Plants, intitled *Pentandria Digynia*, i. e. Plants whofe Flowers have Five Stamina, and Two Styles. The Syftem of Botany which the Doctor has eftablifhed, of claffing the Plants by the Organs of Generation in their Flowers, reduces this Genus under the Clafs here mentioned, which joins it to many other Genera, which, by all former Methods, were feparated to a great Diftance; and the moft natural Place for this Genus is with thofe Plants where *Tournefort* has claffed it, as the Heads are compofed of many flofculous Flowers, each of which is fucceeded by a fimple Seed.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here exhibited are,

Fig. 1. AMARANTHOIDES *lychnidis folio, capitulis purpureis majoribus*. Globe Amaranthus, with a Leaf of Lychnis, and larger Purple Heads. *a*, fhews the Two-leav'd Empalement, which is hollow like a Gutter, and clofely embraces the Floret *b*, which is divided at the Top into many equal Parts, and afterwards fucceeds the Seed *c*, fo clofely, as with Difficulty to be feparated.

This is the Firft Species mentioned in the *Gardener's Dictionary*. By Doctor *Breynius* this Plant is titled, *Amaranthe affinis, altera fpecies, five flore purpureo. Cent.* 1. 110. And by Doctor *Commelin*, in the *Amfterdam* Garden, it is titled, *Amaranthe affinis, Indiæ Orientalis, floribus glomeratis*, [illegible] 1. 85. In *England* it is commonly called *Globe Amaranthus*, or Eternal Flower; and by the *French*, *Immortelle*, becaufe the Flowers will continue their Beauty a long time, if they are gathered in Maturity, and preferved in a dry Place.

Doctor *Linnæus* has changed the Name of this Genus to *Gomphrena*, and titles this Species, *Gomphrena caule erecto, foliis ovato-lanceolatis, capitulis folitariis, pedunculis diphyllis. Hort. Cliff.* 86. *Spec. Plant.* 224.

The Plant here reprefented is a Native in *India*, from whence the Seeds were brought to *Holland*, about the Year 1690, where the Plants were raifed in fome curious Gardens, and the Seeds were diftributed to moft of the curious Gardens from thence; but this Plant was not common in the *Englifh* Gardens till the Year 1715; but is now become one of the great Ornaments of the Gardens in Autumn.

There is a Variety of this Plant, which is common in fome of the *American Iflands*, and is by many fuppofed to be the fame with this; but all thofe Plants which have been raifed in the *Englifh* Gardens from the Seeds which were brought from *America*, have fmaller and flatter Heads; the Plants branch out more, and do not grow fo upright as thofe from *India*; the Flowers come much later in the Year, fo that their Seeds feldom come to Maturity in *England*; therefore I have added the Epithet of *capitulis majoribus* to this Plant, to diftinguifh it from the *American*, which never produces Heads more than half the Size of this, in the Places where it naturally grows.

Fig. 2. AMARANTHOIDES *lychnidis folio, capitulis argenteis majoribus. Tourn. Inft. R. H.* 654. Globe Amaranthus, with a Lychnis Leaf, and larger Silver Heads. This Sort is figured by Doctor *Breynius*, in his Firft Century of Plants, p. 109. Icon. 51. And in the next Plate he gives the Figure of another Species, which he titles, *Amaranthe affinis Brafiliana, glomeratis parvifque flofculis. Icon.* 52. The Seeds of this Species I have feveral times received from *America*, and have conftantly obferved the fame Difference between the Flowers and Plants of this, and thofe with Silver Heads from *India*, which is here figured, as there is in thofe with the Purple Heads before mentioned; fo that if the Difference between them is not fufficient to conftitute them different Species, they are Varieties which conftantly continue the fame from Seeds; therefore thofe which come from *America* are not worth cultivating in *England*, as their Flowers are not near fo large or beautiful as thofe from *India*; nor do the Plants produce half the Number of Heads.

Doctor *Linnæus* makes them but One Species, that with Silver, and the other with Purple Heads. Indeed, the Colour is not fufficient to make them different Species; tho' they never vary from their Colour, but always continue the fame as the parent Plants from which their Seeds are taken.

This

'm SA[t is !rfi cntvmion in i" ; M J « . J .cds of this Son from *HittjrtJ,* in the Year *tjit.,* since which time it has been preferved in fcvcral curifn Gardens, but that with purple Heads, making a firtfr Appearance, ii by moft Perfons preferred to the M hite; tW fume of the White being intermixed with them, adds to the Variety. They are both very ornamental Plants in a Garden; they begin to flew their Flowers early in 7«"" provided the Seeds are :inAf*Tf*i and if the Plants are brought forward, j,y being removed into Two I lot-beds, they will be ill fuil Beauty by the Beginning I *ygfy,* «nd continue til) the End ot *&rpttmbrr,* or the Beginning of *Otiekr;* when the Seeijs will be rip?, which Should then be cut off, ami ilitr Seeds preferred in the -til) thcSc*fon for fowing tlirm •, but they (hould be kept in a dry, wwrii, Room, elhcrwife tlic Secdi will not grow.

The ufual Htight *to* which thefe Plants grow i*, *bout Two Fe« ind an half i and, when they are not too much drawn in the Hot-beds, they will form themfelvci into regular handfome Plaal

P L A T E XXII.

J.

Amaranthus ^ *Tew*.* Z15J.fi. *H-* J *fart* (landing almoft horuoiirali in which Particular irdifFi-rs from all the other .Species of this Genus; (or fume of [htm have upright, and others pendulous Spike? *;* iomc' of which are fo long as to trail upon ihe Ground, tho' they are produced from the Top of Plants winch are generally upward of Two Fett high: Thcfe Spikes arc -monly but (lender, which are ftrctched out to lucH Lengths.

Mtibui. Plum. t$. U. Ge*. PU»t.* **9+1.**

Amaranthus, w Ftowm GIKTLI.

Til IS G«tuj of Plant* i» by l)r.7W*/«rt ranged I, *J'itth with a* r,*Jiving* ÖIK in his Sixth Clafs, which is titled *Key-flower, whofe Pointal becomes a Seed-vejfel, which opens tranfverfely in Two Parts.* Mr. *Ray* places it in his Fifth Clafs of Plants with *apetalous Flowers, whofe Empalement inclofes the Seeds.* Doctor *Linnæus* removes this Genus to a great Diftance from thofe of its Congeners, placing it in his Twenty-firft Clafs of Plants, intitled, *Monœcia Pentandria,* from there being Male and Female Flowers in the fame Spikes, and the Male Flowers having Five Stamina: But this is not regular in all the Species, for fome have Three, and the others Five Stamina, and this often occurs in the fame Plant. The *Amaranthus Oppofitus,* commonly called *Cockfcomb Amaranthus,* is placed by Doctor *Linnæus* in his Fifth Clafs of Plants, as thefe have hermaphrodite F jwen only; fo that thefe Plants, which, by moft of the Writers on Botany, have been included in the fame Genus, are now removed to a great Diftance from each other. The Title which the Doctor has given to that Genus is *Celofia.*

The Species here reprefented is,

Amaranthus, *racemis cylindricis laxiufculis, foliis ovatis.* *his nu-.-tSmf:* i.e. Amaranthus with cylindrical Spikes, produced from the Wings of the Leaves, in Form of a Cruls. *a,* repreients a Flower; *b,* the Seed.

The Seeds of this Plant were firft from the *Bahama Iflands;* but it is not certain whether it is a Native of thofe Iflands, or has been brought thither from fome other Country, however, it is now in fo great Plenty there, as to be eaten by the Inhabitants as a boiled Sallad; and, fo far as I can learn, it is cultivated in their Gardens; tho' in thofe warm Countries, where the Seeds ripen well, thefe Plants will foon overfpread the Ground, where their Seeds are permitted to fcatter, and become very troublefome Weeds.

This Plant will grow to the Height of Three Feet, and produces many Spikes of a bright Purple Colour, which come out from the Wings or Footftalks of the Leaves, cpofing each other all the Length of the Plant,

:ited are not *fo* regularly cylindrical as are thofe of the other Speciei, but have feveral Swellings in different Parti, which, together with the Manner in which they are produced, do fufficiently diftinguiih IT 'runi all the other Specici of this Genus.

This Plant muft bf raifed On ;„ Hot-bed in ihe Spring, odxrwilc it will nor ptrlr n *EJBUKJ;* but they fhould •,ot be too much drawn by the Gl iffti, for th.it will caufe (htm tu run up weak, and then thr^ never make fo good an Appearance, as wrten they are brought up more hardily. In 7«« they may be planted into the open Borders . or if they arf ilcfigtictl fol PoO, to pl JICC ainonj', other annual Plants i PI Courtf, they fhould be potted, and l Ihad >m the Sun until they have taken Root; after which time ! ry tnay be removed into the open Air, and placed w •;rrc they are deftgned to remain. The fame Culture which the Co •skfcomb ufually has will agree with this, <-nly it may be treated more hardily.

It is in Beauty from the • ^!iddi(' of *Jtttu* tilt the FroB in Autumn puts an End to it. The Seeds will ripen toward the End of *September,* when thej ftioukl be taken before the Froft injures them.

Moft of the Species of *Amaranthus* are in all h* hot Countries ufed as culinary Plants: The Seeds of feveral of them have been fent to *England,* with Advice to propagate them for the fame Purpofe here; but as *Spinach,* and fome other efculent Plmw. are entirely fuperfeded with greater Eafe, and alfo much preferable •Q the others; there are few Perfons fo fond of thefe Novelties, as to prefer them to thofe which are commonly brought to the *London* Markets: Indeed, in thofe Countries where other efculent Plants are fcarce, thefe may be cherimed, but where *Spinach, Coleworts,* and many other efculent Plants will thrive, there is not One Species of this Genus which is w idiy oi being }•. upgarrd.

P L A 'T[1] E XXIII.

Amaryllis, *Lin. Gen. Plant. 367. Lilio-Narciffus Tourn. R. H. 365. Tab. 207. Raii Method. Plant. 120*

Lily Daffodil.

THIIS Genus of Plants is by Doctor *Linnæus* placed in his Sixth Clafs of Plants, and in the Firft Section of the Clafs, intitled, *Hexandria Monogynia,* i. e. Plants whofe Flowers have Six Stamina, and One Style. Doctor *Tournefort* places it in the Fifth Section of his Ninth Clafs, intitled, Plants with a Lily Flower, compofed of Six Leaves, whofe Empalement becomes a Fruit. Mr. *Ray* places it in his Twenty-third Clafs, which he titles, Herbs with grafly Leaves, bearing Flowers which have a triangular Seed-veffel.

By fome of the old Writers on Botany, who have mentioned any of the Species of this Genus, they are called either *Lilio-Narciffus,* as their Flowers have fome Affinity to both thefe Genera. This induced Dr. *Tournefort* to make a new Genus of them; and as they approached near to the *Lily* in fome Species, and in others to the *Narciffus,* he compounded the Two Names of *Lily* and *Narciffus* to *Lilio-Narciffus;* but Doctor *Linnæus,* having rejected thefe compound Titles, has altered it to *Amaryllis,* which is an antient Name oi 4 Plant.

The Species here reprefented are,

Amaryllis *ftipite multiflora, corolla campanulata æquabili, genitalibus declinatis,* i. e. Amaryllis with many Flowers included in the fame Cover, whofe Flowers are equal, and bell-fhaped, having the Parts of Generation declined; commonly known in *England* by the

the Same of *totiaJtm* LA.* ThU i* the Fifth Spe-
cie mentio**Md in the *Gardener'; DiHicaer?* a, re-
picknti the Spatlu, or Cover, which *it.* includes the
Flower-bods, and open* in Two Part* •heti the
flowers are near expanding. 4, *(h.* shews the Stamina
with the Sryk, which decline toward the lower Part
of the Klower, but turn upward, so that the Sum-
tnits and the Style approach nearly together *t,* fhrrt
the bu!bt*ui Root, with the Lt*vcj, which do oot
appear tiij tlic Spring.

1 hit Plant *a* by Sir *ffttu Sbvu* mtltlrd, ZiS* AV-
pshan:U.\ fore i Victor *fturtw/trl* fuppofed
P *"rrmtm* kaa figi • the *Par tub/*} Bit, ; i!um Ame-
nmiaam fmmttt Jkn, Bt'lddtmjtb.lum,* <nd t *Dm Ttrtn,* but he wu i
awtimmUm
e:st Countries to thi* Plant, and alfo to that mentioned by Sir *Hans Sloane*, which may have occafioned the Miftake made by Doctor *Tournefort*, the Plant which is figured in this Plate being fo called in *Portugal* and *Italy*; wherraithi- other Sort was firft iom^»n7« to *Holland*, by tii: *xi* »ttcwb I un of *Hermat* I feeing the r.

'A»«i *$Mut, m* the Jiltnd of «nti hi vn leemi to be well eftouab

they CtU 1 and the « A' tioned, an Flint het r»jfi/, about the long refiticd in the ROOM were *tnd* were Girdent near Case to thenct to there i ll

This *Son* Kuou ar

6de t» ibey i

DC

rr pfOpofri

Ml

fc, the

SJuf

•'--- ia At

ing Five, Six, or Seven Flowers at the Top, which are in Shape like the common *Red Lily*, and ftink as ftrong, but of a loft purple Colour, inclining to white within toward the Bottom, having an agreeable Scent. If the Seafon is favourable, or the Flowers are fcreened from Froft, which fometimes happens at that Time of the Year, as alfo from violent Winds, or heavy Rains, they will continue in Beauty a Month, or longer; and are very ornamental Plants to a Garden, at a Seafon when there is a great Scarcity of Flowers; therefore they are worthy of being propagated by all thofe whofe Delight is in Flowers.

As thefe Flowers appear fo late in Autumn, they never produce any Seeds in *England*, therefore they can only be propagated by Off-fets here, which is but a of increafing their Roots, for they are too tender to live in open Borders in this Country; therefore whoever pfOpofri to have thefe Flowers multiply with them, fhould plant them in a warm Border, near a South Wall, putting the Roots Six or Eight Inches deep in the Ground, and before the fevere Froft fets in, the Borders muft be covered Four or Five Inches thick with rotten Tanners-bark, to prevent the Froft from penetrating the Ground: With this Management the Roots will thrive, and in the Spring they will put out ftrong Leaves, which will remain flourifhing till the End of *June*, when they will begin to decay; and foon after they may be tranfplanted: But they fhould Ml be removed oftener than every third *Year*, if they are expected to produce ftrong Flowers; nor fhould they be planted in a moift Soil, for in fuch their Bulbs will rot in Winter.

There is another Species of this Genus, which approaches near to this here figured, but differs in having a much paler Flower; and the Flowers are produced in the Spring, whereas this always flowers in Autumn. The Sort here mentioned was brought from the *Cape of Good Hope*, in the Year 1724, to *Holland*. Some of their Bulbs were firft me by Doctor *David Pa* the prefent Profeffor of Botany at *Leyden*, which have produced their Flowers in the *Chelfea* Garden, and are in SJuf fo like that here figured (as are alfo the Leaves of the Plant), as not to be diftinguifhed therefrom, but by the Colour, and the Time of its flowering.

The Sort here figured is by the *Italians* called *Narcijfus Belladonna*, and is cultivated in great Plenty in the Gardens about *Florence*, fo ia At Autumn Seafon it is one of the greateft Ornaments of their Gardens. The Flowers are brought to Market there, and are ufed to adorn their Houfes and Churches, for at that Seafon there is a Scarcity of other Flowers.

P L A T E XXIW

Am - vt.t it, *ff*tb* •»«,'; Mtf, *marftmitu* w4lio f-'lnwrn intlutfcl in ihc (a ire equal, fh»; W»Trd. Thtt li commonly known in *England* by the Title of *Mexican Lily*. It is figured by *Herman* in the *Paradifus Batavus*, and is there titled, *Lilium Americanum* *j Jkrt, Belladonna dictum*, p. 194. This might probably lead Doctor *Tour-* the Miftake of fuppofing it to be the fame with that v pecies which is mentioned by Sir *Hans Sloane* tn hi* CuiJ(«M of *Amn* Plants; but if he had attended to the Defcription which Doctor *Herman* has given of his Plant, he would have found it to be h l *Lily* before defcribed.

IUJ ***Mmmimmiitt*+*** or Cover, which furrounds #, #, i»j»tSrrt» the ^ii-ji divides into Two Parts, when the Flower-tewK, HKJ *the* Bud* Mt nrtr oprnmg. *A*, fhews the Stamina, or Male Or ans, which are fituated round the ftyle are declined toward the lower Part

Mt thd FWWCT

rpKJS ft» M h« hm> mot* thwi I hirty Years in i but Uwn whence it ww brought is not certain. It flowered in Mr *Fairchild*'s Garden at *Hoxton* in 1727, when the late Doctor *James Douglas* caufed a Figure of it to be drawn, and wrote a Folio Pamphlet on it. He gave it the Title of *Lilium Regium*, becaufe it was in full Beauty on the Firft of *March*, which was the late Queen's Birth-day. Mr. *Fairchild* told me the Roots were brought from *Mexico*; fo he gave it the Name of *Mexican Lily*, which is ftill continued to it by the *Englifh* Gardners.

Doctor *Herman* fays it came from the *Caribbee Iflands*; but all the Roots which I have received from thofe Iflands, by the Title of *Red Lily*, are of a different • *i* Sort. from this.

It flowers conftantly in the Spring, when it is placed in a very warm Stove. It is in Beauty in *February*; and thofe which are in a moderate Temperature of Air will flower in *March* or *April*. The Stems of their Flowers feldom rife much more than a Foot high; and each Stem produces Two, Three, or Four Flowers, rarely more than that Number. It is much tenderer than the former Sort, therefore will not thrive in this Country, unlefs it is preferved in a warm Stove in Winter. It propagates by Off-fets, but never produces Seeds in this Country.

PLATE

PLATE XXV.

AMMI, *TMTH /*(R H- 3<H' C. B. P.* i<9- A *tLj ,1 I.nCtx Plant.* 20?'

BJJHOPIWIED.

ranged in the First Section of his Seventh Clafs of Plants, intitled, *Herbs with umbellated Flowers ranged circularly, which Empalement turns to Two fmall channelled Seeds.* Mr. *Ray* places it in the Eleventh Section of his Eleventh Clafs of Plants, which he ftiles, *Herbs with umbellated Flowers, which are fucceeded by ftort thick ftriated Seeds.* Doctor *Linnæus* places it in his Fifth Clafs of Plants, intitled, *Pentandria Digynia*, i.e. Plants whyfe Flowers have Five Stamina, and Two Styles.

The Species here repreſented is,

AHMI M9«I, C *B. P.* 159. Common Broad-leav'd Biſhopſweed. This is by *John Bauhin* titled, *Ammi vulgare majus, latioribus foliis, ſemine minus* **ilTMt.** *Hiſt. Plant.* Vol. III. p. 2. 27. By *Dodonæus* it is called, *Ammi vulgare Pempt.* 301. Doctor *Linnæus* titles it, *Ammi foliis inferioribus pinnato lanceolatis ferratis ſuperioribus multifidis laciniatis. Hort. Upſal.* 59. *Spec. Plant.* 243. i. e. Biſhopſweed, whoſe lower Leaves are winged, ſpear-ſhaped, and ſawed on the Edges, and the upper Leaves divided into many narrow Segments. *a*, ſhews the under Leaves, which are broad, and ſawed on their Edges; *b*, the upper Leaves, which are divided into many narrow Segments; *c*, repreſents the Flowers growing in an umbel; *d*, the Seeds which ſucceed the Flowers.

There is a Variety of this Plant, which is mentioned in ſeveral Botanic Books, under the Title of *Ammi majus foliis pluribus ſingly ſo acutely inciſis. C. B. Pin.* 159. i. e. Greater Biſhopſweed with Leaves finely cut and curled. But this is only a ſeminal Variation, for from the Seeds of one Plant there will ariſe Plants of various Forms, ſome with very broad Leaves, others with very finely divided Leaves, and ſome of a middling Sort between both. I have frequently taken the Seeds of each

V **trirtf,** and Town them in **difitrenl** Places with great C*re(and have always found, t)ut from each Parcel there hive been Plants of all ti.e different Varieties pro- **uccd ; fo iha** they muſt not be taken for diſtinct Species, notwithſtanding their different Appearances; tho' *Fuchſius, Camerarius*, and ſome others, have ſuppoſed them diſtinct Planes. Mr. *Ray* obſerved both the Varieties growing promiſcuouſly in the Vineyards and cultivated Fields in *Italy* and *France*, where **this** l'iasit naturally grows, ſo makes no Juubc ot iti betng a feisiinal Variation. *I'ttrkin/cn* h*s itippoſed thii Plmt to be a Native of *England*, **ind** fiiy-t it wi5 (pund wild about *Greenhithe* in *Kent*. Ilui ii mutt have cerumly trilen from ſome Seeds accident• *.\y I entered thrre, or thrown out of ſome Garden; becauſe it has not lien lound in that Place ſince his time, nor in any other **Part** of *E*gUtnd*, growing naturally: Tho' when once the S«di »rr (own in a Garden, and the Plants are permitted to ſhed their Seeds in the Place, there will be a Supply of **PlMtt** annually produced, as long as any of the Seeds remain in the Ground.

This Plant is Annual, and, if the Seeds are ſown in Autumn, the Plants will flower by the Beginning of *July*, and the Seeds will ripen the Beginning of *September*, or ſooner, in a warm Seaſon. When the Seeds are ſown in the Spring, they often remain in the Ground till Autumn, and ſometimes till the following Spring, before the Plants appear; nor will thoſe Spring-ſown Plants, which come up the Firſt Year, be near ſo ſtrong as thoſe ſown in Autumn; which in good Ground generally grow near Three Feet high, and periſh ſoon after their Seeds are perfected.

The Seed of this Plant is the only Part which is uſed in Medicine; it is employed in carminative Decoctions, and is eſteemed a good Aromatic, being attenuating and diuretic.

There was formerly another Sort, whoſe Seeds were brought from the *Levant*, by the Title of *Ammi verum*, and *Ammi Creticum*: But of late Years there has been none of theſe Seeds imported, but the Seeds of the common Sort have been uſed to ſupply its Place.

PLATE XXVI.

AMOMUM, *Lin. Gen. Plant.* 2. *Flor. Lapl. Prod.* 11. *Zerumbet, C. B. Pin.* 35. *Raii Method. Plant.* 122.

ZERUMBET, or ZERUMBETH.

THIS Genus of Plants is by Doctor *Linnæus* placed in his Firſt Claſs, intitled, *Monandria Monogynia*. The Flower having but One Stamen, and One Style. Mr. *Ray* places it in his Twenty-third Claſs of Plants, which he titles *Graminifolia floribus bulbi inſtar*, i.e. Plants with Grade-like Leaves bearing Flowers.

The Characters of this Genus are,

The Flowers are produced in a compact ſcaly Head, each having a Spatha, or Leafy Cover. The Flower is of One Leaf, having a ſhort Tube, and is divided into Three Parts at the Top, the middle Segment being larger than the other. In the Center is One Stamen, ſhaped like a Leaf, which NUMB. V.

ariſes by the Style, and is of the ſame Length, reſting upon the Germen, which afterward becomes an oval Fruit, divided in re *Thrt* Cells, *which contain many Seeds.*

The Specie i here repreſented is,

AMOMUM *ſcapo nudo, ſpica oblonga obtuſa. Hort. Cliff.* 3. *Hort. Upſal.* 1. *Flor. Zeyl.* 8. *Flor. Lapl. Prod.* 11. Zerumbet, or Zerumbeth, by ſome called Broad-leav'd Wild Ginger.

Doctor *Tournefort* hath not mention nedar.. of the Species of Ginger in his Inſtitutions of Botany; nor have we mi good i deſcriptions of the *Zerumbeth Galingale* and *Zedoary*, by which they may be diſtinguiſhed. The only Author who has well deſcribed the Plant here figured, is Doctor *Hermann*, who ſays it is the *Zerumbet* of the Shops, but does not diſtinguiſh it ſufficiently from the

Galingale, or *Zedoary*. The Writers on the *Materia Medica* have only described the dried Roots, as they have been imported, being ignorant of the Plants whose Roots they were; and it is but of late Years that we have had the Plants in the *English* Gardens, therefore could not determine what they were.

The Roots which I have seen sold in the Shops for the lesser *Galingale*, were those of the Plant which Doctor *Linnæus* has titled *Kæmpferia*, and is figured by Doctor *Kæmpfer*, who calls it *Wanhom*. It is also figured and described in the *Hortus Malabaricus*, under the Title of *Katsjula Kelengu*.

The *Zedoary* approaches near to the Plant here figured, but the Leaves are much broader, and grow near twice the Height of those of *Zerumbeth*, and are placed on every Side the Stalk; whereas those of *Zerumbeth* are only on Two Sides, so appear flat, when compared with the other, and the Roots are much larger. How this differs in its Flowers I cannot say, as I have not seen this Species in Flower; but the *Zerumbeth* flowers annually in *England*, when it is kept constantly in the Tanners-bark; for if the Pots in which the Plants are planted be placed on Shelves in the Hot-house, the extreme Fibres of the Roots will become dry, and then the Plants will not thrive after.

The generical Name of this and the common Ginger, was *Zinziber*, by which most Authors who have mentioned these Plants have called them: But Doctor *Linnæus* has altered their Title to *Amomum*, and has added to them the *Cardamom* and *Grains of Paradise*; making them Species of that Genus.

Doctor *Hermann*, in the *Hortus Lugduno-Batavus*, calls the Plant here figured *Zinziber [illegible] latifolium*; and in *Garcias* it is titled *Zerumbeth*. It is a Native of *India*, from whence the Roots are brought for Use.

a, represents the Root, as it spreads in the Ground; *b*, the naked Flower-stem, which arises immediately from the Root; *c*, the obtuse Spike; *d*, the Flower coming out of the scaly Head; *e*, the Foot-stalk of the Leaf, coming from the Root, which decays in Autumn; at which time the Roots should be taken up for Use, as they are at that time in the greatest Strength.

The Root of this Plant is the only Part which is used in Medicine; it is heating, drying, and is esteemed good to expel Wind, comforting the Bowels; and is frequently ordered for Cholics, and other Disorders of the Bowels, as also to prevent Vomitings.

The *Zerumbeth*, *Zedoaria*, and lesser *Galingale*, are now pretty common in many curious Gardens in *Europe*, where there are Hot-houses with Beds of Tanners-bark; but unless the Pots in which their Roots are planted be constantly kept in the Tan-bed, the Roots are apt to shrink, and when that happens, they frequently rot; for, by giving the Plants much Wet, they are soon destroyed, especially after they have been kept dry any time; which is also the case of the common *Ginger*.

The Roots of the lesser *Galingale* were obtained from *India* in the Year 1724, by *Charles Dubois*, Esq; of *Mitcham* in *Surry*, who communicated them to several curious Persons in *England*, and they have since been sent to many curious Persons in *Holland*, *France*, and *Germany*. The *Zerumbeth* and *Zedoary* were brought to *England* about the Year 1732, from *Holland*. And these multiply so fast, where they are properly managed, that many of these Roots are annually thrown away.

The common Ginger, which grows naturally in the *West Indies*, has been long in the *English* Gardens; but neither of these Sorts made any Progress here, until the Use of Tanners-bark in Hot-houses was introduced; since which they all thrive as well as if they were in their natural Countries, and large Quantities of the Root of Ginger have been taken up for Preserving in *England*.

PLATE XXVII.

AMORPHA, *Lin. Gen. Plant.* 763.

BASTARD INDIGO.

The Characters of this Genus are,

The Empalement of the Flower is tubulous, cylindrical, and is of One Leaf, which is divided at the Top into Five Parts, which are erect: The Flower is papilionaceous, but differs from all the Genera of this Class, having only a broad Standard, which stands above the Antheræ, so that the Wings and Keel are wanting to the Flower: The Stamina coalesce slightly at the Bottom, but are separated above the Empalement, and are of unequal Lengths. These support short standing Summits, which are channelled. The Pointal stands above the Summits, supporting a single Stigma: The Pointal afterward becomes a short Pod, included in the Calyx, opening in One Cell, in which is One or Two Kidney-shaped Seeds.

THIS Plant has been placed with the *Barba Jovis*, to which Genus it is nearly allied; but the Flowers wanting the Keel and Wings, and the Pod being compressed, are sufficient to distinguish it from the other Plants of that Genus, which occasioned Doctor *Linnæus* to separate it, and to constitute a new Genus of it, by the Title of *Amorpha*.

In the Catalogue of Trees and Shrubs, which was published by a Society of Gardeners, it is there mentioned by the following Title, viz. *Barba Jovis Americana Pseudo-acaciæ foliis flosculis purpureis minimis*; and in the *Philosophical Transactions* of the Royal Society it is called, *Barba Jovis Caroliniana, Pseudoacaciæ foliis*, Bastard Indigo, *[illegible]* Nº 437.

There is but One Species of this Genus at present known, which is that here exhibited; therefore it hath no specific Title; but it is in the Catalogue of Mr. *Clifford's* Garden titled, *Amorpha*, p. 353. Tab. 19.; in the Catalogue of the *Upsal* Garden, p. 208.; and in the *Prodromus* to the *Leyden* Garden, p. 393. This is the Third Species of *Barba Jovis* in the *Gardener's Dictionary*.

a, represents the Corolla of the Flower, which consists of One broad single Standard; *b*, the Ten Stamina, with their Summits, which are of unequal Lengths; *c*, shews the Style, with the Stigma standing above the Stamina; *d*, the short compressed Pod.

The Seeds of this Plant were sent from *Carolina* by Mr. *Catesby*, in the Year 1724, which were sown in many Gardens, and Numbers of the Plants were raised from them, some of which produced their Flowers in a few Years after; and now they are pretty common in most of the Nursery Gardens about *London*, being propagated and sold as a flowering Shrub, with many other Sorts.

It will grow to the Height of Eight or Ten Feet; but generally produces many Branches near the Root, which


a
b
c

are placed irregularly; so that it will not make a good Appearance, when it is placed single; but if planted among other Shrubs, so as that the Stems are hid from Sight, the Tops of the Branches, when in Flower, make a pretty Variety; but as it is late in the Spring before the Shoots come out, these Shrubs have the Appearance of being dead till the End of *April*, or the Beginning of *May*; but when they begin to put out new Shoots, they soon grow to a considerable Length, and are furnished with long winged Leaves, shaped like those of «ie *Cemme* JIUKU,* but of a darker Green: The Flowers are produced in Spikes, at the Extremity of the Shoot*, being generally Three or Four together: These Spikes are Six or Eight Inches long, and fully garnished with Flowers, which are commonly in Beauty about the latter End of *June*; but the Seeds seldom ripen in *England*.

In *North America* they have made a coarse Sort of *Indigo* from the Leaves of this Shrub, which occasioned their calling it Bastard Indigo; but since the true Indigo Plant has been there cultivated, the Inhabitants have made no Use of this.

PLATE XXVIII.

AMYGDALUS, *Town. Inst. R. H.* 627. *Raii Hist.* 1429. *Lin. Gen. Plant.* 565.

ALMOND TREE.

THIS Genus of Plants is by Doctor *Tournefort* ranged in the Seventh Section of his Twenty-first Class, intitled, *Trees and Shrubs with a Rose Flower, whose Pointal turns to a Stony Fruit.* Mr. *Ray* places it amongst the Trees whose Flowers join to the Base of the Fruit, and grow single. Doctor *Linnæus* places it in his Twelfth Class of Plants, intitled, *Icosandria Monogynia*, from the Flowers having Twenty Stamina, and a single Pointal; and he joins the *Persica* to this Genus, making it only a specific Difference: But where the Fruit is admitted as a Character to the Genus, it must be separated; the outer Cover of the *Almond* being dry, hard, and compressed; whereas the *Peach* is rounder, the Flesh thick and moist, and the Stone very rough.

The Species here represented are,

Fig. 1. AMYGDALUS *fatiua fructu majori. C. B. P.* The manured Almond with a larger Fruit. *a*, represents the Flowers expanded; *b*, the Stone divested of its outer Cover; *c*, an intire Fruit with its Cover.

In most of the Botanic Books there is a Distinction made between the Sweet and Bitter Almond: But these are only accidental Varieties, for it frequently happens that the Two Sorts are found growing upon the same Tree; tho' in general, those Trees whose Fruit have sweet Kernels, are, for the most part, fair; but the Sweet, or that which is usually sold for the *Jordan Almond*, is a different Tree; the Flowers are White, and [illegible]; the Branches of the Tree are much slenderer, and the Leaves long and narrow. This Sort is distinguished by *Caspar Bauhin* under the Title of *Amygdalus dulcis putamine mollior. Pin.* 442.

Those Persons who are desirous to have this Sort of Fruit in Perfection, must plant the Trees against a South, or South-east Wall, otherwise they will seldom produce Fruit in *England*: And if it happens that the Standard Trees of this Sort produce Fruit, which in favourable Seasons is sometimes seen, they rarely ripen, nor grow to any Size; but against Walls I have had very good Fruit.

These Trees of the common Almond, whose Kernels are sweet, may be propagated in Plenty, by budding them upon Plum Stocks, for the Fruit will always continue the same as those from whence the Buds are taken, but the Trees raised from the Fruit seldom prove the same as those from whence the Fruit is taken. This is by Doctor *Linnæus* called, *Amygdalus foliis petiolaris serratis reflexis glandulifer. Hort. Cliff.* 186. *Sp. Plant.* 473; and under this general Title he includes all the Species, although the Tree with White Flowers differs so much in Leaf, Shoot, and Fruit, as is sufficient to make a distinct Species from the common Sort: And there are Two other very distinct Species now in the Gardens, one of which hath broad Leaves, and Flowers smaller than those of the leaf Peach Flower; the other hath short silvery Leaves, which remain thro' the Winter, and do not fall till they are thrust off by new Leaves in the Spring.

Fig. 2. AMYGDALUS *Indica nana. H. R. Par.* The Dwarf Almond with single Flowers. This is by Doctor *Morrison* titled *Amygdalus persica, H. R. Blef.* and in *Morison's History* it is *Amygdalus nana.* Doctor *Linnæus* titles it *Amygdalus foliis petiolaris lanceolatis. Hort. Cliff.* 186. *Sp. Plant.* 473; and he supposes it to be the same with that Plant which is figured by Doctor *Amman*, under the Title *Armeniaca Persicæ folio, fructu nigricante. Ruth.* 173. *Tab.* 30. But the Specimens of this which were sent to *England* by Doctor *Amman* shew it to be very different from that here figured.

This Sort hath been frequently confounded with the *Persica Africana nana flore incarnato simplici. Town.*; which may have been occasioned by People's supposing it to be the single Flower of the same Species which is usually propagated in the Nurseries by the Title of *Double flowering Dwarf Almond*: But whoever compares the Leaves, Shoots, or Flowers, of the Two Sorts, will soon be convinced of their Difference: nor is the Single, of the Sort with the Double Flowers, to be found in the *English* Gardens at present.

The Sort here figured will grow to the Height of Three Feet, and is very subject to send forth Suckers from the Roots, whereby the Ground will be stored with Plants. It flowers in *April*, and often ripens its Fruit in *England*. Both these Sorts are propagated in the Nursery-gardens near *London* in Plenty; and are sold as flowering Trees and Shrubs, being chiefly planted in Gardens for Ornament, their Flowers making a fine Appearance early in the Spring: The First Sort usually flowers in *March*; but in early Seasons it frequently is in Beauty by the Middle of *February*, and in late Years not before the Middle of *April*. When the Trees flower late in the Season, they commonly produce Plenty of Fruit; but when they come out early, the Blossoms are frequently killed, so that few Fruit succeed them. This Tree will grow to the Height of Sixteen or Twenty Feet, or more, if they are planted on a light Soil, but in strong wet Ground they do not thrive so well, nor are of so long Duration.

They have been long cultivated in *England*, the First is supposed to be a Native of *Mauritania*, and the Second of *Asia minor*.

PLATE

PLATE XXIX.

ANCHUSA, *Lin. Gen. Plant.* 167. *Bugloſſum Tourn. Inſt. R. H.* 133. *Tab.* 53.

ALKANET.

THIS C>Tiui *t>(* PUntt it by Do&or *Unmm* **rwu** in hn Fifth I Claſs, untitled *Pentan* **nfr&l Mmrp"** the Flowers **tumng** , aitd x **fir,** Mr. *R*?* pU which -eui. r.-»^ *U^ts* *ai* he titles, *Herbs* *are ſucceeded by Four naked Seeds.* The Diſtinction which Mr. *Ray* makes between *Anchuſa* and *Bugloſſum*, is in the Firſt having red Roots; in which he is followed by Doctor *Boerhaave*, who has joined ſome Plants to this Genus, whoſe Roots are not Red; but the Colour of the Root is hardly ſufficient to conſtitute a ſpecific Difference, much leſs a generical one. Doctor *Tournefort* has included all the Species under the Genus *Bugloſſum*; but Doctor *Linnæus* has applied this Title of *Anchuſa* to the Genus, and has dropp'd the Title of *Bugloſſum*, the former Title having been more frequently *ukA* by ifc* oW Writers in Botany.

Tbe Speciet here rejirctcnt

ANCHUSA *foliis ſerratis, ſubtùs lanuginoſis dentatis, pedunculis bractea ſtaminibus, calycibus fructiferis inflatis.* *Linn. Gen. Pl. Plant.* 133. i.e. Alkanet with narrow indented Leaves, ſmall Footſtalks to the Branches, and a ſwelling Cup or Empalement to the Fruit. *a*, repreſents a ſingle Flower ſeparated; *b*, the Tube of the Flower; *c*, the Five Stamina in the Centre of the Flower.

This Plant is by Doctor *Tournefort* titled, *Bugloſſum Luſitanicum, Echii folio undulato. Inſt. R. H.* 134. As this Plant has not been figured in any of the Botanic Books, we imagined it might be more acceptable to the curious to exhibit its Figure, rather than any of the other Species, moſt of which have been already figured and deſcribed by ſeveral Botanic Writers.

The Roots of *Alkanet*, which are directed for Uſe, are brought to *England* from the *South* of *France*, and are of a fine Red Colour; ſo that they are often uſed to make a Red Colour: But whether this is a diſtinct Species, or may be the Effect of the Soil or Climate in which it naturally grows, I cannot take upon me to determine; but all thoſe Roots which I have examined of *Engliſh* Growth, have not had any Appearance of that beautiful Colour, which is conſtant in the Roots from abroad; tho' I have frequently ſown the Seeds which have been ſent from abroad for the true Sort, which *Caſpar Bauhin* titles *Anchuſa panicis ſtriatus. Pin.* 255.; and *Tournefort*, *Bugloſſum radice rubra, flore Anchuſæ vulgaris, ſeminis cerulei. Inſt. R. H.* 134.

The Plant here figured is a Native of *Spain* and *Portugal*; it grows near Three Feet high, having many ſtrong lateral Branches, which are produced from the main Stem, near the Ground; theſe are garniſhed with ſtiff rough Leaves, Six or Seven Inches long, and about half an Inch broad at the Top, cloſely embracing the Branches, having no Footſtalks, being Two Inches broad at the Baſe, and are indented and waved on their Edges; the upper Surface is beſet with Hairs, and is very rough to the Touch; theſe are ſet alternately on the Branches; and from their Baſe the Spikes of Flowers come out, which grow a Foot or more in Length: The Flowers, which are of a fine Blue Colour, are placed alternately, having a ſmall Leaf juſt below each: Theſe Spikes are reflexed at the Top, ſomewhat like thoſe of the *Viper Bugloſs*; the Empalement of the Flower afterward becomes the Cover to the Seeds, and is ſwell'd at the Bottom, where are lodg'd Four naked Seeds. The Root of this Plant commonly decays after the Seeds are perfected; ſo that it is generally ra metre **i.h*n** > ' ' ' nial Plant, tho' ſometimes, when it grows upon Gravel, or in the Joints of Stone Walls, it will live Three or Four Years; but theſe Plants ſeldom grow more than a Foot high, and have ſmall narrow Leaves; ſo that it appears like a diſtinct Species.

PLATE XXX.

ANDROSACE, *Tourn. Inſt. R. H.* T>. 4«. *Raii Meth.* 34. *Lin. Gen. Plant.* 179. We have no *Engliſh* Name for this Plant; but it may be called Cowſlip Chickweed, for the Flowers, which are like thoſe of Gladwind, grow on an Umbel, like the Cowſlip.

THIS Genus of Plants is by Doctor *Tournefort* ranged in the Second Section of the ſecond Claſs, intitled, *Herbs with a Flower of One Leaf, ſhaped like a Salver, whoſe Pointal afterward becomes the Fruit.* Mr. *Ray* places it in his Nineteenth Claſs of Plants, intitled, *Herbs with a Flower of One Leaf, which is ſucceeded by veſicular Fruit.* Doctor *Linnæus* places it in his Fifth Claſs of Plants, intitled, *Pentandria Monogynia*; the Flowers having Five Stamina, and a ſingle Pointal.

The Species here repreſented are,

Fig. 1. ANDROSACE *vulgaris latifolia annua. Inſt. R. H.* 133. Broad-leav'd annual Androſace. This is the Firſt Species mentioned in the *Gardener's Dictionary*, where the Characters of the Genus are deſcribed. *a*, repreſents the Umbel of Flowers; *b*, a ſingle Flower ſeparated from the *Involucrum*; *c*, the expanded Flower in the *Involucrum*; *d*, the intire Fruit, riſing upon the *Involucrum*; *e*, the Veſſel open, ſhewing the Seeds.

This Plant is by *Caſpar Bauhin* titled, *Aſter aquis Androſace dictus major. Pin.* 251.; and by *John Bauhin*, *Androſace Matthioli altera*, Vol. III. 568.; and by Doctor *Linnæus*, *Androſace perianthio maximo. Hort. Upſal.* 36. *Spec. Plant.* 141. i.e. Androſace with a large [illegible] to the Flower.

Fig. 2. ANDROSACE *folio lanceolato dentato glabro, pedunculis ſimplici umbella brevioribus. Lin. Flor. Suec.* 160. Androſace with ſmooth Spear-ſhaped Leaves, an angular *Involucrum*, ſhorter than the Flower.

This Plant is biennial, ſeldom continuing after the Seeds are perfected; the Leaves grow cloſe to the Ground, which are ſmooth, and ſometimes are ſlightly indented on the Edges; but for the moſt part they are intire: From the Centre of the Leaves there are Three or Four naked Stalks ariſe, which grow about Four Inches high, each ſupporting a looſe Umbel of Flowers, which ſtand upon long ſlender Footſtalks; they are White, and conſiſt of One Leaf, ſpread open, and are divided into Five Parts at the Brim: Theſe are ſucceeded by veſicular Seed-veſſels, which open in the Middle, having One Cell, which is replete with roundiſh Seeds.

The Firſt Sort grows naturally in *Aſpria* and *Hungary*, amongſt the Corn; and the Second is an Inhabitant of the Mountains in *Ruſſia* and *Siberia*.

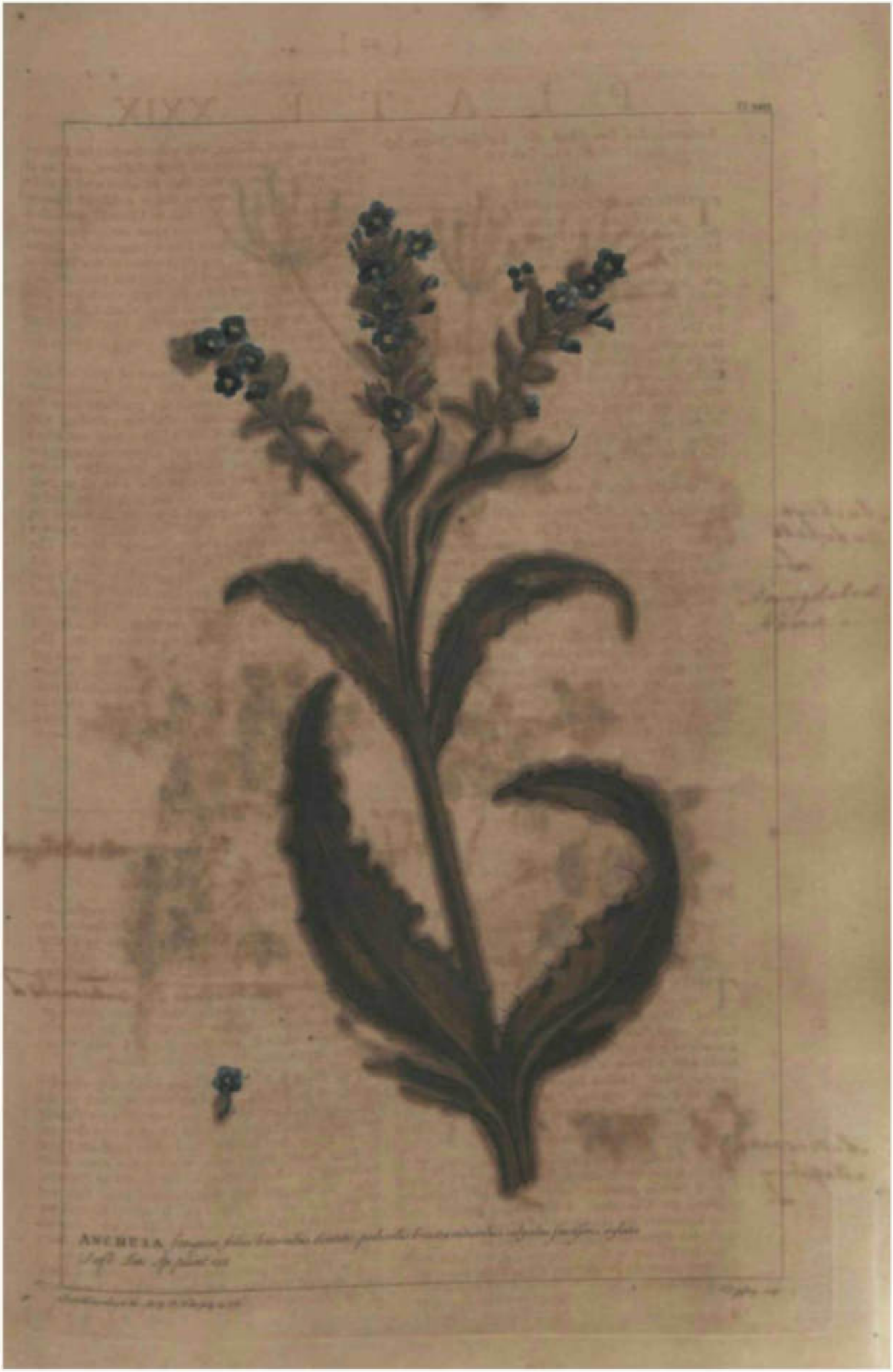


PLATE XXXI.

ANEMONE, *Tourn. Inst. R. H.* 275. *Tab.* 147. *Raii Method. Plant.* 69. *Lin. Gen. Plant.* 614.

ANEMONY, *or* EMONY.

THIS Genus of Plants is by Doctor *Tournefort* ranged in the Seventh Section of his Sixth Class, intituled, *Herbs with a Rose-flower, whose Pointal turns to a Fruit composed of many Seeds collected in a Head.* Mr. *Ray* places this Genus in his Fifteenth Class of Plants, which he titles, *Herbs with many naked Seeds succeeding each Flower*; And this is in the Seventh Section of that Class, which includes those Plants with naked Flowers. Doctor *Linnæus* places it in his Thirteenth Class, intituled, *Polyandria Polygynia*, i. e. Plants whose Flowers have many Stamina and Germina: To this Genus he adds the *Anemonoides* of *Boerhaave*, the *Hepatica* of *Dillenius*, and *Pulsatilla* of *Tournefort*, making them only different Species of the same Genus: But as the *Hepatica* has a Three-leav'd Empalement to the Flower, and the *Pulsatilla* has a many-leav'd Empalement, so they should not be joined with the *Anemone*, which has a naked Flower.

The Species here represented is,

ANEMONE *tenuifolia multiplex, miniata flores foris quotannis novo*, *H. R. Par.* Narrow-leav'd Double Anemony, with Flowers which vary in their Colour annually; called by the *French Cemelione*, and in *England* the *Butterfly Red*, or *High Admiral*. *a*, represents the outer Petals of the Flower, which are much broader than those which occupy the Middle, as at *b*, which are narrow, and are what the Florists call the Thrum of the Flower.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*, under the Title of *Anemone*.

There are a great Variety of these Flowers in the Gardens of the curious, which have been obtained from Seeds: These differ in their Colour, and the Size of the Flowers; and are accordingly distinguished by the Florists: But as these are only accidental Varieties, arising from the Seeds of the same Flower, they are not esteemed real Differences by Botanic Writers, who only mention the Broad and Narrow-leav'd Sorts as Two distinct Species.

The Sort here represented was some Years past in great Esteem, the Flowers being very large and double; and these would every Year vary so much in their Colours and Stripes, that if an intire Bed of these Roots were planted, there would such a Variety appear in the Flowers, as those who were not skilled in Flowers might easily be deceived, in supposing them so many different Flowers; some of the Flowers being of a deep red Colour, with scarce any Stripes of other Colours; and other of the Flowers being greatly striped thro' every Petal with white; and the several Gradations from plain to those which are more white than red, will be found in this Flower, where there are any Number of Roots planted.

The Single, or (what the Florists call the *Poppy Anemony*) are those which produce Seeds; for the double Flowers never have any; therefore, in order to obtain good Flowers, the Seeds should be saved from the best of those with single Flowers, some of which have a double Range of Petals surrounding the Organs of Generation. From the Seeds of these more double Flowers may be expected, than from such as have only a single Range of Petals; and those whose Flowers are well coloured, should also be preferred. The blue and purple-colour'd Flowers are now most esteemed by the Florists; but a Mixture of the red and striped Flowers will greatly set off the others.

These Flowers grow naturally in the Islands of the *Archipelago*, and in several other Parts of the East, where the Borders of the Fields are bedecked with them in the Spring, making a very gay Appearance during their Continuance in Beauty. From thence the Roots have been transplanted into the Gardens in *Europe*; and from their Seeds the great Variety, which is at present to be found in the Gardens of the Curious, has been obtained. These Flowers are in Beauty in *April* and *May*, and the Seeds ripen in *July*.

PLATE XXXII.

ANGUINA, *Michel. Nov. Gen.* 12. *Tab.* 9. *Cucurbita, Hort. Pis. Tab.* 21. *Trichosanthes, Lin. Gen. Plant.* 966.

SNAKE-GOURD.

The Characters are,

It hath Male and Female Flowers on the same Plant, as the Gourds, Cucumbers, and Melons, have: The Male Flowers have an Empalement of one Leaf, which is divided into Five Parts at the Top: The Petals of the Flower consists of many Filaments or Threads, as at Letter b, *having Three Stamina in the Center: The Female Flowers have a reflexed Empalement of One Leaf, cut into Five Parts, as at Letter* a; *in the Centre of which is the* Germen, *which afterward becomes a long twisted Fruit, represented at* c, *and is divided in Three Cells, which contain many flat Seeds.*

This Plant is figured by *Micheli*, in his *Nova Genera Plantarum*, *Tab.* 9. who applied this Title to the Genus, in the Catalogue of the Garden at *Pisa*: It is also figured under the Title *Cucurbita sinensis fructu longo anguino vario flore candido, capillamentis tenuissimis ornato*; but Doctor *Linnæus* has changed the Title of this Genus to *Trichosanthes*, and Places it in his Twenty-first Class of Plants, intituled, *Monœcia*, there being Male and Female Flowers on the same Plant. According to Mr. *Ray*'s Method, this Genus must be placed in his Sixteenth Class, which he titles *Herbæ Pomiferæ*, i. e. Apple-bearing Plants. It must be placed in the Seventh Section of the First Class of Plants in *Tournefort*'s Institutions, which is composed of the cucurbitaceous Plants. These have bell-shaped Flowers of One Leaf, whose Empalement turns to a Fruit, for the most part fleshy.

It is an annual Plant, which muſt be raiſed on a Hot-bed early in the Spring; and when the Plants are of a proper Strength to remove, they muſt be tranſplanted on a new Hot-bed, and treated in the ſame manner as early *Cucumbers* and *Melons*; with which Management the Plants will ripen their Fruit in *Auguſt* or *September*, but unleſs they are brought forward in the Spring, they will not perfect their Seeds in *England*. It is a Native of *China*, from whence the Seeds were brought, which have been cultivated in ſome curious Gardens in *Europe*, as a ſingular Plant: But the Fruit being of no Uſe, there are few of the Plants raiſed in *England*, except in Botanic Gardens, for Variety.

PLATE XXXIII.

Anguria, *Tourn. Inſt. R. H.* 106. *Tab.* 35. *Citrullus Rail Method. Plant.* 70. *Cucumis*, *Lin. Gen. Plant.* 907.

The Water-Melon.

THIS Genus of Plants is ranged in the Seventy Section of *Tournefort*'s Firſt Claſs of Plants, who makes the diſtinguiſhing Character of it to conſiſt in the Plant's having divided Leaves, and an edible Fruit: In all other Reſpects it agrees with the other cucurbitaceous Plants. Mr. *Ray* places the *Anguria* in the Seventeenth Claſs of Plants, which he ſtiles *Herbæ Pomiferæ*, i. e. Apple-bearing Herbs; but Doctor *Linnæus* joins this with the *Cucumber*, making them of the ſame Genus.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here repreſented is,

Anguria Americana fructu eduliſ oblongo, *Inſt. R. H.* 107. i. e. *American* Water-Melon, with a prickly eatable Fruit. Doctor *Plukenet* has given a Figure of this Fruit, with the Title of *Cucumis ſylveſtris Americanus*, *Angurie folio*, *fructu ovi figurâ & magnitudine*, *ad maturitatem pallido*, *ſpinoſis tuberculis monſtrioſe inſtar muricato*, *Phyt.* 170. *f.* 3. Sir *Hans Sloane*, in his *Catalogue of Jamaica Plants*, calls it, *Cucumis Angurie folio latiore aſpero*, *fructu minore candido*, *ſpinis ſimplis muricato*, p. 103. Doctor *Linnæus* titles it, *Cucumis foliis palmato-ſinuatis*, *pomis ſub-ovatis echinatis*, *Hort. Upſal.* 251. *Spec. Plant.* 1011. This is the Eighth Sort mentioned in the *Gardener's Dictionary*.

The Fruit of this Sort is eaten when green by the Inhabitants of the *American* Iſlands, as Cucumbers, where the Plants grow naturally without Culture, but they are greatly inferior to the Cucumbers which are raiſed in *Europe*. The Fruit is oblong as large as a Pullet's Egg, and in its Shape like it, but the outer Coat or Rind is cloſely ſet with blunt Prickles, ſomewhat like the Skin of an Hedgehog. When the Fruit is expoſed to the full Air, it is of a dark-green Colour, but thoſe of them which are cloſely covered either by the Leaves of the Plants, or Weeds growing among them, are as white as the white Cucumber, which occaſioned Sir *Hans Sloane* giving it that Epithet.

Moſt of the other Species of this Genus have large Fruit, which are ſerved up to the Table in Deſert, when ripe, as the Melon, and in hot Countries the Fruit is greatly eſteemed for its cooling Quality, the Pulp reſembling that Ice; and when they are gathered in a Morning, before the Sun has warmed them, and kept in a cold Situation, the Pulp is almoſt as cold as Snow, and hath a Sweetneſs like Ice-water ſugared. And their Fruit may be eat in Plenty with great Safety, by Perſons in Fevers, and are found to be very refreſhing and wholeſome; but in *England*, where the Weather is ſeldom ſo hot as to make their cold Fruits deſirable, there are few Perſons who eſteem them, therefore they are cultivated in few Gardens here, the Muſk-Melon being greatly preferred to them, as their Flavour is much richer; and when they are good, ſeldom occaſion any Diſorder to the Perſons who eat them in Moderation. The Plant here figured is rarely delivered in the *Engliſh* Gardens, unleſs for the ſake of Variety. It grows naturally in the warm Parts of *America*, from whence their Seeds were brought by ſome curious Perſons, which have been ſown in Botanic Gardens, where the Plants are annually raiſed, to add to their Collections.

PLATE XXXIV.

Asii, *D. Marchan. Memoir de l'Acad. Scien.* 1718. *Emerus Tourn. Inſt. R. H.* 630. *Tab.* 418. *Indigofera Lin. Gen. Plant.* 794.

Indigo.

THIS Plant is by Doctor *Tournefort* joined to the *Emerus*, or *Scorpion-Senna*; and in this he is followed by other Botanic Writers: Few of them having ſeen the Plant in Flower, had no Opportunity to examine the Characters. *John Bauhin* ranges it with the *Colutea*, or *Bladder-Senna*; and *Caſpar Bauhin* joins it to the *Iſatis*, or *Woad*, from its Property of making a blue Dye; nor was this Genus properly diſtinguiſhed from the others of the ſame Claſs of Plants, till Mr. *Marchant* gave a Memoire to the Royal Academy of Sciences at *Paris*, in the Year 1718; to which he has given a very minute Deſcription of every Part of the Plant.

It ſhould be placed in *Tournefort*'s Tenth Claſs of Plants with Papilionaceous Flowers, but he has ſeparated the Trees and Shrubs from the Plants of this Claſs, and placed them at the End of his Herbaceous. Doctor *Linnæus* places it in his Seventeenth Claſs of Plants, intitled, *Decandria*, the Flowers of this Claſs having Ten Stamina, Nine of which are joined together, and the other ſtanding ſingle at a ſmall Diſtance from the other. As Mr. *Marchant* had given the Title of *Aſii* to this Genus, which Name the Inhabitants of moſt of the Countries where it grows naturally had applied to it, Doctor *Linnæus* has rejected it, becauſe it is a barbarous Name; and has given it the Title of *Indigofera*.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The


ANGURIA.

ANNONA *foliis lanceolatis, fructibus ellipticis* Linn. Sp. plant. 757

The Species here represented is,

Anil, sive Indigo Americana, siliquis in falculæ modum incurvis Marchant Mem. Acad. Reg. Scien. 1718. American Indigo, with crooked Pods, shaped like a Sickle. a, represents the Flower with its Two Wings expanded; b, the Pod; c, the Seeds taken out of the Pod.

This is by Tournefort titled, Emerus Americanus siliqua incurva, Inst. R. H. 650. John Bauhin calls it Colutea foliis Anil nominatum, Hist. 1. 384. Caspar Bauhin, in his Pinax, titles it Isatis Indica, foliis Rorismarini, Glasto affinis, p. 113. and in the Hortus Malabaricus, Vol. I. p. 101. it is described under the Title Ameri, which is the Malabar Name for this Plant. Sir Hans Sloane, in his Catalogue of Jamaica Plants, titles it, Colutea affinis fruticosa, floribus spicatis purpurascentibus, siliquis incurvis, e cujus tinctura Indigo conficitur, p. 141. Doctor Linnæus, in the Flora Zeylanica, calls it Indigofera leguminibus arcuatis incanis racemis foliis brevioribus, p. 275. This is called in the West-Indies Guatimala Indigo, to distinguish it from another Sort which approaches near to it, and is in the Islands of America called Wild Indigo, but is not esteemed so good for making Indigo as the other. There is also another Sort very different from either of these, which is found wild in South Carolina, and was much cultivated by the Indigo Planters there, when they began to raise the Indigo first; but, upon Trial, they found it would not produce Indigo in so great Quantity as the Guatimala, so they have abandoned that Sort, and now cultivate only that here figured. The Carolina wild Sort hath a perennial Root, but an annual Stalk, which decays in Winter; the Leaves are so much thinner on the Branches, and are not so succulent as those of the manured Sort; yet from this wild Sort, as also from Two other Species, which grow naturally in India, the Inhabitants of that Country make good Indigo; and formerly there was one Species of Anonis used in America for this Purpose.

And I am persuaded there are several other Plants which will afford this Dye, tho' perhaps not in so great Quantity as this.

As the Inhabitants of Carolina have taken to the Culture of Indigo, we may hope in a few Years this Branch of Trade may return again to the British Colonies, which hath been for several Years past almost engrossed by the French; and if proper Care is taken by the Planters in the Management of this valuable Commodity, there can be no doubt of their having the greatest Part of this Trade to themselves, since they may carry it on at a less Expence, than it can be done in the Sugar Colonies. But there are Two Instances in which they have always failed, since they began the Culture of Indigo; the first is, in sowing the Seeds too close, whereby the Plants are drawn up tall, and have a greater Proportion of Stalks than Leaves; and the Stalks, consisting chiefly of Fibers, afford but a small Quantity of Indigo; the other is, in letting the Plants stand too long before they are cut for Use, whereby most of the large Leaves are all decayed or fallen off, and the Plants become woody; so that there is but a small Part of the Plant dissolved by the Fermentation in the Vats; whereas if the Plants have sufficient Room to grow, they will be furnished with Leaves from the Ground upward, which will be fat and succulent; and if the Herb is cut as soon as any Flowers appear on the Plant, the Stalks will then be soft, so that after they have passed the Fermentation in the Vat, there will but a small Part of the Plant remain undissolved, and a much greater Quantity of Indigo produced from the same Quantity of the Plant, which will be of a finer Colour, and bear a greater Price in the Markets of Europe. As I have given the whole Process of making Indigo in the Gardener's Dictionary, I shall not repeat any Part of that in this Place; but have taken the Liberty of mentioning the Two Articles above, believing they may not only be of Use to the Indigo Planters, but, if rightly attended to, may become a national Benefit.

PLATE XXXV.

Annona, Lin. Gen. Plant. 613. Guanabanus, Plum. Nov. Gen. p. 43. Tab. 10. Anona Raii Meth. Plant. 151.

There are many Species of this Genus, which are Natives in the warm Parts of America, Africa, and Asia; some of which are esteemed for their Fruits, which are usually served up at the Tables of the principal Inhabitants of the Countries where they grow; and are by the English in America distinguished by the following Titles; viz. Custard-Apple, Sour-Sop, Sweet-Sop, Water-Apple, &c.

THIS Genus of Plants is by Doctor Linnæus ranged in his Thirteenth Class, intitled, Polyandria Pentagynia. The Plants ranged in this Class should have many Stamina and Germina in each Flower, which is not so in those Species of this Genus which I have examined; but as the Characters which Doctor Linnæus has given to this Genus are taken from Father Plumier's Figures, he is excusable for the Mistake. In the Centre of each Flower there appears to be a great Number of Summits surrounding the Germen, where there is a trifid Style; and in some of the Species there are Three Stamina, which rise above the others, but in the Species here figured these are wanting.

Father Plumier, who follows Tournefort in his Method of classing the Plants, places this in the Class of Plants with a Rose-flower, whose Pointal becomes a soft fleshy Fruit, including many hard Seeds.

Mr. Ray ranges it with the Apple-bearing Trees, whose Fruit are not umbilicated, and have a soft Pulp.

The Two Titles which have been applied to this Genus of Plants, are both barbarous Names of the Countries where they naturally grow, therefore have been indifferently used by the Writers on Natural History: But this of Annona being less harsh than Guanabanus, Doctor Linnæus has chosen to make use of it, rather than the other.

The Species here represented is,

Annona foliis lanceolatis, fructibus trifidis, Lin. Sp. Plant. Annona with Spear-shaped Leaves, and two or three Fruit succeeding each Flower on the same Footstalk; commonly called, by the Inhabitants of North America, Papaw. a, represents the Flower composed of Three Petals, which is surrounded by a Three-leav'd Empalement; b, shews an intire Fruit; c, is a Fruit cut through the Middle, shewing the Seeds d, lying in a Row in one Side of the Fruit.

The

The CHarnfters of this Genus arc exhibited in the *Gardtntfs D'ttlittiary,* under the Article *Cuumthi*ae.

This Species is figured arid defcribed *I* y Mr. Catefby, in his Hiftoryof *Carolina,* and the *Baba* • a Iflands, under the Title of *Amxa fntlls fostji.* laevi fcrotum Arie*tis refnente,* Vol. II. p. 8;. he 11 confounds it with other Pla ?s which he found growing on the Bahama Iflands; but doth not take any Notice of its being found in *Vir-gim'a* and *Maryland-,* tW it has been found in both thefe Countries! and the Seeds have fi equently been brought *toEx£laKd, hy* the Title of *Papaw-Tree.* Mr. Catefby fays, that this T«e frWorn a.rows more than Ten or Twelve Feec high in that Country, with Stems as large as the Small of a Ma>r I eg; fo that it is rather a Shrub (han a Tree, efpeciilly *i*s it often rifes with feveral Stem* from the Root. H< alfo mentions that the Fruit is felctom eaten but b. the Negroes. In his Defcription cf the J-lower he h» cer. ainly miftaken the Colour, which *he* fays is of a ydlon ifh Green; whereas all thefe Trees which have produce: Flowers in *England,* are very different, Iving of a rufty purple Colour, as they are here repreftnteoi and there cat* be no doubt of their being die lime Species with that he h. as defcribed; the Fruit and Seeds being very different from all the other Species of this Genus in Shape; fo that it is very eafily diftinguifhed.

This is the only Species of the Genus, which will live in the open Air in *England.* All the other Species which are yet known being too tender to live in this Country, unlefs they are preferv'd in Stoves, the largeft Plant of this kind, which I have feen, is growing in the curious Garden of his Grace the Duke of *Argyle,* at *Whitton,* near *Hounflow,* which has produced Flowers for fome Years paft; but our Summers are not warm enough for the Plants to produce Fruit in *England.* There are alfo fome other Trees of this kind in the Gardens near *London,* which have flowered, but are of a fmaller Growth. The Flowers are produced in *England* the Beginning of *May,* foon after the Leaves come out.

It is a Native of the *Bahama* Iflands, of *Carolina, Maryland,* and *Virginia,* growing ufually in low, moift, Places, where they are fheltered from violent Winds. In *England* thefe Plants are apt to fuffer by Cold, while young; but after they have obtained Strength, they will refift the Froft, and thrive very well in the open Air, if they are planted in a fheltered Situation.

P L A T E XXXVI.

Anonis ... *R. Ff.* 408. *Tab.* 219. *Raii Me-tbed. PUxt.* 107. Ownw, *Lin, Ct>:. Plant.* 772.

Reft-Harrow-, Canjwri, *Put] Whin-,* and in fomc Countries it ji cailed *Fttrzt.*

DOCTOR *Tnmtfert* plac« this Genus in his Tenth ClaJi of Pljnci with a papilionaceous Flower. Mr. *Rtr/* places it in his Twenty-firft Clafs of leguminous Plants with a'papilionaceous Flower. Dr. *Linnaeus* ranges it in his Seventeenth Clafs of Plants, intituled, *Diadelphia Decandria*; in which Clafs are included all the leguminous Plants with a Pea-flower. The Two Titles of *Anonis* and *Ononis* are indifferently ufed by the *Latin* Writers on Botany.

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented is,

Anonis *purpurea verna fruticofa perennis fruticofa flore rubro amplo. Mor. Hift.* 2. 170. Early fhrubby Purple Reft-Harrow, with a large Red Flower. *a,* reprefents the Fore-part of the Flower to the View; *b,* fhews the hinder Part, with the Empalement; *c,* the Pod, which fucceeds the Flower. This is the Sixth Species mentioned in the *Gardener's Dictionary.* It is called by *Dodart,* in his Memoirs, *Anonis purpurea fruticofa non fpinofa*; and in the Memoirs of the *Royal* Academy of Sciences at *Paris, Anonis montana perennis purpurea fruticofa.* Doctor *Linnaeus* has titled it, *Ononis floribus paniculatis, pedunculis fubtrifloris, ftipulis vaginalibus, foliis ternatis, Hort. Cliff.* 355.

This is a very beautiful Shrub, which feldom rifes above Two or Three Feet high in *England*; but divides into many Branches, which fpread near the Ground. At the Extremity of every Branch there are Spikes of large red Flowers produced about the Beginning of *May*; at which Time thefe Shrubs make a fine Appearance; and are one of the principal Ornaments of the Gardens at *Paris* at that Seafon: But in *England* it is far from being common, and only to be found in fome curious Gardens, which may have been occafioned by over Care; for it is a very hardy Plant in refpect to Cold; but is with Difficulty preferved in Pots, being One of thofe Sort of Plants which rarely thrive, unlefs they are planted in the full Ground: It delights in a middling Soil, neither too ftrong, nor over-light; and in an Eaftern Expofure, where it may have but half Sun, the Plant will thrive well, and annually produce Flowers, and perfect Seeds. It commonly flowers in *May,* and the Seeds are ripe in *July.* This Plant is eafily propagated by Seeds, which fhould be fown early in *March,* on a Bed of middling Earth, expofed to the Eaft. The Plants will come up in about Six Weeks after, but fhould not be removed till the following Autumn.

The common Sort of *Anonis,* which is mentioned as a medicinal Plant, is a very troublefome Weed, where it hath once gotten Poffeffion of the Ground; the Roots of it fpreading very wide; and are fo tough, as fcarce to be cut or broken by the Plow; which occafioned the Name of *Reft-Harrow,* and *Refta-bovis.* In fome of the midland Counties it is called *French Furze*; but how that Epithet came to be applied to this Plant, is hard to determine.

ANONIS [illegible]

PLATE XXXVII.

ANONIS *viscosa spinis carens lutea major*, C. B. P. 389.

Great yellow viscous Rest-harrow, without Spines.

THIS is the *Natrix Plinii* [illegible] *Anonis mitis flore luteo*, [illegible] *lutea*, *Hort. Eyst.* [illegible] *non spinosa lutea Tabern. Icon.* 439. and *Anonis lutea non spinosa Dalechampio natrix*, *J. B.* 2. p. 393. Doctor *Linnæus* titles this Plant, *Ononis pedunculis* [illegible] *terminatis foliis ternatis*, *Hort. Cliff.* 358. and he has joined to this the *Anonis viscosa spinis carens lutea minor*, *C. B. P.* supposing them to be the same Plant, but they are very different from each other. The Flowers of the Plant here figured being pendulous, whereas those of the other stand erect; the Root also of this Plant is perennial, but the Stalks are annual, dying to the Ground every Winter. But the other Plant is biennial, the Root seldom continuing longer than Two Years, and often perishes, soon after the Seeds are perfected, in the first Winter. The Stalks of this grow much taller, the Flowers are much larger, and stand upon longer Foot-stalks than the other, and the Appearance of the Plant, when in Flower, is much more [illegible] in the Flower-garden; whereas the other is only preserved in Botanic Gardens for Variety. *a*, shews one of the [illegible] Flowers on its Back-side. *b*, represents the Fore-side of the Flower, shewing its large Standard, with the Two Wings and the Keel.

This is the Twentieth Sort exhibited in the *Gardener's Dictionary*, the Flowers are of a beautiful yellow Colour, growing pretty close together, on long Panicles: The time of its flowering is in *June* and *July*, and the Seeds ripen the Beginning of *September*. The Roots of this Sort do not bear transplanting well after the First Year; for when they begin to be hard and woody, they seldom put out new Fibres, if they are removed; so they should be transplanted the first Autumn to the Places where they are to remain. If the Soil is dry, the Roots will continue several Years; but in wet Ground they are apt to rot in Winter. This Plant is a Native in the South of *France*, *Spain*, and *Portugal*, growing in their Arable Land.

PLATE XXXVIII.

ANTHEMIS, *Lin. Gen. Plant.* 870. *Chamæmelum*, *Shaw. Sp. Afr.* 138. *Pyrethrum C. B. P.* 148. *Raii Hist.* 353. [illegible]

THIS Genus of Plants is, by Doctor *Linnæus*, ranged in his Nineteenth Class, intitled, *Syngenesia Polygamia superflua*. *Caspar Bauhin* makes this a distinct Genus; so doth Mr. *Ray*, in his History of Plants, where he copies from *Caspar Bauhin*. *Tournefort* hath not mentioned this Plant in his Institutions; though it is hardly possible it should escape his Knowledge, as he travelled through great Part of *Spain* and *Portugal*, in search of Plants; in both which Countries it is very common in Vineyards, and other cultivated Lands. This Plant, according to *Tournefort's* Method, should be placed in the Genus of *Buphthalmum*.

The Species here delineated is,

ANTHEMIS *caulibus simplicibus unifloris decumbentibus, foliis pinnato-multifidis*, *Hort. Cliff.* 414. Pellitory of *Spain*. *Caspar Bauhin* titles it, *Pyrethrum flore bellidis*, *Pin.* 148. and *Lobel* calls it, *Pyrethrum officinarum*. *Gesner* calls it, *Pyrethrum Germanicum*, to distinguish it from Two other Plants, which then had the Appellation of *Pyrethrum*, which were both umbelliferous Plants; but, being of an acrid Taste, were supposed to have the same Quality of discharging cold Rheums, so were classed according to their supposed Virtues, which was the most common Method among the old Botanic Writers.

According to Mr. *Ray's* Method, this Plant should be placed in his Genus of *Chamæmelum*: And Doctor *Shaw*, who found this Plant growing wild in *Africa*, has given it the following Title, *Chamæmelum speciosi flore, radice longa fervida*, p. 138. *i. e.* Camomile with a specious Flower, and a long warm Root. Doctor *Linnæus* has adopted the Title of *Anthemis*, which is an old Name that hath been applied to Camomile, and hath dropped that of *Chamæmelum*; and he has added most of the Species of *Buphthalmum* to this Genus. In the Synonyma which he has joined to this Plant, he adds the *Buphthalmum Creticum Cotulæ folio Breyn. Cent.* which is a very different Plant from that here figured. For this hath a perennial Root, which runs deep into the Ground, shaped like a Carrot, but *Breynius's* Plant is an annual; the Stalks are branching, and stand erect, the Flowers growing at the Extremity; whereas those of the Pellitory trail upon the Ground, and are single, each having One Flower. The Plant figured by *Breynius* is the *Buphthalmum Cotulæ folio*, *C. B. P.* which is a medicinal Plant, standing in most of the Dispensaries under that Title: And this Plant is under the Title of *Pyrethrum* in the Dispensaries; the Roots being imported from abroad, which is the only Part of the Plant in use. The Characters are exhibited in the *Gardener's Dictionary*, under the Title *Buphthalmum*. *a*, represents the Front of the female Flower, which is stretched out on one Side like a Tongue. *b*, shews the hinder Part of the same, which is of a purple Colour: These compose the Rays or Border of the Flower. *c*, shews one of the hermaphrodite Flowers, which compose the Disk. *d*, the double Style. *e*, the Five Stamina, which are in each of the hermaphrodite Flowers. The Roots of this Plant run down a Foot or more into the Ground, are in Shape like those of Carrot, about as big as a Man's Finger, of the Colour of Horse-radish before the Roots are washed, and are white within, of an acrid biting Taste. From the Root arise Stalks about a Foot or more in Height, which are garnished with fine cut Leaves, somewhat like those of *Stinking Mayweed*, but narrower. At the Top of each Branch is produced one large radiated Flower, like those of Camomile, but much larger, being white within, and of a purple Colour on the Outside. When the Flowers begin to decay, and the Seeds are formed, the Weight of the Heads

g»ner»lly decline* the Stalks to the Ground j and if the jcifon at that time proves mostl, the Seeds of this Plant do rstrety ripen in *England i* tor tlie 1: mbryo's of the Seed are each included in a fcaly Cover, in so whi the Wet gets, the Embryo's periih •, *(a* that there are few Yrars when the Seeds of this come to Maturity in *Belaud,* which occafions its being very rare in the Gardens here. The firft time I mtled ifiU Plant wis from Seeds which were picked out of *Raijim.* Tins was in 173: j and the Year after, the Plants produced Seeds, which ripened well •, *h* that I had a Supply of them to diftribure; and the Plants which were raifed from thefe Seeds continued feveral Yean, but they did not perleft their Seeds; fo that, in the Winter 175 j, the old Roots being deftroyed, the Plant is *i prefent* loit in *England.*

This Plant will thrive very well in the open Air in *£nfla*.l,* and will R-fift the Cotii 01 our cjrdinarj- "Winters, provided the Seed* arc fowo upon a dry Soi) \ for tnwetGroii -i will jwri;' where the 1' for u t •on, like t planting well. It lovej a lo u fufr be 1'bnti icidorr. <

It flowers ing, or when tin Seeds are forming, they feldom come to Maturity. The Flower-ftems rife about One Foot high, each having One Flower on the Top, fhaped like tbofe i of Camomile, but much larger, being of a pure whitsden, duri: withinfide, and of a purple Colour on the outmiy be eat when they J fo that they make a pretty Appearance in the Garthe time of their flowering. The Roots up for Ufe toward the End of *Oftober,* re not vegetating.

P L A T E XXXIX.

IS-THIRCCUM, *Lin.* Gm. *Plant.* 380. *Bulhint &x. tiit. friar.* 169. *Flcr. ljjd. prsi.* 33. *PbaUngttm Infi. R. H. 3/6$. Tat.* 103. *Ra,i Melted.* u 8.

SPIDER-WORT.

TIll IS Genus of Plants is, by Dt^or *Ur,-* placed in hi* Sixth Claf* of Plimi, inti- *;a Momfyxiai* the Flower* having ej Stamina, and One Style. He diftinguifhes dve Specie* «f this Gcnui from rhofe of *JfpUdtLtu,* bv the Pet*li of the Flowcii being fpreid open, and the Filanv being hairy. *Ttvnufsrt* mikes the Difference between *Phakngium* and *4fpbodtiks* to confift in ihc ! the former having Six Petals, and thofr of (he i are only cut into Six Pans ar [he Top, but ire juiiJa at the Bottom; *fo* that it is *x* Flower of One 1 *he* dillinguifhe* the *phalan^iitm* from *Ormthtgdmm* by the Root, the Utter having bulbous Root*, tliofe of the former have fibrous ROOT Mr. *Hay'i* diftjnguifhing Clurjiter ut rlus Genui.

The Species here rtprefented aft,

Fig. 1. ANTHiaictiM *acaidt, fetus carneji: :* 1 *ifi k$mii loxu ^fri* Sulkt, taper rklhy IJCJV Spikr- of Flowers• ". repr.; raker) from the Spike. *, a Secd- tlve SettU. This approaches near to the *jtntjii fvbuUtis fimiHrtiibti ftrittts, Hm. Upjti.* 8j. but tite Lt*ves of tins 4rc much longer, round ; iiorr than twite ihe Length of thr aitd each Flower hit a mi, that whoever fre» the i tJvif bong are known '- Vran. ver*) .

conftintly flower thofr v they v r Itowering. >B 1 .'«/ iii Ijr*V) dedimng 1 Flo* out < placed th- fbon flow; continued to produce Flowers moft Part of the Year.

This Plant will .Jrive well in *England,* unlefs the Pots are plunged into an Hot-bed of Tanners-bark, and the Air kept up to the Heat afligned for the *Ana- H4>.* I in this Situation the Plants will thrive, and pro- dute Plenty «t Ktuwcn, *tni* perfect their Seeds, which,

generally declines the Stalks to the Ground; and if the Season at that time proves moist, the Seeds of this Plant do rarely ripen in England; for the Embryo's of the Seed are each included in a scaly Cover, into which if the Wet gets, the Embryo's perish; so that there are few Years when the Seeds of this come to Maturity in England, which occasions its being very rare in the Gardens here. The first time I raised this Plant was from Seeds which were picked out of Raisins. This was in 17[illegible], and the Year after, the Plants produced Seeds, which ripened well, so that I had a Supply of them to distribute; and the Plants which were raised from these Seeds continued several Years, but they did not perfect their Seeds; so that, in the Winter 1753, the old Roots being destroyed, the Plant is at present lost in *England*.

This Plant will thrive very well in the open Air in *England*, and will resist the Cold of our ordinary Winters, provided the Seeds are sown upon a dry Soil; for in wet Ground the Roots will perish with the first Cold of Autumn. The Seeds of this Plant should be sown where the Plants are to remain; for as they have long Tap-roots, like the Carrot, so they do not bear transplanting well. It loves a loose sandy Soil, where there is sufficient Depth for the Roots to run down; for in a shallow Ground the Plants seldom continue longer than One Year.

It flowers in *June*, and the Seeds ripen in *August*; but if the Season proves moist, at the Time of its flowering, or when the Seeds are forming, they seldom come to Maturity. The Flower-stems rise about One Foot high, each having One Flower on the Top, shaped like those of Camomile, but much larger, being of a pure white withinside, and of a purple Colour on the outside, so that they make a pretty Appearance in the Garden, during the time of their flowering. The Roots may be taken up for Use toward the End of *October*, when they are not vegetating.

PLATE XXXIX.

ANTHERICUM, *Lin. Gen. Plant.* 380. *Bulbine Lin. Edit. prior.* 369. *Her. Lugd. Bat.* 33. *Phalangium Tourn. Inst. R. H.* 368. *tab.* 193. [illegible]

SPIDER-WORT.

THIS Genus of Plants is, by Doctor *Linnæus*, placed in his Sixth Class of Plants, intituled, *Hexandria Monogynia*; the Flowers having each Six Stamina, and One Style. He distinguishes the Species of this Genus from those of *Asphodelus*, by the Petals of the Flowers being spread open, and the Filaments being hairy. *Tournefort* makes the Difference between *Phalangium* and *Asphodelus* to consist in this; the Flowers of the former having Six Petals, and those of the latter are only cut into Six Parts at the Top, but are joined at the Bottom; so that it is a Flower of One Leaf. And he distinguishes the *Phalangium* from *Ornithogalum* by the Root, the latter having a bulbous Root, and those of the former have fibrous Roots. Which is also Mr. *Ray's* distinguishing Character of this Genus.

The Species here represented are,

Fig. 1. ANTHERICUM *[illegible]* Spider-wort, without Stalks, taper fleshy Leaves, and very loose Spikes of Flowers. *a*, represents a single Flower, taken from the Spike. *b*, a Seed-vessel. *c*, One of the Seeds. This approaches near to the *[illegible]*, *Hort. Upsal.* 88. but the Leaves of this are much longer, rounder, and of a glaucous Colour. The Spike of Flowers is more than twice the Length of the other, and each Flower has a much longer Foot-stalk, so that whoever sees the Two Plants, cannot doubt of their being different Species; especially when they are known to keep their Differences when raised from Seeds, as [illegible] Years the Plant here figured has done; for I have raised several of the Plants from Seeds the Two last Years, which have not in the least varied from their Parent. And the other Sort I have sown the Seeds of several Years, without having any Variation in the Plants. I received the Seeds of this Plant from the *Cape of Good Hope*, in the Year 1751; and the Plants which came up flowered, and produced Seeds the next Spring, and have every Year produced Plenty of Seeds since. The Plants constantly flower twice a Year, in *April* and *May*, and again in *August* and *September*. The Spikes of Flowers, which appear in the Spring, are always succeeded with Seeds, which will ripen well; but those which appear in the Autumn do rarely perfect their Seeds; for the Winter generally is too cold in *England* to ripen their Seeds. This Plant is full as hardy as the Fourth and Fifth Sorts of *Phalangium*, in the *Gardeners Dictionary*, so only require to be protected from the Frost; but should have as much free Air as possible in mild Weather, otherwise they will draw up weak, and will not flower well. The Spikes of Flowers are near Two Feet high: These are produced from the Roots, between the succulent Leaves of the Plant; and, being of a fine yellow Colour, they make a good Appearance during the Time of their flowering.

Fig. 2. ANTHERICUM *[illegible]* Spider-wort, with narrow plain Leaves, and a declining Stalk. *a*, represents the Flower-stem. *b*, the Empalement of the Flower. *c*, the Flower expanded. *d*, a Flower taken out of the Empalement. *e*, the Stamina. This Plant approaches near to *Ornithogalum [illegible]*, *Hort. [illegible]* but it differs from that, in having several Flowers included in the same Cover, whereas that has but Two. The Stalks of that are always erect, but these constantly incline to the Ground. And the Flowers of that appear only in the Spring, whereas this Sort flowers almost every Month.

The Roots of this Plant came from *Jamaica*; they were accidentally taken up with some Plants of Allspice, which were sent me from thence, which were dead when they arrived; but the Roots of this Plant had put out their Leaves; so I planted them, and placed them in the Bark-bed in the Stove, where they soon flowered, and perfected their Seeds, and have since continued to produce Flowers most Part of the Year.

This Plant will not thrive well in *England*, unless the Pots are plunged into an Hot-bed of Tanners-bark, and the Air kept up to the Heat assigned for the *Ananas*. In this Situation the Plants will thrive, and produce Plenty of Flowers, and perfect their Seeds; which,

if

ANTHOLYZA *foliis linearibus sulcatis floribus albis uno versu dispositis*

Fig. 1. ANTHYLLIS herbacea foliis quaterno-pinnatis floribus lateralibus Mill. Dict. ...
Fig. 2. ANTHYLLIS fruticosa foliis pinnatis aequalibus floribus capitatis Mill. Dict. ...

if flitTered to fcttwr upon the Pots, wit! produce Ptrnty oi young l'lin», without any Care i or it they arc ftgi^ i^l'.-it-Aoru! pJWKed tfiju jJ1ot-bcd :>: Turners W%~,*Ifcft^iW^- ^cTlfttnflHs will come up :tt tO Ihotild IK treated in the lime manner (*l(1 Piano,

WE are about Six Inches long, (rrafj, and are a Hide hairy. The Fiowcr.ftalks are fcldom more than Four Inches long, and incline coward Uic C> round. There arc Three or of tlide produced at the Extremity oi the Foot-[talk, which are of a ye 11 uw Colour within, burgrecnifh on the uuiliUc, and arc ot *than.* Duration, tiltiom continuing open more thin Otie Day-, but frefh Flower* r3 them ; fo that they urc not long diftitute of Flower*, dpccUJJjr in Summer.

v

P L A T E XL.

A, *tju. Ctn. $6.*

I of thi* Genus arr,

Tit Fboftr is tf OM IMJ, irvsiei into Six Pans, ibt upper ttstsg terf<T than the knurr: Eatb Flrwtr indsfij in a *Spatha, or Skt.it b.* b, *whtcb is tmptftd* 7ir» / *nitr of the Flewtr it flaud the :, and ailrnjtd h •te!ot%fitn. btsb fitpp$rt fmail by a raoA/h* W- *art JtUtd with fmetl*

THIS is placed by Doctor *Linnæus* in t!ir Third Di- in*, and ortms witi,

titrihui I'HJ.JIU, JhritHi

about a F(iot and hilf hii;h, bending on one Side, and toward the Top are produced Five or Six Flowers, on one Si: i Two- Irav'd Sjijtha, or Sheath it fmaller than thofe of the *Camfleg,* and have i°l half an Inch long; Ib that the ! I wbJcJi it dirt'rrs from iht I i pure white when it firft o[Kns but jitrrward changes to a darker Colour. In the I the Germcn, crowned with Three Srygma, of * dark * lour, .ittrmicd by Three flV nt, The < men after wjrd become! (rot 1-vcflil, opening in Thr« Oils, which ire fillc-d lar Seed), ;i *Me},* and the Serdi i *aft.*

Thij Plant vrai r*'(ed from *Set.* *,.-,rx* from the *Caft tf Geti Ihpt,* in the Year 1751, and hath lloweted the Two lj.ll Tfean in the *Cbttfte-Gsrdfn,* where it hilh pfrfefted S«di. It require* to be (helter'd re if theic are placed under an Hoc-bed Frame in Autu mn, and in mile; Wea- ther t • Plints may have as much free Air « prillihlr, they will thrive much bet- ter than in «Ort • *v* Wtither the icvem thr Cold from penctntin, tlic Ruots, they begin to put out (heir Leavet in *OOtbfr,* wl continue growing all the W'inter; fmd in V•••••^*i,\ Leiv« decay, ii» that the Rooti may be r- *Angttf,* after thr out of the Ground till the 1: • *Offtitr,* * they !li..i.l<i be planted in *Von,* rilled » ;dy Earth, and may be expofed to the • wen Air, until there is Danger of Fruft, when they fhould be removed into Shelt •1. As th' Roots are fmall, fo they mu not not be planted in l.i: Pots, for in fuch rhcy will nut thrive. Th< largeft Roots fhoul t have a Peny- pot, and the fmaller a Three-farthing, and the leall a Halfpeny-pot ; fo that a Fnune of Three l.ighu wilt contain many of ilieie Pou.

P L A T E XLI.

iirT *ft*.

THIS Genus of Plants is, by Doctor *Linnæi,* ranged in his Seventeenth Clafs, intitulcd, *Decandria Decagynia,* the Flower having Ten Stamina, Nine of which are joined together, and the other ftands fo it to forrn Two Bodie*. To thti Genul he has joined the *Barba Jovis, Ervacea,* and one Species of *Cytisus.* Doctor *Tournefort* places it in his Truth Clafs of Plants, with a papilionaceous Flower of feveral Leaves, whofe Pointal changes to a ftort Pod of One Cell. Mr. *Ray* places it in his Twenty-firft Clafs of Plants, with papilionaceous or leguminous Flowers, with irregular petnatrd Leaves. The Title *Alaternus* was applied

applied to one Species of this Genus, by J. B. *Bauh.* trni fotne other old Writers, tor the Virtues of the Plant in h *jbabjllis* was more general:. thors *i* fo Do&or *Utm*ns* hath adopted this Name *Kid* rejected the other.

The Species here rcprefemed arc,

Fig. i. AXTHVLLIS *btrbatta fisUi; fustr ••• Js laterajtbui, Ihrt. pf* Bladder-Pea, or Kidney-Vetch ot *Spain.* calk it, *Vxbttraria pauapbyiks, fyj}. R. I, Ctjfwr Banbin* cities tt,^jj:nu *ftstapi,, Pin.* J2I. and *"John Raubtn, Trifchum £... ifjicariitm, 11$. %. %6t.* a, rtpr; *rwet* juft opened on ch^ Plant. *, is a [ing!e Flowr ii* in the fwclliug Empalement. r, ii the upj or Standard ol the Mower. *J>* the trifi«l Style. *t,<x** of the Scamina ftpirar<i ftorn the Body, the Fourth Sort of *Vthurmi** in the *Carder,,, i*

This Plant grows naturally in the South oi *Spain, PertttgaJ, Il&'y,* and other waitr. Countries, whrrc it is a Weed in their Arabic ! but if the Seeds are pern the Plants will come up with *v* »nd as their Brjnchi „ Ground, ttiry barjm;: troubiei are permitted to grow The Flowers a ti'jced in Bunches, at the J Leaves; but as they hive little Beauti feldom perrr.itted to have Gardens, for the fake of \ : tbw«» and the Seed,

Anthyllis Barba-Jov

Fig. 2. ANTHYLLIS *frutcsa, foliis pinnatis, floribus capitatis. Hort. Cliff.* 371. Shrubby Kidney-Vetch, with equal pinnated Leaves, and Flowers growing in Heads, commonly called *Barba Jovis, or Silver Bush.* This is the *Barba Jovis palmo latior. J. B.* 3. 5[illegible] and *Barba Jovis, C. B. P.* 397. Jupiter's Beard, or Silver Bush, fo called from the Whiteness of the leaves. This is the firft Sort of *Barba Jovis* in the *Gardener's Dictionary.* This grows naturally in the South of *France,* in *Spain, Portugal,* and *Italy,* where it rifes to the Height of Eight or Ten Feet, with many woody Branches, which are garnifhed with filvery winged Leaves, which abide through the Year. The Flowers are produced in the Spring, at the Extremity of the Branches, growing in Clufters or Heads, and are white. Thefe are fucceeded by fhort Pods, in each of which there are generally Two Seeds. They ripen in *July,* in the natural Places of its Growth, but in *England* the Seeds rarely come to Maturity. It is preferved in many curious Gardens, for Variety, and is removed into the Green-houfe in Winter, being too tender to live abroad through the Winter in *England,* but it fhould have as much free Air as poffible in mild Weather, otherwife the Branches will draw, and become weak, fo will not produce Flowers, nor do the Plants make a good Appearance when they are weak. In *England* thefe Plants flower about the End of *May,* or the Beginning of *June.*

P L A T E XLII.

,Tiw. hfl. R.I* -.. *gif*

AP*D«tAOO«t *er* \

JHIS it rural in tl ~.*wnt-ftn'i* Third Claft of PUna, imituted, *I fobs a* <numah*s, fijiukus, and ftr/lnuitd l'k-vn Leaf.* Mr. *Rjy* plates it in the Set Nineteenth daft, intituled, *fa/iuli/trc* m irreiukr vrlJf.Vkvaer.* Doftor *Umuni* p|.i, hit Fourteenth Clalt of Plants, IMZMRMM* *jhgitfptnma.* And to ttm Genut *U* or *TtaJ-Jtax,* the ^*farina* of *TmntJ Dtlkmui.* But in this, I think, he .. j by many Botaniltt, the Genus, it rather occailons (Learner \ and as the *Imam* and H«el or Spur hncr; efcape tl (hould not be rrjoftrd. Bcli DirTerence in the *Ntiiarnm* i their Secdveflelt, v KH> Two Uenera.

TV Specie* here reprrfcw

111. Leaf.

V \

be ace

wbkh are

that

wh

PLATE


APHACA Lab. Nova pr


Fig. 1.
APOCYNUM foliis oblongis
Fig. 2.
APOCYNUM foliis

PLATE XLIII.

APHACA, *Tourn. Inst. R. H.* 399. *Tab.* 223. *Raii Meth.* 103. *Lathyrus, Lin. Gen.* 781.

THIS Plant is ranged in the Second Section of *Tournefort's* Twelfth Class, intitled, *Herbs with a Pea-flower, whose Pointal turns into a long unicapsular Pod.* Mr. *Ray* places it in his Twenty-first Class of Plants, with a leguminose Flower, having single Leaves, and smooth Pods. Doctor *Linnæus* ranges it in his Seventeenth Class of Plants, intituled, *Diadelphia decandria*, joining this to the *Lathyrus* and *Cymenum* of *Tournefort*; but as it is very difficult to distinguish the Plants of this Class, without taking the Order of their Leaves and Tendrils to our Assistance, as *Tournefort* and *Ray* have done, so if we do, we must separate this Genus from the *Lathyrus* and *Cymenum*, as this hath single Leaves, and the Tendrils proceeding from the Joints of the Stalk between the Leaves which grow opposite.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

There is but one Species of this Genus at present known, which is here represented, viz.

APHACA, *Lob. Icon.* 70. Yellow Vetchling.

a, represents a single Flower, which is of the Pea-bloom kind. *b b*, the Empalement of the Flower, which is divided into Five Parts. *c c*, the Pointal, which afterward becomes the Pod. *d*, the Pod intire. *e*, the Pod opened, shewing how the Seeds are ranged.

This Plant is, by *Caspar Bauhin*, titled, *Vicia lutea, foliis convolvuli minoris, Pin.* 345. and by *John Bauhin, Vicia quæ Pitiso Aphaca, sive Anguillara lutea siliqua fere lutea, J. B.* 2. *p.* 316. There is another Variety of this Plant mentioned by *Tournefort*, in his Institutions of Botany, with a white Flower striped with Black; but this is only a seminal Variation, which doth not continue, but changes to yellow when sown.

The *Aphaca* is found growing wild in several Parts of *England*, chiefly in the Fields which are sown with *Wheat* and *Rye*, or such other things as are sown in Autumn; for if the Seeds of this Plant are sown in the Spring, they seldom grow the first Year, which is the Reason of its being rarely found in such Fields as are ploughed and sown in the Spring. This is a trailing Plant, which grows about Two Feet high, fastening itself by the Tendrils, to whatever Plants grow near it; and where there happens to be no Support near, the Branches trail upon the Ground. The Flowers are produced in *June* and *July*, and the Seeds ripen in *August*; which if permitted to scatter, the Plants will come up better than when they are sown with Care.

There is little Beauty in the Flowers of this Plant to recommend it; but as there is a natural Looseness in the trailing Branches, which renders it proper for Ornaments in Needle-work, or for printing on Linens, so we judged it might prove acceptable to such Persons who are employed in either of these Branches.

PLATE XLIV.

APOCYNUM, *Raii Meth. Plant.* 78. *C. B. P.* 302. *Tourn. Inst. R. H.* 91. *Tab.* 20. *Lin. Gen. Plant.* 269.

DOGS-BANE; in *French* Apocin.

THIS Genus of Plants is, by Mr. *Ray* placed in his Eighteenth Class, intituled, Herbs with many seed-vessels succeeding each Flower. Doctor *Tournefort* ranges it in his First Class of Plants, with a monopetalous Bell-shaped Flower, whose Pointal changes into a Fruit composed of several Sheaths, or Husks. Doctor *Linnæus* places it in the Second Division of his Fifth Class of Plants, intituled, *Pentandria Digynia*.

The Characters of this Genus are exhibited in the *Gardener's Dictionary*.

The Species here represented are,

Fig. 1. APOCYNUM *scandens foliis oblongis acuminatis floribus amplis luteis & patulis, Houst. Mss.* Climbing Apocynum, with oblong pointed Leaves, and large yellow spreading Flowers.

Fig. 2. APOCYNUM *scandens amplo flore villoso luteo fructu tumido angulosis glabris, Houst. Mss.* Climbing Apocynum, with a large yellow hairy Flower, and a smooth angular swelling Fruit.

a, represents the Front of the Flower spread open. *b*, the hinder Part of the Flower, shewing the Cup, which is divided into Five Parts. *c*, the angular swelling Seed-vessel. *d*, one of the Seeds taken out of the Pod, with the Down adhering to it.

These Two Plants were discovered by the late Doctor *William Houstoun*, at *Vera Cruz*, in *New Spain*, in the Year 1729, and the Seeds of both Sorts he sent to *England*, where many of the Plants were raised in some of the curious Gardens; but as they grew too high for the Stoves which were then built, and being too tender to live thro' the Winter in *England*, without artificial Heat, so they perished before they perfected any Seeds. The first Sort produced Flowers in the *Chelsea-Garden*; but the second Sort grew so luxuriantly, as to spread over all the Plants which grew near it, and had no Appearance of flowering.

In the native Country of their Growth, these Plants are generally found in Woods, where they twist themselves about the neighbouring Trees, and climb to the Height of Thirty or Forty Feet. They produce their Flowers in *July*, and their Seeds ripen in *January* following.

The Figures of both these Plants were drawn by Doctor Houstoun on the Spot where he discovered them, and were sent to me, with his Collection, after the Doctor's Death, as he had bequeathed me all his Papers, Drawings, and Collection of dried Plants.

PLATE XLV.

APOCYNUM *erectum, Africanum, villoso fructu, foliis* [illegible] *subhirsuto, Pet. Pl. 24.*

Upright *African Dogs-bane, with a hairy Fruit, and broad* [illegible]

a, represents a single Flower, whose Petals are fallen, and the five-cornered Nectarium open. *b*, shews the hinder Part of the Flower, with the Empalement. *c*, the Pointal of the Flower, which rises between the five-cornered Nectarium, which afterward begins to form the Pod. *d*. *e*, is the Pod full-grown and intire. *f*, the Pod opening, shewing how the Seeds are ranged over each other. *g*, a single Seed without its Down.

The Seeds of this Plant were sent me from the *Cape of Good Hope*, in the Year 1752; from which I raised several Plants, which have since flowered, and perfected their Seeds, in the *Chelsea-Garden*. It is a Shrub, rising about Five or Six Feet high, dividing into several spreading Branches, which are garnished with Leaves, placed irregularly, being sometimes opposite, and often growing alternate, and frequently Three Leaves coming out round the Stalk, as if they arose from the same Joint. The Leaves are about Three Inches long, and half an Inch broad in the middle, and are hairy. The Flowers are produced in Bunches which come out from the Branches, by the Foot-stalks of the Leaves, and are of a whitish Colour, a little inclining to purple. These are of One Leaf, cut into Five Parts, and stand on pretty long Foot-stalks. The Flowers are succeeded by roundish swelling Pods, which are beset with Hairs; and when ripe do open lengthwise, and disclose the Seeds, which are placed *imbricatim*, like Slates upon Buildings, each having a Plume of soft Down adhering to the upper-part, which help to disperse the Seeds to a great Distance.

There are Two other Species of this Plant, which approach near to this; and Doctor *Linnæus* hath supposed them to be only seminal Varieties, so makes them the same; but as they do not vary when raised from Seeds, so they may with Certainty be deemed distinct Species. The Two others are, the broad and narrow smooth Willow-leav'd Dogs-bane. These Two differ from each other only in the Breadth of their Leaves; the latter having pointed Leaves, whereas those of the former are more obtuse; and their Differences do constantly hold in the Plants which are raised from Seeds. The broad-leaved Sort is found growing naturally in *Spain*, as also in *Minorca*, from whence the Seeds have been sent to *England*. But it is also a Native at the *Cape of Good Hope*, from whence the Seeds were first brought to *Holland*; but the Sort here figured differs greatly from both those Species in the whole Habit of the Plant; for the Branches of this grow diffused, whereas the other grow erect; and there is a great Difference in their Pods, those of the other terminating in a sharp Point, whereas these are obtuse; and the Leaves of this are broader than either of the other, and are pointed and hairy; so there can be no Doubt of its being a distinct Species, especially as it always maintains this Difference when raised from Seeds.

These Three Sorts are propagated by Cuttings, which should lie a Day or Two to dry, after they are separated from the Plants; for as the Plants do abound with a milky Juice, so if the wounded Part be not dried before the Cuttings are planted, they are very subject to rot; as they also are, if they receive too much Wet; therefore the surest way to propagate these by Cuttings, is to plant them in Pots, filled with light Earth, and to plunge the Pots into a moderate Hot-bed of Tanners-bark, giving them but little Water. This may be done in any of the Summer Months, and the Cuttings will put out Roots in a Month, when they must be exposed to the open Air, to harden them before Winter. The Plants do not require any Heat in Winter, so may be preserved in the Green-house, being careful that they have not too much Wet at that Season. They flower most Part of Summer, and the Seeds ripen late in the Autumn.

The Down, which adheres to all the Species of *Dogs-bane*, is very soft and elastic; so that if it be pressed close together, no sooner is the Weight removed from it, but it expands to its former Bulk. This is much used in *France* for stuffing of Cushions and Pillars, being extremely light and soft. It is there called *De la Wate*. In *England* it hath been used for Quilts, being very proper for Persons who are troubled with the Gout, who cannot bear any weighty Covering over them; this being very warm, yet so light as not to be felt, or occasion any Pain. But as this Down cannot be had in large Quantities from *English* Growth, so those Persons who are desirous to have it, must procure it from *America*, where several Species do grow in great Plenty.


APOCYNUM

AQUIFOLIUM *sive Agrifolium vulgo J. B. 1. 114*

AQUILEGIA *pumilo præcox Canadensis Cornut Canad 80*

PLATE XLVI.

AQUIFOLIUM, *Tourn. Inft. R. H.* 600. *Tab.* 371. *Agrifolium Raii Meth. Plant.* 139. *Ilex Lin. Gen. Plant.* 156.

HOLLY-TREE; in *French* HOUX.

THIS Genus of Plants is, by Doctor *Tournefort*, ranged in the Second Section of his Twenty-firſt Claſs, intituled, *Trees and Shrubs with a Flower of One Leaf, whoſe Fruit changes to a Fruit having hard Seeds.* Mr. *Ray* places this Genus in his Third Diviſion of *Trees and Shrubs having Berries which have Four Seeds in each.* Doctor *Linnæus* puts this Genus in his Fourth Claſs of Plants, intituled, *Tetrandria Tetragynia*

T«w, sod h,

with i:

.

.:t*

to be

0M0f$_H$

a, repreſents a ſingle Flower, with its Four Stamina. *b*, the intire Berries. *c*, a Berry cut through, ſhewing the Four Seeds lodg< d in their ſeparate Cells.

Doftor *Lam*us* tides (bit . *Ilex foliis acuti* i *ttutis ſpinoſis, Hort. Cliff.* 40. As there are ſome of theſe Plants which produce only male Flowers, which are not ſucceeded by Fruit, and others whole Flowers are hermaphrodite, and have Berries ſucceeding them; ſo this Genus, according to Doctor *Linnæus*'s Syſtem, ſhould be p ucc d in his Twenty-ſecond Claſs of Plants, and in his F •urth Diviſion, which he titles, *Dioecia Tetrandria.*

The Holly-Tree is ſo well known in *England* as to need no Deſcription. It grows naturally in the Woods in many Parts of *England*. The uſual Growth of theſe Trees is from Twenty to Thirty Feet high, though in ſome Places there are ſome of a greater Height. hue the general Growth of them is not more than I mentioned. They flower in *June*, and the Berries are ripe in Winter. Their Berries, when ſown, do very rarely grow the firſt Year; ſo they are generally buried I one Year in the Ground, and taken up again in the Autumn, and ſown: The Spring following the Plants will come up; ſo that there is one Year's weeding of the Beds ſaved by this Method; and the Seeds ſucceed much better than thoſe which are ſown the firſt Year.

The Holly being ever-green, has been long propagated in the Gardens for its Beauty, and was formerly in great Uſe for making Hedges: but ſince the old Method of clipp'd Hedges and thorn Trees hath been caſt out of Gardens, the Holly has not been ſo much propagated. Though there are few Ever-greens of greater Beauty, where they are judiciouſly diſpoſed. The Variety of variegated Hollies, which have been preſerved in the *Engliſh* Gardens, greatly exceeded what could be found in any other Country; and for ſome Years were eſteemed the greateſt Ornaments of the *Engliſh* Gardens; ſo that in many of them, their Trees were ſo much crouded, as to leave little Room for other Plants; but ſince the Alteration of the *Engliſh* Taſte, they have been almoſt totally rooted out. Yet, when theſe Trees are properly diſpoſed in Gardens, and permitted to have their natural Shape, they are very ornamental in the Winter-Seaſon.

From the Bark of the *Holly* is made *Birdlime*, and the Wood is uſed by the Turners for many of their Wares, being very hard and white, and poliſhes very ſmooth.

OMOf$_H$

The Species here figured is,

AQUIFOLIUM *foe Agrifolium vulgo, J. B.* 1. 114. The Common Holly. This is, by *Caſpar Bauhin*, tituled, *Ilex aculeata latifolia, folio ſubtus luteſcente, Pin.* 425.

PLATE XLVII.

AQUILEGIA, *Tourn. Inſt. R. H.* 428. *Tab.* 242. *Raii Meth. Plant.* 79. *Lin. Gen. Plant.* 605.

COLUMBINE; in *French* ANCOLIE.

THIS Genus of Plants is, by Doctor *Tournefort*, placed in his Eleventh Claſs, intituled, *Herbs and Under-ſhrubs with a polypetalous anomalous Flower.* Mr. *Ray* ranges k in hi* t ighteenth Claſs of Plants with irregular Flowers, which are ſucceeded b.....; Pods. Doctor *Linnæus* places it in his Fifth Diviſion of the Claſs of Plants, intituled, *Pentandria Pentagynia*: *i* the HOWC having many Stamina, and Five Germina.

Tlunmii

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The

The Specks here reprefentrd is,

AlVitrti* *ptfixS* *fT4tax Cat!,:•* \y dwarf C .id*. *s*, fhews the Flower, as it is divided into Five Parts near the Foot-ftilk -. the Numbi of Stamina, which ftretch out beyond the Corolla. *t*, the Seed-veffel, which is compofed of Five Cells, each terminating with a crooked Tail. This is the Sixth Species mentioned in the *Gardner's Dictionary*. By Doctor *Linnæus* it is titled, *Aquilegia minoris refta, flaminibus corolla longioribus, Hort. Upfal.* 153.

Doctor *Tournefort* enumerates Thirty-nine Varieties of Columbine; but thefe are all reduced to Three Species by Doctor *Linnæus*, which is too fmall in Number; for although the various Colours of their Flowers fhould not be admitted as Differences, yet the Structure of their Flowers may be allowed to diftinguifh the Species; therefore thofe which are ufually termed the Starry Columbine, muft be diftinguifhed from thofe called the Rofe Columbine: and there are three other which are as diftinct, mentioned by *Tournefort*, exclufive of this. And there is another Variety of this, mentioned in the Catalogue of the King's Garden at *Paris*, under the Title of *Aquilegia Canadenfis præcox præcox*; but I doubt of their being different Species, for from the fame Seeds I have had Plants which grow not more than One Foot high, and others have been near double that Height, fo that I fufpect it may be owing to the Soil and Situation of the Plants, that this Difference in their Growth is occafioned, for I have not obferved any Difference in their Leaves or Flowers. This Plant flowers in *April*, and the Seeds ripen in *Auguft*. It grows naturally in *Canada*, *Virginia*, and moft of the Northern Parts of *America*, from whence the Seeds have been fent to *Europe*.

PLATE XLVIII.

ARBUTUS Tree, Strawberry Tree. *hft. R,* *H.* 598. *Tab.* 368. *Raii Mi-ibed. PIOKI* 155. *Lin. Gen. Plant.* 458.

The STRAWBERRY-TREE, in French ARBOUSIER.

THIS Genus of Plants is ranged, by Doctor *Tournefort*, in the Twentieth Claſs, intituled, *Trees and Shrubs with a monopetalous Flower, whofe Pointal becomes a fleſhy Fruit, filled with hard Seeds.* Mr. *Ray* places it among the Trees bearing Berries, including feveral Sorts; and Doctor *Linnæus* ranges it in his Tenth Claſs of Plants, intituled, *Decandria Monogynia*, the Flower having Ten Stamina, and One Germen.

The Characters of this Genus are exhibited in the *Gardner's Dictionary*.

The Species here repreſented are,

Fig. 1. ARBUTUS *folio ſerrato, fore oblongo, fructu rotundo, ſtriato. Hort. Pyſ.* The Strawberry-Tree with a ſawed Leaf, an oblong Flower, and oval Fruit. *a*, ſhews the oblong Pitcher-ſhaped Flower. *b*, the oval Fruit. *c*, the Fruit cut tranſverſely, ſhewing the Five Cells in which the Seeds are lodged. *d*, the Fruit cut longitudinally. *e*, the Seed taken out of the Cell. *f*, the Style which is ſtretched out at the End of the Fruit.

Fig. 2. ARBUTUS *folio ſerrato, C. B. P.* 460. Strawberry-Tree with a ſlaved Leaf, and round Fruit.

It is not certain if theſe are diſtinct Species, or only Varieties which ariſe from the ſame Seeds; however, as there is ſo great Difference in the Flowers and Fruit of theſe Trees, ſo we have exhibited the Two Sorts as they are generally termed by the Gardeners. I have alſo obſerved, that where theſe have ſtood near each other, in the ſame Soil and Expoſure, that the Sort with round Fruit has been the moſt plentiful Bearer.

Theſe Trees grow naturally upon the Hills in *Italy* and *Spain*, as alſo in the weſtern Parts of *Ireland*. They riſe to the Height of Twenty or Thirty Feet, but do rarely riſe with an upright Stem, uſually ſending out many Stems near the Ground, which put out, on every Side, Branches, which are garniſhed with oblong ſawed Leaves, of a bright green, and are ſtiff. Theſe abide all the Winter, and are thruſt off in the Spring by the new ones; ſo that it is always cloathed with Leaves. The Flowers appear in *September* and *October*; ſoon after which time, the Fruit, which ſucceeds the Flowers of the former Year, are ripe; for they are at leaſt a Year from the flowering to the ripening of the Fruit.

Fig. 1. ARBUTUS *Folio serrato floribus oblongis fructu ovato.*

Fig. 2. ARBUTUS *Folio serrato &c.*

•\H (T11 TtJ *rams* ,/rctirn/'*-ntibus foliis-lineari-lanceolatis rigidis subtus argenteis flore magno aureo pedunculo longissimo*

ARGEMONE. *Mexicana* Linn. 859.

Published according to the Act by Mr. Miller, 1 Oct. 1801

PLATE XLIX.

ARCTOTIS, *Lin. Gen. Plant.* 886. *Arctotheca, VaillAc. R. Scien.* 1720. *Anemohofpermos, Herm. Cat. Com. Hon. Amfi.* 2. p. 45.

We have no *Englifh* Name for this Genus of Plants.

THIS Genus of Plants is by Doftor *Unnaus* ranged in his Nineteenth Clais^intituled, *Syngenefta Polygamia iffSma*; tte* hermaphrodite Flowers in each Empalement being abortive, the Female Flowers only having Seeds fucceed them. *Vatllant,* in the Memoirs of the Academy of Sciences for 1720. ranges this Genus in his Clafs of corymbiferous Wants with radiated Flowers -, and Doftor *Boerhaave* Places it in his Clafs, intituled, *Gymnomonofpcrma dtp Me.* Doctor *Herman* gave the Title of *Anemonofpermas* to this Genus, from the Charafter of the Seeds, which are furrounded with a Down, like thofe of the *Anemone-,* and *Vaillant* gave it the Title of *Arctotheca,* from the Sheath or Cover of the Seeds being hairy like a Bear; and the *French* Name which he adds to it *Ourfe.* 1 he other Characters of this Genus are exhibited in the *Gardeners Dictionary.*

[The ^fcpcJ^We^rel^efented is,

ARCTOTIS *ramiTdecumbentibus, foliis lineari-lanceolatis rigidis fubtus argenteis, fiore magno aureo, pediculo Iongiffimo.* i. e. *Artlotis* with trailing Branches, narrow ftiff Leaves, white on their Under-fide, and a large golden Flower Handing on a long Foot-ftalk.

This'Plant has been lately introduced into the Gardens from the *Cape of Good Hope,* where all the Species of this Genus do naturally grow : But this Sort hath by much the molt fpecious Flower of any yet difcovered. I received this Plant from Do&or *Adrian Van Royen,* the late Profeffor of Botany in *Ley den* ; and have fince diftributed it to many curious Perfons in *England.* The Branches of this Plant are woody, and fpread themfelves flat on the Surface of the Ground. Thefe are garnifhed with Leaves, which come out in no regular Order, but are placed on every Side the Branches. They axe about Four Inches long, and about half an Inch broad toward the End where they are broadeft, with one longitudinal Rib in the Middle; the Upper-fide being of a dark-green Colour, and fmooth •, but the Under-fide. is very white. They are ftifF, and for the moil part entire; but fome few are cut in on their Sides into Three Parts, and others into Five; as they are reprefented in the Figure. From between the Leaves the Foot-ftalk of the Flower arifes, which is near Six Inches long, having on the top One large Flower, whofe Rays are of a gold Colour within, but of a pale yellow on the outfide: At the Bafe of the Rays there is a beautiful Circle of black chequered with white ; and the Difk within the Circle is of the fame Colour with the Rays. Thefe Flowers are produced in *May* and *June;* but they are not fucceeded by any more till the next Seafon ; whereas moft of the other Species of this Genus are feldom deftitute of Flowers, except in the middle of Winter. This Sort produces no Seeds in *England;* but it is very eafily propagated by Cuttings; which if planted in any of the Summer Months, and placed upon an old Hot-bed, fhading them from the Sun in the middle of the Day, they will take root in Five or Six Weeks; when they fhonld be expofed to the open Air, that they may not be drawn up weak; for the more the Plants are expofed to the open Air, the better they will flower; but in the Winter they muft be protefted from Froll; fo that if the Pots are placed under an Hot-bed Frame in Autumn, where in mild Weather they may enjoy the free Air, and in the Nights, or when it is cold, they may be cover'd with the GlafTes and Mats to fcreen them from Froft, they will thrive and flower better than when they are more tenderly managed. In Summer they muft be placed in the open Air, with other exotic Plants from the fame Country, where they will make a fine Appearance during their Seafon of flowering. As the old Plants are fubjeft to rot in Winter, therefore there fhould be a Supply of young ones raifed from time to time to fucceed them; for the young Plants will flower better, and make a finer Appearance than the old.

This is the latt Sort mentioned in the *Gardener's Dictionary.* At the time when the laft Edition of that was printed, this Plant had been but lately introduced into *England;* fo the Culture of it was not fo well known as at prefent •, therefore I have inferted it here.

PLATE L.

ARGEMONE, *Tourn. Injl. R. H.* 239. *"Tab.* 121. *Lin. Gen. Plant.* 574.

THIS Plant is ranged in the Second Seftion of *Toumefort's* Sixth Clafs, *mtizulcdjHerbswithaRofefoaped Flower, whofe Pointal or Empalement turns to a Fruit with One Cell.* Doftor *Linnaus* places it in his Thirteenth Clafs, intituled, *Polyandria Monogynia ;* the Flower haying many Stamina, and One Germen. In *Englifh* it is called PRICKLY POPPY.

There is but One Species of this Genus, which is here reprefented *; viz.*

ARCEMONE *Mexicana Injl. R.H.i^. Mexican* Prickly Poppy.

This is by the Two *Bauhins* called *Papaver fpinofum, Pin.* 172. *Prod.* 92. *J. B.* ^ 397. Dodtor *Morifon,* in his *Hijiory of Plants,* 2. p. 277, intitles it *Papaver fpi* nofum luteum, foliis albis venis notatis.* Doctor *Linnaeus* has added Two other Species to this Genus, which

Doctor *Tcurnefort* placed under *Papavcr-,* to which Genus they more properly belong, as they agree in their Charafter with the *Welch Poppy* ; which is continued under the Genus of Poppy by Doftor *Linnaeus:* And this Species he titles *Argemone capfulis quinquevalvibus foliis fpinofis, Spec. Plant.* 508. *a,* fhews the Flower, with the Stimina in the Centre, furrounding the Germen ; *b,* the Seed- veffel, opening at the Top; *c,* the Seeds taken out of the Capfule.

The Seeds of this Plant were brought from *America,* by the Title of *Figo del inferno,* or *Ficus infernalis,* the Infernal Fig; fuppofed to be fo called from aRefemblance between the Seed-veflel of this Plant and the Fig; but being clofely befet with Prickles, it may have endangered the Lives of fome ignorant Perfons, who have attempted to eat it. ' The whole Plant abounds with a yellow Juice, like the *Celandine,* which flows out on the Plant's being broken or wounded. The Seeds of this Plant are ufed in the *Weft-Indies* to purge ; and the Juice of it is efteemed good for fore Eyes. It is ufed for many Diforders in the *Weft-Indies*; but in *Europe** I believe, it is not ufed in Medicine.

This Plant grows naturally all over the *Weft-Indict* where it is a very troublefome Weed in all the cultivated Lands ; for if a few Plants are fuffered to fcatter their Seeds, they will fufficiently flock the Ground. And in thofe Gardens in *England,* where this Plant hath been fown, the Seeds have fallen, and the Plants have in many Places become troublefome to root out again.

P L A T E LI.

ARISTOLOCHIA, *Tourn. Inft. R. H.* 162. *Tab.* 71. *Rail Meth. Plant.* 89. *Lin. Gen. PlanL* 911.

BIRTHWORT.

^TOurnefort places this Genus in the Second Section of his Third Clafs of Plants, intituled, *Herbs with anomalous tubulous Flowers of One Leaf ending in a Tongue. Mr.Ray* ranges it in theSecond Se&ion of hisNineteenth Clafs, which he titles, *Herbs bearing Pods, with an irregular difform Flower of One Leaf:* And Doftor *Linnaeus* places it in his Twentieth Clafs of Plants, and in the Fifth Order ; which he calls *Gynandria Hexandria,* from the Summits or Anthem? being joined to the Pointal.

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented are,

Fi^. i. ARISTOLOCHIA *clemaiitis refta, C. B. P.* 307. Upright climbing Birthwort. This is the *Ariftolochia Saracenica* of *Dodonxus, Pemp.* 326. and *Ariftolochia clematitis vulgaris* of *John Bauhin, Hift.* 3. p. 560. Dr. *Linnaus* titles it *Ariftolochia foliis cordatis, caule ereclo, fioribus axillaribus confertis, Hort. Upfal.* 279. *Spec. Plant. 962.* This is the Third Species enumerated in the *Gardener's Dictionary.* In *French* it is called *Ari-4 ftoloche.*

Fig. 2. ARISTOLOCHIA *longa vera, C. B. P.* 307. The true long-rooted Birthwort; in *French, Ariftoloche Iongue.* Doftor *Linnaus* titles it, *Ariftolochia foliis cordatis petiolatis integerrimis obtufiufculis, caule i?ifirmo, floribus folitariis, Spec. Plant.* 962. This is the Second Species in the *Gardener's Dictionary.*

The Firft Sort is very common in the *Englijh* Gardens, Where-ever it is once planted, it fpreads fo faft by its creeping Root, as to render it difficult to extirpate again; for the Roots will run Three or Four Feet deep in a light Soil; and if any Part of the Root is left in the Ground, it will ihoot up again, and produce a great Number of Plants ; and fome of thefe Roots having been thrown out of Gardens, have fpread themfelves in Fields, and by the Side of Highways; fo that fome Perfons have fuppofed this Plant to be a Native of *England;* but as it is never found remote from Gardens, it is certain that this is not the natural Place of its Growth ; but was introduced from *France,* where it is found wild in the Fields. The other Sort grows naturally in the South of *France, Spain,* and *Italy ;* from whence the Roots are brought to *England,* for medicinal Ufe,

p L A T E LII.

Ar*uMj *Town. Inft. R. //.* 152. *Tab. 69. Rait Meth. PL* 74. *Lin. Gen. Plant.* **915.**

WAKE-ROBIV, *or* CUCKOW-PINT.

DOdor *Tournefort* ranges this Genus of Plants in the *b* in Section of his Third Clafs of Plants, intituled, *tltrbs with an anomalous or cowled Flower of One Leafs* Mr. *Ray* places it in his Seventeenth Clafs of Plants which he titles, *Berry-bearing Herbs.* Dr. *Linnaeus* places it in his Seventh Divifion of the Twentieth Clafs of Plants, intituled, *Gynandria Polyandria,* from the Stamina being inferted in the Germen. The whole Structure of the Flower in this Genus is very fingular,

The Charafters of this Genus are exhibited in the *Gardener's Dictionary.*

The

Fig. 1 ARISTOLOCHIA clematitis recta C. B. P. 307.
Fig. 2 ARISTOLOCHIA longa vera C. B. P. 307.

Published according to Act

PLATE VII.

ACANTHUS, *Town. Injl. R. H.* 176. *PL* 80. *Lin. Gen. Plant.* 711.

BRANK URSINE *or* BEARS-BREECH.

THIS Genus of Pants is ranged in the Fifth Section of the Third Clafs of Plants, in *Tourneforfs Inflitutions of Botany*^ intituled, *Herbs with anomalous Flowers of One Leaf.* Mr» *Ray* places this Genus in his Clafs intituled, *Herbs whofe Seeds are lodged in Pods*^ *having a difform or irregular Flower of One Leaf.* By *Rivinus* it is ranged under his Clafs of *irregular Flowers of One Leaf.* Doftor *Linnaus* ranges it in his Fourteenth Clafs, intituled, *Didynamia Angiofpermia.* And Doctor *Van Royen,* in the *Prodromus* to the *Leyden Garden*^ places this Genus in his Clafs of Plants intituled, *Ringentes Angiofpermia.*

The particular Characters of this Genus are defcribed in the *Gardener's Di£lionary.* #, fliews a fingle Flower, feparated from the Spike ; b_y reprefents the Fore-part of the Flower, which is divided into Three Segments ; *c,* the Hinder-part of the Flower; d_7 One of the Stamina at full. Length, with its Apex taken out of the Flower ; <? the Ovarium, which afterward" becomes the Seed-veffel; /, the Seed-veflel intire -, g_9 reprefents the Seed-veflel cut tranfverfely, ihewing the Seeds as they are lodged in the Hufk j h_y the prickly Empalement or Cover of the Flower.

The Species here reprefented is,

ACANTHUS *raricribus* fe? *brevioribus aculeis munitus. Tourn. Inft. R. H.* 176. i. e. BEARS-BREECH or BRANK URSINE, guarded with fewer and fhorter Prickles. By Doftor *Plukenett* this Species is titled, *Acanthus fylvefiris mitioribus [pints. Almag. Bot.* and in the Catalogue of Plants in the Garden at *Pifa,* it is mentioned with this Title, *Acanthus medius rarioribus £S? brevioribus aculeis donatus Fagon* ; and in this Book there is a Figure of a Leaf in the Second Plate, which the Author fuppofes to be a different Species from that which is here reprefented; but as I have raifed feveral Plants from the Seeds, which were fent me by the Author, fo I am convinced that it is the fame Plant here figured, having had it growing in the *Chelfea Garden* many Years, itanding near the Plant of *Tourneforfs*^ which was raifed from Seeds fent from the Royal Garden at *Paris*> and has been an old Inhabitant in *Chelfea Garden.*

Doftor *Linnaeus* mentions but Two Species of this Genus, which are *European* Plants -, thefe are *the fmooth* and *prickly Bears-breech* -, in which he is followed by Do£tor *Van Royen;* fo that neither of them mention this Sort, fuppofing it to be only a Variety ; but from many Experiments which I have made, in raifing the Three Sorts from Seeds, I can affirm they never vary, but conftantly produce the fame Species as the Seeds were gathered fromj as doth alfo the Fourth Sort, mentioned in the *Gardener's Diftionary*^ which approaches near to the firft or *fmooth leaved* Sort, but the Leaves are larger, and of a fliining Green.

It is generally fuppofed, that the Foliage on the Capitals of the *Corinthian Pillars* is taken from the fmooth Sort of *Acanthus*; but by thofe Figures which we fee reprefented in the Books of Architecture, they have a much nearer Refemblance to this Species. And as this Sort grows naturally in many Places in *Italy* > and alfo in the Iflands of the *Archipelago*^ fo we may fuppofe that this may be the Plant from which they compofed the Capitals of the Pillars of that Order of Archite&ure, efpecially as it is much more common in thofe Countries.

The fmooth Sort of *Bears-breech* having been figured in feveral Books of Botany already, and there being no good Figure of this Plant extant, fo we imagined that this might be more acceptable to the curious; efpecially as the eflential Characters of the Genus are th£ fame in both, the Difference between the Two Species being in their Leaves, this Sort being much more jagged* and the Incifures of the Leaves being terminated by Spines; whereas thofe of the other Sort have fewer Cuts> which are obtufe, and have no Spines on them.

The fmooth Sort is that which is directed by the College of Phyficians to be ufed in Medicine •> but it is now rarely prefcribed; for the Herb-women generally fupplied the Markets with either the *Hellebor'after*', or *Sphondylium,* inftead of this Plant; fo that when it was ordered, the right Plant was very feldom ufed; which, may have occafioned the leaving of it out of Pradtidfc. The *Germans* in general fubftitute the *Sphondylium* or *Cow-parfnep* for this, which is by moll of their Writers intituled *Branca Urjina;* by which Name it is mentioned in all their Difpenfaries.

The Leaves of this Sort are a Foot and half long* about Nine Inches broad, arifing with a Foot-(talk immediately from the Root; between the Leaves arife the Flower-ftems, which are commonly Three Feet high* which are garnifhed with Flowers from near the Ground to their Top.

Thefe Plants begin to flower the End of *May,* and continue till the latter End of *Auguft*\ the Flowers at the Bottom of the Spike appearing firft, fo that on the fame Spike there is often a Continuation of Flowers near Two Months.

PLATE viii.

ACER, *Tourn. Inft. R. p. 615. PL* 386. *Lin. Gen. Plant.* 1077. *Raii Meth.* 157.

The MAPLE-TREE.

THIS is placed by *Tournefort* in the Third Section of his Twenty-firft Clafs, intituled, *Trees and Shrubs with a Rofe-flower, whefe Pointal turns to a multicapfular Fruit.* Do&or *Linnaus*^ *in* the former Editions of his *Genera Plantarum,* ranges this in his Eighth Clafs of Plants, intituled, *Ottandria Monogynia*^ from the Flowers having Eight Stamina, and a fingle Style* But, in the laft Edition of his Method, he has removed it to his Twenty-third Clafs of *Polygamia Monoecia,* becaufe there are Male and Hermaphrodite Flowers on

the fame Plant. Mr. *Ray* places this Genus in his Clafs of Trees with a dry Fruit, having Wings.

The Characters of this Genus are defcribed in the *Gardener's Dictionary*; *c,* reprefents an Hermaphrodite Flower, with its Eight Stamina ; *b, a* Male Flower, having no Ovarium •, *c,* the Calyx or Flower-cup ; *d,* the Seeds with its Wings.

The Species here reprefented are,

Fig. i. ACER *Platanoides. Munt. Phyt. Fig.* u. Maple with a Plane-tree Leaf, commonly called the *Norway Maple.* This is the *Acer montanum orient alisPlatani foliis atro-virentibus. Pluk. Phyt. Tab.* 252. /. 1. and in the *Uortus Cliff,* it is titled, *Acer foliis palmatis acute dentatis, flcribus corolla fpeciofis corymbofis* 143. and in the *Flora Suec. Acer foliis quinquelobis acuminatis acute dentatis glabris, flortbus corymbofis,* ^.303.

This Tree is a Native in the Northern Parts of *Europe,* and was firft introduced into the *Engliih* Gardens *from Norway*; fo has been generally known by the Name of *Norway Maple* among the Gardeners. It grows to a large Tree; the Wood is hard and tough, and of a white clofe Texture, and is much ufed by the Inhabitants of the Countries where it naturally grows. It hath not been much cultivated in *England,* till of late Years; fo that there are few large Trees to be found in the Gardens at prefent: But as it is found to be of quick Growth, and extremely hardy, refitting the Spray of the Sea better than moll other Sorts of Trees, fo it has been greatly propagated within a few Years paft in the Nurferies about *London.* This is the Seventh Species in the *Gardener's Dictionary.*

Fig. 2. ACER *Virginianum, folio majore, fubtus argent eo, fupra viridi fplendente. Pluk. Aim.* 7. *Phyt. Tab.* 2./. 2. The red or fcarlet Flowering Maple of *Virginia.* This is, by Doftor *Herman,* titled, *Acer Virginianum foliis fubtus incano, flofculis ex viridi rubentibus. Par. Bat. p.* 1. *Tab.* 1. and in the *Hort. Upfal Acer foliis quinquelobis acuminatis acute ferratis, petiolis teretibus, p.* 94. In *Linnaeus"s* Species of Plants, *Acer foliis quinquelobis fubdentatis fubtus glaucis, pedunculis fmplicijfimis aggregatis,* 1055.

The Figures which have been exhibited of this Species are very imperfeA-, that in Doftor *Plukenet* hath no Flowers, and Do&or *Herman's* Figure has but few, and thofe are reprefented too fmall. Mr. *Catefly's* Figure reprefents the Seed-veffels very perfeft, but the Flowers are not very correft; the Stamina are ftretched out tpo far from the Corolla, and are ill-coloured.

There are Two Varieties of this Tree cultivated in the Nurferies near *London.* The firft was fent to *England* by Mr. *Banijler,* from *Virginia,* and has been^many Years in the *Bifhop of London's Garden* at *Fulham,* the *Phyfic Garden* at *Chelfea,* and fome others. This produces fmall fcattering Bunches of Flowers.

The other was raifed in the Gardens of Sir *Charles Wager,* at *Parfons Green* near *Fulham,* in the Year 1725. The Flowers of this are produced in clofer Bunches, and the Branches are fuller garniflied with them than are thofe of the other; fo that the Trees make a much finer Appearance when in Flower. The Gardeners diflinguifh this by the Title of Sir *Charles Wager^s Maple,* the other being called *Scarlet Flowering Maple* ; but as there is no Difference in their Flowers, Seeds, or Leaves, fo they muft be deemed but One Species, as they are only accidental Varieties arifing from Seeds. This is the Fifth Species in the *Gardener's Dictionary,* where the other is placed as a diftinft Sort; but, upon Examination, I can find no fpecific Difference between • them. This ieldom grows very large in *England;* the largeft Trees which I have feen are not more than Twenty Feet high, and their Stems not more than One Foot Diameter. The Wood is clofe and white, but the Branches are often Iplit down from the Trees, where they are much expofed to the Winds. From this Tree (as from mod of the other Sorts of Maple), diftils a fweet Juice from the Parts which are wounded, during the Spring, which, being boiled, produces Sugar.

The Firft Sort flowers about the Middle of *April,* and the Second in the Middle or latter End of *March,* at which time they make a fine Appearance.

P L A T E DC

ACHJLLEA, *Lin. Gen. Plant.* 871. *Ptarmica Tourn. Inft. R. II.* 496. *Tab.* 283. *Ageratum Rail Meth. Emend.* 38.

Sweet Maudlin, or *Common Maudelin.*

This Genus of Plants is, by Doctor *Tournefort,* ranged in the Third Section of his Fourteenth Clafs of Plants, intituled, *Herbs with a radiated Flower, having no Down adhering to their Seeds.* By Mr. *Ray* it is placed in his Clafs of Plants, intituled, *Herbs with a Corymbiferous naked Flower.* By Doctor *Unnaus* it is placed in his Nineteenth Clafs of Plants, with Male and Female Flowers inclofed in the fame Empalement, whofe Stamina and Anthera are joined in a Cylinder.

The Species here reprefented is,

ACHILLEA *foliis pinnatis foliolis lineari-lanceolatis baft fur-CumauSlis. Flcr. Leyd. prod.* 176. Maudlin with hoary Tanfey Leaves. This is, by Doctor *Tournefort,* titled *Ptarmica Orientalis, foliis Tanaceti incanis fore aureo, Cor. Inft. '37.* It is the Sixth Species of *Ageratum,* in *Bocrhaave's Index Plantarum.*

This Ge of Plants was, by the Botanifts of the laft Age Su MAODSK ; but Doctor Tournefort has applied that Title to Plant from thofe here whofe Characters are very different this Genus, as the Char or Sneezewort, agreed pr with there. But Doctor *Linn*us* has giving this EpithS old Title of the *Tarloi* Genus, which is an

The Characters of this r» are defcribed in the *Gardener's DiMona* prefents a Hngle Flowers, which are inclofed in & fingle Head of ment; the Half-Florets common Empale- the Flower ; *d,* a Floret or Hermaphrodite Flower, of which there are fevera^ft each Embryo's of the Seeds.

This is the Thirteenth SDec" in the *Gardener's Diaiondry* mentioned no Figure as in the Books of Botany;

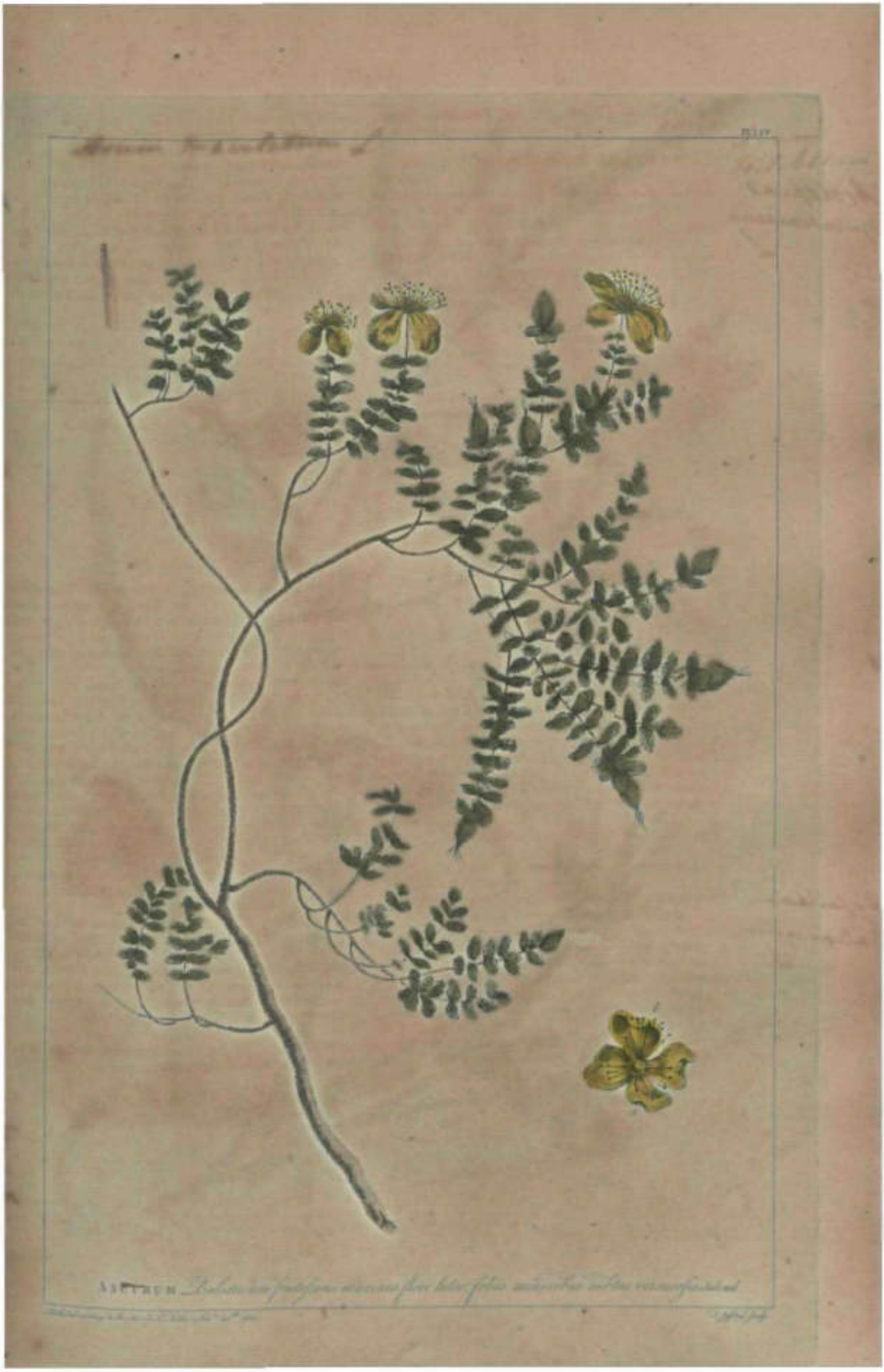


Fig. 1

Fig. 2

Fig. 1 ASPARAGUS foliis C. B. P. 489.

Fig. 2 ASPERULA foliis Rubiæ tinctorum odora C. B. P. 334.

PLATE LV,

ASPARAGUS, *Tburn. Infi. R. H.* 300. *Tab.* 154- &*» *Method. Plant.* 75. *Lin. Gen. Plant.* 382. Afparagus, Sparagus, or Speerage, corruptly called *Sparrow-grafs. In French, Afperges.*

THIS Genus of Plants is by Doftbr *Tournefort* ranged in the Eighth Section of his Sixth Clafs, intituled, *Herbs with a Rofe-Jbaped Flower, whofe Point al, or Empalement, turns to a [oft Fruit.* Mr. *Ray* places it in his Seventeenth Clafs of Plants, which includes the Herbs bearing Berries: And Dr. *Linnaeus* ranges it in his Sixth Clafs of Plants, intituled, *Hexandria Monogynia,* i. e. Plants whofe Flowers have Six Stamina and One Pointal.

The Species here reprefented is*

Fig. 1. ASPARAGUS *fativa, C. B. P.* 489. Common cultivated Afparagus. This is the *Afparagus Hortenfis* of *Dodonxus, Pemp.* 703. 2nd the *Afparagus Hortenfis* &? *Pratenfis of John Bauhin, Hijl. VoL* 3. 2 75. Garden Afparagus. Dr. *Linnaeus* titles it *Afparagus caule herbaceo erefto-, foliis fetaceis Jlipulis paribus, Flor. Suec.* 222.

This is the Sort which is commonly cultivated in the Gardens, and is one of the molt delicate Produdh of the Kitchen-Garden ; therefore is well known to moft Perfons in the State when it is proper for the Table : But after the Shoots have advanced fo far as to produce the Flowers and Seeds, it is not fo generally known; therefore we thought it might not be difagreeable to the Public to give a Reprefentation of it here, *a,* repref ents the Bell-fhaped Flower, confifting of One Leaf; *b,* (he Berries full-grown •, *c,* the Seeds taken out of the Berries. This is the Firft Species enumerated in the *Gardener's Diftionary.*

The other Characters of this Genus are exhibited in the *Gardener's Dictionary.*

There has been great Doubt among the Botanifts, if the Wild and Garden Afparagus were the fame Species; fome having fuppofed they were, and only differed by Culture; while others have affirmed that they were fpecifically different. But having made the Experiment by Sowing of the Seeds of the Wild Sort in the Garden, I found no other Difference between them than in the Size °f the Shoots, thofe of the Garden being larger; but the Wild Sort fhot up earlier in the Spring, when it was growing in the fame Situation with the Garden. The Shoots were equally wefftafted; and, by faving Seeds from fome of the largeft Shoots of the Wild Sort, the Plants, which were raifed from thofe Seeds, produced Shoots almoft equal in Size to any of the Garden Afparagus : Therefore I make no doubt but the Third Generatiot^would have been full as large •, but this I had

[illegible] *Wtr&xW^9ki* ofthis menfllukl by *Cafpar Bauhin,* Mr. *Ray, Tournefort,* and other Authors •, *viz.* ^U -1 ^IC ^arc*en^ or cultivated. 2. The narrow-leaved Wild. 3. The maritime Sort, with thick Leaves. But J bcheve thefe only differ accidentally, from Culture, or fcoily *for* I have *ken* fome of the Third Sort, which was cultivated in a Garden in *Wales,* from the Seeds gathered ^"ar-the Sea, which did not differ frorq the common; yet ,??r• *Magnol^* and fome others, have fuppofed ic to be a difter ent Species, becaufe the tender Buds of it were bitter, and the Berries were larger: But whoever has been converfant with the Culture of Afparagus, muft know that neither of thefe ought to be admitted to make a Difference •, for from the fame Root there has been cut Buds perfedtly fweet, and very bitter * and, on the fame Stalk, there have been frequently Berries of various Sizes ; fo that we may fafely agree with Mr. *Ray* and *Cafpar Bauhin* to pronounce them to be only accidental Variations, produced from the Soil and Situation,

It grows wild in *Lincolnshire, EJfex,* and *Cornwall,* in the Meadows near the Sea. The tender Buds of the Garden Afparagus are boiled and eaten in the Winter and Spring; and the Roots and Seeds are ufed in Medicine,

Fig. 2. ASPERULA *Raii Meth. Plant** 54. *Ger. Herb. g66. Park. Theat. 563* C. B. P.* 334. *Lin. Gen. Plant.* 113. *Aparine Tourn. Infi. R; H.* 114. *Tab.* 39. Woodroof, or Woodruff. In *French, Muguet.*

Mr. *Ray* ranges this Genus in his Twelfth Clafs of Plants, intituled, *Herbte Stellate,* from the Leaves of all the Plants in this Clafs being placed round the Stalks at each Joint, pointing like the Rays of a Star.

Doftor *Linnaeus* places it in his Fourth Clafs of Plants, titled, *Tetrandria Monogynia* \ the Flowers having Four Stamina and One Germen. *Tournefort* has joined this Plant to the Genus of *Aparine,* or Goofe-grafs -, making it a Species of that, which he ranges in the Ninth Seftion of his Firft Clafs, which he titles *Herbs* with a Bell-fhaped Flower of One Leaf, whofe Empalement turns to a Fruit having Two Seeds joined together.

Doftor *Linmeus* has made a Genus under this Title, and has added fome Species of *Gallium* and *Rubia* to this Genus.

The Species here reprefented is,

ASPERULA, *five Rubecla montana odora, C.B.P.* 334. Woodroof, or Woodruff. This is the *Afperula odorata% fore albo,* of *Dodonaus, Pemp.* 355. By *Parkinfon* it is titled, *Afperula, ant Afpergula, odorata. Theat. 563.* Doftor *Linnaeus* titles it, *Afperula foliis cflonis lanceolatis, fiorum fafciculis pedunculatis. Flor. Suec.* 114. *Tournefort* puts it under *Aparine* by the following Title -, *Aparine latifolia montana humilior9 Infi. R. H.* 114. *a,* reprefents the Leaves growing in Whorles round the Stalks; *b,* the Umbels of Flowers $ *c,* a fingle Flower taken from the Umbel.

This Plant grows wild in fhady Woods in many Parts *of England-,* fo is rarely kept in Gardens j but being ufed in Medicine, we have given a Figure of it. The Roots of this Plant do fpread far in the Ground; fo that where it has taken good Root, it will multiply faft enough by the Roots; but it doth not often produce Seeds : which is frequently the Cafe of many other Plants, which have creeping Roots. The Stems come immediately from the Root, and rife about Six Inches high. Thefe are garnifhed with Leaves at every Joint, which are generally Six or Eight in Number. They are in Shape like thofe of the *Clivcr* or *Goofegrafs,* but fmooth. The Flowers are produced at the Top of the Branches in Umbels, which are white, and have a fweet Scent, They come out in *April* and *May,* and in Autumn the Shoots die to the Ground.

PLATE LVI.

ASPHODELUS, *Tourn. Inft. R.H.* 343. *Tab.* 178. *Rait Meth. Plant.* 116. C. *B. P.* 28. L/». *Gen. Plant.* 379. Afphodel, or KirtgVfpear. In *French, Asfodele.*

DO&or *Tour nefor t* ranges this Genus of Plants in the Firft Section of his Ninth Clafs, intituled, *Herbs with a Lilly-flower of One Leaf, cut into Six Parts, whofe Pointal turns to a Fruit.* Mr. *Ray* places it in his Twenty-third Clafs of Plants, which he titles *Herbs with Grafs-ieaves bearing Flowers, which have a tricapfular Seed-veffel.* Dr. *Linnaeus* puts it in his Sixth Clafs of Plants, titled, *Hexandria Monogynia,* from the Flower having Six Stamina and One Style. And the eflential Difference which he makes between this Genus and *Ornithogalum* is, that the Flower of this is of One Leaf, and thofe of *Ornithogalum* have Six. Mr. *Ray* makes One of its Charafters to confift of the Roots which have many Tubers, or Fangs.

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented is,

ASPHODELUS, *foliis plants, caule ramofo, floribus fpdrjis \ u* e. Afphodel, or King's-fpear, with broad plain Leaves, a branching Stalk, and Flowers placed thinly. *a,* reprefents the Flower, which is deeply cut into Six Parts ; *b,* the Seed-veffel, which is divided into Three Cells.

This Plant was raifed from Seeds in the *Chelfea* Garden, *Anno* 1751, where it produced Flowers the following Year. The Seeds came from the *Cape of Good Hope,* where this Plant naturally grows.

The Roots of this Plant are compofed of many Tubers, or Fangs, each about the Size of a little Finger, toward the upper Part, where they are largeft, and diminifh gradually downward to the Size of a fmall Straw. Thefe are joined together at the Crown (like the Roots of Afparagus), where the Buds are formed-, from whence the Leaves are produced, which are generally Seven or Eight in Number, coming out without any Order. Thefe are Nine or Ten Inches in Length, and an Inch and Half broad in the Middle, leffening gradually to both Ends. They are fmooth, and of a glaucous or fea-green Colour. From the Centre of the Root arifes the Flower-ftem, which grows about Two Feet high, and divides into feveral Branches, having a few narro' Leaves, generally one being placed at every Divifion o the Branch. The Flowers are produced thinly on tn Branches, forming a loofe Spike, or Thyrfus. J^ are white, and confift of One Leaf, which is deeply ci into Six Parts. In the Centre is placed the Gern ? ^ fupporting the Pointal, attended by Six Stamina, wni are inferted in the Valves of the Neftarium, and are a ternately fhort. The Germen becomes a roundifh See veffel, opening in Three Cells, which are filled wit* triangular Seeds.

I do not find this Plant mentioned in any Botanic Books, although it is very likely to have been formerly in the *Dutch* Gardens. There having been fome Paintings of the Plant in feveral Flower-pieces, which are fuppofed to have been done upwards of Sixty Years. However, it has been loft for fome Years in *Europe* * an has been lately recovered from Seeds, which were ten from the *Cape of Good Hope,* to *England* and *HollM^* The Firft Seeds which I received from thence, was ^"* latter End of the Year 175O,which were fown in *Oft* and, in *March* following, the Plants came up, and mad confiderable Progrefs that Summer •, and, the following Spring, 1752, produced Flowers, and perfected their Seeds. Since which time, I have received many of this Plant from the *Cape of Good Hope* in fev eels i fo that we may fuppofe it to be pretty there. There is no certain Seafon of this Plant flowering. For the Firft Year, it flowered in *May*; and nn then it has flowered in *Auguft* and *September* •, and, whe the Plants are kept in Warmth, they fometimes flower in Winter. When the Flowers are fully blown, they make a pretty Variety among other exotic Plants *, bu unlefs the Seafon is dry and favourable, thofe Plants, which are expofed to the open Air, do not open thei Flowers kindly.

This Plant is too tender to live through the Winter m the open Air in *England-,* fo muft be kept in Pots, ana houfed, in Winter, or placed under a Hotbed Frame, where the Froft is kept out by Covering : In whicn Management, the Plants will thrive better than in common Green-houfe. In Winter, thefe Plants mutt have little Wet; for much Moifture, at that Seafon, is apt to rot their Roots. It is propagated by Seeds; the Roots do not increafe in *England.*

PLATE LVII.

ASTLR, *tfourn. Lift. R. H.* 481, *"Tab.* 274. *Raii Meth. Plant. 53. Lin. Gen. Plant.* 858. *Helenium VailL N. Gen. Ml. R. Sc.* 1720. Starwort. In *French^ Afire'*

DOAor *Tournefort* ranges this Genus of Plants in his Fourteenth Clafs, intituled, *Herbs and Under-Jhrubs with a radiated Flower, which is fucceeded by Seeds having Down.* Mr. *Ray* places k in his Seventh Clafs of Plants, which he titles *Herbs with a difcous radiated Flower, and pappofe Seeds.* Doftor *Linnaeus* places it in his Nineteenth Clafs of Plants, which he titles *Syngene/ia Polygamia,* from their being Male, Female, and Hermaphrodite Flowers included in the fame Empalement.

The Sp£ci£g here regrefentgdjtre,

Fig. 1. ASTER *Carolinianus pUofiis conyza ctrule* fi^' floribus luteis, qtiafi umbellatim difpofitis;* i. e. Hairy *Carolina* Starwort, v/ith Leaves like the blueCo and yellow Flowers difpofed in a Sort of Umbel reprefents the Rays of th r, which are fli cut into Three Parts at th_ ,^:remities •, *b,* the *V^* of the Flower, which is compefed of feveral Florets 5 *c,* (hews one of the Half Florets which compoie tn Ray taken out of the Empalement; *d,* reprcfents Floret taken out of the Difk, fitting on the Embry *e;* in the Centre of which is placed^the Pointal/-

The


ASPHODELUS folius planis ensiformibus floribus spicatis

ASTER *Carolinianus pilosus Conyzæ coeruleæ foliis, floribus luteis quasi umbellatim dispositis.*

ASTRAGALUS *Alpinus perennis alopecuroides*

The Seeds of this Plant were fent me from *South Carolina,* in the Year 1742, by my late Friend Dr. *Thomas Dale,* which fucceeded in the *Chelfea* Garden, where the Plants flowered the following Year-, but the Seafon proved too cold to ripen the Seeds, and the Plants being biennial, they perifhed in Winter.

This Plant produces many hairy oblong Leaves near the Root, which come out without any Order. They are from Four to near Six Inches long, and almoft an Inch broad. From between thefe Leaves the Stalk arifes immediately from the Root, which is Two Feet and an Half high, fending out feveral Side-branches. Thefe are garnifhed with hairy Leaves of the fame Shape with thofe at Bottom, but are fmaller, and are placed alternately on the Branches, which they clofely embrace, having no Foot-ftalk. At the Top of the Stalk, the flowers are produced, which are large, and of a yellow Colour, compofed of many Half Florets, which form the Border, or Ray, and the Difk in the Centre is compofed of feveral Florets, each having a Pointal in the Middle, and attended by Five (lender Stamina, which do not extend beyond the Corolla. At the Bottom of the Pointal is placed the Embryo, crowned with a pappoleDown, which ferves to waft the Seeds abroad when they are ripe. Thefe are included in one common fcaly impalement.

This Plant approaches near to one which is figured by Dr. *Plukenet, Plate* 340, which he titles *After lutens -Mariatus, faligneis brevioribus foliis hirfutis pubefcentibus, jummo caule ramofius.* But the Leaves in his Figure are much lefs than thofe of our Plant, and the Flowers are Imaller; and their Foot-ftalks are garnifhed with Leaves clofe to the Empalement; fo that I doubt of its being the fame Plant.

This muft be ranked in the Genus of *After,* if We follow *Tournefort's* Method; but, according to *Faillant's* it fhould be under that of *Helenium* ; and Dr. *Linnaeus's* Syftem places it in his Genus of *Inula^* which he diftinguifhes from *After^* by its Empalement not being reflexed, and the Anthera being feated in the pappofe Down.

Fig. 2. ASTER *Americanus procumbens, Belli dis minor is facie, Houft. Manf.* i. e. Trailing *American* Starwort, having the Appearance of the leffer Daizy.

This Plant was difcovered by the late Do6lor *William Houftoun,* in the Year 1739, growing in Plenty in the fandy Ground about *Vera Cruz* in *America*; where he drew the Figure, and made a Defcription of the Plant upon the Spot; which he fent to *England* with the Seeds, forne of which grew in the *Chelfea* Garden, and the Plants flowered the following Summer, but did not perfect their Seeds.

It hath (lender fibrous Roots, which creep in the Ground, and fend out many (lender round Stalks, which bend and incline to the Ground. Thefe are about Four or Five Inches long, deftitute of Leaves, each fuftaining One Flower, in Shape and Size of thofe of the common Field Daizy, of a whitifh purple Colour; but the Rays are narrower. The Difk is compofed of feveral Florets, which are fucceeded by fmall Seeds crowned with a pappofe Down. The Empalement, which includes the Flowers, is fcaly, as reprefented at G.

As this Plant is a Native of a warm Climate, fo it will not live in the open Air in *England*: therefore the Seeds muft be fown in an Hot-bed, and the Plants will require a Stove to maintain them through the Winter.

P L A T E LVIII.

ASTRAGALUS, *Tourn. Inft. R. H.* 415. *tab.* 233. *Rait Meth. Plant.* 106. *Lin. Gen. Plant.* 799. Milk-Vetch. *In French, Aftragale.*

THIS Genus of Plants is by Dr. *Vournefort* ranged in the Fifth Seftion of his Tenth Clafs, intituled, *Herbs with a papilionaceous Flower, whofe Pointal changes into a bicapfular Pod.* Mr. *Ray* places it in his Twenty-firft Clais, and Third Divifion, which he titles *Leguminous Herbs, which are not three-leaved, whofe Pods have a double Row of Seeds.* Dr. *Linnaus* places this Genus in his *candria,* from theFlowersliaving Ten StaminT, which form Two Bodies, Nine of them joining together, and the Tenth Handing feparate.

The Species here reprefented is,

ASTRAGALUS *Alpinusprocerior Alopecuroides^ Inft. R. H.* 416. i. e. Taller Fox-tail Milk-Vetch of the *Alps.* This Plant is tituled by Dr. *Linnaeus,* in the Catalogue of Mr. *Clifford's* Garden, *Aftralagus capitulis oblongis, MiBus calycibus, & leguminibus lanatis,* p. 361 ; and, ^^^^*SpedesPlantarum, Aftragalus caukfeens, fpicis cymtticis\ykffltibus calycibus, leguminibiifque lanatis,* p. *755'*

This Plant was difcovered by Dr. *Tournefort* growing on the *Alps,* who brought the Seeds to the Royal Garden at *Paris,* where it fucceeded, and produced Seeds, which have been communicated to moft of the Botanic Gardens in *Europe.* But, fince his time, this Plant has been found growing naturally in *Siberia* \ from whence I have received the Seeds.

There are feveral Species of this Genus now known ; but that which is here figured, is one of the moft fpecious ; and as there is not a good Figure of the Plant in any of the Botanic Books, fo I have chofen this to reprefent the Genus, *a,* reprefents the Pod feparated from the Spike-, *b,* fhews the Pod opened lengthways, with the double Row of Seeds, which is one of the Characters of this Genus ; *c,* is a fingle Seed taken out of the Pod. The Spikes of Flowers are confpicuous in the Prior.

This Plant Teldom continues longer than Three Years. The Firft Year, it rarely rifes uptc flower; but when the Plants come up in the Spring, they will get Strength before Winter; fo will flower ftronger the following Summer. The Flower-ftems rife near Two Foot high, and produce One or Two clofe obtufe Spikes of Flowers, which clofely furround the Stem, having very fliort Foot-ftalks. The Empalement of the Flower, as alfo the Pods, are almoft comoft covered with a foft Lanugo, or Down. The Flowers are yellow, and of the Pea-bloflbm Kind, confifting of a Standard, a Keel, and Two Wings. In the Keel is clofely wrapped theTen Stamina and Pointal. After the Flower is pad, the Pointal becomes a fliort Pod, having Four or Six Kidney-fhaped Seeds. It flowers in *July,* and the Seeds ripen in *September.*

PLATE

PLATE LIX.

BALSAMINA, fount. Ltd R 481. Balfamina foemina, &c. IV. t. 46. Tan. Gen.

DOctor Tournefort ranges this Genus of Plants in his Eleventh Clafs, intituled, Herbs with a polypetalous anomalous Flower, whofe Pointal turns to an unicapfular Fruit. Mr. Ray places it in his Twenty-fecond Clafs of ... Flower, ... Dr. Linnæus, places it in his Nineteenth Clafs of Plants, intituled, Monogamia; and keeps the Title of Impatiens to the Genus, which was applied to it by Bvdonics, Rivinus, and fome other Authors, from the Seed-veffel being impatient to the Touch when ripe; for, upon its being handled, the Pod burfts open and rolls up in ... throwing out the Seeds to fome Diftance.

The Species here reprefented is,

BALSAMINA femina, flore majore plena elegantiff... variegato ... Female Balfamine, with a ... double Flower, elegantly ftriped. *a*, reprefents the ... of the Flower, which is bent at the Foot-ftalk, where there is a Spur or Heel produced, ... the Forepart of the Flower ... the Pod when fully grown; *d*, the Seeds.

The Seeds of this Plant were brought from *China*, ... the Title of *Immortal Eagle Flower*. ... pre- ferved ftveral Years in the Gardens of curious Perfons, and if Care is taken to pull off all thofe Flowers from the Plants, which are not double or well-coloured, not permitting them to have Seeds, the Kind may be pre- ferved without degenerating in *England*. There is one Sort of this Plant common in the Mantis of *America*, which is called Cock ... But this grows very large in our Gardens, and very rarely comes to flower till late in the Seafon; nor are the Flowers fo double as in the ... fort; fo it is fcarce worth propagating here. I do imagine, that this was introduced from *India* to thefe Iflands, ... a Plant natural to that Country, where, by its bearing Plenty of Seeds, it is now become fo common there, as to be thought a Plant of that Country; but as the Inhabitants have not been careful in faving or the Seeds, fo it hath degenerated there fo much, as to have few Plants with double Flowers. The common Sort with fingle Flowers has been long cultivated in the *English* Gardens; but was firft brought from *India*, where there are feveral other Species of this Genus, but none of them approaches to the Sort here figured in beauty. Dr. *Linnæus* fuppofes the common Balfamine and this ... the fame Species; in which I think he miftakes; for the Flowers of this are near double the Size of thofe of the common Sort; fo that aitho' the colours of the Flowers may vary, and the double degenerate to fingle Flowers, yet they will never alter in the Size of the Flower, nor will the Plants have the fame appearance; fo that they may be put down as different Species.

... Title ... was applied to this Genus by fome of the old Botanic Authors, who joined this with the *Momordica*, to which they gave the Title of *Balfamina* ... for no other reafon than that of the Fruit burfting open on the Touch, when ripe, as the Pods of the other do; but there is no Affinity either in the powers or Fruit of the Two Plants; *the Momordica* approaching near to the *Cucumber* in Flower and Fruit.

PLATE LX.

BASTERIA.

The Characters of this Genus are,

The Empalement of the Flower is of One Leaf cut into Five narrow Segments to the Bottom: The Flower is compofed of many oblong pointed Leaves, or Petals, which are inferted in the Empalement, each turning inward toward their upper Part, fo as at firft to wrap over the Stamina fomewhat like the Flowers of the ftarry Anemone. In the Centre of the Flower is placed the roundifh Ovarium which is compofed of Five Germina, and is attended by many fhort Stamina, crowned with blunt Summits.

THIS Plant muft be ranged, according to Dr. *Linnæus's* Syftem, in his Clafs ... Mr. *Catesby* has figured this Plant, in his *Hiftory of Carolina*, under the following Title: *Frutex corni foliis conjugatis, floribus injlar Anemones ftellata, petalis craffis rigidis, colore fordide rubente, cortice aromatico,* Vol. I. p. 46. It is commonly known in the Gardens by the Name of *Allfpice*; but as that Title has been long applied to the *Jamaica Pepper*, fo the fixing of it to this Plant may occafion Confufion in their Names.

In *England* this is but a low Shrub, rarely rifing above Three or Four Feet high, and, in its natural Country feldom more than Eight or Ten Feet. It divides into many irregular Branches, which are covered with a bright brown Bark, which is very aromatic. Thefe Branches are garnifhed with Leaves placed by Pairs oppofite which are oval, being near Two Inches long, and about One and an Half in the Middle, generally ending with a Point, having One longitudinal Vein, with Three ... horizontally to the Sides. At the Extremity of the Branches the Flowers are produced fingly, fupported by fhort Foot-ftalks. Thefe are compofed of many narrow crowded Petals, of ... of a very dark ... and Purple Colour, ... in their Centre a roundifh Ovarium, compofed of Five Germina, furrounded by a great Number of fhort Stamina, with ... Summits of a yellow Colour. The Ovarium always falls away with the Petals of the Flower in *England*, and never ... fo that it is uncertain what Seed-veffel it produces.

As this Plant hath not had any proper Title given it in any of the Botanic Books, I have applied the following Name to it, in Honour of my ... Friend Dr. ... Fellow R. S. of ...

BASTERIA ... *foliis ... caule frutkofo;* i.e. ... with oval pointed Leaves and woody Stalks. ... the ... Part of ... Flower, with its Empalement; *b* ftews the Forepart of it; and *c*. the many Stamina which furround the Ovary.

... his ... *Exoticarum*, has figured ... which feems to approach near this in the Flower, and alfo in the Scent of its Bark; but he fays it rifes to the Height of a Cherry tree, and the ... his are much longer than thofe of this ... doubt of its being the fame ... procured from *Carolina* by Mr. *Catesby*, who fays it grows at a great Diftance from the Settlements already made in that Country; but I have been informed ... the Inhabitants of *Charles-Town* have ... in their Gardens of late Years, fo have great ... there.

This Shrub will live in the open Air in *England*, ... is planted in a warm Situation; but in fevere Winters it is frequently killed, when the Plants have not ftrength, or are too much expofed to the Winds.

BALSAMINA FEMINA. *flore majore plano, digitatofimbriato variegato.*

BASTERIA. *Foliis ovato-acuminatis* [illegible]


Pl. LXI
B.v UHDIA folius ovato-cordatis, lobis longiss»»« parallelis

BELLADONA *majoribus foliis* [illegible] *Hafn. I.R.H. 77.*

R. Marsh del.

Published according to Act of Parliament by M. Miller Sept. 1, 1736. *M. Miller sculp.*

PLATE LXI.

BAUHIN.IA, *Plum. N. Gen. Plant* 23. fab. 13. Lin. Gen.* 459. Mountain Ebony.

THIS Genus of Plants is by Doftor *Linnaeus* ranged in his Sixth Clafs, intituled, *Decandria Monogynia,* the Flowers having each Ten. Stamina and One Style.

The Species here reprefented is*

BAUHINIA *foliis ovato-cordatis lobis longijfimis parallelism* i. e. Mountain Ebony, with oval Heart-lhaped Leaves, with very long Lobes ftanding parallel, *a,* reprefents the Flower, with its Ten incurved Stamina ; *b,* the Style of the Flower 5 *c,* the Pod •, and *d,* the Seed taken out of the Pod.

The Charafters of this Genus are exhibited in the *Gardener's Dictionary.*

The Plant, here reprefented, approaches near to the *Bauhinia non aculeata, folio ampliori bicorni,* of Father *Plumier*; but the Lobes of the Leaves are much longer 5 nor are the Flowers fo large as thofe of his Plant, which is figured in the *Hortus Malabaricus,* by the Title of *Velutta-Mandaru* ; and is, by Dr. *Linnaus,* titled *Bauhinia foliis ovatis lobis acuminatis femiovatis Spec. Plant.* 375.

There are many Species of this Genus, which are Natives of the *Weft* and *Eaft Indies,* in both of which they are equally common. The Seeds of this, as alfo of Two other Species, I have received from *Jamaica,* by the Title of *Mountain Ebony,* the Wood of the Trees being very hard and black, fomewhat refembling the true libony, occafio&ed their fo calling it; and having no better Epithet for it in *Englifh,* I have Continued that Name to it. I have received Seeds of another Sort from *Jamaica,* by the Title of *Upright Honey-fuckle,* the Plants of which are now growing in the *Chelfea* Garden, but have not yet flowered. This Sort feldom grows taller than Five or Six Feet, in its native Soil, but the Extremities of every Branch are garnifhed with large Clufters of Flowers, fomewhat refembling thole of the *Honey-fuckle,* from whence it had this Name. The common Title of this Genus of Plants in the *Eaft Indies* is MANDARU, to which they add fome other Epithet to diftinguifh the Species. One of the Species, which is that of Father *Plumier* before-mentioned, has been titled by fome ancient Botanifts *Arbor S. Thorny* and the Flower *Flos Divi Thorns*; the Flowers of that Species being, ftriped with purple, the ignorant People had a Superftition that they were ftriped with *St. Thomas's* Blood.

There are a much greater Variety of thefe Plants than are mentioned in any of the Books of Botany ; for I have Specimens of at leaft Twelve Sorts, which are very diftinft *, fome of which have twining Stalks, others have their Stems and Branches full of Thorns ; many of thefe came from *Jamaica,* and others were fent me from the *Leeward Iflands.*

As thefe Plants are Natives of hot Countries, fo they will not live in *England,* unlefs they are placed in a Hot-houfe in Winter ; but a moderate Warmth will preferve them, provided they have not much Wet in Winter, Several of the Sorts flower very well in *England,* and make a very good Appearance in the Hot-houfe, when they are in Flower; fo are as well worth preferring, as moft other exotic Plants; and the Seeds of them may be eafily obtained from the *Weft Indies.* The Culture of them is fully inferted in the *Gardener's Dictionary.*

PLATE LXII.

BELLADONA, *Tourn. Inft. R. H. 77- ^ab. 13. Solannm lethale, feu Belladona, Raii Meth. Plant.* 74. *Atropa Lin. Gen. Plant.* 222. The Deadly Night-fhade.

THIS Genus of Plants is by *fmrncfort_* ranged in the Firft Section of his Firft Clafs of Plants, intituled, *Herbs with a Belljhaped Flower, of One Leaf, whofe Pointal changes to a foft pulp Fruit.* Mr. *Ray* places it in his Seventieth Clafs of Plants, *bearing Berries which grow feparate.* Dr. *Litmaus* ranges it in his Fifth Clafs of Plants, intituled, *Pentandria Monogynia -,* the Flowers having Five Stamina and One Germen.

The Species here reprefented is,

BELLADONA, *majoribus foliis et floribus, Lift. R.H. 77.* Deadly Night-fhade, with larger Leaves and Flowers, *a,* reprefents the Bell-fhaped Flower, which generally turns downward ; *b,* one of the Berries intire, ^hen ripe • ; *c,* fhews the Fruit cut open -, and *d,* the Seeds.

This is by *Clufius* called *Solatium lethale Belladona* \ and by *Tragus, Solanum hortenfe nigrum* ; by *Cafpar Eauhin, Solanum Melanocerafus, Pin.* 166; by *Parkinfon* and *Gerard, Solanum lethale* ; and in *Englijh, Dwale,* or *Deadly Night-fhade.* Doftor *Linnaeus* has changed the Title of this Genus *toJtropa;* and this Species he calls *Atropa caule herbacfo, foliis ovatis integris. Sp. Plant.* 181. There is another Species of this Genus, mentioned by *Clufius* and *Tournefort,* having fmaller Leaves and Flowers; but if there is a real Diftin<5Hon between thefe Plants, I have not *fctn* the latter in any of the *Englifh* or *Dutch* Gardens.

The Sort here figured grows wild in feveral Parts of *England,* but particularly about *Rochejier* and *Chatham^* in *Kent,* where I have obferved it growing from between the Joints of old Walls, and in molt of their unfrequented Lanes; and in *Wood/lock-Park,* in *Oxford/hire,* and *Up-Park,* in *Hampjhire,* in great Plenty. This Plant hath a perennial Root, and an annual Stalk, which decays to the Ground in Autumn, and frefh Shoots are put out from the Roots early in the Spring •, which, in a rich moid Ground, will.gro^ to the height of Five Feet-,

but on poor Land, or when the Plants grow out of the Joints of Walls, their ufual Height is from Two to Three Feet. The Flowers are produced fingly from the Joints, between the Leaves, on pretty long Foot-ftalks : Thefe are large and Bell-fhaped, divided at their Rim or Edge int6 Five Parts, and are of a dufky brown greenifh Colour on their Outfide, and purplifh within. In the Centre of the Flower is placed the oval Germen, fupporting a fiender Stile, attended by Five Stamina, which extend the Length of the tubulous Flower, and are crowned with thick Summits, which incline on one Side. When the Flower falls off, the Germen turns to a globular foft Fruit, refting in the permanent Empalement •, this is flatted at Top, and when ripe is of a fhining black Colour, filled with a purple Juice, in which are many Kidney-fhaped Seeds. It flowers in *June, July^* and *Augufiy* and the Fruit is ripe in *Augujt, September,* and *OElober ->* for there is a Succeffion of Flowers and Fruit on the fame Plant upwards of Three Months.

The Berries of this "Plant are of a malignant pv,....:.~~:5 Nature ; and being of a fweet Taftc, many Children have been poifoned by eating them •, therefore the Plants fhould be deftroyed before they produce Fruit, in all Places where Children are permitted to walk, to prevent the ill Effeft which may otherwife happen. The only fafe Remedy againft the Poifon of thefe Berries is to drink a large Glafs of warm Vinegar, as ibon as pofli-ble after eating of the Berries, which will prevent them having a bad Effeft. The Leaves of this Plant are fometimes uied in outward Applications, for Inflammations, or to abate hard Swellings or Tumours ; and fome Perfons have ufed them for the Cure of Cancers and fcrophulous Difeafes.

If the Berries of this Plant arc permitted to fall on the Gronpd, the Seed; will produce Plenty of the Plants the following-Spring.-, fo tfm^Lfyiglt'Plant* teiA8F^ft to perfeft its Seeds, will foon fill the Ground with Plants.

P L A T E LXIII.

BERBERIS, *Tourn. Inft. R. H.* 614. *Tab.* 385. *Rail Meth. Plant.* 154. *Lin. Gen. Plant.* 399. The Barberry Bufh. In *French*, *Epine-vinete.*

THIS Genus is by *Totirnefort* ringed in his Second Se&ion of the Twenty-firft Clafs of Plants, intituled, *Trees and Shrubs with a Rofe-Jhaped Flower', whofs Pointal becomes a Berry.* Mr. *Ray* places it among his Trees and Shrubs which have Berries with many Seeds, which are not umbilicatedi and Dr. *Linnaeus* ranges it in his Sixth Clafs of Plants, intituled, *Hexandria Monogynia -,* i. e. Plants whofe Flowers have Six Stamina and One Style.

The Species here reprefented is,

BERBER is *Dumetorum$_y$ C. B. P.* 454. The common Barberry or Pipperidge Bufh,

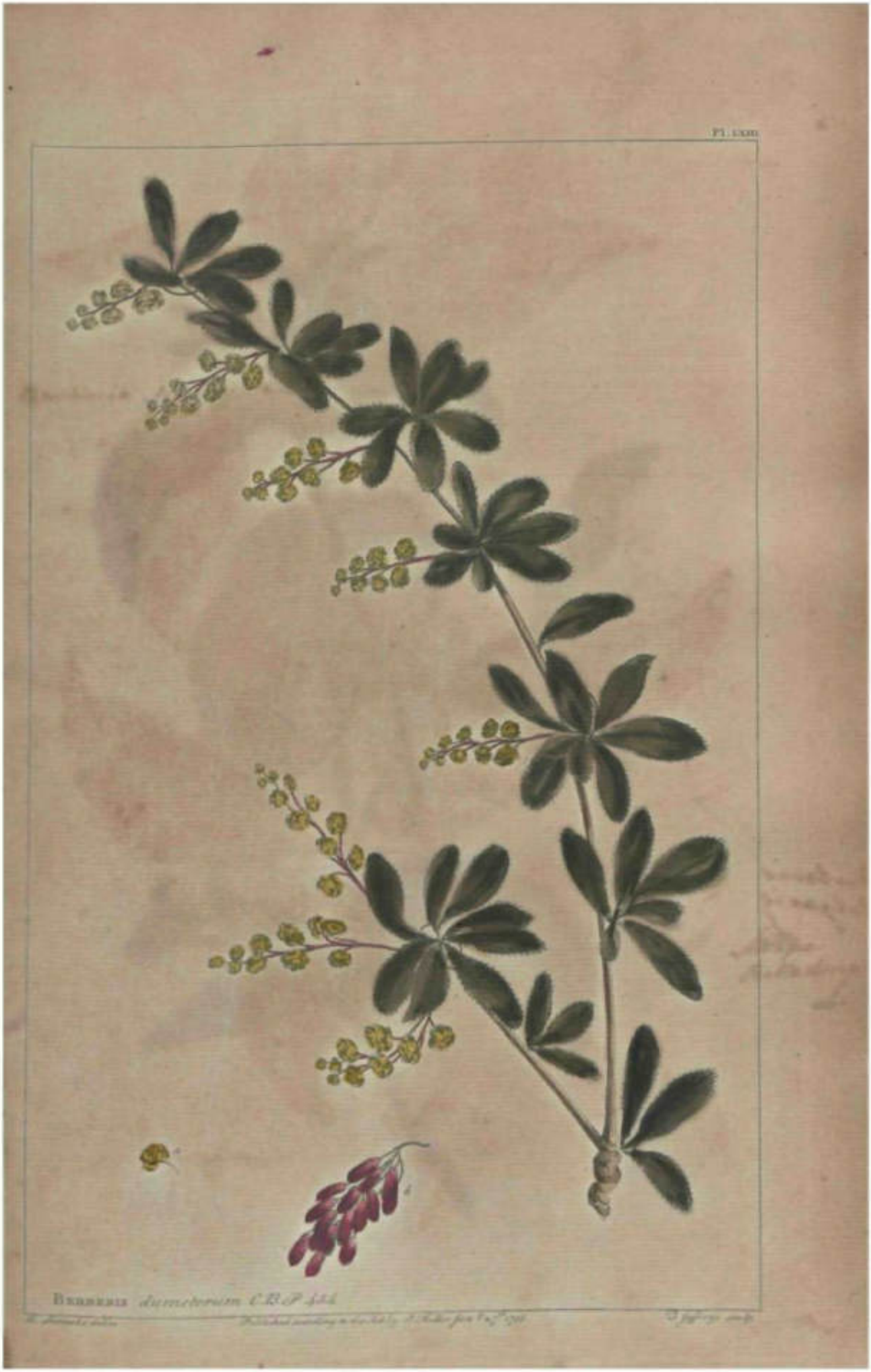
This is the *Berber is vulgo qua & Oxyacatitha putata, J. B.* 1. 52.; and, by *Dodonaus$_y$* is titled, *Spina acida five Oxyacantho pempt.* 750. Dr. *Unnaus* titles it, *Berberis pedunculis raccmojis, Mat. Med.* 290. *Sp. Plant.* 330.

This Bufh is frequently found growing in the Hedges in feveral Parts of *England;* though I believe it is not a Native of this Country ; but the Seeds have either been fcattered in the Places where they are found growing wild, or the Plants have been removed out of Gardens •, for I have never feen it grqwing wild in any of the Woods : But where-ever any of thefe Plants happen to grow, they foon propagate very faft, both by Suckers, which are abundantly fent forth from their Roots, as alfo from Seeds falling, or being fcattered by Birds.

It grows to the Height of Six or Eight Feet, with many Stems arifing from the Root, and thefe do branch out on every Side, fo as to form a large Shrub or Buffi. The Branches are long and brittle, armed with fliafp Thorns at the fetting on of the Leaves, which are, fcr the moft part, triple, like the three-thorned *Acacia.* The Bark is white on the Outfide, but the inner Bark is of a deep yellow. The Leaves are placed alternately *on* the Branches, which are oval, their upper Part being blunt and rounded, and neatly indented on their Edges, having a fharp acid Juice. The Flowers are produced in Bunches, like thofe of Currants; thefe arc Bottle-fhaped, fpread open at their Brims, and are of a yelloW Colour, having Six compreffed Stamina, each of theft* crowned with a double Summit: In the Bottom of the flower is fituated a roundifli Ne&arium, divided into Two Parts. After the Flower is fallen, the Germen becomes a Fruit of an oblong Form, having One Cell, in which are lodged Two hard oblong Seeds. The Flowers are produced in *May* ; thefe have a ftrong faint Smell; fo that where there are many of the Bufhes growing, it is very difagreeable for any Perfon to approach them at that Seafon. The Fruit is ripe in *September,* when they are brought in Plenty to *xht London* Markets, and fold for Pickling.

rl^he l^nncrBark> and the Berries of this Shrub, are uied in Medicine. The inner Bark is accounted opening and attenuating, and is efteemed good againft the Jaundice, taken either in Infufion or Decoftion. The *ruit is very cooling and reftringent, and good & moiften the Mouth, and quench Thirft in burning Fevers. AConferve made of the Fruit is ferviceablc again* all Kinds of Fluxes, and is frequently ordered in the Jaundice. The Seeds are alfo reckoned to have the fame Quality, but are feldom ufed.

The Propagation and Culture of this and the othc-l Species of this Genus, are fully inferted in the *Gardner s Dictionary* •, fo I need not repeat them here,


Pl. xxxii.
Berberis dumetorum C.R.P. 444.

Bidens. calyce oblongo squamoso, seminibus radii sterilis non deciduis coronatis, receptaculo ...

Published according to Act of Parliament by Ph. Miller June 27. 1760.

BIGNONIA foliis pinnatis minoribus, foliolis mucronatis marginibus incisis, [illegible] radicatis.

PLATE LXIV.

BIDENS, *Cafalp.* 488. *Vourn. infi.R. H.* 462. *tab.* 262. *Lin. Gen. Plant.* 840. *Cannabina aquatica Rait Meth. Plant.* 37. *Verbefina Rivin. Ceratocephalus Vaill Mem. Acad. R. S.* 1720. Water Hemp Agrimony.

nnOurnefort ranges this Genus in his Twelfth Clafs of Plants, with flofculous Flowers, and Seeds without Down. Mr. *Ray* places it in his Eighth Clafs of Plants, which he *fitlziCorymbifer* fiore radiato* ; and Dr. *Ltnn*us* puts it under his Nineteenth Clafs of Plants, Intituled *Syngenefia Polygamia tqualis-,* which includes thole Plants, whofc Female and Hermaphrodite Flowers* included in the fame *Involucrum,* are equal

The Species here repref^pted is, *p*

BIDENS *calyce oblongo fqtiamofo feminibus radu corolla non deciduo coronatis* Juffieu <, Water Hemp-Agnmonia, with an oblong fcaly Empalement, whofe t lowers and Empalement are permanent, and never fall away from the Bud. *a9* (hews the fcaly Empalement, clofely embracing the Flower-bud 5 *K* the Rays of the Flower, which are indented at their Extremity; *c,* the Hermaphrodite Flowers, which compofe the Dilk; *d9* One of the Female Flowers, taken out of the hm-palement, to which adheres a tingle Seed 5 *, One of the Seeds taken out of an Hermaphrodite Flower; /, reprefents the fmall Stamina, with their globular Summits.

The Charafters of this Genus are exhibited in the *Gardener's Biflionary.*

The Seeds of this Plant were fent from *Peru* to the Royal Garden at *Paris,* where it has flounfhed a few Years paft, and the Plants have produced Seeds there, which have been communicated to feveral curious Gardens in *Europe.* The Seeds were fent me in the Year 1753; and the following Summer the Plants flowered, and produced good Seeds in the *Cbelfea* Garden. It nies to the Height of Four Feet : The Stalks do become hard and ligneous, and divide into many Branches; which are garnifhed with oblong fmooth Leaves, which are incire; thefe are placed oppofite by Pairs : At the Extremity of the Branches the Flowers are produced, each Handing fingle upon a Foot-ftalk, which is garnifhed with fmaller Leaves, clofe to the Empalement of the Flower. This Empalement is compofed of many Scales, placed *imbricatim,* like the Tiles on an Houfe, and clofely embrace the Flower, which is compofed of a Border of Female Flowers, having each One Leaf> (tretched out like a Tongue^ forming the Ray of the Flower; and in the Centre are many Hermaphrodite Flowers, which are tubulous * and thefe do compofe the Difk of the Flower : Each of thefe have Five flender Stamina, fupporting a globular Summit: In the Centre is placed the Germen, which afterward becomes a fingle oblong Seed. The whole of the Flower continues, and never falls offj fo that when the Seeds are ripe, the Rays of the Flower are remaining firm, and only change their Colour; and adhere fo clofely to the Seeds, as to render it difficult to part them. The Flowers when blown are as large as thofe of the common Marygold, and are of a yellow Colour.

The Seeds of this Plant muft be fown upon an Hot-bed in the Spring; and, when the Plants come up, they muft be tranfplanted to another Hot-bed, to bring the Plants forward ; but they muft not be drawn too much, which will render them very weak : therefore when the Weather is favourable, they fhould have a large Share of Air admitted to them. By the Beginning of *June* they fhould be inured to bear the open Air by Degrees, and, about the Middle of that Month, they fhould be tranfplanted, with Balls of Earth to their Roots, fome of them into Pots, and others into warm Borders, fhading them until they have taken Root •, after which Time they will require no farther Care, but to water them in dry Weather. In *July* the Plants will flower, and the Seeds are ripe in *Offober* : But in wet cold Seafons the Seeds will not ripen in *England,* unlefs the Plants are flieltered under Glaffes.

PLATE LXV.

BIGNONIA, *tourn.InJi.R.H.164.. fab. 7*'. Lin. Gen, Plant. 677. Raii Meth. Plant.* 90. *Gelfemmum Cor nut.* The Trumpet-Tree, *vulgo.*

THIS Genus of Plants was eftabliflied f^yb^nefort, who gave it this Title in Honour to the late learned Abbe *Bignoti,* who was principal Libra nan, to the King of *France,* and he ranged it in the Third Seftion of the Firft Clafs of Plants, intitled, *Herbs with an anomalous Flower of One Leaf, fpreading open at their Brim:* Mr. &? places it in his Nineteenth Clafs of Plants, «<\/* *a labiated Flower of One Leaf, which is fucceeded tyrons* ; and Dr. *Limunu vats* it in his Fourteenth Clafs of Plants, intituled *Didynamia Angioffermia,* the Flowers ot this Clafs having T*/o long and Two fhort Stamina.

The Species here exhibited is,

BIGNONIA *foliis finnatis minoribusjdiolis mucronatis marginibus inci/is geniculis radicals ;* i. e. Trumpet-flower (or *Bignonia),* with fmailer pointed winged Leaves, beino- cut on their Edges* and Roots coming out from the Joints of their Stalks, *a,* reprefents the Flower intire, growing in a Clufter, at the Extremity of the Branch -, *b,* fhews a Flower opened lengthways, with the Two longer and Two fhort Stamina, and the Pointal fituated between the Two long Stamina; f, reprefents the Pod, when full grown, and the Seeds ranged *imbricatim,* like Tiles on an Houfe; *d,* a fingle Seed taken out of the Pod, with its Wing adhering to it.

This

This Species is, by Mr. *Gatejly,* titled *Bignonia fraxini foliis, coccineo fiore minor e* ; i.e. Bignonia with Afh-Leaves, and a fmaller fcarlet Flower. He has given a Figure of it, but it wants the Seed-veflel; and the Colour of his Flowers is much more like the larger Sort, which Dr. *Tournefort* titles *Bignonia Americana fraxini folio, fiore amplo Ph<enicio.* *Injl. R. H.* i64. This laft has been many Years an Inhabitant in molt of the curious Gardens in *Europe*\ but was brought from *Ncrlh America,* where it grows naturally in the Woods, fattening its Branches to the tall Trees, by the Roots which are fent forth at the Joints, whereby they are fupported, and mount up to the Top of the higheft Trees. And when they are planted near Walls, the Roots will faften themfelves into the Joints of the Wall, and, where they have room, will rile to the Height of Fifty or Sixty Feet. This larger Sort is figured by *Cornutus, Ferarins,* and feveral other Botanifts, by the Title of *xjelfeminum Hederaceum Indicum,.* from the Refcmblance of its Flowers to thofe of the *Jafmine*; and the *French* do now call it *Jafmin de Virginie*\ but in *England* it is generally known by the Title of *Trumpet-ficwer,* or *Mexiccitle.*

The Plant here figured is, by many Botanifts, ftp pofed to be only a Variety of the larger Sort •, but all the Plants of this Sort which have been raifed from Seeds in the *Englijh* Gardens, for feveral Years pad, do retain their Difference-, fo they may be allowed to be diftinct Species. There are Two old Plants in the *Cbelfea* Garden, One of each Sort, which have grown near each other above Fifty Years, and do conftantly produce Flowers every Year, which are remarkably different in their Size and Colour, as alfo in the Size and Shape *ot* their Leaves •, but it is of late Years that this Sort has been much propagated in the *Englijh* Gardens. Tne Seeds of it were fent from *Carolina* in 1724 by Mr. *CateJby,* from which many Plants were raifed ; and fince that Time the Seeds have been frequently fent to *England* from that Country, and great Numbers of Plants have been raifed in the Gardens ; but the Plants which have been raifed from Seeds are feveral Years before they flower, and are not near fo produftive of them as thoie Plants which are propagated by Suckers, or Cuttings from old Trees.

P L A T E LXVL

BISTORTA, *Tourn. Inst. R. H.* 511. *Tab.* 291. *Rait Meth. Plant.* 22. *Polygcnum, Lin. Gen. Plant.* 445. Biftort, or Snake-weed.

THIS Genus of Plants is by *Tournefort* ranged in his Fifteenth Clafs, intituled, *Herbs with jiamine - ous Flowers, whofe Pointal becomes the Seed, wrapped in the Empalement:* Mr. *Ray* places it in his Fifth Clafs of Plants, *with jlamineous Flowers, which are fucceeded by Seeds*; Dr. *Linnaus* places it in the Third Divifion of his Eighth Clafs of Plants, intituled *Qttandria Trigynia** the the Flowers having Eight Stamina and Three Styles ; and he joins this, the *Perficaria, Fagopynim,* and *Helxifie,* of his former Edition, to the Genus of *Polygonum^* making thefe only Species of that Genus.

The Species here reprefented is,

BISTORT A *major radice minus intorta, C. B. P.* 192. The greater Biftort, or Snake-weed, *a,* repreients the Flowers as they grow in a clofe Spike -, *b9* is a fingle Flower taken from the Spike, which fliews they have no Empalement, fo the Corol of the Flower afterward clofely furrounds the Seed.

This is the *Bijiorta major vulgar is* of *Parkinfon* and *Gerard* ; by *John Bauhin* it is titled *Bijiorta major rugofioribus fcliis, hiji.* 3. *538.* ; and Dr. *Linnaeus* titles it, *Polygonum caule fimplictjjimo monajiachyo, Jo I Us ovatis in petiolum decurrentibus, Mat. Med.* 188. *Spe. Plant.* 360.

This Plant grows naturally in moift Meadows, in feveral Parts of *England,* particularly in *Torkfhire,* and ibme of the Northern Counties. It is found in pretty great Plenty in *Batterjea* Meadows, near the River-fide, which is the only Place fo near *London* where I have obfcrved it growin[illegible].....rally. The ufual Time of its flowering is in *May* and *June*; though, when the Autumn proves moift and favourable, it frequently flowers again in *September* and *Oftobcr-,* but efpecially if the Meadows are mowed for Hay, and the Stalks and Leaves of the Plants are cut pretty near the Ground, then they put out new Leaves and Stalks from the Roots, ana thefe produce a frefh Succefiion of Flowers in the Autumn : And where any of thefe Plants are preferved in Gardens, if the Stems are cut down as foon as the Flowers are paft in Summer, they will pufh out frein Stalks foon after, if they grow in moift Ground, or are duly watered, and thefe will have Plenty of Flowers in the Autumn ; when thefe Plants will make as good an Appearance in a Garden, as many other Plants whicr* are allowed to have a Place there.

It propagates greatly by its running Roots; fo that when it is once allowed a Place in the Garden, it win foon multiply faft enough. The Leaves and Stalks decay in Winter, and the Roots put out new early in the Spring.

The Roots of Biftort are ufed in Medicine, which are drying and binding, fo are efteemed to be of Service in all Kinds of Fluxes and Hamorrhages, either from tftc Bowels, or in any other Part. They are alfo *[illegible] mic, and good in peftilential Fevers. They re n fon, and the Bite or Sting of venomous Creatures.

Thefe Roots have alfo been ufed for tanning of Leather, for which Purpofe Rewards have been &*!? Perfons by way of Encouragement; but the great Quantity of Roots which would be required for this Purpofe in order to fupply the Want of Oak-Bark, is more than can be procured growing wild •, and I fear it will ne anfwer the Expcnce of cultivating it, as the Oak-tf> can be had in Plenty in moft Parts of *England.*


Pl. LXVI.
I.I..T[)KTA MAI OB
,///,W < ..A-'S'. If2


Pl. LXVII
BLATI \ IIJ V

Pl. LXVIII

[illegible] Constantinopolitana, flore
ref[illegible] caeruleo calyce vesicario T. Cor. 6.

G. D. Ehret pinxit. Published according to the Act by P. Miller Feb. 24th 1758. J. Jefferys sculp.

PLATE LXVII.

BLATTARIA, *Tourn. Inft. R. H.* H7- 9**- 61. *Raii Meth. Plant.* 85. *Verbafcum, Lin. Gen. Plant.* 217. Moth Mullein •, in French, *Herbe aux mites.*

TOURNEFORT ranges this Genus in his Second Clafs of Plants, intituled, *Herbs with a Wheel-ffoaped Flower of One Leaf whofe Pointal turns to a dry Fruit.* Mr. *Ray* places it in his Nineteenth Clafs of Plants, *whofe Flowers are uniform, monopetalous, and are fucceeded by dry Capfules.* Dr. *Linnaeus* puts it in his Fifth Clafs of Plants, intituled, *Pentandria Monogynia,* the Flower having Five Stamina, and One Germen. Dodtor *Tournefort,* Mr. *Ray,* and fome other Botanifts, have feparated the Plants of this Genus from the *Verbafcum,* or Common Mullein, on account of their Seed-veffels being round, whereas thofe of *Verbafcum* are oblong, ending in a Point.

The Species here reprefented is,

BLATTARIA *alba, C. B.* P. 241. White Moth Mullein. *a,* reprefents the Plant before it fhoots out the Flower-ftem •, *b,* the long Spike of Flowers ; c, the fingle Flower, taken from the Spike, fliewing the Five Stamina, and the fingle Stylus, as alfo how the Flower is joined at the Bafe, fo as to fall off intire, though it is cut into Five Parts almoft to the Bottom, *d,* reprefents an intire Seed-veffel; *e,* the fame cut through horizontally, fhewing the intermediate Partition which divides it into Two Cells; *f* the Seeds taken out of the Capfule.

This Plant is, by *Lobel,* titled, *Blattaria fore albo, perperam verbafcum femina vulgb. Icon. 563.* and by *John Bauhin, Parkinfon,* and others, *Blattaria flore albo,* i. e. Moth Mullein, with a white Flower. There are Two other Varieties of this Plant, one with a Rofe-coloured Flower, and the other with a worn-out purple Flower; but thefe are accidental Varieties which do vary, and are not conftant. This with white Flowers often produces Rofe-coloured Flowers; and the Seeds of the Rofe-colour fometimes produce Plants with the purple Flowers. Thefe are biennial Plants, which periffi foon after they have perfe&ed their Seeds. The Plants very rarely fhoot up their Flower-ftems the Firft Year, but fpread their Leaves clofe upon the Surface of the Ground, in the manner reprefented in the Figure j and the Spring following the Flower-ftem is put forth from the Center of the Plant, which rifes to the Height: of Three or Four Feet, according to the Goodnefs of the Soil wherein they grow. The Flowers are produced almoft the whole Length of the Stem, at every Joint; One or Two coming out from the Wings of the Leaves, and thefe fucceed each other, fo that the fame Stem will be garniJhed with Flowers upwards of Two Months. The ufual Time of their Flowering is in *June, July,* and *Augufti* and their Seeds ripen in *Ottober*; which, if permitted to fall on the Ground, will grow much better than if fown, efpecially if they are not fown in Autumn, foon after are ripe; for the Seeds fown in the Spring do often fail, or frequently remain till the following Autumn before they grow.

Dodtor *Tournefort* enumerates Fifteen Varieties of this Genus, Eleven of which are undoubtedly diftinft Species, feveral of them having perennial Roots, and fome have perennial Stalks ; but they are alfo as different in the Form of their Leaves as moft other Species of Plants of the fame Genus; fo fhould not be confounded as they are by Doftor *Linnaeus,* in his Species of Plants, where he enumerates only the common yellow Moth Mullein, and fuppofes all the others to be but feminal Varieties; whereas many of them, which I have cultivated above Thirty Years, have always retained their Difference when raifed from Seeds. All the Species of this Genus are hardy •, and if they are fown upon poor Land, and in Rubbifh, or happen to grow upon old Walls, they will refill the greateft Cold of this Country -, but in a rich moift Soil they often rot in Winter.

PLATE LXVIII.

BORRAGO, *Tourn. Inft. R. H.* 133. *Tab. 53. Borago Raii Meth. Plant. 86. Lin. Gen. Plant,* 172. Borage j in French, *Bourrache.*

THIS Genus of Plant is, by Do&or *Tournefort,* ranged in the Fourth Seftion of his Second Clafs, intituled, *Herbs with a Funnel or Wheel-fhaped Flower of One Leaf whofe Ptintal is attended by Four Embryos, which afteward become fo mnny Seeds inch fed in the Flower-cup.* Mr. *Ray* places this Genus in his Thirteenth Clafs of Plants, intituled, *Herbs with rough or prickly Leaves, whofe Flowers are fucceeded by Four naked Seeds:* And Doctor *Linmeus* ranges it in his Fifth Clafs of Plants, intituled, *Pentandria Monogynia,* from the Flower having Five Stamina, and One Stylus.

The Species here reprefented is,

BORRAGO *Conftantinopolitana, flore reflexo caruleo, calyce veficaria, Tourn. Cor.* 6. i. e. Borage of *Conjlantinople,* with a blue Flower, whofe Petals are reflexed, and a fwelling Empalement. This Plant is, by Doftor *Linnaeus,* titled, *Borago calycibus tubo corolla brevioribus, foliis cordatis, Hort. Cliff.* 45. *i e.* Borage with an Empalement fhorter than the Tube of the Flower, and Heart-fhaped Leaves. *a<,* reprefents a fingle Flower, drawn but of the Empalement, and reverfed to fhew the Tube; *b,* reprefents the Empalement, With the Pointal arifing from the Bafe,. between the Four Embryo's, and itretched Out beyond the Empalement ; *c,* fhews the Five Stamina, connected at their Summits v/ith the Pointal.

This Plant hath a perennial Ro8t, which fpreads and increafes very much when it is planted in a light dry Soil •, and if it has a warm Situation, it will live in the open Air without any Cover : But as it is a very early Shooter in the Spring, generally flowering in *February,* in mild Seafons, fo when it happens to prove Froft in *March,* the Flower-ftems are frequently killed, where they

they grow in an open Expofure; but near the Shelter of Walls, or other Fences, they are feldom injured; for I have had them growing fome Years in a North Border, where the Sun never appears in Winter; and eVen there the P1^s have thriven well: But thefe rarely flowered with me fo well as thofe which were ip a warmer Situation.

The Flower-ftems rife near Two Feet high, but many of the Flowers begin to open before it is Six Inches from the Ground; for the Flowers, at their firft Appearance, are collefted into a clofe Spike ; but as the Stem advances in Height, the fmaller Flower-ftalks branch out into a diffufed Spike. Thefe come out alternately from the main Stem, and have each a fingle Leaf growing at their Bafe. The Flowers all hang downward, and the Corol is refiexed black, fomewhac like thofe of the *Cyclamen,* or Sow-bread. Thefe are of a pale blue Colour* having their Stamina and Pointal connected together at theirSummits, which is One of the Characters of this Genus. There are Four Embryo's, fituated at the Bottom of the Kmpalement, which become fo many naked Seeds; but thefe ſeldom ripen *in England-,* but the Plant iucreafes abundantly, by its creeping flefhy Root.

As the common Borage is a Plant well known *to* mod Perfons, we have omitted giving the Figure ot that Plant, and have made choice of this, to explain the Charafters of the Genus.

Do&or *Tournefort* found this Plant growing naturally near *Conftantinople,* from whence he fent the Seeds to the Royal Garden at *Paris* \ where they Succeeded, and from thence many curious Gardens have been *fun*[illegible] with the Plant.

P L A T E LXIX.

BROWALLIA, *Lin. Gen. Plant.* 691. *Baku Difi. Hort. Hort. Chel bid.* 67. *AEl. Phil n. 452. p. 2.* We have no *Engliſh* Title for this Plant.

DO6lor *Linnaeus* ranges this Genus in his Fourteenth Clafs of Plants, intituled, *Didynamia Angiofpermia,* from the Flower having Two long and Two fhort Stamina, and many Seeds inclofed in One Capfule. According to *Tournejorfs* Method, it fhould be placed in the Fourth Section of his Third Clafs of Plants, intituled, *Herbs with an anomalous and perfonated Flower of One Leaf:* And it will come into Mr. *Ray's* Nineteenth Clafs of Plants, with an irregular difform Flower of One Leaf.

The Charaders are;

// hath an irregular Funnel-Jhaped Flower of One Leaf, with a cylindrical Tube, Jtretched out a good Length beyond the Empalement, as at a; *the upper Part (or Limb) of the Flower* b, *is fpread open, and deeply divided into Five Parts*, each of which is again cut into Two fhorter Segments, which are round, the Two upper Segments being a little broader than the lower. From the Bottom of the Tube arife the Two long Stamina, which are broad and refiexed, as at C; and the Two floorter* d •, *which do not extend beyond the Tube of the Flower. In the Center is Jituated an oval Germen,fuppcrting ajlender Stylus. The Germen afterward becomes an oval Capfule, filled with fmall naked Seeds.*

The Species here reprefented is,

BROWALLIA *foliis lanceolatis petiolis longis, caule ramofo, radice annua*; i. e. Browallia with Spear-fhaped Leaves, with long Footftalks, a branching Stalk, and an annual Root.

This Species differs from that which is figured in the *Clifford* Garden, the Leaves being broader, and toward the upper Part of tjie Stalk they are placed oppofite. ;iant were brought from *Peru,* when grows naturally, and were ſent me from the curious , Garden of Duke *D'Ayen* at *Bu Germain-,* which have fucccded the Two laſt Years in the *Chelfea* Garden. The other Sort, which is figured in the *Clifford* Garden, was fent to *England* by Mr. *Robert Millar,* from *Panama,* in the Year 1735; which fuccecded in the *Chelfea* Garden, where it has continued to flower, and produce Seeds every Year, but the P}ants of both Sorts perilh in Autumn-, fo that the beed muft be fown upon an Hot-bed in the Spring, and the Plants brought forward on another •, othcrwife they will not perfect their Seeds in *England.* The Plants uiualiy grow about Two Feet high, and fpread out into many Branches on every Side the Stalk : Thefe are garnilnca with Leaves of the fame Shape with thofe on the main Stem, but are much fmaller. Toward the End of tneie Branches the Flowers are produced lingly, upon long Footftalks, arifing from the Wing of the Leaf. *ſ* have a (hort Empalement of One Leaf, which is cut into Five Parts : Out of the Center of the Empalement the Flower arifes, which is crooked and bent downward : The Top of the Tube is fpread open, and the Brim, or open Part of the Flower, has ſome Reſemblance to a lip*ped Flower, being irregular: It is of a bright blue Colour, fomctimes inclining to a purple: When thde [illegible] away, the Germen in the Center b e c o m ^ g ^ | § [illegible] of One Cell, filled with fmall brown ingniarfceds. *x* flowers in *July, Auguft,* and *September,* and the Seeds are ripe in Five or Six Weeks after.

When this Plant was firft raiſed in the *Chelfea* Garden, I gave it the Title of *Balea,* in Honour to Mr. Zw> an eminent Botanift, and a great Friend of Mr. *Rty*'s: By this Title it was delivered to the Royal Society, and printed in i\\z*Tranfaftio>is,* and alſo in the Catalog^ of the *Chelfea* Garden: And by the fame I communic&teo the Seeds to Doftor *Linn<eus,* who afterward changed *w* Name to *Browallia,* and printed it in the Catalogue of Mr. *Clifford?** Garden ; fo chat this latter Title is become univerfal amongſc Botanifts.

NELLA *odorata Lusitanica flore violaceo Barr. Icon.*

R. Lancake delin. *J. S. Miller sculp.*

Published according to Act of Parliament by P. Miller February 24, 1758.

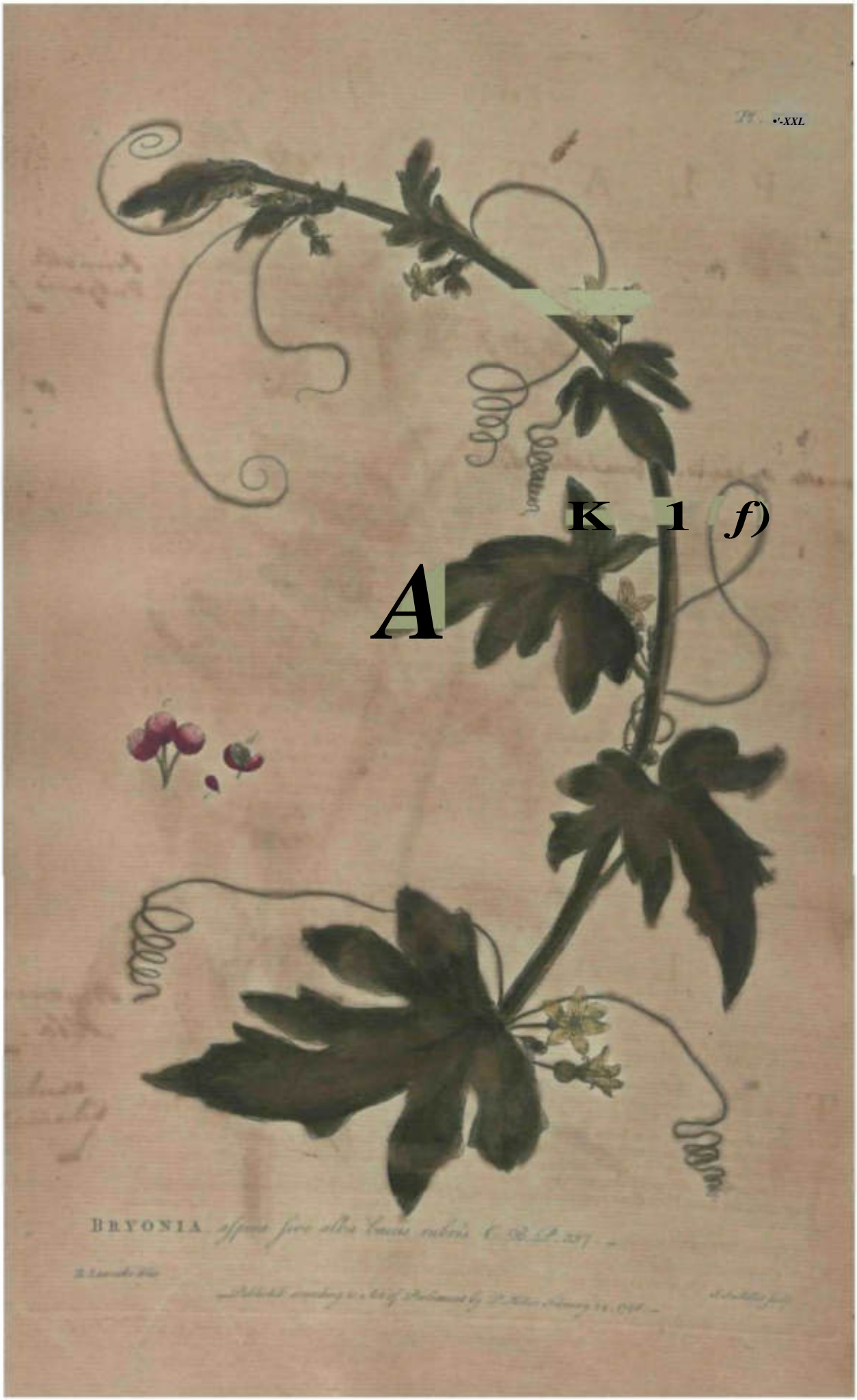

XXL
K 1 f)
A
BRYONIA

PLATE LXX.

BRUNELLA, *Tourn. Injl. R. H.* 182. *Tab.* 84. *Prunella Rait Meth. Plant. 62. Lin. Gen. Plant.* 654. Self-Heal; in French, *Brunelle.*

THIS Genus is, by Do&or *Tournefort,* ranged in his Fourth Clafs of Plants, intituled, *Herbs with a Lip-flower of One Leafy whofe upper Lip is crefted, or woked.* Mr. *Ray* places it in his Fourteenth Clafs of Plants, whofe Flowers grow in Whorls round the ſtalks. Doctor *Linnaus* ranges it in his Fourteenth Clafs, intituled, *Vidynamia Gymnofpermia,* from the blowers of this Clafs having Two long and Two fhort lamina, and being fucceeded by Four naked Seeds.

The Species here reprefented ar

FIG. 1. BRUMELLA *odor at a Lufitanica, flore Diòlaceo, Barrel* Icon.* 561. i.e. *Portugal* fweet-fcented Self-heal, with a violet Flower. *a,* reprefents the Flower intire, with its Empalement; *b,* the Two longer; and ^ the Two fhort Stamina; *d,* the Seeds taken out of the Empalement.

This Plant is, by Doftor *Tournefort,* titled, *Clinopodium Lufitanicum fpicatum &? verticillatum, Inji. R. H. 195** and by *Cornutus Bugula odorata Lufitanica, H.Canad.* 46. Doftor *Linnaeus* titles it, *Prunella brafteis pinnatodentatis ciliatis, L*fl. def.31. Sp. Plant.* 601. This Genus is by fome Botanifts titled *Prunella,* and by others *Brunella*; and by the fame Authors the Titles are indifferently ufed; but the Difpenfaries generally have it *Prunella.*

This Plant is annual, perifhing as foon as the Seeds are ripe; and if the Seeds are permitted to fcatter, the Plants will come up in the Autumn, and live thro* the Winter; fo will flower earlier the next Summer than thofe which are fown in the Spring. The Plants will require no other Care but to be kept clean from Weeds, and to be thinned, if they ſtand too near each other. They flower in *June* and the Seeds are ripe in *Auguſt* and *September.* It grows naturally in *Spain* and *Portugal.*

FIG. 2. BRUNELLA *major, folio fton dijfefto, C.* 5, *P.* Greater Self-heal, with an intire Leaf. *a,* reprefents the Flower. This is the *Prunella vulgaris,* or Common Self-heal, of *Jtorkinfon* and *Gerard.* The Charafters of this Plant arc exhibited in the *Gardener's DiSionary.*

This Plant grows wild in the Meadows in moſt Parts of *England,* and flowers in *June* and *July*.. This is thfe Species which is ufed in Medicine; fo we have exhibited a Figure of it. It is much ufed as a vulnerary Herb, and is brought from *Switzerland,* with feveral others, under the general Appellation of Wound-Herbs. - The Leaves and Flowers of this Plant are ufed; fo the beſt Time for gathering of this Herb is when it is in full Flower. It is preſcribed in *Ptiſans,* in *Broths,* and in *Apoxems,* for Spitting of Blood, and for the Bloody-flux, and for all Sorts of *Hemorrhages,* or *Fluxes of Blood.* It is ufed by way of *Injection* in deep Wounds, and by way of *Clyſter* in the *Bloody-flux.*

As this Sort grows naturally in the Meadows* it is not admitted into Gardens *, but whoever hath a mind to cultivate it, ſhould ſow the Seeds ſoon after they are ripe, when the Plants will come up much better than when the Seeds are ſown in the Spring. The Plants are very hardy* ſo require no other Care but to keep them clear from large Weeds. They ſeldom continue longer than Two Years; but the Seeds being permitted to ſcatter, furniſh Plenty of young Plants to ſupply their Place.

There is another Species of this Plant with cut Leaves; but this is not ſo common in *England* as the former, but in many Parts *of France* and *Germany.* It is the moſt commonly found wild, and is indifferently uſed for the ſame Purpoſes as our common Sort.

PLATE LXXI.

BRYONIA, *Tourn. Inſt. R. H.* 102. *Tab.* 28. *Bryonia alba, RaiiMeth.* 72. *Lin. Gen. Plant.* 970. White Briony, or White Vine; in French, *Coleuvrée.*

THIS Genius is, by Doctor *Tournefort,* ranged in the Seventh Section of his Firſt Claſs of Plants, intituled, *Herbs with a Bell-ſhaped Flower of One Leaf,* whoſe Empalement turns to a fleſhy Fruit, or Berry. Mr. *Ray* places it in his Seventeenth Claſs of Plants, intituled, *Berry-bearing Herbs;* and Doctor *Linnaus* places it in his Twenty-firſt Claſs of Plants, intituled, *Monoecia tyngenefia;* the ſame Plant producing Male and Female Flowers.

The Species here reprefented is,

BRYONIA *ofpera, five alba, baccis rubris,' C. B. P. 397.* The common white Briony, with red Berries, or white Vine.

This is by *John Bauhin* titled, *Vitis alba, five Bryonia, J. 1.* 14. Doctor *Linnaus* titles it, *Bryonia foliis palmatis Utrinque callofo-ſcabris, Hort. Cliff.* 453. in French, *Coleuvrée, ou Vigne blanche.* It is called white from the Colour of the Root, to diſtinguiſh it from the *Tamnus,* which in the Difpenſaries is titled, *Black Briony*; the outer Skin of the Root being of a dark Colour.

a, reprefents the male Flower, ſtanding on the Pedicle; *b,* the female Flower, reſting on the Embryo, which afterwards becomes a Berry, reprefented at *c,* which is intire; *d* the ſame cut open; *e,* the Seed.

The Roots of this Plant run deep into the Ground, and grow to a large Size. Theſe have been reduced to an human Shape, by fixing a Mould (ſuch as is uſed by the Image-makers to form their plaiſter Figures) to the Roots when young, leaving them growing in the Ground; and, if the Mould is not too large, the Root will grow to fill it in One Year, and be of the intended Form. And then they dig up the Roots carefully, with all their Fibres, and exhibit them to View for *Mandrakes* and have thereby impoſed* upon ignorant Perſons.

The

The white Briony has been generally fuppofed to be male and female in different Plants; for in many Plants the Flowers have been all male, and in others moftly female: But I have obferved that feveral Plants, which I cultivated in different Parts of the Garden, were of 'difftring Sexes while young; but the Plants which protkiced only male Flowers, the Two firft Years of flowering, afterward had Flowers of both Sexes; but the Number of female Flowers the firft Year was fmall, but as the Platfts grew older, they became more fruitful, and the fame I have obferved in the *Mulberry,* and fome other Trees, which produce Flowers of both Sexes.

This Plant grows naturally dn the Sides of Banks, and under Hedges, in moft Parts of *England.* The young Shoots begin to appear in *March*-, thefe put out Tendrils, which feften to the Branches of whatever Bufhes grow near them-, whereby they rife to the Height of *Seven* 'or Eight Feet; their pliant Shoots' intermixing with the Branches of the Hedges, fo are fupported from trailing on the Ground. The Flowers come out at the Wings of the Leaves, Two or Three upon each Footftalk. Thefe open in *May,* and are of a whitifh-green Colour, being cut into Five Parts almoft to the Bottom. The female Flowers reft on the Embryo; which afterward becomes a globular Berry, turning to a bright red Colour, when ripe> which is in the Autumn, when they hang down from the Hedges in fmall Clufters.

The Roots, Shoots, Leaves, and Berries, of this Plant are ufed in Medicine, and are efteemed good to remove obftinate Obftrudions, being powerfully purgative. The beft Seafon to take up the Roots for life is in the Autumn, as foon as the Shoots decay; but the Leaves and Shoots are beft for Ufe in the Spring, when they abound with Juice.

PLATE LXXII.

BUGLOSSUM, ***Tcurn. Inji. R. H.*** **133.** ***Tab.*** **53.** ***Raii Meth. Plant. 56. Anchufa, Lin. Gen. Plant. 167.*** Buglofs; in French, *Buglofe.*

T^HIS Genus is, by Doftor *Tournefort,* ranged in the Fourth Section of his Second Clafs of Plants, **intituled,** ***Herbs with a Funnel-Jhaped Flower, having Four Embryo's feated round the Pointal, which afterward become fo many Seeds wrapped in the Empalement of the Flower.*** Mr. *Ray* places it in his Thirteenth Clafs of Plants, **which he titles,** ***Herbs with rough Leaves, having Four naked Seeds fucceeding each Flower.*** **Doctor** ***Linnaus*** **has** altered the Title of this Genus to *Anchufa*; which Name was applied to One Species of this Genus with red Roots, and by the Title of *Anchufa* has been long known in all the Difpenfaries. And Mr. *Ray* thought the Character of its red Roots fufficient to eftablilh a diftinct Genus, fo he has on that Account feparated it from *Bugloffum.* This comes into Doctor *Linnaus's* Fifth Clafs of Plants, intituled, *Pentandria Monogynia;* the Flower having Five Stamina, and One Stylus.

The Species here reprefented is,

BUGLOSSUM ***anguftifolium majus, fore caruleo, C. B. P. 256.*** Greater narrow-leav'd Garden Buglofs, with a blue Flower, *a,* reprefents a fingle Flower, with its Tube at full Length-, *b,* fhews the Front of the Flower deprefied, and fpread open; *c,* the Empalement of the Flower; i, a Seed taken out of the Empalement.

This is the ***Bugloffum vulgare majus, J. B.*** **3. 574. and the** ***Bugloffum angujiifolium, Lob. 576.*** **commonly called** Garden Buglofs, to diftinguifh it from the annual Wild Buglofs; and I believe the Plant here figured doth not differ from the Two following, which are mentioned **in** ***Tcurnefart's Corollarium;*** **viz.** ***BuglaJJum orientale angujitfdtum altiffimum,*** **and** ***Bugloffum vieni'ale anguPfohum,fioreparvoc*ruleo-,*** **for I have frequently raifed** by both thefe Titles, which have always **proved** the common Garden Buglofs, fo that if thofe are diftinft Species, I have not had the good Fortune to fee them. There is alfo a Variety of this Than t... there is no other Difference than the Colour of the Flower, fo it is fcarce worthy of being mentioned.

It ... will continue fome Years, when ... but in rich moift G... feldom lafts ... longer than Two or Tree Years: For when ... rture, ... are large, and are replete with moifture ... in Winter. Thefe Plants ... Leaves ... al Stems, according to the Age or Strength of the Roots, which rife about Two Feet high, and ... narrow rough Leaves, which are ... the Whole Length of the Stalks ... divide into Three or Four Parts ... The blue monopetalous tubulous Flowers, growing in a loofe Spike for Thyrfus). Thefe ... Seeds ... when ... Flower, but foon drop out ... the Seeds are produced about a Month after the flowers fall away. It arows wild **in** ***Italy, Spain,*** **in the South of** ***France] J^Gennany.***

The Flowers of this Plant are One of the Four Cordial Flowers ... in the Difpenfary ... The Leaves and Roots of the Plant are fometimes ufed in Medicine, and are fuppofed to have the fame Virtue as the Flowers ... Cordial, and good to exhilarate the Spirits, and drive away Melancholy.

BUGLOSSUM angustifolium majus flore caeruleo C.B.P. 256


Tt. LXXII.
BUPHTHALMUM
J&U

Pl. LXXIIII.

BUPLEURUM, *arborescens Salicis folio Inst. R. H. 210.*

R. Lancake delin — *Jas. Miller sculp*

Published accord[illegible] February [illegible]

PLATE LXXIII.

SUPHTHALMUM, *C. B.* P. 134. *J. B.* 3. 124. *Chryfanthemum^ Cluf. Hift.* **332.** *Cotula Tcurn. Inft. R. H.* **495.** *Tab.* 282. *Anthemis Lin. Gen,* 870. Ox-eye; in French* ***Oeilde Bmf.***

DOCTOR *Tournefort* ranges this Genus in the Third Sedion of his Fourteenth Clafs of Plants, **intituled,** ***Herbs with a radiatedFlower•, whofeSeeds have no Down adhering to them.*** **Mr.** ***Ray*** **joins this Genus** to *Cbryfantbetnum,* and places it in his Seventh Clafs of Plants with a corymbiferous radiated Flower. And Dodor *Linnaeus* ranges it in his Nineteenth Clafs of Plants, joining **this with the** ***Chamamdum*** **of** ***Tournefort.***

This Species here reprefented is,

BUPHTHALMUM ***Creticum Cotul* folio, flore luteo, Breyn.*** *Cent.* 1. True Ox-eye, with a Leaf like (linking Mayweed, and a yellow Flower.

Of this there are Two Varieties; one with yellow, and another with white Flowers; which are both mentioned by Do&or *Breynius.* There is alfo a Third, with naked Flowers, having^ no Rays, which is, by Do&or *Linnaus,* placed in his Genus *ofAnacyclus.* But all thefe Varieties will arife from the Seeds of the fame Plant, as. I have many Years obferved; and often the Flowers with Rays, and the naked Flowers, have been on the fame Branch ; fo they may truly be made but One fort. Thefe Plants do not only vary in their Flowers, but the Leaves alfo are different, fome being finely divided, and the others having broader S^gmanf s; aiid this is frequent, from the Sed ^ f [illegible] ^ [illegible] i t w h t yellow Flowers, and whofe Leaves are not fo finely divided a* thofe of the white, and is fuppofed to be the true medicinal Ox-eye.

a, reprefents the Bud of the Flower, (hewing the fcaly Empalement \ *b>* the Outfide of the Flower, when open ; *c,* the Rays of the Flower fully expanded:; *d>>* one of the Half-Florets, or Rays, taken out of the Flower; *e,* one of the Seeds fitting *on* the Placenta ; /, a fingle Seed feparated from it.

This is an annual Plant, which perifties foon after the Seeds are ripe -> and if the Seeds are permitted to featter, the Plants will come up in the Autumn -, and unlefs the Winter proves very fevere, will live in the open Air; and thefe will come much earlier to Flower than thofe which are fown in the Spring, and will grow much larger. Their "ufual Time of flowering is in *July* and *Auguft,* though there will be fome few Flowers fucceed thofe till the End of *September.* The Seeds ripen in about Five or Six Weeks after the Flowers decay. The Plants grow to the Height of Two Feet; and if they are allowed room, do fpread out into many lateral Branches, efpecially in good Land.

This Plant has been continued in moft of the Difpenfaries for many Ages, and is fuppofed to be the fame which *Diofcorides* recommends, as good for the Jaundice* and to reftore the Skin to a good Colour. But of late Years it has been intirely difufed in the Shops; and whenever Ox-eye has been ordered, the Greater Ox-eye Daizy has been ufed. It grows naturally in *Spain* and *Portugal,* from whence I have received the Seeds.

PLATE LXXIV.

BUPLEURUM, ***Tourn. Injl. R. H.*** **309.** ***Tab.*** **163.** ***Lin. Gen. Plant.*** **291.** ***Sefeli, C. B. P.*** **161.** ***J. B.*** **3. 2.197.** *Dod. Pempt.* 312. HareVear.

DOCTOR *Tournefort* ranges this Genus of Plants in his Seventh Clafs, intituled, *Herbs and Under-Jhrubs^ with a Flower of feveral Leaves^ which expand in Form of a Rofe^ and grow in an Umbel.* **Mr.** ***Ray*** **places** it under the Title *of Sefeli A5thiopicumfrutex,\n* the Fourteenth Seftion of his Eleventh Clafs of Plants which contains the umbelliferous Plants, with fimple Leaves; and Dodtor *Linnaeus* ranges it in his Fifth Clafs of Plants, intituled, *Pentandria Digynia*; the Flower having Five Stamina, and a double Stylus. The Characters of this Genus are exhibited in the *Gardener's Diaionary.*

The Species here reprefented is,

BUPLEURUM ***arborefcens, falicis folio, Inft. R. H. R.*** **310.** Tree HareVear with a Willow Leaf, *a,* reprefents an intire Flower, taken from the Umbel, fhewing its Empalement; *b,* (hews the Front of the Flower expanded, which *h* divided into Five Leaves -, *cy* repns*fents the Seeds. This is, by *Cafpar Bauhin^* titled^ ***Sefeli /Etbiopicum falicis folio^ Pin. 161.*** **and by** ***John Baubitt, Sefeli Mthiopicum fruticofum folio Periclymeni,*** *Hift-* 3* P- 2. 197. By *hodonkus* it is titled, ***Sefeli Mthiopicum frutex-t Pempt.*** **312. Shrubby Hartwort of** *Mtbiopia** By this laft Title it is generally known in the Nurferies near *London.* Doftor *Linnaus,* in his **Species of Plants, titles it,** ***Bupleurum frutefcens, foliis cbovatis integerrimis,*** **p. 238.**

This is an Evergreen Shrub, which will rife to the Height of Five or Six Feet, and divides into many lateral Branches ; and may be reduced to a regular Head, by pruning off the lower Branches, fo as to make it rife to have a Stem. The Branches are well garnifhed with oblong, fmooth, fhining, green Leaves, of a pale foft Colour. Thefe remain through the Year, which renders this Shrub very beautiful in the Winter Seafon; for as the Branches grow pretty clofe, togethfer; and are furnifhed with Leaves their whole Length, fo it fprms an handfome Shrub. The Leaves are placed alt&natelv

on the Branches, and arc Four Inches long, and near One broad in the Middle. The Flowers are produced in Umbels, at the Extremity of every Branch \ thefe are compofed of Five narrow Petals, which are of a yellow Colour at firfl, but fade away to a brown. Thefe are fucceeded each by Two long, narrow, ftriated Seeds, which rarely come to Maturity in *England.* The Time of its Flowering is in *July* and *Augujf.*

This Plant grows naturally in the Southern Parts of *France,* and in *Italy,* and generally along the Coaft near the Sea, uponth* Rocks. It has been long an Inhabitant in fome of the *Englijh* Gardens, where it was, for many Years, preferved in Pots, and placed in Greenhoufes in Winter, luppofing it was too tender to live abroad in *England.* But of late Years it has been much propagated by theNurfery Gardeners near *London,* and is become a common Shrub in moft of their Gardens; where it refiftj the Cold of the fevered Winters, provided it is planted on a dry Soil; and if the Bottom is a Gravel, Stone, or Chalk, with a Foot of Earth thereon, it will prevent the Roots from running deep in the Ground ; whereby the Plants will be more ftinted in their Growth, fo will be hardier to refill the Cold, and of longer Duration, than thofe which have a rich deep Soil.

The Method of propagating this Shrub being inferred in the *Gardener's Difiionary,* I (hall not repeat it here.

The Seeds of this Shrub are much more acrid, and of a ftronger Smell, than thofe of *Marfeilles Hart<wott* therefore fome Phyficians fuppofe they are poffeffed of noble Virtues, and confequently, to be more efte&ual in **the *Thsriac*.**

P L A T E LXXV.

CALENDULA* *Ray Metb. p.* **36,** *Tabern.* **231*** *Lin. Gen. PL CaltbaTourn* fourn. Inft. R. H.* **498.** *Tab.* **284.** *JDimorphotheca Fail/. A.C.* **1720.** *Cardifpermum^ranf. A* Pa?-* 4« *7[2]4** Marygold; in French, *Soud.*

MR. *Ray* ranges this Genus of Plants in his Eighth **Clafs, intituled,** *Herbs with a corymbiferous radiated Flower* \ and continues the old Title of *Calendula,* **given by** *Tabernemontanus,* **and fome other old Writers it,** on Botany, to it- But Dodlor *fournefort* has appro- **priated** *Cafpar Bauhins's* **Name of** *Caltha* **to it, and** places it in the Fourth Section of his Fourteenth Clafs **of Plants* intituled,** *Herbs with a radiated Flower, whofe Seeds are incloftd in the Empalement.* **But Doftor** *Linnaeus* has reftored the old Title *of Calendula* to this Genus, and **has applied that of** *Caltha* **to the** *Populago* **of** *Tournefort,* v/hich, by moft of the old Writers, was titled *Caltha falujlris.* Do&or *Linnaeus* places this Genus in his Nineteenth Clafs of Plants, intituled, *Syngenejia Polygamia necejfaria.* **Mr.** *Vaillant,* **in the Memoirs of** the Academy of Sciences for the Year 1720, has feparated thefe, and fome other Species, from the Genus of *Marygold,* and conftituted a new Genus of them, under the Title of *Bimcrphotheca* •, which Cgnifies a Plant having Two Sorts of Ovaries. It was afterwards titled *Cardifpermum,* in the Memoirs for the Year 1724, from the Seed being lhaped like a Heart. But as the Seeds of fome of the Species are of a different Form, fo this Title is not very proper. Therefore Doftor *Linnxus* has joined them again, very rightly, to the other Species of Marygold.

The Species here reprefented are,

FIG. 1. CALENDULA *foliis dentatis, Flor.Leg.* **Pr. 177,** Marygold with indented Leaves, *a,* reprefents the Flower-bud inclofed in the Empalement; *b,* the **Backfidc of the Flower, *hen open •, *c,* the Forefide of the fame -, *d,* the Seed taken out of the Empalement.**

This Plafct is, by *Do€tors Herma'nn zn&Boerbaave* **titled*** *Calendula humilis Africana, flore intus albo, forts violacce fimplici Lugd.* 104- *i. e.* Low *African* Marygold, with fimple Flowers; which are white within, and of a Violet-Colour on their Outfide. Dodtor *JAnnaus* titles *mibus, Hort. Upfal* 274. And Mr, *Vaillant* calls it, *Dimorphotbeca foliis incifts, ovariis rninoribus. A£l. R* $* 1720*

FIG, 2» CALENDULA *foliis radicalibus finuatis^caulinis fu~ perne denticulatis, Flor. Leyd. prod.* **177.** *i. e.* **Marygold** with its lower Leaves finuated, and thofe on the upper Part of the Stalk indented, *a,* reprefents the Flower-bud before it opens; *b,* {hews the Outfide of the Flower when open; *c,* the Infide of the fame- **This is titled by Mr.** *Vaillant, Dimorphotheca pubefcens,foliisincifis,fioreminore, ovariismajoribus. Att.R-** **J720. And by Do6b«r** *Umaus* Calendula foliis lanceolatis,dentatis pedunculis Juperneincraj[atis,Hort.Cliff-*74<*

The Seeds of this Plant were brought from the *Caff* of *Good Hope* (where they grow naturally), into the G in *Holland,* about Sixty Years ago; and from thence all the curious Gardens in *Europe* have been furnifhed with them. They are both annual Plants, which are hardy enough to thrive in the open Ground in *England;* 10 are very proper Ornaments for the Borders in Flower hardens. If the Seeds are put into theGround in A&rf *or April,* the Plants will flower *mjuly,* and the Seed* will ripen in *September;* but if the Seeds are fown at different times, there may be a Succeffion of flowering Plants for Three or Four Months •, but thofe which come to Flower late in **the** Seafon will not produce good Seeds.

Fig. 1. CALENDULA *foliis dentatis Flor. Lapd. 777.*
Fig. 2. CALENDULA *foliis radicalibus sinuatis caulinis sagittatis dentatis, Flor. Lapd. 777.*

Fig. 2.

Fig. 1.

Fig. 1. CALENDULA ... Fig. 2. ASTER ...


Pl. LXXVII
Fig. 2.
Fig. 1.

PLATE LXXVI.

Fig. 1. **CALENDULA/^VJ** ***linearibus denticulatis et integerrimis, Flor. Leyd. prod. 1 yj.*** **i. e. Marygold, with very** narrow whole Leaves,. which are denticulated. *a,* reprefents the Bud of the Flower before it opens •, *K* fliews the Outfide of the Flower when open ; c, the Infide of the Flower fully expanded ; *d,* the Seed.

Calendula graminifolia L.

THIS Plant is titled, by Doctor Commeline, *Bellis Africana, florum pediculis foliofis, foliis angujiis et integris, Hort. Amjl.* 2.97. **by Doftor** ***Boerhaave,*** **in the** Catalogue of Plants, in the *Leyden* Garden, it is titled, ***Caltha Africana foliis croci angujlis, fiorum petalis externe Purpurafcentibus, interne albis, p.*** **113. i.e. African Marygold,** with narrow Saffron Leaves, and the Rays of the flower purple on their.Outfide, and white within; by ***Vaillant*** **it is called,** ***Dimorphotheca Jtaticis folio, Vaill. Ail.*** **^720 ; and by Dodtor** ***Linnaeus, Calendula foliis linearibus Mintegerrimis, caule fuhnudo. Sp. Plant.*** **922.**

The Seeds of this Plant were brought from the *Cape of Good Hope,* in the Year 1698, to *Holland,* where it Was firft raifed in *Europe*; and was figured by Dodtor *Commeline,* in the Second Volume of the Plants in the *Amfierdam* Garden, under the Title of *Bellis,* &c. above £J^te^d ; and^ from that Garden, moft of the curious Gardens in *JEurope* have been furnilhed with this beautiful Plant: but although this has been long in the *Englifh* Gardens, yet it is not fo commonly feen there as might be expe&ed, or as it deferves ; for there are few Plants which continue in Flower fo long as this, there being scarce any Month in the Year, when there are not fome °f the Flowers open : but from the Beginning of *March* to the Middle of Winter, there is a conftant Succeflion °f Flowers : and as the Plants only require a little Prote&ion from Froft, they are worthy of a Place in every curious Garden.

*FIG. 2. **ASTER** ***caule ramofo fcabro perenni, foliis cvatis, fejftlibus pedunculis nudis unifloris*** **5 Star wort, with a** perennial, rough, branching Stalk, oval Leaves fet clofe to the Branches, and a naked Footftalk fupporting a fingle Flower,

The Occafion of this Plant being exhibited here, out of the Order purfued in this Work, was, from its being fuppofed a Marygold, at the Time when the Figure was drawn on the Plate, which was foon after the Flowers appeared, before the Seeds were fo forward as to fhew their Down, which fits on their Top, and is one of thedi-wnguifhingCharafters of Starwort from Marygold; and this being a Plant undefcribed, we were induced to exhibit the Figure, therefore hope we may be excufed for this Freedom, as we fhall be careful not to repeat it. It is probable there may be fome who may objeft to the ranging this Plant in the Genus *of After,* becaufe the Flower has a fimple Calyx ; fo would rather have it a *Calendula orOrtbonna:* But as thcfirft has Two Sorts of Seeds without any Down, fo it cannot, with propriety, be placed there. And the *Othonna,* whofe Seeds are fituated in a downy Receptaculum, differs from this, whofe-Seeds are crowned with a downy Pit]me.

The Seeds of this Plant were fent me from the *Cape of Good Hope,* in the Year 1753, but without any Title* The following Spring, two Plants came up from them in the *Chelfea* Garden, which have flourifhed extremely well there, and have been propagated fince in Plenty.

The Plant has many fibrous Roots, from which arifes apurpliflirough Stalk, which divides into many Branches near the Root, fo as to form a low bufliy Plant, for it jfeldom rifes much more than Two Feet high; but the Branches will extend more than a Foot on every Side: Thefe are garnifhed with oval Leaves about an Inch long, and a Third Part of an Inch broad; they are pretty thick and fucculent, and are rough to the Touch, coming out at the Joints of the Stalks by Pairs oppofite, and fometimes Three at a Joint, or in other Places Two larger and Two fmaller at the fame Joint, having no Footftalks: Toward the upper Part of the Branches, the Footftalks of the Flower arife, which are from Four to Six Inches long, and naked, each fupporting a fingle radiated Flower, *a,* reprefents the Flower-Bud, {hewing the fcaly Empalement; *b,* the under Side of the Flower, when open ; *c,* the Infide of the Flower, when fully blown; *d,* the Placenta, with the Seeds fitting with their Down ; *e,* a fingle Seed taken from the Placenta, with the Down on its Top.

The Rays of the Flower are of a fine Sky-blue Colour, which, after they have been fome time expanded, turn back toward the Empalement: The Difk of the Flower is yellow. After the Flower falls away, each of the Florets, which compofe the Difk, is fucceeded by a fingle Seed, crowned with a foft Down. The whole Plant is a little acrid to the Tafte.

This Plant is never deftitute of Flowers the whole Year 5 for, in the Winter Seafon, there will always be a Number of them in Beauty, though, at that Time, they are not quite fo large as in Summer; however, they make a fine Appearance at all Seafons; and as they only require to be protected from Froft, they defervc a Place in every curious Garden. The Plants which I raifed in the *Chelfea* Garden, which were placed in a Frame, with wooden Shutters to cover them in the Froft, have been as vigorous, and continued flowering through the Winter, full as well as thofe which were placed in the Green-houfe: but as yet I have not tried if they will live in the open Air, as the Plants were in no other *Englifh* Garden ; fo till a larger Stock of Plants are raifed, it is not prudent to try this Experiment: But from what I have obferved, it may be fuppofed, the Plants will live in the open Air, if they are placed in a dry Soil, and warm Situation, which will be a valuable Acquifition to the Flower Garden.

PLATE LXXVII.

CANNABIS, *Tourn. Inft. R. H.* siS- ^ab^- 3°9' *Raii Meth. PI.* 19. *Un. Gen. Plant.* 988. **Hemp; in French** ***Chauvre.***

DOCTOR *Tournefort* ranges this Genus in the Sixth Seftion of his Fifteenth Clafs of Plants, **intituled,** ***Plants with apetalous Flowers, which are Male «*a Female indifferent Plants.*** **Mr.** ***Ray*** **places it in his** Fifth Clafs of Plants, which he titles, *Herbs with Jlami* neous Flowers, which are of Two Sexes:* **And Doftor** *Linnaeus* places it in his Twenty-fecond Clafs, intituled, *JDioecia Pentandria,* from the Plant's being Male and Female, and the Flower having Five Stamina. As the Male and Female Hemp arifes from the fame Seeds, fo we have reprefented them both in this Plate*

Fio-

FIG. x. CAVNABIS, *foliis digitalis mas, Lin. Hort. Cliff* j.* Male Hemp, with fingered Leaves.

FIG. 2. CANNABIS, *foliis digitalis famina, Lin. Hort. Cliff.* 475. Female Hemp, with fingered Leaves.

a, fhews the Spikes of Flowers on the Male Plant, which are compofed of Five fhort flender Stamina, fupporting oblong fquare Summits j thefe are included in an Empalement, cut into Five Parts to the Bottom •, £, reprefents the Flower of the Female Plant, which conlifts of an Empalement of One Leaf, which is permanent; the Flower having no Petals, but in the Center of the Empalement is lodged the Germen, fupporting Two long Styles with a pointed Stigma: The Germen afterward becomes a globular depreffed Seed, as at c, *c.*

Some Authors have diftinguiflied thefe Plants by the Titles of *Sativa* and *Erratica* j i. e. the manured and the wild Hemp; but as they come from Seeds indifferently, where-ever they are fown, or in Places where the Seeds are accidentally fcattered, that Diftinftion is not proper. There is a Neceflky of having fome Plants of the Male Hemp among thofe of the Female, in order to tender them prolific: Therefore thofe fhould not be drawn out from between the others, until their Spikes of dufty Flowers are quite faded; for in *Lincoln/hire,* where a Jarge Quantity of Hemp is generally cultivated, they frequently have drawn out all the Male Plants, which is called *Fimble-bemp^* foon after they were diftinguilhable-, by which they fuppofed the Female Plants, which are called *Karle-bemp,* would have more Room to flourifh 5 but, by this, they were deprived of the Crop of Seeds •, fo that, by this dear-bought Experience, they Jiave altered their Method, and do not draw away the Male Plants fo foon. I have myfelf made Trial of this Experiment for feveral Years, by removing all the Male Plants of Hemp from the Female, as foon as they were difcernable •, and although the Female Plants have continued ftrong and flourishing, yet have they never-produced any good Seeds.

As Hemp is of fuch fingular Ufe in this Kingdom, it is great Pity that a much greater Quantity of it is not cultivated in *England-,* for there are many large Tracts of boggy light Land, which would produce it as well as any Part of *Europe* •, and this might employ many <>} the Poor, who are, at prefent, a great Burthen to their Parifties •, and hereby a confiderable Sum might be laved to the Nation. And in fuch Places where it is now cultivated, if half the Quantity of Seeds, which is ufuallj^ allowed to an-Acre, wenfowq, and ihe IIJanjs if Mj[a]; ISWdT^ea&rDifhh^ are fo ufually practifed, the Produce would be much more; for, by feparating and leaving fome Plants fingle, and allowing them Room to fpftad, they have been Four times as large in their Stems as thofe which have grown near each other on the iaine Spot of Ground, and have produced more Hemp than Six of the bed Plants which grew near together, in *the* common Method of Culture.

The Male, or *Fitnble-hemp,* is always fit to pull by the End of *Auguft*; for when their Spikes of Flowers are decayed, the fooner they are pulled the better they will be; for they foon begin to fhrink and decay, fo afford lefs Hemp. And by doing this in Time, there will be a longer Continuance of Employment for the Poor, in watering and breaking of it-, for the Seeds of ^ female, or *Karle-hemp,* will not be ripe till after *Michaelmas,* fo the Plants muft not be drawn up before *0£lober,* for till then they will continue in Vigour. The Seeds of Hemp is the only Part ufed in Phyfic, and, at prefent, thofe are rarely prefcribed -, an Oil is drawn from them, which is ufed for many Purpofes; and the Seeds are reckoned very good for Poultry, when given to them in moderate Quantities; for, being warm, it is fujppoka. to caufe Hens to lay Eggs in great Plenty. The famous *Bangue,* which is fo much ufed by the *Indians* and *P&~fians* to promote Venery, is a Species of Hemp ; and* by the Defcriptions given of it, not much differing from the common Sort.

As this is one of the moft-confpicuous Plants wherein their different Sexes appear fo ftrongly, we have chafea to exhibit this Plate for that Purpofe, rather than for its Beauty,

P L A T E LXXVIII.

CAPNOIDES, **tourn. Infi. R. H.* 423. *Tab-.* 237. *Fumaria> Lin. Gen. Plant.* 760. Slender podded Fumitory.

THIS Genus of Plants is, by Doftor ^*Tournefort,* ranged in his Eleventh Clafs, which is titled, *Herbs with a polypetakus anomalous Flower, whefe Pointal turns to an unicapfular Fruit*; and Doftor *Unnaus* places it in his Seventeenth Clafs of Plants, Lftituled, *Diadelphia* <H§% *\dria,* the Flower havingfiijpKtamina, which are feparated into Two Bodies. Mr. *Ray* has removed the Genus of *Fumaria* to a great Diftance from its Congeners, and placed it with a few others in his Twenty-fifth Clafs, which contains fuch Genera as he was at a Lofs where to. range.

There is but One Species of this Genus, which is here reprefented.

CAPNOIDES, *Infi. R. H.* 423. Podded Fumitory,

A, reprefents a fingle Flower taken from the Spike, whofe Characters are the fame with Fumitory; *b>* (hews the Pointal arifing from the Bottom of the Empalement; *c,* an intire Pod •, and *d,* the Pod opening lengthways^ with the Seeds adhering by their Placenta j *, the Seeds out of the Pod,

Cornutus, who is the Firft Author that mentions this Plant, calls it, *Fumaria ftliquofa Jempervirens,* p. 59; how he came to add the Epithet *of fempervirens to* rt» not eafy to conceive; for it is an annual Plant, wWch perifhes foon after the Seeds are ripe-, and it may fuppofed, this Appellation has led Doftor *Unn*us* in^ the Miftake he has made, by joining this to the *Fumitory,* making them the fame Species \ to which alfo adds the yellow *Fumitory:* But whoever has °bierv the Three Plants, cannot doubt of their being ditttf* Species; for *the yellow* and *white Fumitories* are low perennial Plants, which grow clofe to the Ground, [an]^. ^ Flowers are produced on Footftalks, arifing immediat y from their Roots ; whereas this Plant rifes with an right Stem a Foot and half high, dividing into Branches •, and from the Wings of the Leaves ante Footftalks of the Flower: The Flowers of this are ai larger and more beautiful than either of the other.

As this Plant will come up from the Seeds, ** fcatter in the Autumn, thofe Plants will be ftrong^ and come earlier to Flower, than thofe which arife rr Seeds fown in the Spring: The former do generally! in *June,* and the latter in *July* and *Auguft,* and tn Seeds ripen foon after.

PLAT*

Pl. LXXVIII.

R. H.

CAPRIFOLIUM *sempervirens flore saturate coccineo* Lin.

CARDIACA *foliis tenuis & profundius incisis glabro. Ammon. Ruth. 49.*

PLATE LXXIX.

CAPRIFOLIUM, *Town. Lift. R- H.* 608. *Tab.* 278. *Rail Method,* 145. *Periclymenum, J. B.* 2. 104. *C. B. P.* 102. *Lonicera, Lin. Gen. Plant. 210.* Honcyfuckle. In *French, Chevrefeuille.*

DR. *Tcurnefort* ranges this Genus of Plants in the Sixth Section of his Twentieth Clafs, intituled, *Trees and Shrubs with a monopetalous Flower, whofe Empalement afterward becomes a Berry.* Mr. *Ray* places it 'among the *Trees with an umbilicated foft Fruit, having feveral Seeds:* And Doctor *Linnaus* ranges it in the Fifth Clafs of Plants, whofe FiowerS have Five Stamina, and a fingle Stylus ; and has changed the Title to *Lonicera,* which *Plumier* had given to a new Genus of Plants which he discovered in *America* ; the Flowers of which have fome Affinity with thofe of the *Honey/tickle,* but the Fruit is a large oval Berry, with One Seed : And the Flower, having Six Stamina, hath occafioned the Doctor's removing it to his Sixth Clafs, in the laft Edition of his *Method-,* and alfo to alter the Title of *Plumier's* Plant to *Loranthus.* So he has continued that of *Lonicera* to this Genus, to which he has added the *Periclymenum, Cbamacerafusi Xylofteum,* and *Diervilla,* -of *Tcurnefort;* alfo the *Sympboricarpos* of *Dillenius:* But he has feparated the *Triojiefpermum* of *Dillenius* from this Genus, which in the former Editions, he had joined to it.

The Species here reprefented is,

CAPRIFOLIUM *Germanicum, flare rubello ferotinum, Brofs. lnft. R, H. 60S.* Late-red flowering Honeyfuckle.

#> reprefents the Tube at the Bottom of the Flower. £> the iuDer Part,#\qjh*;h is cut into feveralSegments, **^irh<£M4pHMt»#*^** **r,** the Pointal which is extended beyond the Stamina, *d,* the Berries which inclofe the Seeds. The Characters of this Genus are exhibited in *The Gardener's Dictionary.*

Tivis Plant is titled, *Periclymenum perfoliatum fcrotinum Jpeciojius,* in the Catalogue of the *Royal Garden* at *Paris :* And, by theNurfery Gaadeners'near *London,* it is called, *The Late-red Honeyfuckle^* to diftinguifh *it* from ano ther, which approaches near to this, which they call *The Dutch Honeyfuckle.* Both thefe flower later in the Seafon than *The Italian Honeyfuckle:* But this, which is here reprefented, produces a greater Quantity of Flowers together than either of the former Sorts•, fo that it makes thai fineft Appearance, during the Seafon of its flowering, of any of the Kinds.

It is difficult to determine if thefe are diftin6t Species, or Varieties which have been produced from Seeds;' but they are all undoubtedly different from our wild *Englijh* Honeyfuckle, although they have been generally fuppofed to be the fame: For the *German* Writers having applied to their common Honeyfuckle this Title, the *Englijh* Botanifts have fuppofed our wild Sort was the fame, fo have confounded them together; but whoever will be at the trouble to examine them, will find a remarkable Difference in the whole Habit of the Two Plants. The *Englijh* Sort hath very (lender trailing Branches, which incline to the Ground, unlefs they are fupported by neighbouring Trees ; fo that it is notpoffible, by Culture, to train it to a Stem. The Leaves are alfo fmaller, and covered with a fine foft hairy Down ; whereas thofe of the *German* Honeyfuckle are large, and more connected to the Stalk, and lefs hairy : The Flowers are larger, and are formed into globular Bunches.

This Sort is now greatly propagated in the Nurferies,' being extremely hardy, and may be trained up with Stems to have large bufhy Heads; the Branches, being ftrong, will fupport themfelves better than thofe of fome other .Sorts; and as the Plants make fo fine an Appearance when in Flower, it renders them more valuable. The ufual Time of their flowering is in *July.*

This Sort has not been fo long an Inhabitant of the *Englijh* Gardens, as that which is (tiled, *The Dutch Honeyfuckle -y* for, about Forty-five Years ago, I remember it was efteemed a great Curiofity, when it was called, *The Flemijh Honeyfuckle,* and was probably brought over by fome of'the *Flemijh* Florifts, who at that Time came over annually with Flo.wers and Plants for Sale.

PLATE LXXX.

CARDIACA, *Tourn. Inft. R. H.i$5. Tab. 8j. Rait Method. Plant.* 64. *Leonunts, Lin. Gen. Plant.* 641. Motherwort. In *French, Agripaume.*

THIS Genus of Plants is by Dr. *Tottrnefort* ranged in the Second Scftion of his Fourth Clafs,, intituled, *Herbs with a Lip flower of One Leaf, whofe upper Lip (or Galea) is hollow like a Spoon.* Mr. *Ray* places it in the Fifth Seftion of his Fourteenth Clafs of PJants, which he titles, *Herbs whofe Flowers grow in Whorles round the Stalks, at the Setting on of the Leaves.* Doftor *Linnaus* places it in his Fourteenth Clafs of Plants, intituled, *Qidynamia Gymnofpermia.* The Flowers of this Clafs have Two long and Two (hort-Stamina, and Four naked Seeds fucceed each Flower. But he has altered the Title of this Genus to *Leonurus,* which had long been [a]PpHed to another Genus of Plants, which were Natives [of] the *Cape of Good Hope:* But thefe the Doftor has **nged under the Genus of *Phlomis,* though, from the Parts of the Flower, I think, they do not any-way agree with the Characters *ofPhlomis,* as the *Galta* of the Flower is ftretched out a confiderable Length beyond the lower Lip, and is not curved over it clofely, as in the *Phhmis.* But the Doctor's Characters are drawn from the Empalement of the Flower.

The Species here reprefented is,

CARDIACA *foliis tenuius &'profundius incifts glabra, Amman. Ruth.* 49. Smooth Mocherworc, with Leaves deeply cut into narrow Segments.

a, reprefents the Empalement of the Flower. £, (hews a fingle Flower taken from the Whorle, exhibiting the Four Stamina with the Pointal, with the upper Lip (or Galea) intire and hollow, and the under Lip (or Beard) cut into Three Parts, *c,* (hews the Style which is placed in the Center of the Flower. *d>* the Four Seeds with the. Empalement. And *e,* the naked Seeds taken out. Doctor *Linnaus* titles this Plant, *Lecnurus foliis tripartitis laciniattSy*

lacimatis, calycibusvillofis, Harl. UpfaV IJI. i.e. LionV tail with tripartite jagged Leaves, and a hairy Empalement.

This Species is a Native *of Tartary,* from whence the Seeds were fent to *Peterflmrgh^* and were fown in the Imperial Garden there, where the Plants grew and perfedted their Seeds; fo that from thence all the botanic Gardens in *Europe* have been furnifhed with the Seeds. There are Two diftinct Varieties of this Plant, One of which hath fmooth Stalks and Leaves, and the other is >very hairy. The Seeds of both Sorts were fent me by Do&or *Amman,* late Profeffor of Botany in the *Imperial Academy* at *Peter/burgh,* which have been feveral Years growing in the *Chelfea* Garden, ,and retain their Difference from Seed ; fo may be allowed to be different Varieties, if not diftintt Species; though Dodlor *Linnaeus* fuppofes them to be the fame.

We have but Two Sorts of Motherwort that are Natives of *Europe,* which are ; The common Sort, which is found wild in many Parts of *England^* though it is fuppofed not a Native here : The other is one with curled Leaves. Thefe Two are by many Botanifts fuppofed to be only Varieties; but, from many Years Experience, I find they conilantly keep their Difference from Seeds.

From whence the Sort with curled Leaves was obtained is uncertain. Mr. *Ray* is the Firft Author who mentioned it, and fays, he received the Seeds from *London,* which grew with him. Both thefe, when once planted in a Garden, will foon multiply, efpecially if the Seeds are permitted to fcatter ; for thefe will grow where-ever they fail, and become troublefome Weeds. The Plants grow to the Height of Four or Five Feet *y* they flower in *June* and *July,* and the Seeds ripen in Autumn. The Stalks decay in WinteF, but the Roots will abide many Years.'

p L A T E LXXXI.

CARYOPHYLLUS, *Tourn. In/I. R. H.* 3.29. *Tab.* 174. *Rail Metb. Plant.* 109. *Dianthus, Lin. Gen. Plant.* 500. The Pink. In *French, Oeilkt.*

ÇTOURNEFORT ranges this Genus of Plants in -* his Eighth Clafs, intituled, *Herbs and Under-fhrubs, with a polypeialous and Clove-gilly-flower Flower.* Mr. Ray places it in his Twenty-ftxond Clafs of Plants whicK he titles, *Herbs with pentapetalous Flowers, having many Seeds included in a Veffel:* And DO&OF *Linnaus* ranges it in the Second Divifion of his Tenth Clafs of Plants, intituled, *Decandria Digynia,* from the-Flowers having Ten Stamina, and Two Styles: And he has changed the Title of the Genus to *Dianthus,* having applied the Title of *Caryophylius* to the *Clove, to* which Doftor *Tournefort* has added the JKpithet of *Aromaticus,* to diftinguifh it from this Genus.

The Species here reprefented are,

FIG. 1. CARYOPHYLLUS *montanus umbeUatm, florilus variis luteis ferrugineis Italiens ^Barrel. Obferv,* 648. i. e. Umbellated Mountain Pink of *Italy,* with changeable yellow and rufty Flowers.

«z, reprefents one of the Petals of the Flower taken out of the Empaletnent. *b>* *b, b>* the Ten Stamina crowned with Summits, *c,* the Two Styles fituated in the Center of the Flower, *d,* the Seed-vefTel cut open, to fhew how the Seeds are lodged, *e,* One of the Seeds taken out of the Veffel.

This Plant was difcovered by Father *Barretter,* in the Mountains of *Abruzzo^* in *Italy* ; and it has fmce been difcovered in *Spain,* from whence I received the Seeds, which have fucceeded in the *Chelfea* Garden. It hath the intire Habit of the *Armeria Clujii,* or *Sweet William.* The Flower-ftems rife about a Foot and a half high, which are garniflied with Leaves fomewhat like thole of the Carnation, but are of a darker Green. Thefe are placed oppofite by Pairs; the Tops of the Stalks are terminated by clofe Umbels of Flowers, each being compofed of Five Leaves. Some of thefe are yellow, and others of a rufty Iron Colour, which often is feen fh the fame Umbel; but, in general, the different Colours are in different Umbels. The Seafon of its flowering is in *July* ; but, when the Weather proves cool and moift, there will be a Succeffion of Flowers till the End of *September.* Its Seeds ripen in the Autumn. The Roots of this Plant wijl abide Two or Three Years, but the young Plants or the Second Year do always produce the greateft Quantity of Flowers; fo .that it is much the better Method *to* raife annually young Plants, and deftroy the old Roots: But the young Plants do rarely flower the Firft Year they are raifed; fo that the Second Year they are in the greateft Perfection : Therefore, to have a conftant Supply of the Plants, there fhould be every Yearafrefl* Parcel raifed from Seejis.

FIG. 2. CARYOPHYLLUS *Jinenfis fupinus, leucoii /olio* flore plena, Boerh. In&. Alt.* The Double *China* Pink*

This Plant is a Native of *China,* from whence the Seeds were fent by the JFW»r£Miflianaries to *Paris,* about, the Year 1705 ; fmce which Time the Seeds have *bten* difperfed to mod Parts in *Europe.* The Plants, which were for many Years produced in the *European* Gardens, were fingle Flowers-, till about the Year 17 there were many Plants with 0 Flowers prpuuced in fome of the Gardens at *Pa* , ut, wheth|r arofe from Seeds of the fingle Sort faved in *Enjmnd, or* were produced from new Seeds obtained from *Gbina,* & difficult to determine ; but in the Y<-ar r722g|V/as t»ic firft Time I had feen thefc « P in of the *Engli/h* Gardens.

There are great Vari:.....Colours in thefe Flowers, which cdnftantly arife from Seeds ; fo that from the Seeds of One Plant, there will be many'i^fferent Colours produced, Thefe are a great Ornament£To the Flower-Garden in the Autumn •, for they co$|mue flowering from *July* until the Froft puts a Stop tjjfcthem : And? u thefe Flowers had an Odour equal to ti|r Beauty, the/- would deferve one of the firft Places iiS Garden ; but they are without any Sort of Scent, whijjjbas occafionea their being too nmch negleftcd : For tnePgreat Beauty* and Variety of Colours in their Flowers, renders then* worthy of a Place in every good Garden. The Flower-ftems of thefe Plants are from Six to Eight Inches h»gfjj and the Flowers terminate the Stalks. The Roots wii often lart Two Years, provided they are growing & * dry Soil; but they, are genet ,|f-d from • Seeds every Year* .


Tt. xxxxi
Fig. 1
Fig. 2
I MWOPHYLLUa
CARYOPHYLLUS

Pl. LXXXIII

CASSIA *foliolis trijugatis ovatis, exterioribus majoribus, flore magno, siliquâ pentagonâ alatâ*

fig. 1. CASSINE *foliis ovato-lanceolatis serratis oppositis dentibus floribus trigynis fructibus*
fig. 2. CASSINE *foliis lanceolatis alternis integerrimis floribus octandris*

PLATE LXXXII.

CASSTA, *Tourn. Injl. R. H.* 619. *tfab.* 392. *RaiiMetbcd. Plant.* 160. *Lin. Gen. Plant.* 461. *Senna fpuria, Houft. MSS.* Wild Senna, *vulgè.*

DOCTOR *Tournefort* has placed this Genus of Plants in the fifth Seftion of his Twenty-firft Clafs, intituled, *Trees andShrubs with a Rofe-flcwer, wbofe Pointal turns to a Pod.* Mr. *Ray* ranges it among the Trees with a Flower of Five Leaves, and Dodtor *Linnaus* places it in his Tench Clafs of Plants, intituled, *Decandria Moncgynia*; the Flower having Ten Stamina, and One Pointal. Dodtor *Houjioun>* in his Manufcript Catalogue of the Plants which he difcovered in *America,* has feparated all the Species of this Genus, whofe Seeds are not included in Pulp, from thofe which are; and ne has given the Title of *Senna Jpuria* to that Genus, and stains that of *Cajfta* to thofe whofe Pods have Pulp Surrounding the Seeds. This Diftinftion was firft made by Doctor *Herman,* but, after his Time, they were joined again by mod of the Writers on Botany.

The Species here reprefented is,

CASSTA *foliotis trijugaiis ovatis exterioribus majoribus,ficre m*gno, filiqua pentagona alata,* i.e. Wild Senna (or Caflia) with Three Pair of oval *Pinnae* to each Leaf, the upper being the largeft, a large yellow Flower, and a Five-angle winged Pod.

a reprefents the Spike of Flowers arifing from Footftalks of the Leaves. *b>* fhews a fingle Flower taken from the Spike, exhibiting the Ten recurved Stamina. *c,* the Pod, which has/Five *Ala%* or Wings, running longitudinally from the fmall Footftalk.

Doctor *Houftoun* titles this Plant, *Senna fpuria plerumqiie hexaphylla, fiore magno, filiquapentagona alata,* MSS, 195. This Plant approaches near to the *Cafjia filiqua qimdrangulari, Hort. Elth.* in its Leaves; but the Flowers of our Plant are near twice as Jargj, and the Pods are much more turgid that} thofe of the other Plant, and the Wings of the Pods are broader. Befide thefe Differences, there is -another very effential one ; which is, the Plant here figured is perennial, and the Stem will become ligneous, whereas the other is an annual Plant.

This Plant was difcovered by the late Doftor *William Houjlctm,* at *Campeachy,* from whence he fent the Seeds, which were fown in feveral curious Gardens in *England** where they have flowered and perfected their Seeds, in thofe Gardens where there were good Stoves to preferve them through the Winter: For, as the natural Country of this Plant is very hot, fo it will not live in *England,* unlefs it is placed in a warm Stove.

It ufually grows about Four or Five Feet high, having a woody Stem, with feveral lateral Branches. Thefe are garnifhed with winged Leaves, each having Three Pair of Lobes (or fmall Leaves), which are broadeft at their Extremity, where they are bluntly rounded off. At the Footftalks of the Leaves the Flowers are produced, which are formed into clofe fhort Spikes. Thefe are compofed of Six Petals (or Leaves), which expand in Form of a Rofe, and are of a bright yellow Colour; in the Center of which is fituated the Style, attended by the Ten recurved Stamina. After the Flower is paft, the Style becomes a Pod of about Six Inches in Length, fwelling in the Middle, and having Five Angles, or Borders, lengthways. Thefe contain many Liver-colour-ed Seeds, which are a little comprefled.

The Leaves of this Plant have been fubftituted for *Senna* in the natural Place of its Growth.

PLATE LXXXIII.

CASSINE, *Lin. Gen. Plant.* 333. *Pluk. Mantifs.* 40. Caffioberry Bufh, South Sea Tea, *or* Yappon.

THE Characters of this Genus are exhibited in *The Gardener's Dictionary.* Doftor *Linnaus* ranges from the Third Divifion of his Fifth Clafs of Plants, intituled, *Pentandria Trigynia,* the Flowers having Five stamina and Three Stigmas.

The Spedes here rgprefented are.

FIG. 1. CASSINE. M^ *ovatO'lanceolatis ferr at is oppnfitis deaduis, floribus corymbofu.* The Caffioberry Bulh, *vulgo.*

This is, by Doctor *Plukenett,* intituled, *Caffine vera Ilrquamfimilis Arbufcul* Pbillyrea% foliis antagonijiis, ex Provincia CaroHnienfi, Mantifs.* 40.

Uoftor *Linnxus* has fuppofed this Plant, and the *Phillyrea Lapenfis folio Cclaftri, Hort. Ellb.* to be the fame ; and alfo the *Fruiex JEthiopicus alatcrni foliis, Seb. Tbef.* ana has added the *Cerafus Sebejlin* domeftic* foliis aliquatenus accedens* of *Phikenett* to it; whereas they are many different Plants : Therefore, it may be fuppofed not then the PJant here figured ; for *h* differs from the *Phillyrea Capenfis* greatly in the Shape of the Leaves, thofe being broader, rounder, and of a much harder Texture, than the *Caffine^* and continue through the Year, being an Evergreen; whereas the Plant, here figured, fheds its Leaves in Winter: And it differs from *Seba's Frutex ALlhiopicus* in its Leaves growing oppofite > whereas thofe of *Seb&'s* Plant are ranged alternately,

a, reprefents One of the Flowers taken from the Bunch, fhewing the Five Stamina. *b>* is one of the Berries, which is intire. Thefe have commonly Three Cells, in each of which is included a fingle Seed.

FIG. 2. CASSINE *foliis lanceolatis alternis fempervirentibus^ floribus axillaribus.* South Sea Tea, Yappon, *or* Evergreen Caffine.

This Plant is feparated by Do<5tor *Linn^us* from the other, and placed in his Fourth Clafs of Plants; and he has join'd it to the common *Holly^* dnder the Title of *Ilex,* making this and the *Baboon Holly* the fame Plant: But if the Doftor had feen the Flowers of the Two Plants, he would not have been guilty of this Miftake •, for the Flowers of the Plant here reprefented, have Five Stamina, and do agree with the other Sort in all the Charadters

raders, ib ihould not be fepsrated; nor can any Perfon, who fees this and the *Baboon Holly,* ever fuppofe them to be the fame Species, as there is a remarkable Difference in all their Farts.

Mr. *Catefby,* who has figured this Plant in his *Hijiory of Carolina,* calls it by Doflor *Plukenetl's* Name ; *viz. CaJJine vera fioridanorum arhufcula baccifera alaierni ferme facie, foliis alternatimfilis tetrapyrene, Pink. Mant.* 40. *Catejb. Hift.* Vol. II. p. 57. In his Plate the Plant is figured with the Berries, when ripe, having no Flowers; and it feldom produces Flowers in *England:* Therefore the exhibiting a Branch of it here, was with a Dcfign to fhew how it differed from the Firit Species •, becaufe they have been by fome Perfons fuppofed the fame, Mr. *Catejhy* feems pofitive that this Plant is the fame as that which grows at *Paraguay,* the Leaves of which are dried and ufed for *Tea* in mod Parts of the Continent of *New Spain* ; fo that the Jefuits of *Paraguay* drive a great Trade with it, and draw great Riches into their Province by this Commodity. And I have been well informed, by Perfons who have feen the Shrubs there growing, that they have Two different Shrubs, from which they gat:..-. Two Scrts of this Tea, which they diflinguifli by different Titles -, and, fo far as they remember the Shape of their Leaves, believe them to be the Two Sorts here reprefented. The Leaves of the Firft Species are ex< tremely bitter ; an Infufion of them is very ferviceabk in recovering loft Appetites •, as alfo tS remove Pains o\ the Stomach : But it'ihould not be made too ftrong, left it prove emetic, or cathartic. This Shrub will grow w the Height of Ten or Twelve Feet, and forms itfelf into a very fpreading bufhy Head. It often flowers in *July,* but I have not heard of its ripening any Fruit in *England.* It will live abroad in the open Air, if planted in a fheltered Situation ; but when it is in a cold flrong Soil, and too much expofed, the tender Shoots are frequently killed in Winter.

The Second Sort is an evergreen Shrub, which is not fo hardy as the former; fo will not live in the open Arr in *England,* unlefs it is planted in a very warm Situation. This feldom grows fo large as the former, and very rarely produces Flowers in *England.*

P L A T E LXXXIV.

CASTANEA, *Tourn. Infl. R. H.* 584. *fab.* 352. *Rail Meth. Plant.* /40, *Fagus, Lin. Gen, Plant.* 951. Chefnut. In *French, Cheiigmr.*

TTX O C T O R *fcurnefort* ranges this Genus in his J L / Nineteenth Clafs, which contains the *Trees and Shrubs with amentaceous Flcivers, which are produced in feparate Parts from the Fruit on the fame Trees.* And Mr. *Ray* places it in his Clafs of *Trees whofe Flozvers and Fruit grow at remote Dijiances.* Doctor *Linnaus* has joined this Tree to the Beech, making it only a Species of that Genus \ *fo* has applied the Title of *Fagus* to this, and places it in the Eighch Sedlion of his Twenty-firft Clafs of Plants, intituled *Monoecia Polyandria,* which includes thofe Plants, which have Male and Female Flowers on the fame Plant; and the Flowers have many Stamina.

The Species here reprefented is,

•*CASTANZAfatha,* C. *B. P.* 418. TheManuredChefnut.

This Epithet is generally applied to thofe Trees which produce large Fruit, which, by the *French,* is diftinguifhed by the Appellation of *Marronier*; but, as the Nuts taken from the fame Tree will produce Trees whofe Fruit will greatly differ as to their Size, fo the Varieties arifing from Seeds (hould not be regarded by Botanifts,

tf, reprefents the Spikes of Male Flowers, which are compofed of many long (lender Stamina, included in a Bell-fhaped Empalement of One Leaf, which is cut into Five Parts at the Top. *b,* fhews the Spikes of Embryo's, which have no vifible Flower, but Three Styles which reft on the Top. Thefe are produced at a Diftance from the Katkins, or Male Flowers, *c,* fhews a Fruit with its prickly Cover. And *d,* One of the Covers open, fhewing the Three Cells in which the Nuts are lodged.

The Characters of this Tree are exhibited in *The Gardeners Difiiunc.ry.*

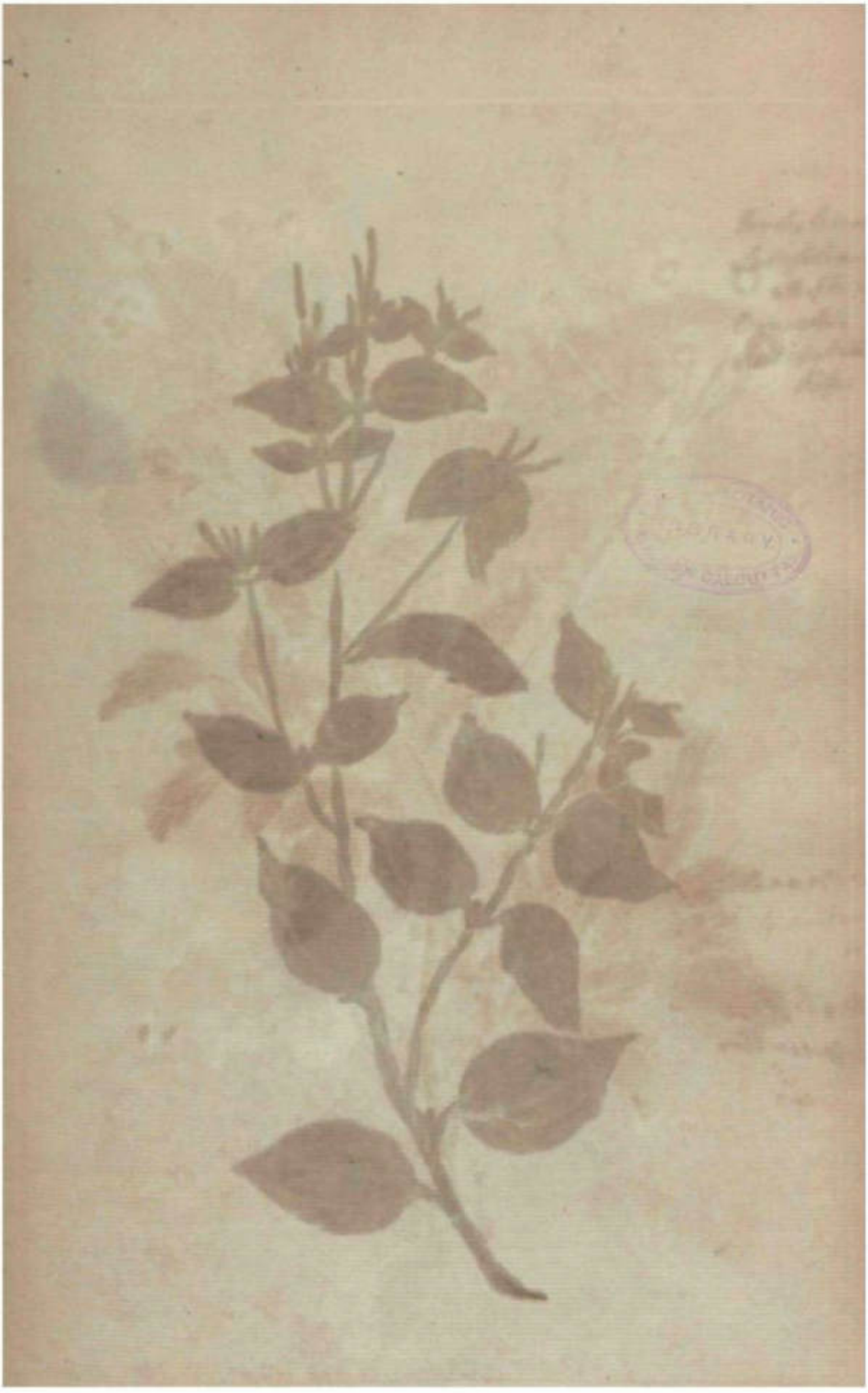
Doctor *Unnaiii* has applied the following Title to this riant, *fagus foliis lanceolatis accuminato-ferratis fubtus nudis Hon. Cliff.* 447. but I think this mould not be joined to the Beech-Tree, but continued as a diftinft Genus under the Title by which it has been univerfall/ known tor many Ages; for, as the Male Flowers of the *Beech-Tree* aic colled into globular Heads, and thofe ur S^e C *ti*^Ui intO lon§ cylindrical Spikes, fo this Diftinction is fufficientto feparate them, were there no Difference in their Fruit.

The Diftinftion which fome Authors have made, between what they term the Wild and the Manured Chefnut, JS only from the Size of their Fruit, as hath been obferved ; but I fuppofe there may be a better Reafon for continuing the Appellation of *Manured* to thofe with large Fruit, becaufe in many Countries, where the Trees are cultivated for their Fruit only, the Inhabitants graft from thofe Trees which produce the faireft Fruit, whereby they preferve them in Perfection: Whereas thofeTrees, which are raifed from the largeft Nuts will degenerate ; Jo that few of them will produce fo lar<*e Fruit as their parent Tree : Therefore, whoever is defirous to have this Fruit in Perfeftion, fhould procure Grafts from fuch Trees as do produce good Fruit, and graft them *on* young Chefnut Stocks, by which Method they may continue^te. Kind. nnH i4,» -r . . . . :n K- ~^r-» fruitful than [illegible]

There can be no Doubt of this Tree having b^en ,J°£ merly in great abundance in feveral Parts of ^^'.^[fince many of the old Buildings are found to be p"[illegible] pally of this Timber; and there are many Records which mention feveral Forefts of thefe Trees: But [illegible] happened that a Tree fo common here, whole [illegible] is fo valuable, mould be almoft extirpated in *Engi*[illegible] is not eafy to account for.

CASTANEA *fulva* C. B. P.

CAUCALIS




Tab. LXXXVI
CEANUTHUS foliis trinerviis Linn. Sp. pl. 298.

PLATE LXXXV.

CAUCALIS, *Tourn. Inji. R. H.* 323. *Tab. IJI. Echinophora, Col. Ecphr.* 1. 97. *Rail Meth. 53. Tordylium, Lin. Gen. PL* 293. Baftard Parfley.

THIS Genus of Plants is by Doftor *Tournefort* ranged in the Sixth Section of his Seventh * Clafs of Plants, intituled, *Herbs with umbellated Flowers, ranged circularly * whofe Empalement turns to Two large Seeds\ which are cbanelled with deep Furrows.* Mr. *Ray* places it in the Thirteenth Seftion of his Eleventh Clafs of Plants, which he titles, *Plants with umbellated Flowers, and prickly Seeds.* Doftor *Linnaeus* has ranged this Plant in his Genus of *Tordylium,* which is included in the Second Divifion of his Fifth Clafs of Plants, intituled, *Pentandria Digynia,* the Flowers having Five Stamina and Two Styles.

The Characters of this Genus are exhibited in the *Gardener's Di£fionary.*

The Species here reprefented is,

CAUCALIS *arvenfis echinata latifolia, C. B. P.* 152^ Broad-leaved prickly Field Baftard Parfley.

** reprefents a fingle Flower taken from the Umbel, Aewing the Flower, which confifts of Five Parts. *b*$_y$ reprefents a Clufter of Seeds. *c,* the Empalement of the Flower, which is cut into Five acute Segments. *d,* the Two Seeds which fucceed to each Flower, *e,* a fingle Seed feparated, fhewing the fmooth Side.

John Bauhin has titled this Plant, in his Hiftory, *Lapfula canaria latifolia, five caucalis, VoL* 3. *p.* 2. 80. And, by *Columna,* it is titled, *Echinophora quarta major platyphyllos purpurea>. Par. 1. 97.* And, by Doftor *Lin-H*[illegible], it is intituled, *Tordylium umbella conferta mediufcula, foliis pinnatis, foliolis lanceolatis incifo-ferrat*[illegible]*Sy Lin. Sp. PL* 240.

This Plant is annual, rifing from the Seeds which fall in the Autumn, where they are permitted to fcatter, or when they are cultivated in Gardens: The Seeds fooufd be fown foon after they are ripe, otherwife they do not fucceed well. The Plants grow about Two Feet high, and divide into Branches, which are deeply chanelled, and covered with Hairs; thefe are garnifhed with broad Leaves, which are divided into feveral Lobes, being deeply cut or jagged, and ferrated on their Edges. At the Top of each Branch the Flowers are produced in Umbels, each of thefe being compofed of Three, Four, or Five, fmaller Umbels, which are for the mod part compofed of Seven Flowers; thefe are of a purple Colour, having Five Leaves, and in the Center is placed the double Ovarium, attended by Five Stamina j thefe are inclofed in an Empalement of One Leaf, cut at the Top into Five acute Segments. When the Flower is paft, the Ovarium fwells, and becomes Two Seeds joined clofe together, covered with a prickly Coat or Cover. *It* flowers in *June*$_3$ and the Seeds ripen in *Auguft* or *Sep* tember.*

The Plants of this Genus were formerly eaten as Sallad Herbs, but of late they have not been ufed either in Food or in Medicine; but fome of the medical Writers have attributed great Virtues to thefe Plants. *Matthiolus* fays, that thefe Herbs comfort the Heart, and remove Obftruftions of the Liver and Spleen, and cleanfe the Bladder and Reins of Gravel, if the Juice of the Herb is drank. There are many other Virtues attributed to thefe Plants, but at prefent they are not ufed. It grows wild in fome Parts of *Cambndgcfhire,* but not very common. *Lobel* fays it is called *Caucalis* from the Form of the Seeds, which refemble oblong hemifpherical Veffels.

PLATE LXXXVI.

CEANOTHUS, *Lin. Gen. Plant. Edit.* 5. *Celajlrus, Edit. i. Euonymus, Com.Mort. Amft.* 1. *p. i6y. Pluk. Almag. *39-* Jerfey Tea.

DO&or *Linnaeus* ranges this Plant in the Firft Se&ion of his Fifth Clafs of Plants, intituled *Pentandria Monogynia,* from the Flowers having Five Stamina and One Style. In the Catalogue of the Garden of Mr. *Clifford,* and all his former Writings, he joins this Plant to his Genus of *Celaftrus,* or Staff-tree; from which he has fince feparated it, and conftituted a new Genus, of which we have at preftnt Four Species.

The Chara&ers are,

The Flower hath a iurbinated Empalement of One Leaf, which is cut at the Top into Five acute Segments, and is permanent. The Flower is compofed of Five roundifh Petals, which are equal, and do not extend beyond the Empalement, as is reprefented at a. *In the Centre of the Flower isfituated the three-cornered Germen, on which is placed a cylindrical Style having a blunt Stigma -, thefe are attended by Five Stamina, placed oppofite to the Petals, crowned with roundijh Summits. When the Flower is paft, the Germen becomes a three-cornered dry Capfule, reprefented at* b, *being divided into Three Cells, each having a fingle Seed, reprefented* c *and* d; *at* e *is fhewn a Clufter of the dry Seed-*[illegible]*f[rfs, as they naturally grow.*

The Species here reprefented is>

CE'AONTHUS *foliis trinerviis, Lin. Sp. Plant.* 195. i. e. Ceanothus with Leaves having Three Ribs or Veins.

This is commonly called *New Jerfey Tea,* and by fome Gardeners *Carolina Spirea.* This Plant is titled by Do<ftor *Commelin Euonymus Novi Belgii Corni femin<e foliis, Hort. Amft.* 1. 167. and Doftor *Plukenet* calls it *Euonymus Jujubinis foliis Carolinienfis, fruttu parvo fere umbellato*$_y$ *Almag.* 132. *Tab.* 28. *F. 6. In* the *Hortus Cliff or tianus^* and the *Flora Virginica,* it is titled *Celaftrus inermis, foliisL ovatis ferratis trinerviis, racemis ex fummis alis longiffimir%* and, in the Catalogue of the Garden at *Upfal*$_9$, *Doctor Linnaeus* has titled it, *Ceanothus corymbis fclio lorigicribus^*

p. 5[illegible].

This Shrub is a Native of *North America,* from whence the Seeds have been brought to *England* by the Title of *New Jerfey Tea,* as it is fuppofed, from the Leaves being ufed as *Tea* in that Country. It was many Years ago growing in the Bifhop of *London's* Garden at *Fulham,* as alfo in Mr. *Derby's* Garden at *Hoxton,* but was for feveral Years after loft in *England-,* and has been recovered again from *America* within a few Years paft, fo as to be at prefent pretty common in mod of the curious Gardens near *London.* Dodor *Plukenet,* who was the Firft Author that has mentioned this Plant, has alfo given a fmall Figure of it in his *Phytographia -,* but it is

too fmall and imperfeft, being drawn from a dried Specimen. Doctor *Commelin's* Figure was drawn from a Plant which had been too tenderly nurfed in a Greenhoufe, whereby the Spikes of Flowers are feparated, and drawn very loofe; whereas when the Plants grow in the open Air, the Flowers are always produced in very clofe Spikes, as they are reprefented in the Figure here annexed. In the Defcription of this Plant, Doftor *Ccmmelin* mentions that the Leaves continued on it all the Winter; and only dropped off in the Summer, when they >\vere immediately fuccecded by new ones: But this muft have happened from the Plants being too young, and their being kept in a warm Green-houfe ; for all 'thofe Plants which grow in the open Air, flied their Leaves in the Autumn, and this they alfo do in their native Country, fo there is no Doubt of its being a deciduous Shrub. The Seeds of this were fent to Do&or *Commelin* from *New Holland*; and I have received Seeds of it from ***New England, Virginia, Philadelphia,*** **and** ***Carolina*** **5 fo** that it certainly grows naturally over the greateft Part of *North America* ± for the *French* Writers mention it growing very common in *Canada,* where thtf Cattle browze on the young Shoots, whereby it is always kept very low; and they recommend the Ufe of the Root in venereal Cafes.

This Shrub feldom rifes more than Three or Four Feet high in *England,* branching out on every Side near the Ground. The Branches are very lender; and as it is pretty late in the Spring before they begin to (hoot, fo, unlcfs the Autumn proves dry and mild, the tender Shoots are often killed down very low by the early Frofts; but, in favourable Seafons, the extreme Parts of the Shoots only are injured by the Cold. Thefe Branches, are garnifhed with oval-pointed Leaves having Three longitudinal Veins running from the Footftalk to the Point, which diverge in the broad Part of the Leaves from each other : The Leaves are placed oppofite by Pairs, and are of a light-green Colour. At the Extremity of each Shoot the Flowers are produced in clofe thick Spikes, which are compofed of Five fmall Leaves, and are of a clear White: Thefe appear \njuly, and make a very fine Appearance during their Continuance; for, as every Shoot is terminated by one of thefe Spikes, *fo* the whole Shrub is covered over with Flowers, the Branches commonly growing very clofe to each other. After the Flowers are paft, there fucceeds to each Flower a tricapfular Seed- vefiel, flatted at the Top, opening into Three Cells, each having a fingle Sted. In warm Seafons the Seeds will ripen very well in *England.* This Shrub is beft propagated by Seeds, which Ihould be fown in fmall Pots, and plunged into a moderate Hot bed, to bring up the Plants, which fhould be enured to bear the open Air by Degrees, as foon as they have obtained a little Strength.

P L A T E LXXXVII.

CSLASTRUS, ***Lin. Gen. Plant.*** **239.** ***Euonymus, Com. Hort. Amjl.*** **1. 163.** ***Raii Bend.*** **72.** ***Method. Plant*** **155.** ***Lycium, Boerh. lnd. alt. 2.*** **237. The Staff-**tree.

THIS Genus of Plants is ranged by Doftor *Linnxus* in his Fifth Clafs of Plants, intituled, *Pentandria Monogynia,* from the Flower having Five Stamina and a fingle Style. The Title of *Celaftrus* has been applied to One Species of *Alaternus,* by many of the old Writers on Botany ; fo Doctor *Linnaeus* has revived that Name, and conftituted a Genus under that Title, and has applied it to fome Plants which were diftributed under Two or Three different Genera by former Botanifts.

The Chara&ers of the Genus are exhibited in the ***Gardener's Diftinary.***

The Species here reprefented is*

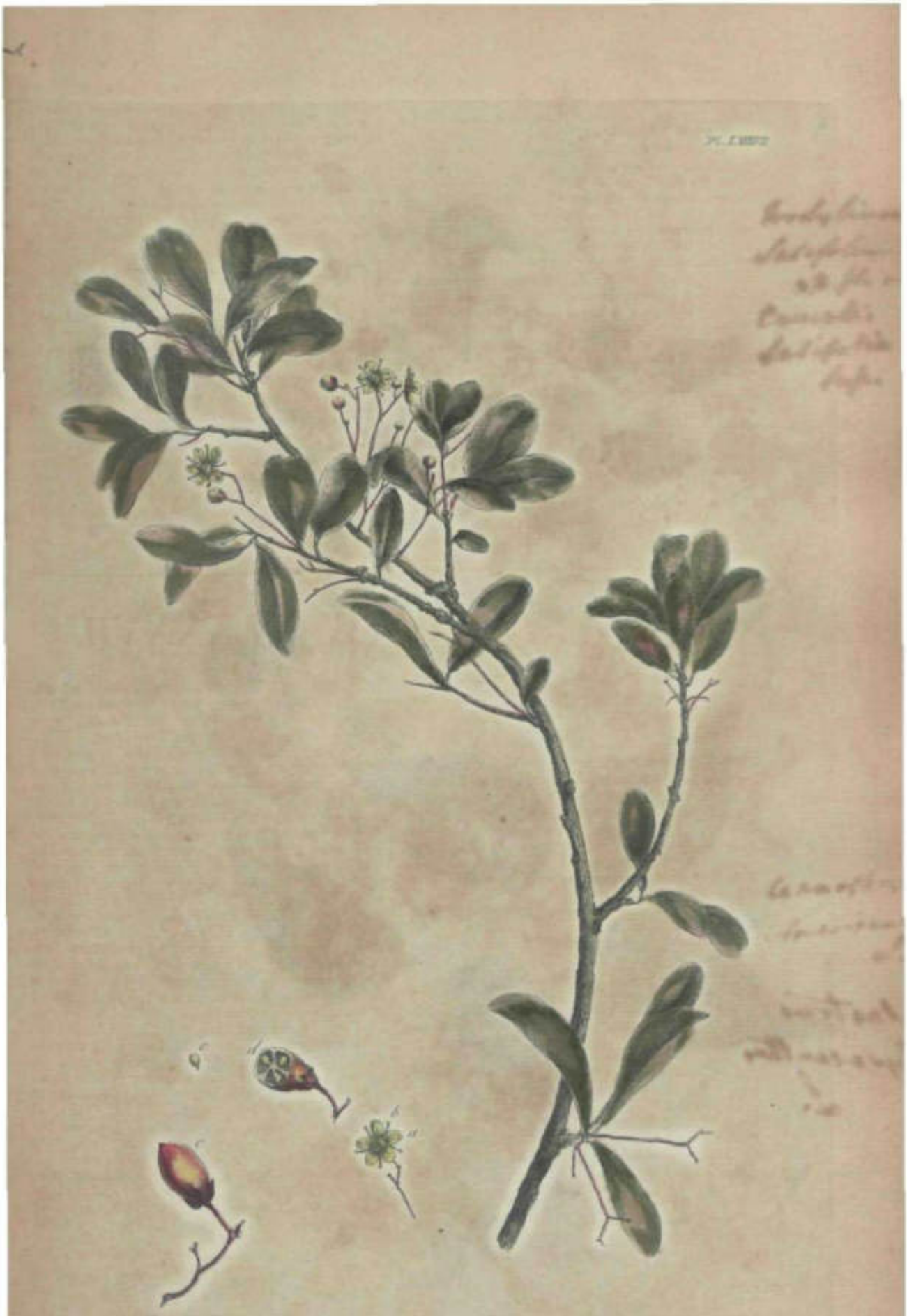
CELASTRU*sfpinis nudis, ramis teretibus, foliis acutis, Hort. Cliff.* 72. i. e. Staff-tree with naked Spines, taper Branches, and pointed Leaves. This has been ignorandy titled *African Berberry* by fome Gardeners.

a, rtprefents a fingle Flower fpread open, fhewing its Five Leaves, with the Five Stamina which are fpread open, as at *b*; and in the Center is fituated the fwelling Ovarium, fupporting the cylindrical Style, *c,* fhews an intire Fruit, with its permanent Empalement. *d,* the Fruit cut through tranfverfely, fhewing the Three Cells, with the Seeds lodged in them. And *e^* a fingle Seed taken out of the Fruit.

This Plant is figured, in the *Hortus Amftelodamenfis,* **by the Title of** ***Lycium ASthiopicum, pyracanth* foliis,*** *Vol. 1. p. 1*63. Doftor *Boerhaave,* in the Catalogue of the *Leyden* Garden, mentions this Plant twice, firft under **the following Title,** ***Rhamno fimilis Africana, fruftu tribculari, folio Pyracanthi, lnd. Alt.*** **z.** ***p. 212.*** **and afterwards by this Title,** ***JLuonymus Africanus craffwribus foliis fempervirens, capfuld triloculari afperatd rubente* lnd. Alt****

2. *p.* 237. Doftor *Plukenet* gives it the following Title, ***Euonymo affinis Aithiopica, Lycii foliis &? aculeis, fruftu Euonymiy Almag.*** **130.** ***Tab.*** **280. .**

This Plant grows naturally in *Ethiopia,* from whence the Seeds were brought to the Gardens in *Holland;* and, from the Plants which were there raifed, mod of the curious Gardens in *Europe* have been fupplied. It feldom grows more than Three Feet high in the Gardens here. The Stem of this Shrub is generally crooked, and the Branches are, irregular and taper. Thefe are garnifhed with Leaves which are about Two Inches long, and half an Inch broad, fome ending in a Point, and others are obtufe; they are ftiff, and of a fhining green Colour, fmooth on their Edges, and are placed without any Order on the Branches. The Flowers are produced loofely in fmall Tufts, (landing upon pretty long Footftalks j thefe are of a dirty-white Colour, and are compofed of Five Petals, which fpread quite open, and in the Center* is placed a fwelling Embryo, crowned with a tapering Style; thefe are attended by Five Stamina, which arife from the Embryo, and fpread open, being fituated be* tween the Petals of the Flower, each being crowned with a blunt Summit. After t^e Flower is paft, the Embryo fwells, and becomes an oblong pointed Fruit, of a reddifh Colour, which opens into Three Cells, in each of which is lodged an oval hard Seed. The ufual Time of its Flowering here is in *June, July,* and *Auguji,* and the Fruit ripens the Winter following. As thefe Plants are ever-green, fo they make a pretty Variety in the Green-houfe during the Winter-feafon, efpedaily when they have a good Quantity of Fruit on their Branches, which, together with fome Flowers which are frequently produced at that Seafon, make a very agreeable Appearance during the whole Winter, which renders this Plant more valuable. Tfce Method of pop** gating it, together with the Culture, are fully exhibited **in the** ***Gardener's Dictionary.***


CELASTRUS

CELTIS *fructu oblongo purpurascente Houst. &c.*

Published according to Act of Parliament by P. Miller May 25th 1758

Fig. 1. CERASUS hortensis plene flore C. B. P. 450.
Fig. 2. CERASUS pumila Canadensis oblonge angusto folio flore fructu parvo Sloan. Hawrl.

Published according to Act of Parliament by W. Miller May 25. 1798

P L A T E LXXXVIII.

CELTIS, *Tourn. Inft. R. H. 612. Lin. Gen. Plant.* 1012. *Lotus arbor, Rail Metb. Plant.* 150. The Lote or Nettle-tree. In *French, Micocoulier.*

THIS Genus of Plants *hby Doctor Tournefor t* placed in the Second Sedtion of his Twenty-firft Clafs, intituled, ***Trees and Shrubs with a Rofe-Flower, whofe Pointal turns to a Berry.*** Mr. *Ray* ranges it in his Clafs of Trees whofe Fruit is fucculent, and joined to the Bottom of the Flower. Dodor *Linnaus* places it in his Twenty-third Clafs of Plants, intituled, *Polygamia Monoecia,* from the fame Tree having Male and Hermaphrodite Flowers.

The Species here reprefented is,

CELTIS *fru£iu obfeure pur pur afcent e, Tourn. Injl.* 612. *American* Lote or Nettle- tree, with dark-purple Fruit.

*» reprefents an Hermaphrodite Flower, *b,* a Fruit full grown, *c,* the Fruit cut tranfverfely, {hewing its fingle Cell, *d,* a Seed taken out of the Cell. *, the Two crooked Pointals which (land on the Embryo, and are encompafled by the Stamina in the Center of the Flower. **Mr. *Ray* titles this Tree, *Lotus arbor Virginiana, fruflu rubro, Hift.* 1917. Do6lor *Gronovius,* in the *Flora Firginica,* calls it *Celtis procera, foliis ovato-lanceolatis ferrafis, fruffu pullo,* p. 195; and Doftor *Linnaeus,* in his *Species Plantarum,* titles it, *Celtis foliis oblique-ovatis ferratis acuminatis,* p. 1044.**

This Tree grows naturally in *North America,* where it becomes a large Tree : It is generally found on moift rich Ground, in the Woods over moft Parts of *North America.* This Species is much more common in *England* than that with black Fruit, though the latter grows naturally in the South of *France,* in *Spain,* and *Italy*; yet is equally hardy, and will bear the C&ld of this Climate full as well. But I do not remember to have iben more than Two large Trees of the *European* Sort .1 any of the *Englijh* Gardens ; one of which was grc /ing in the Bifhop of *London*'s Garden at *Fulham,* and the other in Do6lor *UvedaPs* Garden at *Enfield:* The latter was (landing a few Years fince, when I paid a Vifit to that Garden ; but the other at *Fulham* was cut down, with many other curious Trees, feveral Years ago.

There are feveral pretty old Trees, now growing in the Gardens near *London,* of the Sort here figured, which produce great Quantities of Fruit annually, and there feldom comes any Quantity of Seeds from *North.America* without having fome of thefe among them ; fo that it is now become common in moft of the Nurfery Gardens near *London.* The Flowers of this Tree are produced in *May,* and always appear as foon as the Leaves are put out, fo they are fully expanded before the Leaves are grown to half their Size, as may be feen by the Branch here exhibited with the Flowers, which is repre* fented in the natural State of the Tree at that Seafon; and the other Branch, which is laid at the Bottom, reprefents their Leaves when grown to their full Size. As it is late in the Spring before the Leaves come out, fo they commonly continue as long in Beauty in the Autumn, for they are the lateft in fading of any of the deciduous Trees j nor do they alter their Colour long before they fall, but continue in full Verdure till within a few Days of their dropping off; and, fo foon as they begin to fall, the Trees will in a few Days be quite deftitute of Leaves, fo that the Litter which their falling Leaves occafion may be fooner cleared away than that of any other deciduous Tree. There is little Beauty in the Flowers or Fruit of this Tree; but, as the Branches are well clothed with Leaves, which are of a fine green Colour, fo the Trees, when mixed with others in Wilderneffes, make a pleafing Variety during the Summer Seafon. The Wood of this Tree, being tough and pliable, is efteemed by Coach-makers for the Frames of their Carriages.

The Leaves of the Sort here reprefented are much broader and fhorter than thofe of the *European* Kind, which, together with the Colour of the Fruit, makes a fufficient Diftindion between them.

P L A T E LXXXIX.

CERASUS, *Tourn. Inft. R. H.* 625.*Tab.* 401. *Rail Metb. Plant.* 150. *Prunus, Lin. Gen. Plant.* 546. The Cherry-tree. In *French, Cerifier.*

DO&or *Toumefort* ranges this Genus in the Seventh Se&ion of his Twenty-firft Clafs of Plants, intituled, ***Trees and Shrubs with a Rofe-fhaped Flower, whofe Pointal becomes a Fruit having a hard Shell***

Mr. *Ray* places it in his Clafs of Trees with moift *ruit which is fattened to the Bafe of the Flower: And Dodtor *Unnaus* ranges it in his Twelfth Clafs of Plants, which he titles *Icofandria Monogynia*; in this Clafs he places all thofe Plants whofe Flowers have more than twenty Stamina. In the laft Edition of his *Genera Plantarum,* he has joined to the *Plum* the *Apricock, Cherry*^ and *Padus,* of his former Edition, making all °* the fame Genus-, but, although they nearly agree in the Chara&ers of their Flowers, yet, if the Fruit is admitted as one of the Characters, the *Cherry* muft *b&* kept feparate from the *Plum* by the Shape of the Fruit, and particularly of the Stone, which in Form is very different; nor will the Cherry grow upon a Plum-ftock, or the Plum upon a Cherry-flock, by grafting or budding ; fo that there is an eflential Difference in their Nature ; for all Trees and Shrubs of the fame Genus are found to fucceed when budded or grafted upon each other, however they may appear to differ in their outward Form.

The Characters of this Genus are exhibited in the ***Gardener's Dictionary.***

The Species here reprefented are,

FIG. 1. CERASUS *hortenfts, pleno flore, C. B. P.* 450. The Manured or Garden Cherry-tree, with double Flowers.

Flowers. This is the *Cercfus multiflora* of *Tabernemontanus,* and *Cerdfus pleno flcre* of *John Bauhin.*

This Tree is cultivated in the Gardens for the Beauty of its Flowers, which come out in *May,* and, during their Continuance, make a very fine Appearance, each Flower being as double as a common Rofe, and of a much larger Size than any of the fingle Flowers ; fo that, as the Trees are generally well garniflied with them, there are few of the Flowering Trees which make fo good an Appearance as this. It is propagated by grafting or budding it upon any common Cherry-ftock ; but, when they are defigned for large Standards, the black or wild Cherry-ftock is beft; but, if they are intended for low Shrubs, they may be grafted upon the *Bird Cherry,* which will ftint their Growth, and caufe them to be Dwarfs.

FIG. 2. CERASUS *pumila Canadenfis, oblongo anguftofolio, fruftu parvo, Du Hamel.* Dwarf Cherry, with narrow Leaves, and a fmall Fruit.

This is probably the fame which is defcribed by *Matthicks, Gerard,* and fome other Botanifts, and was formerly in many of the *Englijb* Gardens. This Shrub feidom rifts more than Three or Four Feet high, and divides into many (lender Branches near the Ground, which are covered with a reddifh brown Bark ; thefe are garnilhed with long narrow Leaves, which are whitifh on their under Side, and of a light Green on their upper Side, coming out without any Order. The Flowers come out Two or Three together at each Joint, the whole Length of the Branches, fupported by long (lender Footftalks, each having Five Leaves, which are much narrower than thole of the common Cherry ; thefe are fucceeded by a fmall red Fruit, which is of an acid Taftc. It flowers in *May,* about the fame Time as the common Cherry, and the Fruit ripens in *July** The Branches of this Shrub, being laid down in the Ground, take Root, fo may be eafily propagated by that Method. The Seeds of this Cherry were fent me from *Paris* by the Title *of Ragouminier,* which I find is the Name given to it in *Canada,* where they alfo call it *Nega,* or *Minel-* This Shrub may be planted in Wildernefs Quarters, where, being intermixed with others of the fame Growth, it will add to the Variety.

PLATE XC.

CEREUS, *Par. Bat.* 122. *Boerh. Ind. Alt.* 1. 292. *JuJJ. A3. R.S.* 1716. *Callus, Lin. Gen. Plant.* 529. Torch Thiftle.

THIS Genus of Plants is by Doctor *Boerhaave* placed among thole Plants which have many Pods fucceeding to each Flower, which by no means agrees with this Plant; but it would more properly come under his Clafs of Apple-bearing Plants, where he has placed the *Opuntia.* Doftor *Tournefort* has not mentioned this Genus in his Inftitutions of Botany; though many of the Species had been figured and defcribed by *Herman,* and other Botanifts, before *Tournefort.* Mr. *Ray* has inferted this Genus, with fome others which were omitted in his *Method of Plants,* in an Appendix-to that Book. Doftor *Linnxus* ranges this Genus in his Twelfth Clafs of Plants, intituled, *Icofandria Monogynia,* the Flowers having many Stamina and One Style •, and he has joined to this Genus the *Opuntia* and *Melocaffus* of *Tournefort,* and the *Perefkia* of *Plumier.*

The Characters of this Genus are exhibited in the *Gardener's Diftionary.*

The Species here reprefented is,

CEREUS *fcandens minor polygonus articulatus, Par. Bat.* 120. Smaller creeping Torch Thiftle, with jointed Branches having feveral Angles. It is alfo titled, by Doftor *Herman, Cereus curajfavicus amplexicaulis polygonus minor, Par. Bat.* ; and, in the *Hefperides Norimbergenfis,* it is called *Cereus Americanus major articulatus, flore maximo no He fe aperient e, fuaviffimum odor em fpirante, Vol.* 1. *p.* 133. *Tab.* 234. ^ Doftor *Linnaeus* titles it *CaRusrepens jubquinqitangularis, Sp. Plant.* ^.6*y.*

a% reprefents the fcaly Empalement of the Flower, which is compofed of many narrow long Leaves, which are *of* a yellowifh Colour within, *b,* fhews the white Petals of the Flower, *c,* the Style in the Center of the Flower, which is divided at the Top into many (lender Segments, *d,* the Stamina of the Flower, with their blunt Summits, which immediately furround the Style. *e,* reprefents the Bud of the Flower before it opens. *f,* the Embryo of the Fruit, which, in the Country where it grows naturally, fwells to the Size of a Bergamot Pear ; but, in *England,* the Whole falls off together, without producing a.iy Fruit.

It grows naturally in the Iflands of *America,* where the Branches faften their Roots into the Bark *of* Trees, whereby they fupport themfelvcs, and climb to the Tops of the tailed Trees.

In *Europe* this Plant is preferved in Stoves, being *too* tender to live through the Winter here without artificial Heat. If the Pots, in which thefe Plants grow, are placed againft the Wall of the Hot-houfe, the Branches ™ P u t ^t Roots which will faften themfelves to the Wall, and may be trained to the Top of the Hot-houfe ; and, where there is a fufficient Height for them to grow, they will in a few Years run to a great Extent, and will produce a great Number of Flowers annually. 1 hefe Flowers are of fhort Duration, never continuing in Beauty above Eight or Ten Hours; beginning to open in the Evening between Seven and Eight of the Clock, are fully blown by Eleven, and by Three or Four the next Morning fade, and hang down quite decayed ; but, during their Continuance, there is fcarce any Flower of greater Beauty, or that makes a more magnificent Appearance-, for the Calyx of the Flower, when open, is near a Foot Diameter; the Infide *ot* which, being of a fplendent yellow Colour, appears like the Rays of a bright Star, and the Petals of the Flowers being of a pure White adds to the Luftre ; and the vaft Number of recurved Stamina, furrounding the Style in the Center of the Flower, make a fine Appearance; and add to this the fine Scent of the Flower, which perfumes the Air to a confiderable Diftance: There is fcarce any Plant which deferves a Place in the Hot-houfe fo much as this; efpecially as it is to be trained againft the Wall, where it will not take up Room. The ufual Seafon of its Flowering is in *July,* and, when the Plants are large, they will produce a good Number of Flowers, fo that there will be a Succeffion of them for feveral Nights, and many of them will open the fame Nigh[c:] 1 have frequently had Six or Eight Flowers open at the lame time, which have made a moft magnificent Appearance by Candlelight; but none of them have [illegible] fucceeded by any Appearance of Fruit.

PLATE


N. LXIII.
CEREUS flandens minor polygonus articulatus Pet. Mant. 120.

PLATE XCI.

CERINTHE, *rourn.Inft.R.H.79. ^ab.\6. RaiiMeth. Plant.* 57. *Ljn^ Qen% pian*t. 171. Honey wort. *In French, Melinet.*

Rournefort places this Genus in the Third Section of his Firft Clafs of Plants, intituled, *Herbs with a Bell-Jhaped Flower of One Leaf, whofe Pointal turns to a dry Fruit having Two oblong Seeds.* Mr. *Ray* ranges it in his Thirteenth Clafs of Plams, which he titles *Herbs with rough Leaves*; and Doftor *Linnaeus* Places it in his Fifth Clafs of Plants, intituled, *Pentandna Monogynia*; the Flower having Five Stamina, and a Tingle Style

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented is,

CERINTHE *quorundam major, flore ex rubro purpurafcente, J' B.* 3. 603. Greater Moneywort, with a purplifh red Flower.

*a** fhews a Flower cut open, reprefenting the Stamina at *b.* ^ *d* reprefems the Empalement of the Flower with Us Pointal. *d,* the Sffid-veffel containing Two Seeds.

This is the Third Sort mentioned in the *Gardener's Dftionary.*

Cafpar Bauhin titles it *Cerinthe flore ex rubro purpura-Jcente, Pin,* 258. Dodor *Linnaeus* joins this Species to that with yellow Flowers, making them only different Varieties, under the following Title, *Cerinthe foliis amplexicaulibus, fruftibus geminis, corollis obtufiufculis patulis, £' Pian*t- 136. *i. e.* Honeywort, whofe Leaves embrace the Stalks, with a double Fruit, arid a fpreading obtufe flower. But although, from the Colours of the Flowers of the Two Sorts only, they may be efteemed Varieties; yet I could never find that either of them changed or altered their Colours from Seeds; for I have cultivated both Sorts for Thirty Years, and have always found, that the Seeds produced Plants with the fame coloured Flowers as thofe from which they were gathered. Thefe Plants grow naturally in *Italy, Spain,* and feveral Parts of *Germany.*

The *Bees* are very fond of thefe Plants; fo that, during their Continuance in FJower, they are conftantly flying from FJovyer to Flower, -and fucking out the mellous Liquor which is lodged in the Bottom of each. The Flowers of thefe Plants do generally hang downward ; fo that the *Bees* are upon the Wing during their thrufting their Probofcis up the Flower to g< t out the Liquor. I believe th^re can be no doubt of this Plant being the fame with what the antient *Romans* mention under the fame Appellation. *Virgil* titles it *Cerint ha ignobile grament,* which Epithet may probably be given to this Plant, from its becoming a very troublefome Weed, and that no Cattle will eat it. For thefe Plants do produce a great Number of Seeds, which in a warm Climate do vegetate immediately after Rain, whereby the Ground is filled with the Plants: And as, in thofe warm Countries, there may be Three or Four Succdiions of Plants from Seeds in One Year^ fo they may be ranged among thofe which are efteemed as bad Weeds. However, as it is a favourite Plant of the *Bees,* fo thofe Perfons who have an *Apiary* fhould-cultivate a Number of thefe Plants in their Gardens, where, by the Diverfity of their fpotted Leaves, and hanging Flowers of different Colours, they will add to the Variety.

They are annual Plants, which, if fown in the Spring, do flower in *July* and *Auguft,* and their Seeds ripen in *September* \ which if permitted to fcatter, the Plants will many of them come up the fame Autumn ; and in moderate Winters, or if growing in a warm Situation, they will live through the Winter \ and thefe autumnal Plants will grow much larger than thofe which are fov/n in the Spring, and will flower at lead a Month earlier: But as the Stems of thefe Plants are fucculent, a very hard Froft generally kills them.

p L A T E XCII.

CHELIDONIUM, *Tourn. Inft. R. H.23J. Tab. 116. Lin. Gen. Plant.* 572. *Chelidonium majus, Raii Metb, PI.* 100. The greater Celandine; in *French, Chelidoine,* or *Eclaire.*

Tournefort ranges this Genus of Plants in the Sixth Seftion of his Fifth Clafs, intituled, *Herbs with a crefs Jha-ped Flower, isbofe Pointal turns to a Pod One Cell.* Mr. *Ray* places it in the Fourth *Se&ion* °r the Twentieth Clafs of Plants, which is titled *Herbs K'Uk anomalous Flowers of Four Leaves.* Doctor *Linnaus* "nges it in his Thirteenth Clafs of Plants, intituled, *Mtyandna Monogynia;* the Flowers having many Sta«nina, and One Style. To this Genus he joins the *Glau*««»of *Tournefort.*

The Characters of this Genus are exhibited in the *hardener's Difiionary.*

The Species here reprefented are,

CHELIDONIUM *majus vulgare, C. P. B.* 144. common greater Celandine. This is the *Chtlionta otjobn Bauhin,* Par. 3. 482. and *Chelidonium Dod. Pemp.* 48,

#, reprefents the Petals of the Flower, which are Four in Number, placed in Form of a Crofs. *b,* the fingle Style in the Center, *c,* the many Stamina, *d,* the Pod laid open. *e>* the Seeds.

FIG. 2. CHELIDONIUM *majus, foliis quernis, C. B. P.* 144. Greater Celandine, with Oak Leaves. This is the *Chelidonium folio lacimato of John Bauhin, 3.* 483. and the *Chelidonium majus laciniato flore^ Cluf Hift.* 203. Do&or *Lirwam* iuppofes thefe to be only feminal Varieties \ *fo* joins them together under the following Appellation. *Chtlidonium pedunculis umbellatis, Spec. Plant.* 505. But, from upwards of Thirty Years having cultivated both thefe Plants, I could never find they altered, but their Seeds always produced the fame as the Parent Plant. But there is another Species mentioned by fome Wrirerson Botany, by che following Title : *Chelidonium majus, foliis & flore minutiffime laciniatis, II. R. Par.* which is only a Variety of the S-cond Sort; for-1 have frequently had Plants produced from? the Seeds of that, whole Leaves and Flowers were much finer clit, and jigged, than thofe of the Parent Plant : And thefe Varieties are frequently fecn growing together s but I never faw the

common Sort rife from the Seeds of thofe, nor do the Seeds of the common ever produce thefe ; therefore they may be allowed as deferent Species.

The Firft Sort grows wild in uncultivated Places, and on the Sides of Banks in divers Parts of *England,* and flowers in *May* and *June.* The Second Sort is only to be found in fome particular Places where it has been fown; but if the Seeds are permitted to fcatter, the Plants will come up, and maintain their Situation in as great Plenty as the common Sort, and become a troubleiome Weed in Gardens.

The common Sort is ufed in Medicine, and is efteemed aperitive and cleanfing, opening Obftruftions of the Spleen and Liver; and is in great Ufe in Curing of the Jaundice and Scurvy. It is alfo by fome reckoned to be cordial, and a good Antidote againft the Plague. A Quantity of this Herb is put into the Compofition of *Aqua Mirabilis.* The Juice of this Herb is ufed outwardly to take away Warts, Specks, and Films; for Tetters, Ringworms, and (curfy Breakings-out. The bruifrd Herb, mixed with Hogs Lard, being applied to Warts, will confume them, as I have frequently experienced. The Juice of this Plant is by fome recommended to be applied to the Eyes, to eat off Film ; but as it is very full of Acrimony, fo it may be vny dangerous, unlefs it is mixed with other Things to blunt the Edge of its Acrimony, as Milk is faid to do. It may alfo be unfafe to adminifter this inwardly without the fame Precaution.

In the laft Edition of *Rafs Synoffis,* this Plant is intituled *Papaver corniculatum luteum, Chelidonia diSum, p.* 309. to diftinguifti it from the *Chelidonium minus Ger.* which Dr. *Tournefort* has placed in the Genus *L&m nunculus,* and Doctor *Boerhaave* has feparatcd from the *Ranunculus,* and put under the Title of *Chelidonia,* from the Empalement of the Flower having Three Leaves.

PLATE XCIII.

CHELONE* *Tourn. Acad. Reg. Sc.* 1706. *Tab.* 7. *Fig.* 2. *Flor. Virg.* 70. *Bitten. Gen.* 11. *Lin. Gen. Plant.* 666. We have no *Englijh* Name for this Plant.

THIS Plant (hould be ranged in the Fourth Sedion of *TourneforCs* Third Clafs of Plants, intituled, *Herbs with an anomalous perfonated tubulous Flower of One Leaf;* and, according to Mr. *Ray's* Method, it fhould be ranged in his Nineteenth Clafs of Plants, intituled, *Herbs with an irregular Flower of One Leaf> having many Seeds in a Capfule.* Doctor *Linnaeus* places this Genus in his Fourteenth Clafs of Plants, intituled, *Didynamia Angiofperma* ; the Flowers having Two long and Two fhorter Stamina, and many naked Seeds fucceeding each Flower.

The Chara&ers of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented is,

CHELONE *floribus fpeciojis pukherrimis colore rof<e damafcen<e, Clayt. Flor. Virg.* 71. Chelone with a fpecious Flower of the Colour of the Damafk Rofe.

a, reprefents the Corolla of the Flower fplit open, *b* «iid *c,* the Four Stamina, Two longer than the other. *d,* the Stylus. *e>* an intire Seed-veffel. /, the Seed-veflel cut through, (hewing the Two Cells, *g,* the Seed.

There are Two or Three more Species of this Genus of Plants; one with a white Flower, which is the mod common in the *Englijh* Gardens; another with a pale blue Flower, which is at prefent very rare in *England*; and one which is called *The Humming Bird Tree* by *Jofcelin,* in his *New England Rarities.* This is alfo pretty rare in *England* at prefent. They are all Natives of *North America,* where they generally grow upon boggy Places, and propagate much by their creeping Roots. The Sort here reprefented is the moft beautiful, the Colour of the Flowers being of a deep Red, and the flowers are lbmewhat larger than thofe of the white. This is the Second Sort mentioned in the *Gardener's Dictionary,* which was fent from *Virginia* by Mr. *Clayton* a few Years pad. Thefe Plants are very hardy, and propagate faft by their creeping Roots; they require a moid Soil and a fhady Situation, flower in *Auguft* and *September,* but do rarely produce good Seeds in *England;* fo are only propagated by parting of their Roots, which is beft done in *March* before they put out their Shoots, when they will foon make new Roots, and thefe will be eftablifhed before the dry Seaion comes on; for if they are tranfplanted lafe in the Spring* they will not have Time to get good Rooting in the Ground before the Heat of Summer; fo that if the Seafon proves dry, they will not make any great Appearance that Year in Flower •, and thofe which are tranfplanted in the Autumn, feldom do well if the Winter proves fevere or very wet; therefore the Spnflç. is by much the moft eligible Time to part and tranfplant thefe Plants.

As thefe Plants flower in Autumn, when there is a Scarcity of other Sorts, fo it renders them more valuable. Their Shoots generally rife Two Feet high, having their Leaves placed oppofite, whole Bafe joifls the Stem without any Footftalk; and fometimes there are Three Leaves produced at the fame Joint, furrounding the Stem. The Leaves are from Two to Three Inches in Length, ending in a blunt Point. They have feveral tranfverfe Veins in them, and are fawed on their Edges. At the Top of the Stalk, the Flowers are produced in Spikes, each coming out from a leafy Cover, which before clofely embraces the Flower Buds ; they feem to be placed *imbricatim,* like the Tiles on a Houfe; but when the Flowers pufli forward, they are extended a confiderable Length beyond thofe leafy Covers. The Flowers are of One Leaf, are tubulous, wide open at their Extremity, fomewhat like thoie or the *Snapdragon* ; but; inftead of the upper Part being arched as in that Flower, thefe are brnt over the Anvils, fo as to form fome Refemblance of a *Tortoife;* whence Doctor *Tournefort* applied this Title to the Genus.

PLATE

CHELONE /<•/(/.- r-/>a/<> •/#//*••• ?•/fa</.•/•'•#//.'• ///>/•('/' rubris.—

Published according to Act of Parliament by B. Walter June 1st 1786.

CIRSIUM majus, singulari capitulo magno vel incanum alterum C.B.P.

Pl. XCV

CLINOPODIUM *foliis ovatis serratis verticillis capitulis distantibus.*

R. Lancake del. — J. S. Miller Sc.

Publish'd according to Act of Parliament by P. Miller June 20, 1758

PLATE XCIV.

CIRSIUM, *Town. Inft. R. H.* 447- #**• [2]SS- *Cafp. Bauhin. Pin.* 377. *Rail Metb. Plant.* 40. *Carduus Ltn. Gen. Plant. S32.* The great *Englijh* foft, gentle, or melancholy Thiftle.

Doftor *Tournefort* ranges this Genus in the Second Seftion of his Twelfth Clafs of Plants, intituled, *Herbs with a flofculous Flower, wbofe Seeds have *»own adhering to them.* Mr. *Ray* places it in his Ninth Claft of Plants, intituled, *Herbs with a compound Flower wbofe Flofcules are tubulous, and inclofedin a common Empalement, formed in an Head.* Dodor *Unuaus* ranges it m his Nineteenth Clafs of Plants, intituled, *Syngenefia polygamia aqualis,* from the Stamina being joined in each Tube, and Male and Female Flowers in the fame common Empalement. He has joined this Genus to the *Carduus,* or Thiftle ; but Doftor *Tournefort,and* others, have feparated from thai Genus all thofe*Plants jvhoie Leaves and Heads are not armed with Spines.

The Characters of this Genus are exhibited in the *Gardener's Dictionary.*

The Species here reprefented is,

CiKstvufaguIap capitulo fquamalo, velincanum alter urn, [illegible] melancholy Thiftle [illegible] fquamofe Heads.

a% reprefents the Embryo of the Seed at the Bottom of the Floret *b*9 where the Five Stamina and Stylus is fliewn. *c*9 is One of the Seeds taken out, with the Plume on its Top. *d,* (hews the Stamina taken out ot the Floret.

This is the *Cirfium Britannicum Clufii repens, J. B.* 3. 46. and the *Cirfium Anglicum jj> Cluf. Hijt.* 168. tfy Doftor *Haller* it is titled *Cirfium joins l$vge lanceolatis Jerratis, fubtus tcmentofis, Helv.6%3.* and, by Doftor *Lin* titeus, Carduus foliis lanceolatis dentatis ampUxicaulibus> Jpinitlis in^qualibus ciliatis, cattle inermi^ Hort. Cliff.* 392. *i. e.* Thiftle with Spear-fhaped indented Leaves embracing the Stalks, having foft Spines and a fmooth Stalk.

This Plant grows naturally near *higkberougk Hill* in *Torkjhire.* I found it in the Park adjoining to *Burrough Hall,* the Seat of *Robert Fentvick,* Elquire •, but in thde uncultivated Places where it grows wild, the Staiks feldom rife much above a Foot high ; whereas, in Gardens, it is generally double that Height, and the Leaves are fo much larger, that it feems a different Plant -, but, by tranfplanting it into Gardens, it foon difcovers itfelf by its greater Growth. The Stalk is fingle, arifing immediately from the Root, and is garnifhed with Leaves, which are Four or Five Inches long, and One and an half broad at their Bafe, where they embrace the Stalk. Thefe are of a fhining green Colour on the»r upper Side, and white underneath, being (lightly indmred on their Edges, where they are befet with fine foft Prickles. Thefe are placed alternately. On the Top of the Stalk is produced a fingle Head, like that of a Thiftle: and at the Joints are often fingle. Heads produced, having a foft, hairy, fcaly Empalement, in which is contained many Female and Hermaphrodite Flowers of a purple Colour, which reft on the Embryo's, on a downy Placenta. The Seeds are alfo crowned with Down. The Roots of this Plant do creep far under the Surface of the Ground, whereby it propagates very faft, efpecially in a light Soil.

This Plant is feldom preferved in Gardens,, unlefs for the fake of Variety -, but I have feen it much cultivated in fome Gardens of Quacks, who pretended to cure Madnefs with it; which probably may have been occafioned by the *EngUjh* Appellation of *Melancholy Thijlk* given to it by *Parkinfon.*

PLATE XCV.

CLINOPODIUM, *fourn. Inft. R. H.* i?4- ™; 9*- *Rf Metb. Plant..*94. *Lin. Gen. Plant.* 644.

Tournefort ranges this Genus in the Third Seftion of his Fourth Clafs of Plants, intituled *Herbs with a labiated Flower of One Leaf, whofe upper Lip is ere£l.* Mr. *Ray* places it in his Fifth Settioa ot the Fourteenth Clafs of Plants, intituled, *Herbaceous Plants with verticillate Flcwers and ofpofite Leaves* ...Doctor *Unnaui* places it in his Fourteenth Clafs ot plants, titled *Didynamia Gymnojpermia,* from the Flowers having Two long and Two bore Stamina, and being fucceeded by naked Seeds.

The Characters of this Genus are exhibited in the *Gardener's Dictionary,*

The Species here reprefented is,

CLINOPODIUM *foliis cvatis rugefis, vertidllis omnibus diftantibus,* i. e. Field Bafil with oval rough Leaves, and the Whoiles of Flowers (landing at a great Diftance.

a, reprefents a fingle Flower feparated from t! e Whories, with its Empalement. '£, the upper Lip of the Flower fpread open, *c,* the Four Stamina, Two long and Two fhorter. *d>* a fingle Seed.

This Plant is a Native of *Egypt*% from whence the Seeds were fent to *Europe,* and the Plants have for fome Years pad grown in many curious Gardens, It hath a peitnniai

perennial Root, but annual Stalks, which grow a Foot and an half high. Theie are garnifhed with oval Leaves, having many tranfverfe deep Furrows, and are of a dark green Colour, placed oppofite, at about Five or Six Inches afunder. There are commonly Two or Four Side-Branches from the main Stems, produced toward the Bottom •, and the Whorles of Flowers are produced at every Joint toward the upper Part of the Stalks. Thefe arc preity large and hairy. The Flowers are fomewhat larger than thofe of the common Field Bafil, and are of a deeper Colour, ftretching a little more out of the Empalement. The Leaves of this have at firft Sight much the fame Appearance; but when they are obferved with Attention, the Difference is foon obferved between the Two Sorts : But the greateft Difference is in the Leaves and Whorles of Flowers being placed at a greacer Diftance, and the Stalks growing fparfely in this Species ; nor do the Plants continue fo Ions as thofe of the common Sort.

This Sort flowers in *June** commonly a Fortnight or Three Weeks before the common *Field Bafih* and the Seeds ripen in *September-,* which if permitted to'icatter, the Plants will come up in the Autumn ; and if tne Winter proves favourable, they will live in the open Air, provided they grow on a dry Soil ; but in moift Ground they are frequently deftroyed, efpecially when the-Plants are young.

This Plant approaches near to the *Clinopodium Onentale Origani folio, flare minimo* Tour. Cowl.* 12. But by comparing this with a Specimen of that Sort from the *Paris Garden,* I find the Leaves of that are fmoother, and placed much nearer together on the Stalks thaa thofe of this Sort, and the Flowers are fmaller; fo that it may be deemed a dittind Species, as thefc Differences are permanent, and do not alter in any of the Plant which arife from the Seeds.

P L A T E xcvi.

CLYMENUM, *Tourn. Inft. R. H.* 396. *Tab.* 218. *Lathyrus vicixformis, feu Clymenum, Rait Meth.* 103. *Latbyrusi Lin. Gen. Plant.* 781. Chichliog Vetch.

rburnefcrt ranges this Genus in the Second Seftion of his Tenth Clafs of Plants, intituled, *Herbs with a papilionaceous Flower, whofe Point al turns into a long unicapfular Pod.* Mr. *Ray* places it in his Twenty-fir ft Clafs of Plants, whicli contain the Herbs with *papilionaceous or leguminous Flowers* \ and this Genus in his Firft Order, which includes thofe Plants which are not trifoliate : And as the Leaves of this Plant do refemble the *Lathyrus* and *Vicia,* fo he titles the Genus *Lathyrus Vkiaformis.* But Dodoor *Linnaeus* joins this, the *Apkaca* and *Nifjclia* of *Tournefort,* to the *Lathyrus,* and places it in his Seventeenth Clafs of Plants, intituled, *Diadelphia Decandria* ; the Flowers of this Ciafs having Nine Stamina joined together, and a fingle One (landing fejwate. In this Clafs of leguminous Plants, Do<5tor *Tournefort* has departed from his own Syftcm, in the Divifion of the Genera-, but there was a Neceffity for his fo doing, becaufe, by the Method which he propofed of ranging the Plants from the Form of the Flower and Seed-veflel only, he muft have enlarged many of the Genera to fo great an Extent, as to have rendered it difficult to diilinguifh the Species, fo as not to perplex his Students: And Nature feems to have pointed out this Method of dividing them by the Form of their Leaves, which are the moil obvious Chara&ers •, and therefore are eafirr comprehended than thofe fmalltr Diftin&ions *o*\ the Flower cup, *&c.*

This Genus *Tournefcrt* diftinguifhes from *Lathyrus,* by its Leaves having feveral Conjugations placed on a Midrjb, winch ends in a Tendril •, whereas thofe of *Lathyrus* have bur. One Pair of Leaves growing on a leafy Border of the Stalk, which ends in a Tendril.

The other Characters of this Genus are exhibited in the *GaiJttJcr's Dictionary.*

Th| Species here reprefented is.

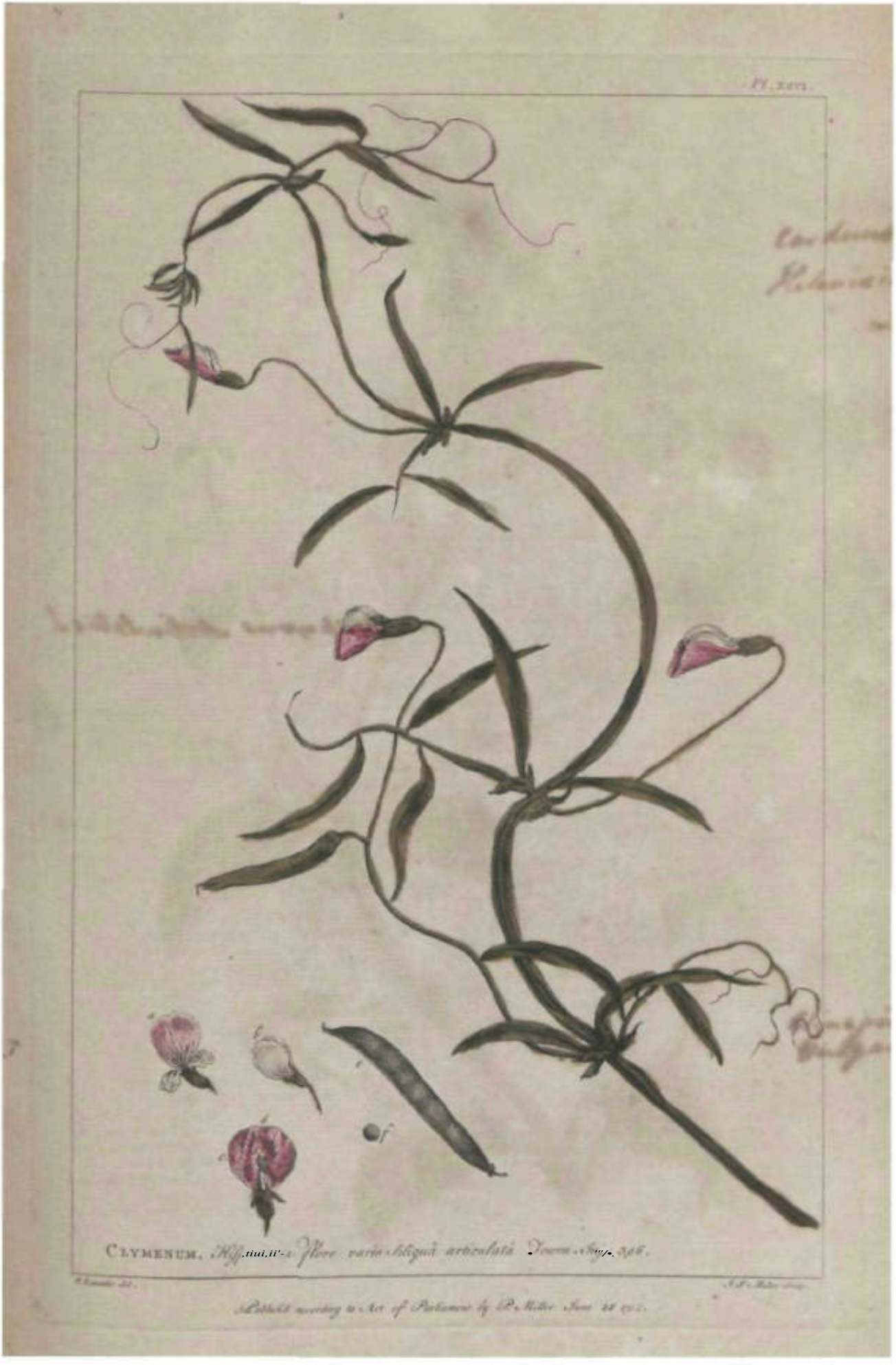
CI^MENUM *Htfpanicum flore vario, fdiqud articulate* Tourn. Inft. 396. i. e.* Spanifli Chichling Vetch, with a variegated Flower and a jointed Pod.

a, reprefents the Flower in Front, (hewing the Standard, the Keel, and the Two Wings, *b,* the hinder Part of the Flower. c_y the Nine Stamina joined together, and One feparated from them. *d*<> the Pointal, which afterwards turns to the Pod *e*; and /, a fmgte Seed taken out of the Pod.

This is by Dodor *Morifon* titled *Lathyrus Viciaoides floris vexillo Pbxnicio, foltis labialibus, fubalbefcentibus, fdiquis Orobi, Hift. Par.* 2. 55. and by Do&or *Linn*u$* Lathyrus pedunculis fubunifloris^ cirrhis polyphyllis^ foliolis alternisy Hort. Cliff.* 363.

This Plant grows naturally In *Spain* and *Portugal* from whence the Seeds have been fent to *England.* A have alfo received the Seeds from *America* ; bur it is not certain that it grows naturally there, or that the Seeds have been carried from *Europe^* and may have propagated there in fo great Plenty, as to render it doubtful whether it was not a Native of that Country. For if the Seeds are permitted to fcatter in a Garden, the Planes will come up, and maintain their Situation without any Culture.

It is an annual Plant, and may be propagated in the fame manner as the *Sweet Peafe.* Thofe Piants which come up in the Autumn, if they are not drilroyed by very fevere Froft in Winter, will flower in *May* and *June** and the Seeds will ripen in *July,* but thufe which come up in the Spring, will not flower till a Month or Five Weeks after; fo that, by fowing at both Seafons, there may be a Continuatioiv>Of Flowers for Two or Three Months, which will miifc a Variety in the Borders of the Flower Garden.


Pl. xcvi.
CLYMENUM. Hisp. Flore variis, filiquâ articulatâ Tourn. Inst. 268.
Published according to Act of Parliament by P. Miller June 24 1761.

CHIRONIA *frutescens corymbiflora Linn. Sp. plant. 190.*

Published according to Act of Parliament by W. Miller, July 1st

CNEORUM — Linn. Hort. Cliff. —

PLATE XCVE

CHIRONIA, *Lin. Gen. Plant.* 227. *Centaurium minus Com. Plant. Rar.* 8. *Tab.* 8. *Old. Plant. Afr. 26.* African Leffer Centaury.

THE Charaders of this Genus are,

The Empalement of the Flower is permanent, and is of One Leaf, which is cut into Five acute Segments at the Top, as is reprefented at a. The Flower is of One Leaf having a large Tube, and is fpread open at the Tcp> where it is divided into Five equal Segments, as is reprefented (it b. *In the Center of the Flower is fituated the oval Germen, fupporting aflender Style* c, *which is declined \ and isfurrounded by Five Stamina* d, *each being crowned with a large contorted Summit. After the Flower is paji, the Ovary becomes a fwelling Capfule, filled with fmall Seeds.*

This Genus of Plants is by Do&or *Linnaus* ranged in the Firft Seftion of his Fifth Clafs, intituled, *Pentandria Monogynia.* The Flowers have Five Stamina, and One Style. There are feveral Species of this Genus, which have been titled *Leffer Centaury* by the feveral Writers who have mentioned them : Some of thefe have a pulpy Berry fucceeding their Flowers, and others have their Seeds inclofed in a Capfule : So that, if their Fruit is admitted as a Characteriftic in diftinguifhing the Genus, thefe muft be feparated to different Genera.

The Species here reprefented is,

CHIRONA *frutefcens capfulifera, Lin. Spec. Plant.* 190. Shrubby Chironia, whofe Seeds are contained in a fwelling Pod. This is by Dodtor *Commelin* titled *Centaurium minus Africanum arborefcens latifolium, flore ruberrimo Rar. PI.* 8. T. e Shrubby African Leffer Centaury, with broad Leaves and red Flowers. Dr. *Linnaeus* has joined all the common Species of the *Leffer Centaury* to the Genus of *Gentian* •, fo has abolifhed the Title of *Centaurium:* But as the feveral exotic Species have but One Style, and the *European* Sorts have Two, he has feparated them, and Con* ftitutcd this Genus by the Title of *Cbironia** from *chiron* the Centaur.

This Plant is a Native of *Africa,* from whence the Seeds were brought to fome curk>us Gardens in *Holland,* where it has been many Years preferved : But as it can be only propagated by Seeds, which are but feldom perfected in the cooler Parts of *Europe,* fo the Plants have not been common in the Gardens; and being fomewhat difficult to preferve through the Winter, has alfo prevented their being made fo common as might have been expected, becaufe the Beauty of irs Flowers renders it worthy of a Place in every curious Garden.

It hath a fibrous Root, which fpreads near the Surface of the Ground. The Stalks are round, and inclining to be ligneous ; but are of a foft Texture: Thefe grow from Two to Three Feet high, having feveral Branches on every Side, which grow erefl : Thefe are garnifhed with fucculcnt Leaves, which are an Inch or more in Length, and an Eighth Part of an Inch broad, ending in an obtufe Point. At the Ends of each Shoot the Flowers are produced, which are tubulous, and fpread open at the Top like thofe of *Periwinkle.* Thefe are of a bright red Colour; and when there are a large Number of the Flowers open on the fame Plant, they make a very fine Appearance. In the Center of the Flower is placed an oval Germen, upon which there is fixed a recurved Style, having a blunt Stigma at the Top. This is furrounded by Five incurved Stamina, each fupporting a large Summit. When the Flowers fall away, the Germen becomes an inflated Capfule* which is filled with fmall Seeds. The FJowers are produced from *June* to Autumn, and the Seeds ripen in *OSober.* This Plant (hould be placed in an airy Glafs Cafe in Winter, where it may enjoy a dry Air, and much Sun, but will not thrive in a warm Stove; nor can it be well preferved in a common Greenhoufe, becaufe a damp moift Air will foon caufe it to rot.

PLATE XCVIII.

CNEORUM, *Lin. Gen. Plant.* 47. *Chamxtea Tourn. Inft. R. H.65i. Tab.* 421. *C. B. P.* 462. *Rait Meth. Plant. 152.* Widow-wail; in French *Camelee.*

THIS Genus of Plants is by Doftor *Unnaus* ranged in his Third Clafs, intituled, *Triandria Monogynia,* from the Flower having Three Scamina and One Style. Do&or *Tournefort* has placed it in the Appendix to his Inftitutions; but it fhould be ranged in his Twentieth Clafs of Plants, tho' by his Method it would be feparated on account of the Flower having Three Petals; v/hereas thofe of that Clafs are monopetalous. Mr *Ray* places it in his Divifion of Trees and Shrubs which have nioifl: Berries not umbilicated, each having a fingle Seed.

The Species here reprefented is,

CNEORUM, *Hort. Cliff.* 18. Widow-wail. This is the *Chamalea tricocccs* of *Cafpar Bauhin* and *Dodon<eus%*

and the *Cneorum* of moft old Writers On Botany: So that Doftor *Linnaeus* has only applied the ancient Title to this Genus, inftead of the modern Name of *Chamalea tricoccos.* It has alfo been titled *Thymelea* by fome Botanifts; but as that Name is now applied to the *Mezeron,* and other Plants agreeing in the fame Chara&er, which have Flowers of One Leaf, fo this Plant muft not be ranged with them.

a, reprefents the Empalement of the Flower ; *b,* the Three Petals of the Flower; *c,* the Berries or Seeds, each Flower being fucceeded by Three Seeds or Berries joined together.

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

This humble Shrub feldom rifes more than Two Feet and a Half high in this Country, but fpreads out on every Side with many lateral Branches, fo as to form a thick Bu(h. The Stems are ligneous, and almoft as hard as thofe of the Box-tree \ and the Wood is of a

pale yellow Colour under the Bark. The Branches are garnifhed with Leaves, Which are ftiff, of an oval Shape, about One Inch and an Half long, and a Quarter of an Inch broad, of a dark-green Colour, having a ftrong Vein or Rib thro* the Middle. The Flowers are produced fingle from the Wings of the Leaves, toward the Extremity of the Branches, which are of a pale yellow Colour, compofed of Three Petals, which fpread open, and a round Germen at the Bottom, having a fingle Style, which doth not rife above half the Length of the Stamnia, which are Three in Number, (landing erect, and are fituated between the Petals. After the Flowers are fallen, the Germen becomes a Fruit, compofed of Three Seeds joined together after the fame manner as thofe of *Titbymalus* or Spurge : Thefe are firft green, afterwards turn of a brown Colour, and when ripe are black. The Flowers begin to appear in *May,* and are fucceeded by others during the Summer Months; and, when the Autumn proves favourable, thefe Shrubs will continue in Flower till the End of *Ottober.*

This Plant was formerly nurfed up in Greenhoufes, and fuppofed to be too impatient of Cold to endure the Winters in the open Air; but by Experience it is found hardy enough to refill the greateft Cold in *England,* provided it is planted on a dry Soil; for in wet Land their Roots will perifh with little Cold ; whereas many Plants, which have been growing in the open Air in the Hyfie-Garden at *Chelfea* upwards of 20 Years, are yet in great Vigour.

As this is a low Evergreen Shrub, fo it may be very ornamental, if placed in the Front of Plantations of Evergreen Trees and Shrubs, for as the Branches grow pretty compact, and are well garnifhed with Leaves, *fo* it will hide the Ground between the taller Shrubs better than moft other Plants; and being a durable Shrub, will not want to be renewed : It rifes better from fcattered Seeds, than if fown with Care.

PLATE XCIX.

COLUTEA, *Town. Inji. R. H.* 649. *Tab.* 417. *Raii Metb. Plata. 163. Lin. Gen. Plant.* 776. Bladder-Sena^; in French, *Baguenaudier.*

THIS Genus of Plants is by Doftor *Tournefort* ranged in the Third Seftion of his Twenty-fecond Clals, intituled, *Trees and Shrubs with a papilionaceous Flower, ivhoje Leaves are placed en each Side the Mid-rib, either alternately or by Pairs.* Mr. *Ray* places it in his Clafs of Shrubs with papilionaceous Flowers and pinnated Leaves. Doctor *Linnaus* ranges it in his Seventeenth Clafs of Plants, intituled, *Diadelphia Decandria,* the Flowers having Ten Stamnia, Nine of which are joined together, and the other ftands off at fome Diftance.

The Species here reprefented is,

Co LUTE A */Ethiopica flore phxnicio, folio Barba-jovis, Breyn. Cent.* 1. 70. i.e. Ethiopian Bladder Sena, with a fcarlet Flower, and Leaves like thofe of Jupiter's-beard. This is the Fourth Sort mentioned in the *Gardeners Diftionary.*

<?, fliews the Flower, with its Petals; *b,* the Ten Stamina; *c,* the Pointal, which afterwards becomes an inflated Pod, as reprefented at *d,* which contains feveral Kidney-fhaped Seeds (hewn at *e.*

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

Dr. *Linntus* titles this Plant, *Colutea frutico/a, foliolis ovato-oblongis.* By the *Englijh* Gardeners it is called *Scarlet Colutea.*

This Shrub is hardy enough to live abroad in the open Air in *England* when the Winters are favourable, and they are planted on a dry Soil, and in a warm Situation : But in fevere Winters the Plants are generally deftroyed •, fo that it is neceffary to have a few Plants in Pots, which may be flickered in Winter, left thofe in the open Air mould be deftroyed. But thofe which live abroad make much ftronger Plants, and produce a greater Number of Flowers, than thofe which are houfed in Winter.

The Plants of this Kind are feldom of long Duration; molt of them decaying the Second Winter, yet in fome favourable Seafons I have ieen of thefe Plants, in a warm Situation, Three Years old, which were upwards or Six Feet high, with very large Heads, and all the Branches covered with Flowers, which made a very fine Appearance: But the ufual Height to which thefe Plants grow, is from Two to Four *Ftw,* and thofe which are expofed to the open Air will have many lateral Branches, well garnilhed with Spikes of Flowers, coming out at the Wings of the Leaves ; which being of a fcarlet colour, and intermixed with the filvery Leaves of tne wants, afford an agreeable Variety. The ufual Time of its flowering is in *June,* and the Seeds ripen in *September;* but in favourable Seafons the Plants often procluce rreih Flowers in Autumn: And many times thofe wants, which are raifed pretty forward in the Spring, will produce Flowers in *Augujl,* and fometimes perfect *thnr* Seeds in *October,* when the latter Seafon proves mild.

Thofe Plants which are planted in Pots, to be flieltered in Winter, muft be treated hardily, otherwife Stalks will be very weak, and produce but few Flowers; therefore they fhould remain abroad in a fheltered Place until the Middle of *November,* unleft the troft fhould prove fevere; and when they are removed into the Greenhoufe, they fhould be placed dofe to the Windows, that they may have as much free Air as poffible. During the Winter they mould have but little Wet.; and in *March* fhould be taken out of the greenhoufe, and placed under fome Cover, where they may be protected from any hard Froft, yet have a grcac bhare of Air to harden their Shoots before their Flowerbuds are formed.

Pl. XCII.

COLUTEA. *Æthiopica flore phœniceo folio Barbæ jovis. Breyn. Cent. 1. 71.*

Published according to Act of Parliament by R. Miller July 1st 1756.

Fig. 1 CONVALLARIA *foliis amplexicaulibus caule tereti pedunculis axillaribus multifloris Hort. Cliff. [illegible]*
Fig. 2 CONVALLARIA *foliis cordatis Fl. Lap. 13*

Published according to Act of Parliament by P. Miller [illegible]

PLATE C.

COLUTEA.

THIS is of the fame Genus with the Plant repreſented on the former Plate. The feveral References there made to the Authors who have treated of the Chara&ers of the Flower will ſerve this Plate alſo\ therefore need not be repeated.

The Species here repreſented is,

COLUTEA *foliolis ovatis integerrimis, caule fruticoſo.* Shrubby Bladder-Sena with oval Leaves, which are intire.

This Shrub is a Native of the Eaſt. The Seeds of it were brought to *England* ſome Years ſince by the Rev. Doctor *Pocock,* who gathered them in *Turkey,* but did not note the particular Place of its Growth: But Doctor *Ruſſel,* who reſided many Years at *Aleppo*^ on his Return to *England* brought ſome dried Samples of this Plant, among many others which he had collected in the Neighbourhood of that City \ and he aſſured me this Shrub was very common in that Country, and generally planted for the common *Bladder-Sena:* But whoever will compare the Two Plants together will ſoon ſee they are two very different Species: And the Difference conſtantly continues in all the Plants which ariſe from Seeds of both Sorts, as I have ſeveral Years obſerved: Therefore I have choſen to give a Figure of it, as it is at preſent undeſcribed; and have added a Leaf of the common *Bladder-Sena* on the Side of this, to ſhew how they differ in the Shape of their Leaves.

a, repreſents a ſingle Flower fully blown; *b,* ſhews the Keel of the Flower opened, whereby the Ten Stamina, ſurrounding the Style at *c,* are repreſented; *d,* ſhews a Pod opened, that the Seeds at *c* may be *k^n* how they are ranged in a ſingle Row, adhering to a ſtrong Membrane, which faſtens both the Valves of the Pod, and through which the Nouriſhment is conveyed to the Seeds.

This Shrub ſeldom grows more than Six or *Seven* Feet high in this Country. The Branches are extended on every Side, and are much more pliant than thoſe of the common *Bladder-Sena,* therefore do not grow ſo erect. The Leaves are alſo much ſmaller, and of an oval Shape; whereas thoſe of the common Sort are broad, obtuſe, and indented at their Extremity, and are of a glaucous or whitiſh-green Colour. The Flowers are little different from thoſe of the common Sort; but they appear at leaſt a Month earlier, and there is a Succeſſion of Flowers continued till late in the Autumn, which renders this much more valuable than the common Sort: And as the Branches of this Sort do not ſhoot ſo luxuriantly, nor ſo upright, ſo they are in leſs Danger of being broken by ſtrong Winds in the Summer; which frequently happens to the common Sort, whereby they are rendered unſightly, eſpecially in ſmall Gardens, where they are not proteſted from the Violence of Winds by other Trees and Shrubs.

This Sort is propagated by Seeds, in the ſame manner as the common *Bladder-Sena,* and is equally hardy; but the Earwigs are great Deſtroyers of the Seeds: So that, in order to have Plenty of the Seeds, there ſhould be the ſame Caution taken as is uſual to preſerve the Flowers of Carnations; which is, to hang a Number of Lobſter-claws, or the Bowls of Tobacco-pipes, inverted, in ſeveral Parts of the Shrubs, into which theſe Inſects will retire for Shelter, and may be daily deſtroyed: But where this Precaution is not obſerved, they will eat into the Pods of the *Sena** and devour all the Seeds. This Sort of *Bladder-Sena* ſends forth many Suckers from the Roots, by which it may alſo be propagated; but the Plants raiſed from Suckers are not ſo valuable as thoſe which are propagated by Seeds, as they never grow ſo ſtrong, and are ſubject to produce many Suckers from their Roots.

PLATE CI.

CONVALLARIA, *Lin. Gen. Plant.* 383. *Polygonatum^Tourn. Inſt. R. H. 395. Tab.* 14. *C. B. P.* 303. *Raii Meth. Plant. 395.* Solomon's Seal; in French, *Seaudc Solomon.*

THIS Genus of Plants is by Doctor *Linnæus* ranged in the Firſt Section of his Sixth Claſs of Plants, intituled, *Hexandria Monogynia,* the Flower having Six Stamnia and One Style. To this Genus he adds the *Lilium convallium* of *Tournefort,* and the *Unifolium* of *Dillenius.* Doctor *Tournefort* places it in the Second Se&ion of his firſt Claſs of Plants, intituled, *Herbs with a Bell-ſhaped Flower of One Leaf, whoſe Pointal becomes a ſoft Fruit or Berry.* Mr. *Ray* ranges it in the Third Diviſion of his Seventeenth Claſs, in which are placed the berry-bearing Planes.

The Species here repreſented is,

FIG. 1. CONVALLARIA *foliis amplexicaulibus^\cauletereti^ pedunculis axillaribus multifloris, Phil. Bot.* 218. *Lin. Spec. Plant.* 315. i. e. Solomon VSeal with a taper Stalk, whoſe Leaves cloſely embrace it, and many Flowers on each Footſtalk, proceeding from the Wings of the Leaves.

a, repreſents a ſingle Flower intire, taken from the Stalk; b_y another Flower placed upright to ſhew the Stamina and Pointal how far theſe advance. c_9 is a Flower cut open, ſhewing the Inſertion of the Six Stamina, and the Pointal ſituated on the Top of the Embryo, which afterwards turns to a Berry *d,* which has a ſoft thin Pulp, in which is incloſed a ſingle Seed. *e,* ſhews the Berry cut through.

This is the *Polygonatum latifolium maximum,* C. *B. P.* 303. and of *Tournefort, Inſt. R. H.* 78. i. *e.* The largeſt Solomon's-Seal, with broad Leaves. This Sort approaches near to the *Polygonatum latifolium Hellebori albi foliis, C. B. P.* but differs from it in its being ſmaller, and the Leaves not ſo long, or ſo deeply veined; nor do the Flowers grow ſo large. This is the Fifth Sore of

of *Pclygonatum* mentioned in the *Gardeners Diflionary.* Ic grows naturally in the Woods of *Germany, Italy,* and *France* ; but ic is equally as hardy as our common *Solomcn's-Seal,* which is found in the Woods in fome Parts of *England.*

FIG. 2. CONVALLARIA *foliis cordatis, Flor. Lap.* 133. *i. e.* Convallaria with heart-fhaped Leaves. This is **the *Li Hum convallium minus C. B. P.* and the *Unifolium Dod. Pempt.* 205. *Camerarius* titles it *Gramen Parnaffi. Epit.* 744. and *Tournefort, Smilax iinifolia humillima, foft. R. H.* 654. *i. e.*** Dwarf Smilax with One Leaf.

This Plant feldom grows more than Four or Five Inches high, arifing with a fingle Footftalk from the Root, upon which there is One or Two heart-fhaped Leaves, which clofely embrace it. The Top of the Woods in fome Parts S 'haveT'f r^ * *loo/ ? Spike* of wIlile FloWerS, which have fhort Tubes, and fpread open at the Top, *A£U* 7 3re divided int0 Four obwfe Segments: Fr, > p Howers are p> the Embryo turns to a fofc *trw* or Berry, in which is inclofed a fingle hard Seed. *n-S this* r At mnMr>v« *r.* n i °.

Plant w h f With many other crceping-rooted nan s, wh ch rarely continue fruitful.

and *Gerll* J 8a hered k in a fn " Wodd near *Han-* ... S 1 a ajfonMr

P L A T E GEL

CONVOLVULUS, *Tourn. Inft.R. H. Si.Raii Meth.Plant* *LiferoT* Bindweedi in ^richi

THIS Genus of Plants is by Doftor *Tournefort* ranged ,n the Third Sedion of his firft Clafs in**tituled *Herbs* *b a Befrflaped Flower of* Z' *wbofe Pointal turns to a dry Fruit, bavin? feveral*** Mr. *Ray* places it in his Nineteenth Claf/ofS **tituled, *Herbs bearing their Seeds in Pods, having Jar Flower of One Leaf* And Doctor *UmuJ^^*** in his Fifth Clafs of Plants, intituled, *Pentandria Monogyma,* the Flower having Five Stamina and One Style

The Species here reprefented is,

CONVOLVULUS *Syrians, Scammoniaca Syriaca Mnr run.* *p.* 2. 12. *S.* 1. *Tab. 3. i. e.* Syrian Bindwid or sf nan Scammony.

a, reprefents the Root from whence the Scammonw is taken -, *b,* fiiews a Flower in Front; *c,* the Back of the Mower, with its Empalement; *d,* is a Flower cut open, to mew the Five Stamina and the Style • *e* is a Seed-vefiel which is commonly divided into' Three Cells, /, is one of the Seeds taken out of the Veffel • *g,* is a Leaf feparated from the Branch.

This is *the Convolvulus foliis fagittatis poftice truncatis fedunculis biftoris, Flor. Leyd. Prod.* 427. *Lin. Sp. Plan'* 153. and the *Scammonia Syriaca, C. B. P.* 294. *John Bauhin* titles it *Scammonia Syriacaflore tnajore Convolvuli Hiji. 2.* 163. ; and *Lobel, Scammonium Syria cum Antiochenum, Icon. 620.* in Engli'fli, *Scammony,* in French *Sca-"monee.* This is the Thirty-third *Convolvulus* mentioned in the *Gardeners Biclionary.* Altho' the native Country of this Plant is about *Aleppo,* yet it is found to be hardy enough to live in the open Air in *England.* The Stalks of this Plant are annual, and perifh in Autumn, but the Root abides feveral Years, and will grow To a large Size. The Branches come out in the Spring? which trail on the Ground, and extend to a great Length on every Side, but have no Diljpofition to climb but toward their Extremity (as do moft ot the other Species of *Convolvulus),* the Stalks being ftrair, and branch out into many fmaller ones. The Leaves are placed alternately on the Branches, fuftained on Pedicles an Inch long: They are for the moft part triangular, but vary in their Shape, fome having (hort, others longer Ears at their Bafe. The Flowers are produced at the Wings of the Leaves, on Foot-(talks, which are Five or Six Inches in Length, each having Two Flowers ; but thefe never open together; for when the firft is fully blown, the other is but a (mall Bud; fo when the firft decays, the other comes forward to flower; whereby there is a Succeflion of Flowers continued on the Plants for a long time. The Flowers are of a pale fulphur cream Colour, and are larger than the fmall wild *Convolvulus.* Thefe are frequently fucceeded by Seeds in *England,* which are inclofed in a dry Seed-veffel, which hath for the moft part Three Cells, in each of which is inclofed a fuigte Seed. The Seeds of this Plant were fcnr me by Mr* *Richard^* Gardener to die King of *France* at *Trianon* and *Verfailles 1* in the Year 1753, which were fown in the full Ground, where they grew very well, and have continued to this time, producing Plenty of Flowers every Year in *June, July,* and *Auguft,* and the Seeds **ripen in *September.***

The *Scammony* which is ufed in Medicine is taken from this Plant; which is done by wounding of the Root, and placing a Shell to each of the Incifions ^0 receive the milky Juice, which flows out plentifully where-ever the Plant is wounded ; and when this is hardened, it is exported for Ufe: Buc of late Years they have added fome other things to the Juice, to augment the Quantity, whereby the Quality of the Medicine is greatly altered \ fo that it is not fo good as a **Preparation of the Juice of the common Sort of *Con*volvulus* which grows naturally in moft Parts of *England.***

Convolvulus Syriacus. Linnæus. Syrian Bind Weed. Mor. Hist. 2. p. 11. tab. 2.

Published according to Act of Parliament by P. Miller July 27. 1768.


Cornus Sylvestris fructu albo Canad. Bauh.

PLATE GUI.

CONYZA, *RaiiMeth. Plant.* 33. *Boerh.Ind. Plant. 116. After. Tourn. Inji. R. H.* 48\. *Tab.* 274. *Erigeron, Lin. Gen. Plant.* 855. Fleabane > in French, *Conife.*

MR. *Ray* ranges this Genus of Plants in his Seventh Clafs, which includes rhofe Plants that have a radiated difcous FJower, and downy Seeds. Doclor *Linmeus* places it in his Nineteenth Clafs of Plants, intituled, *Syngenefia Polygamia ^perflua.* The Flowers of this Clafs are Male, Female, and Hermaphrodite, joined and included in the fame common Empalement; and, according to Dodtor *Tournefort's* Method, this mutt be ranked with the Star-Worts, in his Nineteenth Clafs of Plants; in which he deludes the Plants that have a radiated difcous FJower, and pappofe Seeds.

The Species here reprefented is,

CONYZA *mas Theophrajli, major Divfcoridis, C. B. P.* *65- The Male Fleabane of Theophraftus, and the Greater of Diofcorides.

*, fhews an intire Head of Flowers, included in one common fcaley Empalement; *b,* one of the Florets which compofe the Difk of the Flower, which is cut off to fhew the Five Stamina and Pointal ; *'c,* the Ovary fupporting the Style; *d,* one of the Half-Florets which compofe the Border of the Flower ; and *e* is one of the Seeds, with its Down.

This is the *Conyza major* of *Dodoneus* and *Clufius. John Bauhin* titles it, *Conyza major Monfpelunfn odorata, Hi/I.* *lo53- i- e.* The greater fweet-fcenred Fleabane of Montpelier. This is the Fourth Species in the *Garden-*? *Dodonary.* Doftor *Linnaus* has joined this Plant to the *hroundje!,* and titles it, *Erigeron pedunculis unijloris weraltbus, calycibus Jquamofis, Hort. Upfal.* 258. *Tournefort* has not mentioned this Plant in *hWlnfiitutions cf Botany,* altho' it is a common Plant in the South of *France^* from whence 1 received the Seeds; and as there is not a good Figure of the Plant in any of the Books of Botany, I have had this taken from the growing Plant in the *Chel/ea* Garden.

The Root of this Plant is perennial; but the Sialk is annual, and decays in Autumn, foon after the Seeds are perfe&ed, and new Stalks arifefrom the Root every Spring. Thefe grow about Three Feet high, and are garniftied, with Leaves placed alternately, which are from Four to Six or Eight Inches long, and Three broad, in the wideft Part. They are a little hairy, and foft to the Touch ; but in hoc Weather both Leaves and Stalks fweat out a glutinous Liquor, which is very clammy. The Flowers are fingle, and grow at the Extremity of each Branch : Thefe are of a yellow Colour, having a Border of Semi florets, inclofing a great Number of Florets which are Hermaphrodite, and are all inclofed in a common fcaley Empalement. Thefe have a ftrong Scent. After the Flowers are pad, the Ppintal of each turns to an oblong Seed, having Down adhering to it, by which the Seeds, when ripe, are wafted by the Wind to a confiderable Diftance.

This Plant grows naturally in the South of *Francs,,* in *Spain,* and *Italy,* where it is ufed to drive away Fleas and Gnats, as fome fuppofe, by its ftrong Scent being dilagreeabJe tothofe Infcfts; but I rather chink they are caught by the clammy Juice of the Leaves and Stalks; fo that when any of thofe fmall Infefls happen to ikip on the Plant, they are fattened thereto, and cannot difengage themfelves from it, as 1 have often obferved to be the Cafe of fome of the fmaller Flies and Gnats, when they have fetthd upon the growing Plants in hot Weather, at which time the Leaves are very **clammy.**

PLATE civ.

<-QRNUS, *Tourn. Inji. R. H.* 641. *Tab.* 410. *Rait Meth.* *147- *Lin- Gen- Plant. 139. Virga Savguinea, Villen. Gen. Nov.* Dogwood j in French, *Cornouiller.*

DOCTOR *Tournefort* ranges this Genus of Plants in the Ninth Section of his Twenty-firft Clafs, intituled, *Trees and Shrubs with a Rofe flower, wbofe Empalement turns to aftony Fruit.* Mr. *Ray* places it among Trees and Shrubs which have an umbilicated Fruit, including a fingle hard Seed. And Dodor *Linnaus* ranges it in his Fourth Clafs of Plants, intituled, *Tetra*** *tna Monogynia,* the Flowers of this Clafs having four Stamina, and a fingle Style.

The Species here reprefented is,

CORNUS *fylvefiris, fruttu albo Gmelin. Amman. Ruth. p.* 198. *u e.* Wild Dogwood, with a white Fruit.

*, (hews a fingle Flower, which is compofed of Four Petals and the Four Stamina fauated between the Petals of the Flower ; *Cy* the Embryo in the Center of the Flower; *d,* the Berries when ripe; arid'*, the Seed taken out of the Pulp.

This Shrub was firft difcovered by G//*^;, who was ProfefTor of Botany at *Peterjburgh,* at *Tobolio,* and afterwards by *Mefferfchmidian,* one of the Botanifts who were fent by the Emprefs of *Ruffia* to fearch after new Plants, towards the Confines of her Dominions, near *Kamfchatki,* by whom the Seeds were fent to *Peterfl,urgh* under the following Title, *Cornus fanriva, feu Virga fanguinea baccis albis racematim h<erentibus, jucco laflefcente plenis.*

The FVuit of this Shrub was frnt to *England* by Doftor *Amman,* the late ProfefTor of Botany at *Peterjlurgh,* from which feveral Plants were raifed, and afterwards propagated in fome of the Nurferies near *London;* and for fome Years it was fold as an *American* Shrub, and by fome it is yet thought to b^ fo ; though we can have no doubt of its being a Native of *Ruffia** nor have there been either' Plants or Seed of this Kind brought from *America.* There is one Sort of *Female Dogwood in* the Gardens, which has been fenc from *America,* in fome Particulars refembling this; but the

Leaves are narrower, and deeper veined, than thofe of our Sort here figured. The Flowers grow in fmaller Umbels, the Fruit is fmaller, and of a deep blue Colour, when ripe ; whereas thofe of this are white, and the Pulp is fo tranfparent, that the Seeds are vifible within it: So that the *American* Sort approaches nearer to our common *IVild Dogwood* than to this.

It hath a woody Stem, which puts out many lateral Branches near the Ground ; fo that unlefs the Plants are trained up while they are young to have Stems, they generally extend their Branches on every Side, to a great Diftance, near the Ground. Thefe Branches, during the Summer, are of a brownifii Colour; but in Winter they change to a fine red, fo as to be very conipicuous at a good Diftance, and have a pretty Effect, when intermixed with other Shrubs, during that Seafon. The Mowers are produced in large Umbels at the Extremity of every Shoot, towards the End of *May.* Thefe are white, and confift of Four Leaves, with Four ul.ite btamina crowned with yellow Summits, and a fingle style in the Center. The Empalement afterwards turns to a white pulpy Berry, inclofing one hard Seed : But unlefs thefe Shrubs are planted in a ftiff Ground, they rarely produce much Fruit, except in cold wet Seafons.

P L A T E CV.

CORONA IMPERIALS, *Tourn. Inft. R. H. 372. Tab* 107

AS£J5 Crown Imperial; in French, c—

cfOURNEFORT ranges this Genus of Plants in the tourth Sediionof his Ninth Clafs, intituled ^'^*Flover of Six Leaves, wbofe P ^ t ^ Z trmt.* Mr. *Ray* places it in his Twenty-third Clafs of Plants intituled *Jcrfc with Grafs Leaves, and Flower) cfSix Leaves.* Doctor *Linntus* ranges it in his Sixth Claft of Plants, intituled *Hexandria Monogynia*; the flowers of this Clafs having Six Stamina, and One Style. In the former Editions of his *Genera Plantarum,* he titled this Plant *Penhum,* and joined the *Corona Regalis to* thU Genus, making them only Two Species ; but in the laft Pdition, the Doftor has joined thefe to the Genus of *tritillaria.*

The Species here reprefented is,

*>*osA IMPERIALS,/lorepulcbre luteo, Inft. R. H,* 272. Crown Imperial, with a fine yellow Flower. This is the Ninth Sort mentioned in the *Gardeners DtSiionary.*

a, reprefents a Tintire Flower, with the Pointal extended below the Petals, and the Stamina furroundine: it, which are not ftretched lower than the Border of the Flower; *bt* mews the Seed-veffel intire; *c,* the fame opened, to fhew the Rangement of the Seeds ; and *d* one of the Seeds taken out of the Pod.

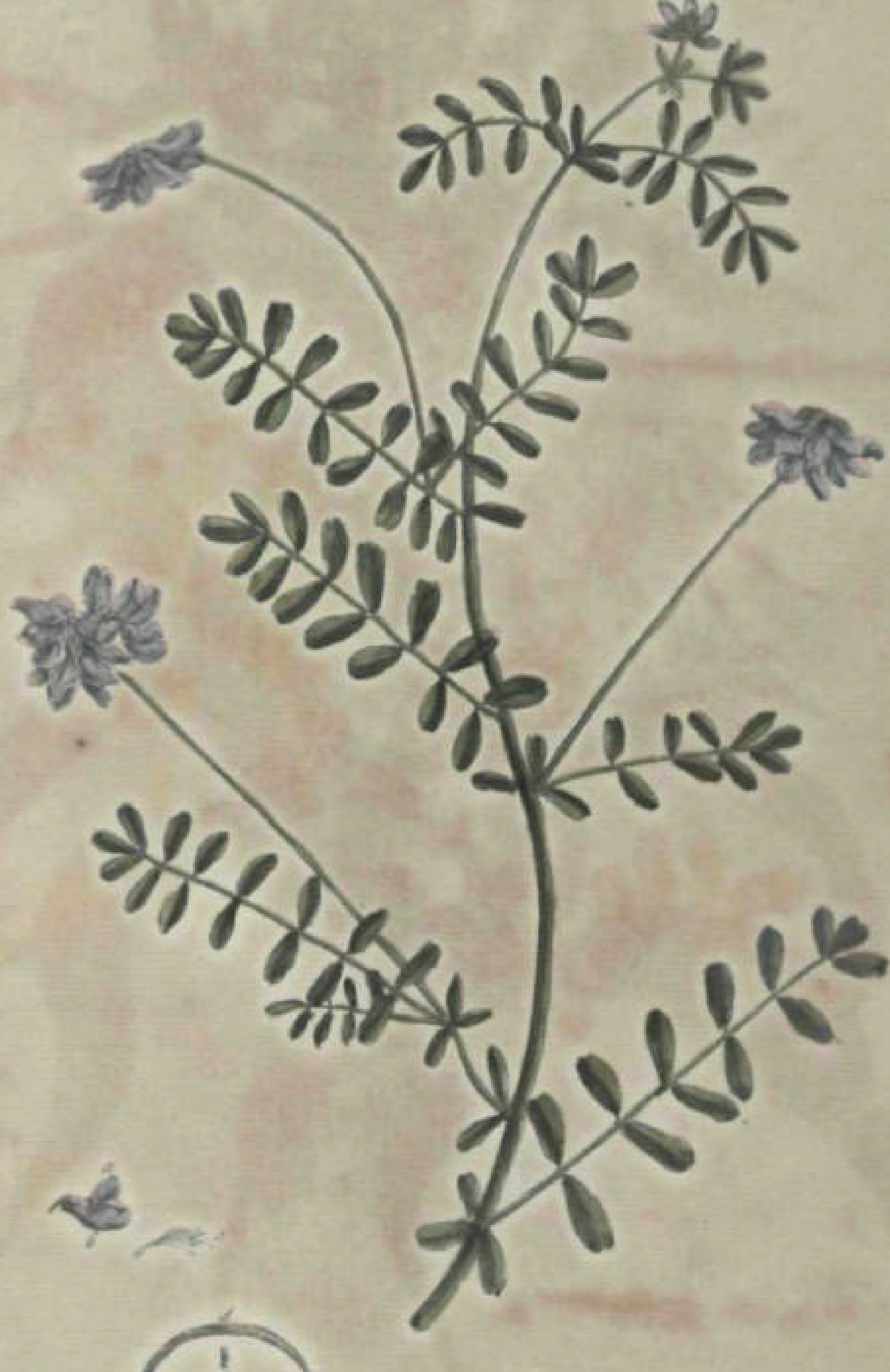
This is the *Liliumftve Corona Imperialis, per omnia major, flore luteo, H. R. Par.* i. e. The greater Crown Imperial, with a yellow Flower. There are feveral Varieties of this Plant, which are preferved in the Gardens of thofe Perfons who are Lovers of Flowers. Thefe are enumerated in the *Gardeners Diflionary,* where there is a full Account of their Culture exhibited. So I fhall only add a Remark or two, which is wanting there.

I nebort here reprefented is one ofthe moft beautiful of the Genus, the Flowers are large and of the fineft Colour. When thefe Roots are planted in good Ground, and permitted to ftand unremoved for Three or Four rears, their Stems will rife upwards of Four Feet high, and produce a great Number of Flowers; but thefe btalks require to be fupported ; for, as their Time of flowering is in the Beginning of *April* (at which Seafon the Winds are often tempeftuous), fo the Stalks being tender, are frequently broken off by the Winds, if they are left unfupported. As this is one ofthe earlieft tall Flowers of the Spring, it makes a good Appearance in the Middle ofthe Borders in a Garden: there be many of thefe Roots planted for they have a ftrong Scent of a Fox; fo that thofe Perfons who cannot endure the Smell of that Animal, may be offended with thefe Flowers, when

This Plant was originally brought from *Perfia to Conftantinople,* and from thence was introduced to thefe Parts of Europe, about the Year 1570, when the Tulip, Narciffus, and feveral other Plants, which new adorn the *EnghJhG^ardens,* were introduced; and tho'thefe are Natives of a Country much warmer than *England,* they are now well inured to this Climate, as to thrive as well as in their natural Places of Growth, and are rarely injured by Froft.

As the Stalks of this Plant decay in *June,* the *Roots* may be taken up foon after, and may be kept out of the Ground till the End of *Auguji,* which is very convenient for the Sending of them from one Country *to another,* and there they have been fpread thro' moft of the Gardens in *Europe,* and late)y have been introduced into *Xortb America,* where they thrive

Pl. CVI.



Herbacea flore vario Inst. R. H. 650.

Publish'd according to Act of Parliament by P. Miller August 26th 1756.

CORONILLA. *minima glauco folio Inst. R. H. 634.*

PLATE CVI

CORONILLA, ***Tourn. Inft. R. H. 650. Rait Metb., Plant.*** 163. *Lin. Gen. Plant.* 789. Jointed-podded Colutea.

DOCTOR *Tournefort* ranges this Genus in his Twenty-fecond Clafs of Plants, intituled, *Trees* and Shrubs with papilionaceous Flower s^ and conjugated Leaves, joined to a common Midrib.* **Mr.** *Ray* **places it with** *\\\$ filiquofe Trees with a papilionaceous Flower, and winged Leaves.* Do&or *Linnaeus* ranges it in his Seventeenth Clafs of Plants, intituled, *Diadelphia Decandria*; the Flowers of this Clafs having Ten Stamina, Nine of which are joined, and one (landing at a Diftance.

The other Characters are exhibited in the *Gardeners* ***Diflionary.***

The Species here repréfented is

£°xuuiLLAMantwuZgia^^ olia, Inft. R. H. **650. i. e.** Maritime jointed-podded Colutea.

a, fhews the Carina or Keel of the Flower; *b,* the Standard or Vexillum ; *c,* the Nine Stamina joined, and One feparate, with the Pointal; *d>* the Pod -, *e,* a Seed taken out.

This is the ***Colutea fcorpioides maritima 'glauco folio,*** **C.** ***B. Pin.*** **397. and the** ***Colutea fcorpioides odorato, Profp. Alp. Exot.*** **xvi.** ***p.*** **17. Dodlor** ***Linnaeus*** **titles it,** ***Coronilla fruticofa, foliolis undenis, extimo majore, Spec. Plant.*** **743.** The Two Sorts mentioned by *Ca/par Bauhin* and *Profper Alpinus,* have been always efteemed as different Plants: Bnt I have found that they are the fame, and only vary according to the Soil and Situation where they grow; for in a poor dry Soil, or when by Accident any of the Plants happen to grow from the Joints of on old Wall, they will be much whiter than thofe which are in a better Soil; and from this Difference in Appearance, many good Botanifts have been deceived : But, by changing the Place of Growth, I have found that the Plants have always altered in their Colour; fo that thofe which were of a filvery Colour when growing on a poor dry Soil, by being planted in better Ground have altered their Appearance to the glaucous Colour; and, on the contrary, by planting thofe Plants which have been of that Colour into a rubbiihy dry Soil, the Plants have been ftinted in their Growth, and become of a filvery Colour; and all the Plants which come up from Seeds taken from either Variety, arife the fame, when fown in the fame Place : So that the extreme Whitenefs which thefe Plants have, when growing in the roeky Parts of *Crete,* may deceive an able Botanift, as it did *Profper Alpinus,* who fuppofed it a different Plant, and gave it **the Title of** ***Colutea fcorpioides odorata, Plant. Exot. ij.***

This is a very humble Shrub, rarely growing more than' Two Feet high, when planted in a good Soil; but in a dry barren Place, not much above One Foot. The Stem is hard and WOody, from whence the Branches arc produced on every Side, near the Ground, fo as to form a low bulhy Shrub. The Leaves are pennated, and are compofed of Five Pair of fmall Leaves, with an odd one at the Extremity. At the Joints where the Leaves are produced, there are Two ear-fhaped Leaves, which clofely embrace the Stalks. Thefe are not exprcfied by *Alpinus* (fo that if his Plant is different from this, it is in this Particular): The Flowers ^reproduced in Clufters* Handing on long flender Foot-ftalks, which come out from the Joints where the Leaves have their Origin. Thefe are of a yellow Colour, and have a ftrong fweec Scent, and the Plants always producing great Plenty of them, make a fine Appearance during the Month of *May,* which is their Seafon for flowering, and the Seeds ripen in *Auguft* and *September*; which, if permitted to fcatter, will come up the Spring following, and require very little further Care, than to remove the Plants to the Places where they are defigned to remain, and to keep them clear from Weeds.

PLATE evr

CORONILLA, *Tturn. Inji. R. H.* jointed-podded Colutea.

THE Characters of this Genus, which are exhibited **in the** ***Gardeners Dictionary,*** **are reprefented** to this Plate.

The Species here reprefented is,

CORONILLA ***berbacea> flore vario, Inji. R. H.*** **650. Herbaceous** jointed-podded Colutea* with a variable Flower.

a, fhews the Carina or'Keel of'tfic Flower; *b,* the Vexillum or Standard ; *c,* the Stamina and Pointal; *dy* the Pod ; and *e,* a fingle Seed taken out of the Pod.

This is the ***Securidaca dumetorum major, flore vario,fM-quisarticulatis,*** **C.** ***B. Pin.*** **349. and** ***the.Colutea herbacea dumetorum majorjSliquis ariiculatis, flore vario, H. L.*** **and by** ***Morrifon*** **it is titled,** ***Coronilla, feu polygala dumetorum major ftliquis articulatis, flore vario* Hift.il*** **119. Dodor** ***Linn<eus*** **has titled it,** ***Coronilla herbacea leguminibus ere£lis teretibus tbrofis numerofis foliis glabris, Hort. Cliff. 362.*** This is the Third Species in the *Gardeners Dictionary.*

It hath a perennial creeping Root, by which it multiplies fo fart, as foon to fpread over a Jarge Trail: of Ground 5 therefore it is an improper Plant for fmall Gardens; nor fhould it be allowed a Place in any Garden, near other Things; becaufe it will foon fpread over and deftroy them : But as there are SuccefTions of Flowers, from the Beginning of *June* to the End of *Auguft,* on the fame Plants, fo a fmall Space may be allowed to this Plant, in fome Corner of large Gardens, where better Things will not thrive ; for this is fo hardy as to thrive In any Soil or Situation.

This Plant was formerly propofed to the curious in Agriculture as a proper Food for Cattle -, and a few Perfons did make Trial of it: Some of whom found by Experience, that it might be cultivated with great Eafe, and become very beneficial to the Farmer; but it was never extended very far. I fuppofe for the fame Reafon'as many other valuable Things are neglected ; only becaufe they were not cultivated by their Predeceflprs: I. remember to have feen a large Spot of Ground

Ground planted with this at *Deepden,* near *Barking* in *Surry,* at a S^fcpf the Honourable Mr. *Howard* •, which althoughflwad been neglefted for fome Years after his *De&tIjEm.* was growing fo rank, as to fpread over and get ^^fettcr of all the rank Weeds, Brambles, &V. which had been permitted to grow among the Plants: And 1 meafured fome of the Branches which I cut off, and found them upward of Five Feet long, and very tender their whole Length : So that a fmall Spot of Ground will afford a good Quantity of Fodder for Cattle; efpecially as it will grow faft enough to be cut Five or Six times a Year: And in dry Seafons, when there is a Scarcity of other Herbage, this will be found an excellent Plant to iupply the Want. The Cattle I have tried with this Herbgreen, were *Horfes* and *Cozvsy* both of which feemed to eat it greedily : And there can be no doubt of its being a better Food for any Cattle than the *Common Vetches*$_y$ which arefown for that Purpofe •, an, as this is an abiding Plant, fo it is much preferable 10 any which require "to be renew*! every Year. The only Objection, of any force, whi~h I have yet heard made to the Culture of this Plant, is the Difficulty of extirpating it, when it is once planted; for the Roots fpread more than Couchgrafs in the Ground. But as the Plant will laft for ever, *(o* in fhould be always planted where it may remain; and upon fuch Land as is too dry reproduce other Herbage, this may be a very profitable Plant. I have fome Roots which have been planted above Thirty Years, and are in as great Vigour as they were .at firft planting. This plant fcldom produces much good Seed in *England %* which may be accounted for from the Roots creeping fo far into the Ground; for many of the creeping rooted Plants become barren as to Seeds. But they propagate fo much by the Root, as to fopply the want of Seeds.

P L A T E

CRASSULA, *Bitten. Hurt. Elth.* 114. *Tab.* 96. *Lin. Gen. Plant,* 352. Letter Orpine, or Live ever.

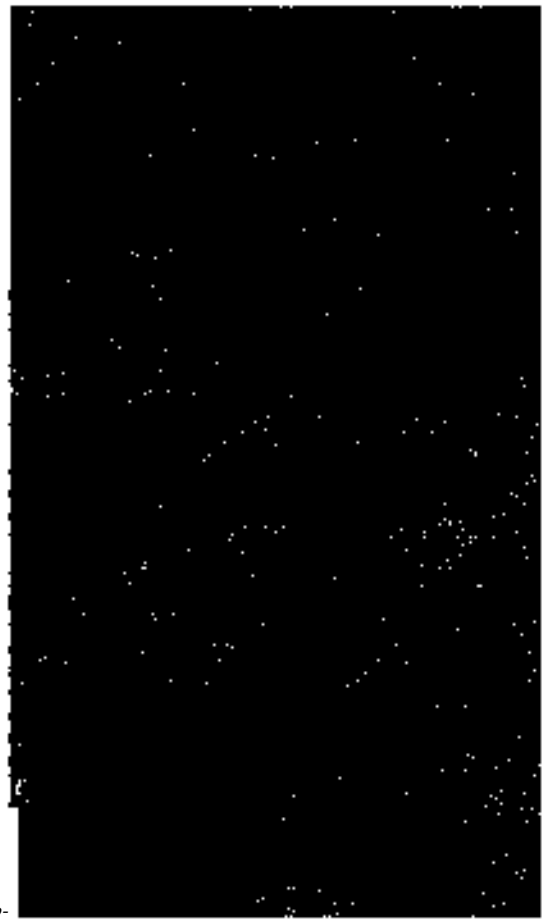
THIS Genus of Plants is by Dodlor *Linnxus* ranged in his Fifth Clafs of Plants, and in the Fifth Divifion, intituled, *Pentandria Pentagynia* ; which includes thofe Plants whofe Flowers have Five Stamina and Five Pointals.

The Chara&ers of this Genus are,

The Flower bath a five-leaved Empakment; *the Corolla confifts of Five narrow Leaves, which are joined at their Bafe> but are reflexed, and fpread open* at the Brim : In the Bottom of the Tube are fituated Five Neflaria*$_y$ *and there are Five Stamina fituated round thefe*$_y$ *which arife from the Bottom of the Tube, and extend to the Brim : At the Bottom of the Tube are placed Five oblong-pointedGermina* ; *after the Flower ispaft, thefe become Five Capfules, cpening lengtbwife*$_9$ *and filled with fmall Seeds.*

The Species here reprefented is,

CRASSULA *altijfima perfoliata, DHL Hort, Elth. 114. Tab.* 96. i. e. Tailed Craffula, whofe Leaves do clofely embrace the Sralks.



a, (hews a fingle Flower taken from the Bunch ; *b,* the Five Stamina ; *c*$_{\%}$ the Five Germina which are in the Centre of the Flower ; *d,* the Seed-vtfTel.

This is the Firft Species enumerated in the *Gardeners BiSIionary^* where the Culture of it is fully exhibited. It was feveral Years propagated in the Gardens of *Holland* and *England,* before it produced any Flowers, and was fuppofed to have been an *Aloe-,* and the young Plant without Flowers was figured by Dodtor *Commeline,* Profeffor of Botany at *Amfterdam,* with the following< Title, *Aloe Africana caulefcens perfoliata ghuca, 0? ncn fpinofa, Pr*L Botan.* 74. *Tab-* 23. Dodor *Linn.tia* has given the following Title to this Plant; CRASSULA *foliis lanceolato-fubulatis feffiiibus connatis candluuUis fab-*

i CRATÆGUS. Virginiana foliis Ovatis. Flora 638.

Pl. CX.

CRINUM, foliis Carinatis. Flor. Leyd. 127.

PLATE CIX.

Cratægus, *Tourn. Injl. R. II. 633. MefpilusLin. Gen. Plant.* 549. *Sorbus H. L. Bat. 699.* Wild Services in French, *Alifier.*

TOURNEFORT ranges this Genus of Plants in his Twenty-firft Clafs, which is intituled, ***Trees and Shrubs with a Rofe Jhaped Flower, whofe Empalement turns to a Fruit incloftng feveral callous Seeds.***

Doftor *Linnaeus* places it in his Twelfth Clafs of Plants, intituled, *Icojandria;* and he feparates the *Crat<egus, Sorbus,* and *Mefpilus,* from each other, by their Number of Styles; the *Cratagus* having Two; the *Sorbus,* Three 5 and the M^/'W, Five, in each Flower. But this Diftin&ion is not conftant in all his Species. **And, *zsTourneJort* has feparated the *CraUgus* and *Sorbus*** from the *Mefpilus,* on account of jtheir Fruit, the Two former having Five Cells in which their Seeds are lodged, and the latter but One, fo we choofe to abide by this Diftindion.

The Species here reprefented is,

Cratægus ***Virginiana foliis arbuti Tourn Injl. R. H.*** 633. Virginia Wild Service, with an Arbutus Leaf.

a, reprefents the Flower expanded; *b,* the many Stamina; *c,* the Five Styles in the Center of the Flower; *d,* the Fruit intire •, and *e,* the fame cut tranfverfly, to fliew the Five Cells in which the Seeds are lodged.

This is by Doftor *Breynius* and *Herman* titled, *Sorbus* ***Virginiana foliis arbuti*; and by Doflor *Linnaeus, Mefpilus inermis foliis lanceolaiis crenatis fubtus tomentofis, Hort. Cliff.*** 189. *i.e.* Medlar without Spines, and fpear-Ihaped Leaves indented on their Edges, and their Underfide woolly. But thefe Indentures on the Edges of the Leaves arc fo fmall, as not to be dilcovcred but by a very near View*

The Shrub is a Native of *North America,* where it grows naturally in moift Woods. It feldom rifes more than Five or Six Feet high in its native Country; but, in *England,* Three or Four Feet is the greateft Height that I have feen any of them. It divides into many (lender Branches, which are garni'fhed with oblong fpear-fhaped Leaves placed alternately. Thefe are of a pale Green above, and of an Afh-colour on their Under-fides, which are woolly. The Flowers come forth at the Divifion of the Branches, and alfo from the Wings of the Leaves, in fmall Bunches (landing on long Foocftalks. Thefe coniift of Five Petals, which fpread open in Form of a Rofe; they are of a dull white Colour, with feveral brown Spots en their Upper-fide. la the Center of the Flower is placed the Germen, fupporting Five Styles which are furrounded by a great Number of Stamina. After the Flower is pad, the Germen becomes a round umbUicated Fruit, having a thin Pulp incloiing Five Cells, in which are lodged fo many hard Seeds.

The Flowers of this Shrub appear in *May,* and the Fruit ripens in *OElober*; which ILould be then gathered, and the Seeds fown foon after; for if they are kept out of the Ground till Spring, they will not grow the Firft Year.

But, as this low Shrub fends out many Suckers from its Roots, fo it is chiefly propagated by thofe in *England** as it is by much the quicker Muhod. But the Plants which are produced from Suckers do feldom rife to have Stems; for they are generally foapt to put forth young ones by their creeping Roots, as to retard their upright Growth.

This Plant delights in a moift light Soil, and Ihould have a fhady Situation, where it will thrive and produce Plenty of Flowers and Fruit, which will make a Variety when intermixed with other humble Shrubs at the Seafon when it is in Flower$ and alfo in the Autumn, when the Fruit begins to ripen.

PLATE CX.

CRINUM *Lin. Gen. Plant.* 366. *Lilium Herm. H. L.* 682. *Lilio Afphodelus. Tourn. Injl. R. H.* 344- *Dill. Hort. Elth. Com. Rom. Rar. Plant.* 15. Afphodel Lilly.

THIS Genus of Plants is by Doftor *Linnaeus* ranged in the Firft Divifion of his Sixth Clafs, intituled, *Hexandria Monogynia:* The Flowers having Six Stamina 2nd One Style. By Doftor *Herman,* and other Botanills, it was placed with the *Lilly,* but has been feparated from that Genus by *Tournefort,* and other later Writers, who gave it the Title of *Lilio-ajphodelus,* from the Root having many fle(hy Knobs like thofe of *Af*phodel,* and the Flower being like that of the *Lilly.* But as Doflor *Linmeus* has rejefted thefe compound Names, fo he has applied the Title of *Crinum* to this Genus of Plants.

The Charadlers are,

The Umbel of Flowers is inclofed by a Two-leafed Spatha or Sheath, which is rejiexedwhen the Flowers appear: The Corolla of the Flower is of One Leaf, having a long cylindrical Tube, and deeply divided at the Top into fix Parts, which are reflexed: In the Bottom of the Tube is Jituated the Germen, fupporting a Style which is crowned with a fmall Stigma. There are Six Stamina which arife from the Bottom of the Tube, and are joined to the Safe of the Petals: Thefe are longer than the Style, and are crowned with oblong Summits, which are incumbent. After the Flower is pajl, the Germen turns to an irregular Bulb.

The Species here reprefented is,

CRINUM *foliis carinatis, Lin. Flor. Zeylan.* 127. *Spec. Plant.* 292. Afphodel Lilly, with hollow keel-lhaped Leaves.

a, reprefents the tubulous Flower cut deeply into Six Parts-, *bb,* the Stamina crowned with its Summit; *cc,* the Style-, *d,* the Spatha or Involucrum, which inclofes the Flower-Buds; *e,* the Bulb fully grown, which is formed by the Germen.

This is titled, by Do&or *Herman, Zeylanicum buU biferum&umbelliferum,H.L.* **682. *i,e.* Bulb-bearingLilly**

of *Ceylon,* with Flowers growing in an Umbel. There is another Species of this Genus, which differs from this which is here reprefented, in the Stems of the Flowers, and the Leaves being of a purple Colour, and the Petals of the Flower have a purple Stripe on their Outfide i but in other Refpe&s it agrees with this.

This is a very ornamental Plant for the Stoves; for, as it grows naturally in the warmeft Climates, fo it will not thrive in *England** but in the warmeft Stoves. The Plants generally flower Three or Four Times every Year, fo have *no* regular Seafons of appearing ; fometimes in the Middle of Winter, at other Times in Spring, Summer, and Autumn; but as their Petals are of a tender Texture, fo they do not continue in Beauty longer than Four or Five Days.

The Flower-Stem arifes immediately from the Root, on the Outfide of the Leaves, which is about Two Feet high j and, at the Top, there are Eight or Ten Flowers, which are placed in the Form of an Umbel, being clofely joined at their Bale, but fpread *o\>en* above. Thefe are of a beautiful white Colour, and fmell very fweet. The Stamina ate ftretched out to a confiderable Length beyond the Petals, which *do* alfo fpread open, each being crowned with a proftrate Summit, fully charged with yellow Farina. After the Flowers are pad, the Germen fwells and becomes an oblong Bulb; which, when put into the Ground produces a Plant of the fame Kind: So that there are never any Seeds on thefe Plants •, but they are eafily propagated by thefe Bulbs; as alfo by Offsets from their Roots.

It grows naturally in the *IJland of Ceylon** and in feveral Parts of the *Spanijh Weft-Indies.* 1 received the Roots of both Sorts from *Panama* ; and have fince been fupplied with more from *Cartbagena*, which have multipled greatly in the *Chelfea* Garden.

P L A T E CXI.

CRCCUS, ***Tourn. Injl. R. H.*** **350.** ***Tab.*** **183, 184.** ***Raif Metb. Plant.*** **116.** ***&g. Gen. Plant. 53.*** **Saffron ^** in French, *Saffran.*

THIS Genus of Plants is by Do£lor *Tournefort* ranged in the Second Sedtion of his Ninth Clafs, **intituled,** ***Herbs with a Lilly Flower of One Leaf cut into Six Parts, wkofc Empalement turns to a Fruit.*** **Mr*** ***Ray*** places it in his Twenty-third Clafs, which he titles, ***Herbs with Grafs Leaves which bear Flowers, and have tricapfular Seed-veffels.*** **Doftor** ***Linnxus*** **has feparated this** and fome other Genera from the reft of the Clafs, where they properly belong, and, by all the former Writers on Botany, have been placed; becaufe their Flowers have but Three Stamina: Whereas the other Genera of the fame Clafs have Six in each Flower. But this is not a natural Divifion of the Plants, fince in all the other eflential Chara&ers they agree. The Charafters of this Genus are exibited in the *Gardeners Dictionary.*

The Species here reprefented is,

CRoevsfativus, C. B. P. **Manured Saffron.**

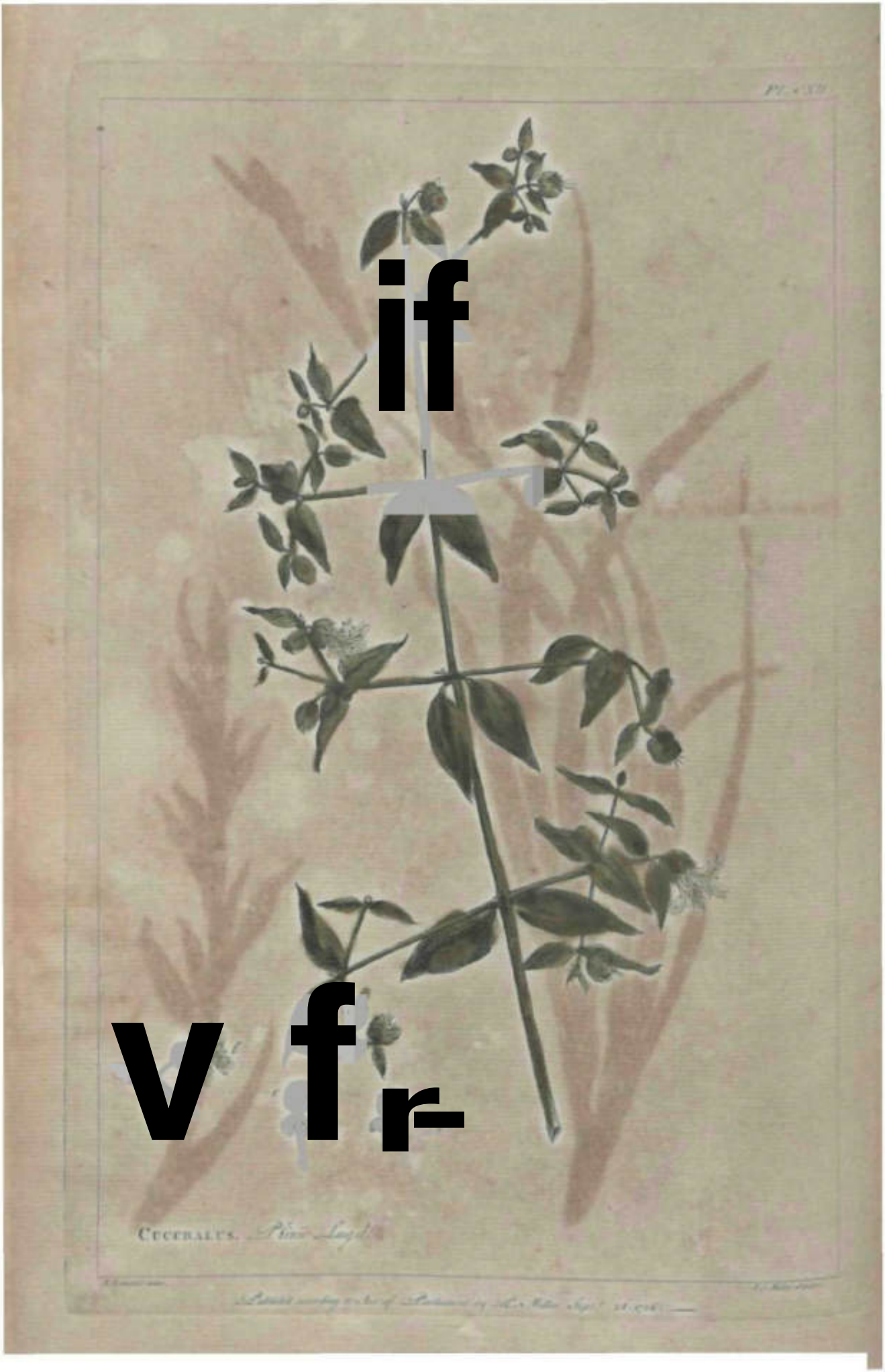
a a, (hews the Three Filaments in the Flower, which are the Parts gathered, prepared, and are fold under the Denomination of *Saffron* \ *b9* is the Style which refts on the Germen. This is by Do&or *Morifon* titled, ***Crocus autumnalis fativus, Hift.*** **2.** ***p.*** **335.** ****. e.*** **Autumnal manured** Saffron. Doftor *Linnaus* has fuppofed, that the other Sorts of autumnal *Crocus,* and alfo thofe of Spring, are only Varieties of this. But whoever will be at the Trouble of comparing them, will find they are effentially different. The other Species of autumnal *Crocus* have all of them the male Parts very perfect; whereas they are wanting in this; for the Three Filaments occupy their Place. Indeed there are not any of thefe autumnal *Crocus's* which perfeft their Seeds in *England*; fo we have not had an Opportunity to obferve if they alter when propagated that Way, But, however near thefe may approach to the true *Saffron^* the Spring flowering *Crocus* muft be allowed to be a diftinft Species from thefe, not only from their Times of flowering, but alfo as they are fpecifically different in their Roots, Leaves, and Flowers. Nor do the Seeds of any of the Spring *Crocus's* ever produce Plants which flower at any other Seafon ; fo that the only Variation of thefe Plants which arife from Seeds, is in the different Colours of their Flowers-, and, therefore^ we may fafely pronounce the true *Saffron* to be a diftinft Species from the others.

Where this Plant is a Native we cannot learn ; *for it* is cultivated in mod Parts of *Europe.* Nor is there any Mention of its growing naturally any where, by any Writers on Botany ; or of its producing Seeds in either of the Countries where it is cultivated, though it may be fuppofed that in its native Country it may. #uC it is always propagated by the Root in *Europe.*

When the Roots of this Plant are put into a deep rich Earth, they are very fubjed to run downward, and produce taper Roots, which are by the Cultivators *of Saffron* called *Spickets,* which, if planted again, become barren of Flowers. Therefore the Land, which is the mod proper for this Plant, is fuch as hath a light Surface, not very deep, lying upon a Bed of *Chate,* which is the Nature of the Soil about *Saffron JValdTM** and in *Cambridge/hire,* where there is more of it cultivated, than in any other Part of *England.* The Method of cultivating, gathering, and manufacturing of this Commodity is fully inferted in the *Gardeners L:* ... an Account of the Profit arifing from it.

The Time of its flowering is about *Micbaehnas,* *n(1 fometimes a little later, according to the Seafon * for> until there has fallen fome autumnal Rains, the Flowers do not appear in Plenty. And the Plenty of *Saffron* depends on the Autumn proving mild and favourable-, for when there-happen (harp Frofts at the Time of its flowering, the Crop will be but fmall and poor.


Crocus sativus


if
v fr-
Cucubalus.


Cyrosia floribus spicatis bifidis Spathis

PLATE CXII.

CUCUBALUS, *Tourn. Inft. R. H. ^39- Tab. iy6. Rait Metb. Plant.* 74. *Lin. Gen. Plant.* 502. Berry-bearing Chickweed.

THIS is by *Tournefort* ranged in his Eighth Clafs of Plants, intituled, *Herbs and Underfhrubs^ with a Flower of many Leaves fhaped like the Gilliflower, whofe Pointal becomes the Fruit.* Mr. *Ray* places it in his Seventeenth Clafs of Plants, which contain the *Berry-bearing Herbs.* Doctor *Linnaeus* puts it in his Tenth Clafs of Plants, intituled, *Decandria trigynia,* from the Flowers having Ten Stamina and Three Styles. And he has added feveral of thofe Species of *Lychnis* to this Genus, which have inflated Empalements. But as this Plant hath its Seeds inclofed in a pulpy Berry, and the *Lychnis* has a dry Seed-Veffel, fo they fhould not be joined together, if we do allow the Fructification to be wnfiderd a diftinguifhing Character of the Genus.

The Plant here repreferted is, *Cucubalus baccifera Plinii Ludf. 14.29.* Thf Cucubalus of Pliny, according to the *Hifioria Lugdunenfis.*

#> reprefents the Flower with its fwelling Empalement •, *b,* the Stamina; *c,* an intire Fruit; d_9 the iame opened longitudinally, to (hew the Arrangement °f the Seeds ; *e,* a fingle Seed taken out of the Berry.

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

This Plant is by *Cafpar Bauhin* titled, *Alfine fcandens vaccifera, Pin.* 250./. *e.* Climbing Berry-bearing Chickweed. By *John Bauhin* it is called *Cucubalum quibufdam^ vel Alfine baccifera, Hift.* 2.175. *Bodonaus* calls it, *Alfine repens, />,* 403, Creeping Chickweed. And *Linntus* titles it, *Cucubalus calycibus campanulatis pet alts diftantibut fruttu color at 0, ramis divaricatis, Sp. Plant.* 414. *i. e.* Cucubalus with a Bell-fhaped Empalement, the Petals ftanding at Diftances, a coloured Fruit, and divaricated Branches.

This Plant will grow to the Height of Eight or Ten Feet, where it hath a Hedge or Bufhes to climb on, otherwife the Branches trail upon the Ground if they are not fupported. Thefe are herbaceous, and die to the Root every Year. The Leaves grow oppofite at every Joint, which refemble thofe of *Chickweed,* both in Shape and Colour, but are larger, and foft to the Touch. The Flowers are produced at the Wings of the Leaves, ftanding fingle upon flender Footftalks : Thefe have a fwoln JEinpalement, fomewhat like the *Winter Cherry.* They are compofed of Five Petals of a pale whitifli Colour, and are fplic "at their Extremities. Between thefe ftand the Stamina with their Summits furrounding the Germen, which, when the Flower is paft, turns to an oval Berry almoft as large as a fmall Black Cherry. As the Fruit enlarges, fo the Empalement becomes more reflexed; and, when it is at the full Size, appears open, the Empalement being turned back to the Pedicle. The Fruit is very black when ripe, and is as fofc as the Berries of Nightfhade, and are as full of Pulp, which furrounds the Seeds. The Root is perennial, and will fpread far in the Ground, where it is allowed Room. Mr. *Ray* obfervedthis Plant growing naturally in the Hedges about *Frankfort*; as alfo in *Italy* and the *South of France.* ArH *Cluftus* found it in great Plenty about *Salamanca.* It is prefer ved in fome *Englijh* Gardens: But the Berries are by fome Perfons affirmed to have no lefs deadly Quality than the *Sleepy Nightfhade:* So the Plants fhould not be permitted to grow in Places where Children frequent.

PLATE CXIII.

CUNONIA, *Buitn. Cun. Tab. 1. Antholyza, Lin. Gen. Plant. 56. Gladiolus Cornut. Canad.* 78. The Scarlet Cunonia.

THIS Genus of Plants is by Dodtor *Linnaus* ranged in his Third Clafs, which is intituled, *Triandria fnonogynia^* the Flowers having Three Stamina and One Style. But according to *Tournefort^* Method of ranging the Plants, it muft be put under his Ninth Clafs; k>r as he diftinguifhes them by their Form and Number of Petals, foall thofe Plants which have been ufually termed Liliaceous, are brought together ; whereas Dodlor *Linnaus,* who diftinguifhes the Claffes of Plants by the Number of their Stamina, has feparated feveral Genera from their ufual Clafs, to a confiderable Diftance, becaufe they have but Three Stamina; whereas the other Genera of this old Clafs of Plants have generally Six Stamina.

The Species here delineated is,

CvuoniA Jloribus fejjilibus, fpathismaximus, Buttn. Cun. Tab. 1, ;. *e.* Cunonia with Flowers growing clofe to the Stalk, and large Spathae or Sheaths.

The Charafters are,

The Flowers grow alternate, each being included in a large Spatha or Sheath which is permanent; they confift of One Leaf, which is divided into Four Parts ; 'the upper Segment being fir etched out to a much greater Length than the others, and as erett, having the Appearance of the Creft in the labiated Flowers. The Two Side Segments are fliort, and adhere clofely to the Inferior or Lip, which is flightly divided at the Extremity, In the Center of the Flower is fituated the Germen, fupporting a flender Style, crowned with a blunt Stigma ; this is attended by Three Stamina which ftand ereft, and are ftretched out beyond the Style. The Germen afterward turns to an oblong *Seed-vejfel, having Three Partitions or Cells, in which are lodged many broad flat bordered Seeds lying ever each other as Tiles on an Houfe.*

a, reprefents the Two Wings of the Flower; b_9 the Standard ; *c,* the Three Stamina ; *d,* the Style ; *e,* the Seed-veffel; /, a fingle Seed •, $g_{\%}$ the Bulb or Root of the Plant; *h,* the Spatha or Sheath which inclofes the Flower-Bud.

Doftor

Am linnet! lias joined this Phut to his Genus •• of this Flower is very ,'lc of that Genus, the under Segment being vrry fhorr, and the 7h. L being ere ft, One . gdeci:mbcnt,."iud the Seeds *ofthi-*. being triangular, whereas. thole of the *Cwurnia* i ringed, *Co* we choofe to abide by the Diftinction of Doctor Linnæus, whoeftabMied this Genus by the Title of *Qmania,* in Honour to Mr. *Ctaisn,* a great Collector of tare Plants, who lives at *Amfitrdam.*

:•: Root is bulbous, Ihaped *very* like that of Crocus. The Leaves are long and narrow, of a pale Green, with a Furrow through tht; Middle. The Sralk is round, .Jyfrom the Root, and grows near Two garniflitd toward the Top with fewend Flowers of a bright fcarlet Colour placed alternately, I ranged on one Side of (he Stalks, {landing errft; each of thefe is included in a thin Sheath, which divides when the ' flowers are blowing. Thefe Flowers are mpnopettolus, but are cut into Four Segments - the upper being very long, ftands ered, and covers the Three Stamina and Style like an Bond, The Two Side Segmenu an: fliort andobtufe; tliefe have fome Refetnblar.ee to the Wings of the papilionaceous Flowers, and clolely embrace the lower Part of the Stamina. The under Segment is very fhort, cloiely adhering to the Spatha. The Three Stamina and Style rcfl up»n the Germen, and are ftretched out near the Length tit the upper Segment or Standard. Wiien the Flower falls away the Germen fwdis to an oblong Secdveffel, wbti divided into Three Cells, whicharerjiied with comprdlM Seeds having Borders or Wings. Ir. Howers in *Mqn* and the Seeds ripen in *July.* This Plant mtift be ranged between the *Gladiolus* and *Antbolyza.* It is a Native of the *Cape* of *Good Hcpt,* from whence J have received the Seeds. There is a Plant of this Genus figured by Cwmtus in his *Hijlery of Canada Mavis* j but the Leaves of his are much /liorter, the Two Wings of the Flower longer, and die Spat ha much fmaikr, than in the Plant here reprefented j fo it mult certainly be diftintt from ours. He titles his, *Gladiolus JEthhphus fttrt cecdmo, p.* 78. *i. 1.* Corn-flag of *Ethiopia* with a fcarlet Flower.

P L A T E CXIV.

W^K?^8TM *W- T& ^54' to* &W, *47. Cmtauna Liu. Gtn. Plant.* 8S0 **Biu; Botcte**; **in** French, *Bkttt.*

THIS Genus of Plants is by *Tournefort* ranged in Under hii ;• Of Wants which he titles, H*Ai tw/i • *cslltStd into Heads.* Doilor *lAnnxus* ranges, It in his Nineteenth Ciafs, intituled, *Sjngentft** WM, from their being Ftmile and Hermaphrodite Ffowen in the fame Head. To this Genus he joins tht J W M *CentwtrittK majtu* and *Calcilmpa:* But by fo doing, he multiplies the Species, fo as to render it difficult to diftinguifh chem.

The Species here reprefented are,

Fig. i. CVANI/S *Montanushtij Hit, C. B. P. 2j$. i. c.* Broad-leafed mountain Bluebortfe. This is by fome called *Batibtlofs Button.*

g a, reprefents One of the Female Flowers; thefe com- ¥ pofethe Border; *b,* the Hermaphrodite Flowers, which t* are tubutous, and form the Dilk\ *c,* the fcaley Empale, mcnt: *d,* One of the Female Flowers taken from the Head *i t,* is One of the Hrrmaprodite Fiowera from the Difk; and /, is the Head or Difk divefted of the lie Flowers which form the Border.

F;g. 2. CYAHUS *angufiorU folio* fc? *iongiort Btlgiats, Hen. \R, par.* Narrow lono-leafed ***Belgki*** Bleebotde.

Thefe Two Species are by Doctor *Linnæus* fuppofed to be the fame; therefore he does not mention :he btter in his Sj>ecies of Plants. To the Firft, he gim the .-..._.....& Title, *Centaurea ealydbss ftrralu, hlih UiKW iatis dKuncxtibus ceuUfimplidffimt, Hurt. Cliff 422- 11-* Greater Centaur, with &wed£(npale«en», ff>ear-/l!ap«l running Leaves, and a fimpj,.. Sta)k. The Ch^ °,™ ^5n"s f^ "h'bitedin the *Gardners Dtitw*

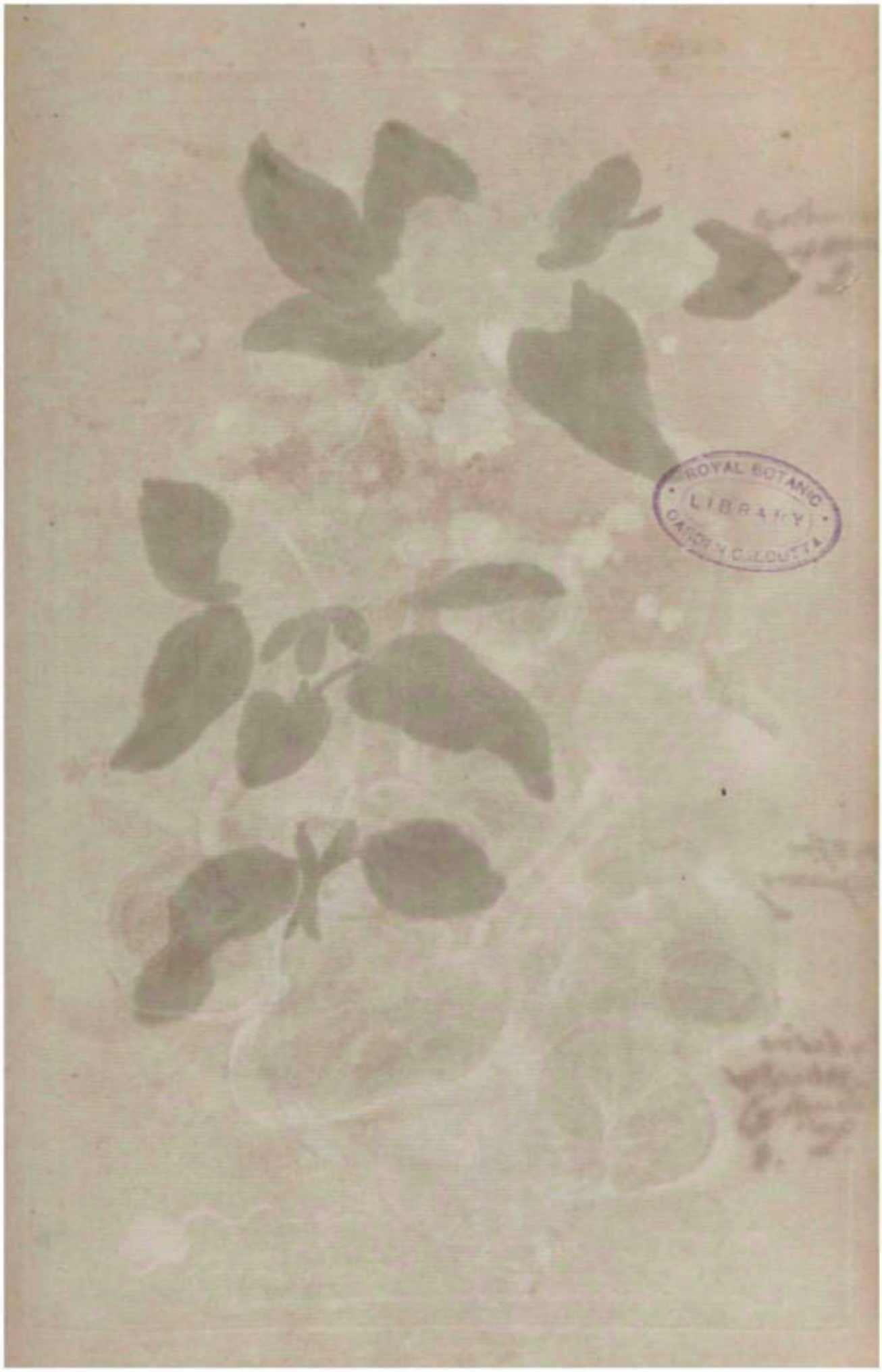
The Firft of thefe Plants is an old Inhabitant of the *tagW* Oardens, and was formerly ufed in Medicine, but of Ute Years has been ftldom prefefftrf. Th« Roots of this PJant do creep much in the Ground, and put forth many Offsets, fo that, if they ate not retrenched, they will foot, fpMad over a UTr; ground. But, as it propagates *fo hit* bv its RoOH, k ftldom produces Seeds in *England.*

• i v Sort/ brought from the *LeyJai* Garden, >O the Year 172;. Before which Time it was not in any of our Gardens; but, by its bring fo *ttfily* pvop*" gawd, « is now become very common here. Both thefe sorts begin to flower in *May,* and frequently continue 50 produce new Flowers for Three Months, efpeciallv in mo.ft.cool Seafons. Whether the Second *Soft* «• originally obtained from the *Sted** of the Firft is«« Mly to determine, but they conftantly prefrrve tkir 1J Jterence in the Gardens, never varying from tach other. I he Leaves of the Firft are whiter than thoft of the Second, and are covered with a foft Down.

Fig. 1. CYANUS, montanus latifolius vel Verbasculum Cyanoides C. B. P. 273.
Fig. 2. CYANUS, angustiore folio & longiore Belgicus H. R. Par.

del. Published according to Act by P. Miller Sept. 28 J. Jefferys sculp.


Pl. CXV.
CYCLAMEN, hyeme & vere florens folio angulose ample.
flore albo basi purpureo Persicum dictum H.R.Par.



Cydonia, fructu oblongo laeviori. Tourn. Inst. 632.

Published according to Act of Parliament by P. Miller October 24. 1756.

PLATE CXV.

CYCLAMEN, *Tourn, Inft. R. H.* 154. *Tab. 68. Raii Meth. Plant.* 121. *Lin. Gen. Plant.* 184. Sow- bread \ *in* French, *Pain de Pourceau.*

CJT*OURNEFORr **ranges this Genus in the Sex Venth Seftion of his Second Clafs of Plants, intituled,** *Herbs with a wheel-Jhaped Flower of One Leaf, wbofe Pointal afterward becomes a foft Fruit.* Mr. ***Ray*** **ranges it in the Second Divifion of his Twenty-third Clafs of Plants, intituled,** ***Bulbofls ajfines,*** **or Plants nearly allied to thofe called Bulbous. Doftor** ***Linmeus*** **ranges it in his Fifth Clafs of Plants, intituled,** ***Pentandria Monogynia^*** **from their Flowers having Five Stamina and One Germen.**

The Chara&ers of this Genus are exhibited in the *Gardeners Dittionary.*

The Species here reprefented is,

CYCLAMEN *by erne &? vereflorens^folio angulofo^ amploflore albobaftpurpurea, Perficumdi£ium, R. H. Par.* Pcrfian **Winter and Spring-flowering Sow-bread, with a large angular Leaf, and a white Flower having a purple Bottom.**

»** **Ihews the Petals of the Flower, which are reflexed;** ***K **the Pointal and Stamina;** ***c,*** **the Seed-veffel, with the Footftalk of the Flower twifted round it;** ***d,*** **the Seeds taken out of the Capfule.**

Do&or ***Linnaus*** **fuppofes all the Species of** ***Cyclamen^*** **Which are mentioned by the Writers on Botany, to be the fame; in which he is as much miftaken as thofe who have fuppofed a much greater Number of diftindt Species than are at prefent known: So that the Difficulty is to fettle which of them are fpecifically different; which is only to be known by frequently propagating them by Seeds, and obferving what Differences will arifp by Culture. This I (hall attempt to afcertain from many Years Experience and Obfervation.**

The Seeds of the *Cyclamen Heder<efolio C. B. P.* which **is the moft common in** ***England,*** **and thrives in the open Air very well, produces only Two Varieties, which are the purple and white Flowers : But there is not the lead Variation in the Leaves, Roots, or Make of their Flowers \ fo that thefe are only accidental Varieties, and not diitincl Species.**

The Seeds of the *Cyclamen hyemale orbiculatis foliis infer ne rubentibtiSi purpurafcente fiore, Count Herbariorurn H* R. Par.* or *Winter'-flowering Sow-breadwith purpleFlowers,* **never produces any Varieties ; but the fame Sort conftantly arifes from its Seeds; and therefore may with great Truth be deemed a diftinft Species from the others.**

The Seeds of the Sort here figured will produce Two Varieties, one with a white Flower and purple Bottom, the other with a pale Flower and a deeper coloured Bottom ; and fometimes there will arife fome Plants with rounder Leaves than others.

There is another Sort, which flowers in the Spring, different from either of thefe, ***viz. Cyclamen verno temport florens, Cluf Hijl.*** 265. i. e. *The Spring-flowering* ***Sow-bread.*** **This is lefs common in** ***England*** **than any of the other, and is undoubtedly a diftindt Species, the Seeds always producing the fame.**

The *Cyclamen radice Anemones^ flore purpures minore* ***odor at oy Boerb. Ind. alt.*** **is fo very differefft from all the others in the Form of the Root, and the Size of the Leaves and Flowers, that no Perfon, who is acquainted with it, can fuppofe it to be the fame Species with any other: But as this rarely produces Seeds in** ***England,*** **fo I cannot from Experience fay how it may vary when raifed by Seeds.**

The common Sort, with purple and white Flowers, is fo hardy as to endure the fevered Cold in this Country in the open Air. The next hardy Sort to this is the *Winter-flowering Sow-bread with purple Flowers,* which, **with a little Shelter in frofty Weather, may be preferved in warm Borders: But all the other Sorts are too tender to live thro' the Winter in the full Ground in** ***Englandy*** **unlefs they are well fecured from Frofts in Winter.**

The common ***Sow-bread*** **grows naturally in** ***Auflria, Hungary*** **and** ***Ijtria :*** **The other Sorts grow naturally in** *Turky, Perjia,* and *Armenia.*

PLATE CXVI.

CYDONIA, *fount. Inft. R. H.* 632. *tab. 405- Raii Metb.* **143.** ***Pyrus Lin. Gen.*** **550. The Quince s** ***tn*** **French,** *Coignier.*

CTT^OURNEFORT **ranges this Genus in the Eighth** ***Ji*** **Seftion of his Twenty-firft Clafs of Plants, intituled,** *"Trees and Shrubs with a rofe-fhapd Flower, wbofe Empalement becomes a Fruit with hard Seeds.* ^ Mr. ***Ray*** **places it among the Apple-bearing Trees with an umbiiicated Fruit. And Dr.** ***Linnaeus*** **has joined this Genus to the Pear, making them only different Species of the fame Genus; and ranges it in the Fifth Divifion Of his Twelfth Clafs of Plants, intituled** ***Icofandria fentagynia,*** **fiom the Flower having more than Nineteen Stamina, and Five Styles.**

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

The Species here reprefented is,

CYDON 1 A *fruflu oblongo Uviort, Tourn. Infl. R. H. 632.* **The Pear-fhaped Quince. This is the** ***Mala Cotonea majora C. B. P.*** 434. and the *Cydonia majora RaiiHift.* 453- *in French, Coignier feme lie.* Dr. *Linnaus* titles it, *Pyrus foliis intergerrimis Hort. Cliff.* 160. *I. e.* Pear-**tree with inure Leaves.**

a, **reprefents the Petals of the Flower when fully expanded ;** ***b,*** **the many Stamina which are fituated round the Five Styles*** ***t,*** **the Fruit intire;** ***dy*** **the Fruit cut thro* the Middle, to fliew how the Seeds are lodged iri thtir Cells in the Center of the Fruit.**

As the Quince is covered with a cottony Down, fo it may be feparated from the Pear, whofe Fruit is not fo j but the other Characters are the fame: And as they

will take upon each other by being budded or grafted, that is a Confirmation of their new Alliance.

We have Three Sorts of Quinces which are cultivated in the *EngliJJj* Gardens ; but the Sort here repreſented is eſteemed the beſt for Kitchen Uſe, and may alſo be uſed in Medicine; tho' that which is called the Apple-Quince is the Sort directed in Diſpenſaries, for all the Purpoſes where Quinces are ordered. The Fruit and Seeds are the Parts uſed.

Whether theſe are diſtinct Species, or accidental Varieties which have been produced from Seeds, is hard to determine; becauſe they are propagated only by Suckers, Layers, and Cuttings, and are rarely raiſed from Seeds, though this is the only Way to know if they will prove the ſame as the Parent Tree, but is too tedious a Method of propagating them; for I have Plants now growing, of Fifteen Years *01* Age, which I raiſed from Seeds; but they have not as yet produced any Fruit; ſo that whether any Variety of the Fruit can be obtained by* this Method is uncertain.

Theſe Trees thrive beſt in moiſt Ground, ſo are generally planted by the Sides of Ponds or Ditches, where they hang over the Water, and in ſuch Situations their crooked Stems, and .draggling Branches, are not ſo much noticed as they would be in an open Spot of Ground, where they might be ſeen on every Side.

The ſeveral Sorts will take by grafting or budding on each other; ſo that where the Fruit is not of the deſired Kind, the Trees may ſoon be altered, by putting ſeveral Grafts or Buds in different Parts of the Trees, and, as theſe grow, cut away all the Branches of the former Kind.

P L A T E CXVIL

CYTISCS, *Tourn. hſt. R. //.* 647. *Tab.* 416. *RaiiMeth Plant. i6₃. Lin. Gen. Plant.* 785. Tree-Trefoil • *in* French, *Citiſe.*

THIS Genus of Plants is by Doſtor *Tournefort* ranged in the Second Seſtion of his Twenty-ſecond Claſs, intituled, *Trees and Shrubs with a leguminous Flower, and Three Leaves upon each Footſtalk.* Mr *Roy* places it among the Trees with a Butterfly Flower' bearing Pods, which have Three Leaves. Dr. *Linnaus* ranges it in his Seventeenth Claſs of Plants, intituled *Dtadelphia Decandria,* from the Flowers having Ten Stamina, Nine of which coaleſce, and One ſtands off at a ſmall Diſtance.

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

The Species here repreſented are,

Fig. 1. CYTISUS *racemis ſimplicibus ere5lis foliolis ovato-obhngis, Hon. Cliff.* 354. Tree-Trefoil with ſingle upright Spikes of Flowers, and oblong-oval Leaves.

a, repreſents the Standard of the Flower ; *b,* the Carina, or Keel; *c,* the Two Wings, or Ate ; *d,* the Stamina, with the Style; *e,* the Style ſeparated from the Stamina;/, the Three Leaves of the Plant; ?-, the under Part of the Flower ; *h,* the Empalement.

This is the *Cytiſus glaber nigricans C. B. P. io₀.* inH the Fourth *Cytiſus* of *Cluſms.*

Fig. 2. CYTISUS *ſioribus capitatis, foliolis ovato-oblongis caule fruticoſo.* Tree-Trefoil with Flowers growinc' in an Head, oblong oval Leaves, and a woodV Stalk *

1 he Firſt Sort grows naturally „n *Aufiria, Bohemia,* and *Hungary,* and, for the Beauty of its Flowers, has been long cultivate in the Gardens abroad; but was little known in *England* till of late Years, ſince I procured Seeds of it, which ſucceeded in the *Ckelſea* Garden ; from whence it has been diſtributed to ſeveral curious Perſons.

This is a low Shrub, which naturally ſends out many Jateral Branches on every Side near the Ground, forming a buſhy Shrub, and is with Difficulty trained to a ſtem. The Branches are ſlender, but grow erecl: liielearegarniſlied with oblong-oval Leaves growing J hreeoneach Footſtalk, Iike7r*>/, which are ſmooth, and or a dark-green Colour. The Flowers are produced m long Spikes, like thoſe *of Laburnum,* but Hand erect, and are of a yellow Colour. As theſe Spikes are produced at the Extremity of every Shoot, *io,* when the Shrubs are full in Flower, they make a fine Appearance. This flowers in *July,* when moſt other Shrub* are paſt, wh;ch renders it more valuable.

1 tie ſecond Sort grows naturally in *Tartary,* from whence the Seeds were ſent to the Imperial Garden at *Peterjburgb,* gnd by the late Doſtor j ^ who waS rrorelior of Botany in that Univerſity, the Seeds were ſenr to *England,* and the Plants have been raiſed in ſeveral curious Gardens.

ri;;THMS-ShrubrifeS t0 the Height of Four Feet, and divides mto many Branches, which are garni/hed with oWong-oval Leaves of a whitiſh-green Colour: Theſe are produced by Threes and Fivls on each Footſtalk. At the Extremity of the Branches Ae Flowers are pro- duced, in clofe Cluſters or Heads, and are of the Pea- blown kmd, of a yellow Colour, inclining toward black at the Bottom. Each Flower hath a large Empalement, which is permanent, and inclofes the lower Part of the rod, wh.ch ſucceeds the Flower. The Pod is ſhort and hair y> inCloſing Three Or Four Kuliey-ſhaped Seeds.

It is very hardy in refpect to Cold; but thrives beſt in a light Soil, which is not too dry ; and loves an open Expoſure, ſo will not thrive under the Shade *of* Trees.

Fig 1. CTTISr*, *iacfim.< /ti* *pluribus crectis foliolis ovato oblongis Hort. Cliff. 334*

Fig 2. CYTISUS *floribus capitato foliolis ovato oblongis caule frutescente*

Dayera. caule foliis alternis cordatis margine dentatis floribus axillaribus

Pubd according to Act of Parliament by P. Miller Chel. 1 1796

Delphinium, *nectariis diphyllis labellis integris floribus Spicatis foliis palmatis multifidis Glabris.*

R. Lancake delin. J. S. Miller Sculp.

Publish'd according to Act of Parliament by P. Miller October 28 1758

PLATE CXVIII.

D'AYENA, *Monier.*

THIS Plant is fo titled in Honour to Monfeigneur *le Due U Ayen,* who is,a great Promoter of the Science of Botany, and has a noble Garden at *St. Germain* in *France,* which is amply furnifhed with Plants from many Parts of the World ; and has appointed Doftor *Monier,* of the Royal Academy of Sciences, Supcrintendant of it.

The Charafters of this Genus, are,

It hath Male and Hermaphrodite Flowers on the fame Plant, which arife from the fame Wings of the Leaves^ The Male Flower a, *hath an Empalement of One Leaf, which is cut into Five acute Segments, in the Center of which are filuated Five Stamina, crowned with blunt Stigma. The Hermaphrodite Flowers* b, *have alfo an Empalement of One Leaf, which u cut into Five Segments almojl to the Bottom* as is reprefented at* e : *The Flower is of One Leaf tubulous at the Boot torn, rifing to fame Height above the Empalement, as at* d, *but fprtad open above, and divided into Five Segments, in the Center of which is placed a round five- cornered Germen fupporting a fmgle Style: The Germen afterward becomes a round lOapfu/e, as at* e, *having Five Furrows* ; *and is divided into Five Cells, as at* f, *wmcb feparate into diftintt Parts when ripe, as at* g, *in each of which is lodged an oval Seed\ as at* h.

We know but One Seecies of th£ Genus at grefeftt, *viz.*

Ayenia Pusilla.

D' A YEN A *hermit, foliis oblonga cordatis margimhus dentatis,floribusaxillaribus.* Smooth D' Aycna, with oblong heart-fhaped Leaves, indented on their Edges, and Flowers produced from the Wings of the Leaves.

The Seeds of this Plant werefent from *Peru* to *Paris,* by the younger *Jufficu,* in the Year i75°> whereth^ fucceeded; and, when the Plants produced Flowers, the Title of D ' i » was applied to it by Doflor *Monier,%* of the Royaf Acadeiny of Sciences, who fent me the Seeds.

This is a low Ihrubby Plant, feldom ruing above a Foot high, having woody Stalks, which divide into feveral Branches: Thefe are garnifhed at Diftances with oblong heart-fnaped Leaves, having pretty long Footftalks, and are indented on their Edges. At the Bottom of the Footftalks of the Leaves the Flowers come our, o-enerally Two at each Joint, *o :t* of which is Male, and the other Hermaphrodite: The Male is generally above the other, and is of fhort Duration, feldom continuing much more than One Day before it fades. The Hermaphrodite Flowers are compofed of an Empale-. ment, and a tubulous Flower of One Leaf arifing our of it, which is extended the Length of the Tube beyond the Empalement, and is then fpread open at the Top, where it is divided into Five Segments, upon each of which is fituated a (lender Stamina, crowned with a blunt Summit, in the Center of which is placed the roundifh Germen, fupporting a fnort Style crowned with a round Stigma. The Flowers are of a purple Colour. After thefe are paft, the Germen turns to a roundifh prickly Capfule, having Five deep Furrows, and is dU vided into Five Cells, which contain oval Seeds.

This Plant is propagated by Seeds, which muft be fown in an Hot-bed early in the Spring; and, when the Plants are One Inch high, they fhould be tranfplanted to a frefh Hot-bed, obferving to fhadethem till they have taken frefh Root; after which they fhould have free Air admitted to them every Day in warm Weather, and gently watered from time to time, as they may require. When the Plants have acquired Strength, they xnuft be carefully tranfplanted, each into a fm?.!l Pot filled with light Earth, and plunged into another Hot-bed, where they may remain to flower and feed; for they are too tender to thrive in the open Air in *England,* fo fhould be conftantly kept under Glaffes, in a moderate Warmth, giving them a large Share of Air in warm Weather. With this Management they will flower in *July* and *Auguft>* and the Seeds will ripen in *September* and *Ottober.*

Thefe Plants may be preferved thro* the Winter, if they are placed in a moderate Degree of Heat: But as they produce Plenty of Seeds, it is not worth Trial to preferve the Plants, becaufe the young ones are always more produ&ive of Flowers and Seeds.

P PLATE CXIX.

DELPHINIUM, *Tourn. Inft. R. H.* 4*6. ***. 241. *R*j* Metb. Plant.* 79. *Lin. Gen. Plant.* 602. Larkfpur •, *tn* French, *Pic ^F Alouette.*

THIS Genus of Plants is by *Tournefort* ranged in the Second SV&ion of his Eleventh Clafs, which includes the *Herbs with an anomalous Flower, waoje I'oin-tal changes to a many-ailed Capjule.*

Mr. *Ray* places it in his Eighteenth Clafs, under which he ranges thofe Plants that have regular t lowers, which are fucceeded by many fmall Pods.

Doftorlira^j ranges ic in the Third Diyifion ot his Thirteenth Ciafs of Plants, intituled, *Polyandna trigynia,* from their Flowers having many Stamina, an# Three Germina,

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

The Plant here reprefented is,

DELPHINIUM, *neftariis diphyllis, labellis integris floribus% fpicatis foliis palmatis multifidis glabris.* Great Bee Larkfpur.

This is the *Delphinium elatius fubincanum ferenne^floribus amplis azureis, Amman. Ruth.* 175. Tall perennial Larkfpur with large azure Flowers.

a, re-

a, reprefents a FJower taken from the Spike ; *b,* the Three Germina; *c,* the feveral Stamina; *d,* the three-cornered Capfule ; *e,* a fingle Pod fepa^ated; *f,* the Capfule cut thro', tranfvcrfely; *g,* the Seeds taken out of the Veffcl.

This Plant hath a perennial Root, and an annual Stalk, which decays in Winter. The Stalks of this Plane grow to the Height of Six or Seven Feet, and are garnilhed with Leaves, which are broad, and divided into Five or Seven Parts, which are cue into many narrow Segments toward the Top. Thefe Leaves come out alternately at the Joints of the Stalks, on long FootftaJks, which turn back toward the Ground. The Flowers are produced in long Spikes at the Extremity of every Stalk, and are of a fine blue Colour, After the Flower is paft, the Germina become three-horned Pods, or Vefiels, which are filled with wrinkled Seeds.

The Seeds of this Plant were fent from *Peterjburgh* by the late Dr. *Amman^* who was Profeffor of Botany there, with Two other Species, which were Narives of *Tartary* , from whence he had received their Seeds. One of chefe Sorts grows to the Height of Four Feet j the £m ... *T hoary, the Segrants cut almoft to the Bot- ... hard: ™e other feidom rifes Two ... Leaves are divided into many narrow Segments at the Bottom ; the Flowers are but few on each bpike, and are large, and of a deep blue Colour. This, I fuppofe, is what Dodor *Limits has* titled, *Delphmiumneaarusdiphyllis* ... *fubfolita-* ... he has added the Synonima of *Delphinium elatius J^anumpmnnefloribusamplisazureisAmman.bs^xzh* ... the Seeds of the PJant *hue* reprefented from *Do&orJwman:* So that he mult be mittaken in the ... eds of the other Two Sorts I received ... fame GentJemen by different Names. It is ... the Pknt here figured ... the *Delpbmtun Lufitanicum g/abrum, Aconoti folii Rolof.* which is another Synonima added by Daftor *Linn<eus* to the 1 ltle above quoted.

In ... Sons have been reveral Years cultivated ... Garden, where the Seeds have been fre- ... fown, and the young Plants have always retamed their ipeciHc Difference, without the leaft Varia- ... therefore there can be no Doubc of their beins ... Species.

P L A T E CXX.

DIGITALIS, *Tourn. Inft. R. H.* **165.** *Tab.* **73.** *Rait Meth. Plant,* **89.** *Lin. Gen. Plant. 676.* **Foxglove j** *in* **French,** *Digital*.*

THIS Genus of Plants is by *Tournefort* ranged in the Third Sedion of his Third Clafs, which includes the *Herbs with an anomalous Flower of one Leaf, which fpreads open every IVay.*

Mr. *Ray* places it in the Second Divifion of his Nineteenth Clafs of Plants, which contains the *Vajculiferous Plants with an irregular difform Flower.*

Dodor *Linnaus* ranges it in the Second Divifion of his Fourteenth Clafs of Plants, intituled, *Didynamia Angicjpermia.* The Flowers of this Clafs have Two long and Two Ihorcer Stamina, and are fucceeded by oval Capfules, containing many naked Seeds.

The Species here reprefented is,

Digitalis *calycinis foliolis lanceolatis, corollis bilabiatis ccutu, caukfruticofa Lin. Up. Plant. 622.* **Foxglove** with a Jhrubby Stalk, fpear fliaped Leaves to the Empalemcnc, and the Two Lips of the Flower pointed."

This is the *Digitalis acantboides Canarienfis frutekfnt fioreatteo, Hcrt -Amfl. z. p.* 205. **and** *Gefnerio folii lanceolatis ferratu pcdunculo terminali laxe fpicato, Hort Cliff* 31S. commonly called Canary Foxglove.

a, (hews the Empalement of the Flower; *b,* the upper Lip, which is extended beyond the other Parts of the Flower ... ews it fingle, when divefted of the Tube; *4,* the Two long and Two fhort Stamina ... the Two Stigma; *f.* the Sced-vefld, inclofed by the Empalement •, *g,* the fame cut thro* longitudinally ... the Veffel cut thro' tranfverfly, to fhew the Cells in which the Seeds are lodged.

This Plant has been long an Inhabitant in fome of the curious *Enghjb* Gardens, where, by its long Continuance, m Flower, it makes a fine Appearance ... termixed with other exotic Plants. It rifes to the Height of Four ... having a woody Stem, which divide»,n.to feveral Branches: Thefe are garniflied with oblong fpear.lhaped Leaves, which are rough, and ... without ... inSm ... gth: Thpfe are of a ... angTcolonr, intermixed with yellow, and are ftaped fomewhat like ... from whence Dodor *Commline* ... *Digitalis* ... *oides.* ... whence the Seeds were brought ... *&gbi£* and many of the Plants were raifed ... the Garden of the B.fhop of London at Fulham, and alfo in the Roy.1 Gardens at ... were they ... feveral Years preferred: Plants The ... tender exotic Plants ... that fcarce any of the ... within about Twenty ... Seeds, which ... have been propagated plentifully in England. ... The Flowers are produced in Spikes at the Extremity of every Branch, fo, as new Shoots are put out at different Times, there ... flow ... different Seafons ... the PJants are fdd()m deftitute of Flowers ... Number of the Plants ... where a ... will be conftantly fome in Flower ... the Plants more valuable ... They are too tender to live in the open Air thro' the Winter ... preferve them ... require no ... HeJt to ... airy Green ... in a *dry* ... very well ... to grow mouldy and rot ... Sho«,'s arc very fcb-- ... This Plant is ... be fown foon after ... propagated ... fandy Kach ... Shoots filled widi light and ... Under a ... Frame in Winter; into a ... which WJll bring up the Plants.


Digitalis purp

DIGITALIS. *calycinis foliolis lanceolatis corollis bilabiatis acutis caule fruticoso* Linn. Sp. pl. 622.

Pl. CXXI

DIANTHUS *floribus solitariis squami[illegible] brevissimis corolla multiplici*

[illegible] delin. *[illegible] sculp.*

Published according to Act of Parliament by P. Miller Nov. [illegible] 17[illegible]

DIANTHUS. floribus aggregatis paniculatis squamis calycinis brevioribus tubum cylindricum aequantibus floribus conjugatis.

PLATE CXXI.

DIAHTHU*. *Lin. Gen. Plant.* 500. *Meth. Plant.* 109. r«r«. *lnjl.* 3*9- *Ro^nm 'French, Odllet.* Commonly called Clove-Gilly-flower, Red Carnation in *England.*

THIS Genus of Plants is ranged by Doctor Linn*us in the Second DiviOon of his Tenth Clafs, intituled, *Decandria Digynia,* from the Flower having Ten Stamina, and/*o by Mr. *Ray* places it in his Twenty-fecond Clafs of Plants, mentulcd. *Herbs with a Flower of Five Leaves, ^ofeSeeds «re contained™ Pods. Tournefort* ranges it: in his Clafs, which he titles, *Herbs mtba Leaves, whofe Pointal turns to a Fruit.* ^been, by moft of the Writers on Botany, *phyllus,* Lm the Smell of the Flower. K *of Cloves,* and from thence came *Chv-GiUxflaver,* to diftinguilh it from that^o *Mover,* ft has alfoby feme been has been oftener applied to fome Plants to the Genus. Same of the Anients have fuppoled it was called *Vettmca** or *Betonica,* from the *Vettones,* a People of *Spain.*

In a former Number there were Two Species of this Genus exhibited under the former Head any at which Time it was not propofed to have more; but feveral of the Subfcribers being have One or Two good Flowers of this fented, we have, to comply with their Requeft, this and the following Plate.

This is the

Dianthus floribus fubternis fquamis calycinis fubovatis brevijfimis, corolla multiplied growing fingly, a fcay *»£>?& tf«» by d. and a double Flower. IMS Appellation of *Carnation* with a flaked Flower.

There are great Varieties of this ^^"/" ^eYears dens of the Lious FlorHK ^rtlyaher in their much improved them i but tney

Tafte about them. Some Years ago theory ,arge Flowers, whofe Pods could not contain their numerous Petals were principally cultivated, as were alfo thofe wS Wed Flowers, commonly called *Puttees ;* but at orefent thofe Flowers which do not burft their Em- Ct and are termed *Whole Blowers, zrc* in the £™«5Efteem; as alfo fuch of them as have full !Sfi, ^Petals, with lively Colours, whole Petals aeTntire and not jagged at their Edges: Th.fe are by the Florifts called *Rofeleavd Flake-Flowers,* to diftmluifh them from *Piauettees.* As every Seafon produces ^any new Kinds of thefe Flowers, fo there are Titles ™en to them according to the Fancy of the Owner» fo ?hlt in every County their Names are frequent y different • therefore the inferring of them here would be intirefy ufelefs. The Two Flowers which are here reSted were raifed from Seeds, and have not been Cured with Titles ; however, as they are fuch as the XV term complete Flowers, they *mil* convey an Idea of this DiftincYion to fuch as are not thoroughly

The^ng^Flower reprefented below is to exhibit the Charafters of the Genus, which are not fo confpicuous fn double Flowers-, for although many of thole have he O^ans of the different Sexes perfeft and produce A Kds vet are they *(o* covered with the Petals of ^Flower'asC to be Ln, unlefs they are pulled out whereas in the fingle Flowers the Stamina and btyies appear Ments me Flower fully blown, with the Stamina and Styles in their natural Pofition -, *b,* (hews the Ten Stamina, with their Summits anfing from the Emoalement, ftanding round the oval Germen; *c,* repreFens the Two horned Styles anfing from the Apex of the Germen ; *d,* (hews the Germen taken out of the EmpalemenT, which hath Three Styles, which is not unSmoon in thefe Flowers-, fo we judged it might be of Ufe toexhibit them here -, *e,* reprefents theaeed veflel cut open longitudinally, to fhew how the Seeds are ranged.

Theother Charafters of this Genus, with full Account of the Culture of the Plants, being exhibited in the *Oardener'i ViBionary,* we lhall not repeat them here.

PLATE CXXII.

THIS Plant being of the which is exhibited in the quires no farther Account of the Ualis longs.

The Species here exhibited is,

*linearibus tub** ^uantibusJorMs* very thus with Flowers growing in narrow Scales to their Empaiement, and the Flowers variegated. This is the *barUtus honevfis ^gujHfoHus fiore mveb Park. Par.* Narrow-leav'd bearded Gillyflower, with a white Middle. It is commonly called Painted Lady William.

«, reprefents the Bunch of Flowrtj terminating the Stalk • *b* the Petals of the Flower, which are fawed on the Beards or Scales of the hmpalcare very narrow; *d,* the Ten Stamina, •SMtummUriifing from the Bottom of the Flower , *e,* the Two Styles fitting upon th, G.rmen -, /, the Seed veflel cut optn horizontally; *g,* the fame

^Koft; Sort have, by many Botanifts have been feparated from this Genus, and the Title of *Arlerius* Tpplied to them ; and from thence our *Lnghjh* Names *of Sweet William* and *Sweet John* have been given Them Thefirft has generally been applied to thole with broad Leaves -, and the latter to the narrow leav'd Sorts, by the Gardeners: But moft of the later Botanifts have placed thefe under the Genus of *Caryophyllus,* and, fy way of Diftinction, have added the

Epithet of *Barbatus* to them, from the narrow ftiff Leaves which are ranged below the Empalement.

Doftor *Linnaus* has alfo joined thefe under his Genus *of Diantbus,* diftinguiihing them from the Carnations by the additional Epithets of *fioribus aggregatis* \ but he fuppofes but One Species of the *Garden Sweet William,* and all the others to be only Varieties which have arifen from Seeds : In which I fo far agree with him, as to allow the Difference in the Colours of the Flowers to make no Diftinttion, becaufe thefe annually change; but the broad-leav'd and narrow-leav'd Sorts keep their Difference, fo they may be allowed as diftinft Species: Of each Sort there are many Varieties, differing in Colour and Form; and fome have double Flowers which never produce Seeds, fo are propagated by Slips or Layers.

The fingle Sorts feldom live longer than Two or Three Years ; therefore young Plants {hould be annually raifed from Seeds, to fupply their Place •, and although many of the Roots will continue longer than Two Years, yet their Flowers will not be fo itrong as thofe of the Second Year •, therefore young Plants (hould always be preferred to old". In the Choice of the Seeds, thofe Flowers which are the moft beautiful foould be marked-, and if all ihofe of bad Colours arc feparatea from them, as foon as they can be diftinguifiied, tnc Plants produced from the Seeds will be lefs liable to vary : And if the Seeds are frequently changed xviJi Perfons who live at a confiderable Diftance, and theboiib in which the Plants grow are very different, the Colours of the Flowers may, by this Method, be better pretervea than can, with the greateft Cave, be done, where tnc Seeds are for many Years faved in the fame Garden.

The *Painted Lady Sweet William* here repreftnted, is one of the moft elegant Flowers of this Tribe, and fheiefore better worth propagating for the Flower-Garden; for the Plants of this grow more compact, and tn Flower-Stems are fliorter, and therefore not fo liable to be blown down or broken as thofe of the other, ana there will always be a great Variety in the cutteren Shades of the Flowers, fo do not require any Ado!"°£ of the o;htr Colours to be intermixed with them. 1 »°l- of the tall growing Sorts, with very deep colourea Flowers, are very proper Ornaments for Jarge rura. Walks, or to intermix with Shrubs •, where they wtU thrive with little Care, and afford a pleafmg Variety.

PL AT E CXXIII.

DICTAMNUS, ***Lin. Gen. Plant.*** **468.** ***Fraxinella, Rail Metb. Plant.*** **79.** ***Tourn. Injl. R. H.*** **430.** ***Tab.*** **243.** Fraxinella, *or* White Dittany j *in* French, *Fraxinelle.*

THIS Genus of Plants is ranged in the Tenth **Clafs of *Linn<eus>* intituled,** ***Decandrin Monogynia,*** from the Flowers having Ten Stamina, and one Style. Mr. *Ray* places it in his Eighteenth Clafs of Plants. The Flowers of this Clafs are irregular, and are fucceeded by feveral Pods. *Tournefort* ranges it in the Second Seftion of his Eighth Clafs, intituled, *Herbs* ***with a Flower of many Leaves, of an anomalous Figure, wbofe Pointal becomes a Fruit confifting of many Cells.***

The Plant here repreftnted is,

DICTAMNUS, *Hort. Cliff.* 161. White Dittany, or Fraxinella. **This is the *Fraxinella purpurea major multiflora, H. R. Par.*** Great Purple Fraxinella, with many Flowers.

a, repreftnts the upper Petals of the Flower, which ftand eredl; *b,* fhews the Ten recurved Stamina, with their Summits; *c,* the Style which fits upon the Grrmen, and is extended the Length of the Stamina ; *d,* the Seed-veflel, compofed of many Cells; *e,* (hews the Seed as it is lodged in the Cells; and /, the Seeds taken out of the Cafe.

This Plant grows naturally upon the Mountains in *Italy,* and in fome Parts *of Germany* •, but is propagated in *England* * for the Beauty of its Flowers. Do&or *Unnaus* fuppofes there is but One diftindl Species of this Genus, and the others are only feminal Variations from it. The Sort with white Flowers is fo; for I have had thefe come up from the Seeds of the purple: But that which is here figured, is certainly a different Species from the common Sort; for I have always found, that the Seeds of this produced Plants of the lame Kind, though fome of them have differed in the Colour of their Flowers. The common Sort hath (hort Spikes of Flowers, which grow thinly on the Stalks, fo are not near fo beautiful as this, which has occafioned its being difregarded •, whereby it is much more rare in the *Englifh* Gardens; which often happens to many other Plants, for the lame Reafon.

The Roots of this Plant continue many Years; c^ the Stalks decay in ths Autumn, and new ones are produced every Spring. The older the Roots are, tfi greater Number of Stalks will be fent forth from earn, provided they are not difturbed ; for how long the Roots will continue in Vigour, is hard to determine: have many which are more than Thirty Years old, an annually increafe in their Strength : Thefe fend out near Twenty Stalks from each Root, which grow tall, ana have long Spikes of Flowers ; whereas young ^lan feldom have more than Three or Four Stems, and tn^ Number of Flowers upon each are much fewer; therefore thofe who propofe to have this Plant in Perf^flOl^ ftiould plant the Roots, when young, in the * where they defigned to remain ; for they do not be tranfplanting well, when they are old.

The Stalks of this Plant rife neai Three Feet high- Thefe are garnifhed with winded Leaves, place da Ite nately ; each being compofed of Four or Five Pair Lobes, with an odd one at the End, like thofe *ot A 4fb-Tree,* but are fmooth on their upp. r S^ic^? \t dark green fhining Colour; on the upper Part of Stalk the Flowers are produced on every Side, forming a pyramidal Thyrfe, or loofe Spike. Thefe are *con*^ pofcd of Five or Six unequal Petals, which are irregularly difpofed, Four of ti.e upper ones being fn° larger than the lower, and ftand ereft ; the olhc^\nr$ downward, and are, in this Sort, of a purplish Colo je, marked with Stripes of a deeper: From the Empa.^ ment there arife Ten long Stamina, crowned wj^ roundifh yellow Summits; thefe are rcflexed, and Cl f h(J upwards ; between which is fuuated a Style of fame Length, fitting upon a five cornered Gernien, wp afterwards turns to a Vtflll with Five Cells, *"* are lodged many fmooth fhining black Seeds, whlC ? fht: hard. This Plant flowers in *May* and *June,* anU u Seeds ripen in *OBobcr*; The Leaves and flowers W a (trong balfamic Smell. The Roots of it are *W^* Medicine.

PLA i L

DICTAMNUS. *Fraxinella Cliff. 168.*

R. Pulteney del. *Published according to Act of Parliament by P. Miller Nov.r 1st 1758.* *J.S. Miller sculp.*

Fig. 1. DIOSMA, foliis linearibus glabris acutis.
Fig. 2. DIOSMA, foliis brevi lanceolatis subtus convexis bifariam imbricatis. Lin. Sp. plant. 198.

Publish'd according to Act of Parliament by Philip Miller ... 1758

DIERVILLA, *Caulibus fruticosis floribus luteis Tourn. R. H. 598.*

PLATE CXXV.

DIERVILLA, *Town. Mem. Acad. R. S. 1706. Boerh. Ind. Alt.* 277. *Lcnicera, Lin. Gen. Plant.* 210. We have no *Englijh* Name for this Plant.

Hn HIS Genus of Plants fhould be ranged in X *Teurnefort's* Twentieth Clafs, according to his Syttem, in which he includes the Trees and Shrubs, with a Flower of One Leaf, whofe Etnpaiement turns to a Berry. Doctor *Linnaus* has joined this to his Genus of *Lonicera,* and ranges it in his Fifth Clafs °f Plants, intituled, *Pentandria Moncgynia,* from the Flower having Five Stamina, and One Style. To this Genus he has added the *Caprifolium, Periclymenum, Chamactrafus,* and *Xylojleum,* of *Tournefort,* and the *$ymthorkarpos* of *Dillenius;* in which he has not ftnftly followed Nature: For if the Flowers only are admitted as charadteriftic Notes, fome of thefe muft be feparated; but if the Fruit be allowed as a Mark of the Genera, it "will ftiU caufe a further Alteration; for as the Fruit of this Plant hath Four Cells, and thofe of *Lonicera* but Two, fo Ijudgr it-will be more intelligible to thofe who are not Adepts in Botany to keep them diftinft.

We know but One Species of this Plant at prefent i which is here reprefented.

DIERVILLA *Acadienjis, fruticofo flore luteo, Tourn. Ac. R. S.* 1706. Shrubby Diervilla of Acadia, with a yellow Flower.

«, reprefents One of the Flowers feparated from the Bunch, (hewing its long Tube, with the upper Part divided into Five Segments ; *b,* (hews the Flower cut open, with Part of the Tube taken off; *c,* reprefents the Five Stamina, and the Style-, *d,* (hews Two Stamina taken out of the Flower, with their round Summits i *e,* reprefents the tubulous Empaiement, which is cut into Five acute Segments at the Top. Doftor *Linnets* tides this Plant *Lonicera racemisterminaBus,fcliis ferralis, Sp. Plant.* 175. .

This Plant was firft brought to *Europe.,* from *Jcadsa,* by Mr. *Vierville,* a *French* Surgeon : So *Tcurnefort,* upon examining its Characters, and finding it would not rano-e in any of his Genera, conftituted a new G< - nus, and applied it to the Name of the Perfon who brought it. Since then the Plant has been found growing rfaturally in feveral of the Northern Parts of *Amcrifa,* and particularly in *Nova Scotia,* in great Plenty.

It is a low Shrub, which feldom nfes more than Three Feet high ; the Stalks are (lender and woody ; thefe have a reddifh coloured Baik, and are garnifhed with oblong pointed Leaves, which are (lightly fa wed on their Edges. They are placed by Pairs oppofite at the Extremity of the Stalk. There is often One 01 Two fmall Branches produced, each of which is terminated by a loofe Bunch of yellow Flowers, which have long Tubes, and are cut into Five Farts at the Top, which turn backward. Thefe, in the native Courtry of their Growth, are fucceeded by oval Berries, which, when ripe, are of a black Colour, and have Four Cells in each of which is lodged a fingle hard Seed. In *England* the Berries are rarely formed •, and thofe which lometimes do appear, never come to Maturity.

The Roots of this Plant creep far under Ground, and fend out many Stems, by which it propagates very fa(h As thefe rife during the Summer Months, lo many of thofe which come up in the Spring produce Flowers the fame Year •, and hereby there is generally a Succeffion of Flowers from *May* to *September* -, for the Shoots of the former Year begin to flower early in the Summer, and the Branches from the Sides of thefe foon io.low» and before thefe are over, fome of the young Shoots will begin to (hew their Flowers > which readers the Plant more valuable.

PLATE *CXW.*

DIOSMA, *Lin. Gen. Plant.* 241. *Spiraea, Com. Rar. PI.* 2» African Spiraea vulgo.

THIS Genus of Plants is ranged in *Linnaush* Fifth Clafs, intituled, *Pentandria Monogynia^* Hower having Five Stamina, and One Style. Thefe Plants have been always ranged under the Genus of *Spr*a* by the Writers on Botany : But, according to *Ltntueus's* Syftem, they muft be feparated, on account of the Number of Stamina in the Flowers ; for in thefe there are but Five, whereas thofe of the *Spiraa* have Twenty : Befide this, there is a five-pointed Neaarium in theie Flowers, which is wanting in the *Sptw,* but as to the Number of Petals in the Flower, and the torm or the Seed-veflel, they agree with the Common *Spir*a*t* io might, according to former Syftems, be ranged with it.

The Species here reprefented are,

Fi* i DIOSMA *foliis Unearibus glabris acutis.* Diofma with narrow fmooth Leaves, terminating in a Point.

This Sort approaches near to the *SpirtaAfricana odorata foliispilofts, Com. Rar. PL 3-* But the Leaves of this are longer, more pointing, and fmooth j in which they differ. This Plant was rafed in the Garden at *Chelfea,* fome Years paft, from Seeds which were fent from the *Cape of Good Hope;* and fince then many Plants have been raifed from the Seeds which have ripened in *England,* which retain their Difference} therefore it may be put down as a diftincl: Plant.

It is a fhrubby Plant, growing Three or togr Feet hi^h fendin^ out many lateral Branches, which extend pretty

pretty wide every Way, fo as to form a large bufhy Head. The Leaves are pretty long and narrow, ending in a fharp Point: TJicy are of a light green Colour,^ndr Smooth ; a H^hen bruifed, emit a ftrong balfamic*t5abur. Tfctf lowers grow in fmall Clufters, toward the Extremity of the Branches, which are white, and are compofed of Five obtufe Leaves or Petals, as is reprefented at *a*; in the Bottom of each Flower is fituated a five-cornered Nedtarium, which is (hewn at *b*\ this fits upon the Germen, which afterward turns to a five-cornered Veffel, reprefented at *d,* which hath Five Cells, containing feveral hard (hining black Seeds; c_y {hews the Five Stamina of the Flower, which lie flat between the Petals.

Fig. 2. ***DIOSMA/OIUS Uneari lanceolatis fubtus convexis bifariam itnbruatis, Lin. Sp. PI.*** **198. Diofma with** narrow fpear-fhaped Leaves, which are convex on their under Side, and ranged Two Ways, like Tiles. **This is the** ***Spiraea Africana, Erica baccifera foliis, Raii Hijt.*** 3. *91. African* Spiraea, with Leaves like the Berry-bearing Heath.

This is a low bufhy Shrub, which feldom rifes above Two Feet high ; but fpreads out its Branches far on every Side: Thefe are garnifhed with narrow fmooth Leaves, of a light green Colour, which are ranged on each Side the Branches, fo appear flat on the upper and under Side ; when thefe are bruifed, they emk a very ftrong penetrating Odour. The Flowers of this Sort are produced fingly from between the Leaves, and are compofed of Five Petals, which are white, and tinged on their upper Surface, as reprefented at *e.* In this the Ne&arium is lefs vifible than the former, and the Seed-veflels are much fmaller, but of the fame Form.

Thefe Plants grow naturally at the *Cape of Good Hope,* where there are many other Species of this Genus ».fon?£ of which have been lately introduced to the *Engltfi* Gardens, where they are very ornamental Plants to the Green-houfe •, for they are feldom deftitute of Flowers. They are propagated either by Seeds or Cuttings: Tne latter, being the mod expeditious, is more generally pradiifed ; for the Seeds feldom grow the Firft Year, but lie in the Ground till the following Spring. The Cuttings may be planted in any of the'Summer Months, in Pots filled with light Earth, and plunged into a gentle Hot-bed, which will take Root in Five or Si* Weeks.

P L A T E CXXVfc

DIOSPYROS, ***Lin. Gen. Plant.*** **1027.** ***Guajacana, Tourn. Injt. R. H.*** **600.** ***Tab.*** **371.** ***Indian*** **Date Plum.**

THIS Genus of Plants is ranged in *Linn*us*'s* Twenty-third Clafs, and the Second Divifion, intituled, *Polygamia Dioecia.* Thefe are Male and Female in different Plants.

Tournefort ranges it in the Second Settion of his Twentieth Clafs, which includes the Trees and Shrubs with a Flower of One Leaf, whofe Pointal turns to a Fruit with a ftony Seed.

The Charafters of this Genus are exhibited in the ***Gardener's Dictionary.***

The Species here reprefented is,

DIOSPY ROS foliorum paginis difcoloribus, Lin. Sp. Plant. 1057. *Indian* Date Hum, with Leaves whole upper aRa uffidcfr Sides arejof Two Colours. This is the ***Guo.jacana, J. B.*** **1. 138. and the** ***Lotus Africana latu folia, C. B. P.*** 447. Broadleav'd *African* Lotus.

a, reprefents an intire Male Flower ; b_x fhews the fame, cut open; *c,* (hews the Eight fhort Stamina, with their round Summits.

By forne this is titled *Guajacum Patavinum*; others **call it** ***Pfeudolotus Africana:*** **But the Title of** ***Diofpyros,*** which is applied to it by *Linnaeus,* is taken from *Tbeophraftus,* who had given it tofome Plant nearly allied to this, if it was not the fame.

Where this is a Native is difficult to determine; but it is generally fuppofed it was brought from *Africa* to *Europe,* and the particular Place is thought to be *Mauritania,* where fome of the Trees are now growing; though thefe may poffibly have been tranfplanted from fome other Country. The Occafion of its being called ***Guajacum Patavinum,*** **was from** ***One*** **or Two very o** Trees growing in the Garden at *Padua,* and the native Country from whence they were brought being unknown. There arc fome who have mentioned this Tree to grow naturally in *Italy,* and the South *of France %* but from the beft Information I can get, thefe have been planted there. This Tree has been but few Years in the *Englijh* Gardens. The Seeds of it I procured from the Garden at *Padua,* where the Fruit constantly ripens ; for in the *Butch* Gardens, where I faw Two or Three pretty large Trees, they never produce any Fruity

In warm Countries thefe Trees grow to a large *S'Z?*x and extend their Branches far every Way. Thefe are well garnifhed with oblong Leaves ending in a Poinc, the upper Surface of them having a fhining Caft of a Copper Colour, and their under Surface a little inclining to white: Thefe are ranged alternately on the Branches. The Flowers are produced fingle out of the Side of the Branches between the Leaves, having very fhorc Foot* ftalks. They are fhaped like a Pitcher, and are of * worn-out purple Colour. The Fruit is the Size or a middling Plum, of a pulpy Subftance, black when fully ripe, and inclofes feveral oblong comprefled Seeds. This Fruit is eaten after it hath lain fome time to mellow, like *tht Medlar,* and is by fome Perfonsefteerned.

We have no Trees large enough in *England* yet to bear Fruit, but Two of the Male Sort have produced Flowers in the *Chelfea* Garden. While young the Plants are impatient of Cold, the Froft fometimes killing the Extremities of their Shoots ; but in a few Years they gi"mV hardy enough to refill the greateft Cold *ot* <hl5* Country, in a warm Situation.

Pl. CXXII

DIOSPYRUS, *foliorum paginis discoloribus. Lin. sp. plant. 1057*

J) QD A U T I A . •;•/*/,• fittmrrA

DORONICUM foliis cordatis obtusis ... 'tcattf-ujfrtti ... axillis amplexicaulibus. Lin. Mat. Med. 394.

P L A T E CXXVII.

DODARTEA, *Tourn. Cor.* 47. *Lin. Gen. Plant.* 698. We have no Englifh Title for this Plant.

THIS Genus of Plants muft be ranged in the Third Section of *Tournefort's* Third Clafs, which includes thofe Plants that have an anomolous Flower of One Leaf, opening on both Sides. Dr. *Linnæus* ranges it in the Second Section of his Twelfth Clafs, intituled, *Didynamia Angiofpermia*; the Flowers of this having Two long, and Two fhort Stamina, and the Seeds are inclofed in a Capfule. It muft be ranged in the Second Section of Mr. *Ray's* Nineteenth Clafs of Plants, intituled, *Herbs with a difform Flower of One Leaf, whofe Seeds are contained in a Capfule.*

The Species here reprefented is,

DODARTIA *foliis linearibus integerrimis glabris. Lin. Sp. Plant.* 623. Dodartia with very narrow intire fmooth Leaves. This is the *Dodartia Orientalis flore purpurafiente, Tourn. Cor.* 47. Eaftern Dodartia with a purplifh Flower.

This Plant was difcovered by Doctor *Tournefort* in *Armenia,* from whence he fent the Seeds to the Royal Garden at *Paris,* where they fucceeded; and the Plants have fince been communicated to moft of the curious Gardens in *Europe.* He gave this Title to it in Honour of Monfieur *Dodart,* Member of the Royal Academy of Sciences at *Paris,* and Phyfician to her Royal Highnefs the Princefs of *Conti.*

It hath a perennial creeping Root, by which it greatly multiplies; the Stalks rife about a Foot and a Half high, ftrait, firm, fmooth, and of a bright Green, fending out many Side Branches from the Bottom upward, fo as to form a fort of low Bufh; at each Joint comes out One or Two narrow Leaves, about an Inch long, which are flefhy, and jagged a little on their Sides, efpecially thofe which come out toward the Bottom: The upper Parts of the Branches are adorned with Flowers, which come out fingly from the Joints; thefe are of a deep purple Colour, and about an Inch long; the Bottom is tubulous, and divides into Two Lips, as is reprefented at *a,* and *b:* The upper Lip being hollow like a Spoon, as is reprefented at *c,* the convex Side ftanding upward, and divided into two Parts: The lower Lip is divided into Three Parts, as is reprefented at *d,* the middle one being very fmall. The Empalement of the Flower is fhort, fmooth, and divided into Five Parts, into which is inferted the roundifh Germen, fupporting a crooked Style, reprefented at *e,* which is crowned by an obtufe Stigma. This is attended by Four Stamina; Two of which are fhort, and Two longer, reprefented at *f:* The Germen afterward turns to a fpherical Capfule, opening in Two Cells, which are filled with fmall brown Seeds.

This Plant thrives very well in the full Ground, and requires no Protection in Winter, and propagates very faft by its creeping Roots; the Flowers come out in *July,* and the Seeds ripen in *September,* and in a Month after, the Stalks decay to the Root.

P L A T E CXXVIII.

DORONICUM, *C. B. P.* 184. *Mich. Gen. Plant.* 32. *Tourn. Inft. R. H.* 487. *Lin. Gen. Plant.* 862. Leopards Bane.

THIS Genus of Plants is ranged in *Tournefort's* Fourteenth Clafs, intituled, *Herbæ flore radiato,* Radiated Flowers, whofe Seeds are crowned with Down. Mr. *Ray* places it in his Seventh Clafs, which includes the Herbs with a radiated difcous Flower, with a downy Seed. Doctor *Linnæus* ranges it in the Second Divifion of his Nineteenth Clafs, intituled, *Syngenefia Polygamia fuperflua*, from the Heads containing many Female and Hermaphrodite Flowers in One common Empalement. To this Genus he has added the *Belidiaftrum* of Mr. *Micheli*, and he has feparated fome of the Species, which had been included in this Genus, to another, under the Title of *Arnica,* becaufe their Female Flowers have Five Stamina, which the Flowers of this Genus have not.

The Species here reprefented is,

DORONICUM, *foliis cordatis obtufis, radicalibus petiolatis caulinis amplexicaulibus, Lin. Mat. Med.* 394. Leopards Bane with blunt Heart-fhaped Leaves, thofe from the Root having Footftalks, but the upper Leaves embracing the Stalks. This is the *Doronicum maximum, foliis caulem amplexantibus, C. B. P.* 184. Greateft Leopards Bane, with Leaves embracing the Stalks; and the *Doronicum* VII *Jufiriscum* 3. *Cluf. Hift.* 2. *p.* 19.

The Root of this Plant is thick and flefhy, and hath many Joints or Knees, fending down ftrong thick Fibres into the Ground. The Leaves, which rife immediately from the Root, are hairy, foft, and Heart-fhaped, having a long Footftalk reprefented at *a*; from the Root arifes a pretty ftrong channelled hairy Stalk, near Two Feet high, which are garnifhed with oblong Heart-fhaped Leaves clofely embracing the Stalks at their Bafe, as at *b*; thefe are hairy and foft: The upper Part of the Stalk divides into Three or Four fmaller, each being terminated by a fingle Head of Flowers, included in One common Empalement, compofed of a double Series of Leaves, which are narrow, and as long as the Rays or Border of the Flower, as is reprefented at *c*; the Border or Rays of the Flower, marked *d,* is compofed of many Female Flowers, which have a fhort Tube, and are ftretched out at the Top on the Side like a Tongue, as is reprefented at *e.* The Difk, or middle of the Flower, is compofed of many Hermaprodite Flowers,

Flowers, which are tubulous, Funnel-fhaped, and cut into Five Parts at the Top, as is fhewn at /; where it fits upon a Germen, which afterward becomes a fingle oval compreffed Seed, as at *g,* crowned by an hairy Down. The Flowers are of a bright yellow Colour, and appear in *May,* which is the Seafon when there are the greateft Number of Flowers •, but in moift cool Summers there is frequently a Succeffion of Flowers till Autumn. The Seeds ripen in *Augujl,* which are difperfed by the Winds, whereby the Plant propagates very fad. It grows naturally upon the *Alps* and Mountains in *Germany* -, and is fuppofed by many to be a very poifonous Plant, v/hich will deftroy *IFolves, Dogs,* and other *Animals* ; though others recommend it as an Antidote to expel- the Poifon of *Scorpions,* The Roots are the only Parts of the Plant ufed, andth«*: but feldom; though it has a Place among the medicinal Simples in mod Difpenfaries.

P L A T E CXXIX.

DRACOCEPHALUM, *Lin. Gen. Plant.* 648. *Moldavica^ Tourn. Inft. R. H.* i#4- *Tab.* 85. *Rail Metb. Plant.* 64. Dragons Head, or *Moldavian* Baum,

THIS Genus of Plants is ranged in Doftor *Linnaus*\ Firft Se&ion of his Fourteenth Clafs, intituled, *Didynamia Gymnofpermia* \ the Flowers having Two long and Two fhort^Stamina, and being fucceeded by naked Seeds. To this Genus he has joined the *MoUdavica* of *Tournefort,* of which Genus this is a Species. *Tcurnefort* places this Genus in his Fourth Clafs of Plants, and in the Firft Sedtion, in which he includes the Herbs with a libiated or lipp'd Flower, whofe upper Lip is galeated and falcated. Mr. *Ray* ranges it in his Fourteenth Clafs of Plants, which includes the Herbs whofe Flowers grow in Whorles round the Stalks.

The Species here reprefented is the

DRACOCEPHALUM, *floribus verticillatis brafleis oblongis, ftrraturis fpinofis foliis jubtomentojis, Lin. Sp. Plant. 595.* Dragons Head, with oblong fpinous Bradteii, and woolly Leaves. This is the *Moldavica Orientalis betonica folio», flore magno violaceo, Tourn. Cor.* 11. Eaftern *Moldavian* Baum, with a Betony Leaf, and a large Violet Flower-, and the *Dracocephalum, floribus verticillatis, foliis lanceolatis floribus cblongis, Hort. Cliff.* 308. Dragons Head, with Flowers growing in Whorles, Spear-fhaped Leaves and oblong Flowers.

This Plant was difcovered by Doftor *Tournefort* in the *Levant,* who fent the Seeds of it to the Royal Garden at *Paris,* where it fucceeded •, and from thence the Gardens in moft Parts of *Europe* have been furnilhed with this Plant.

It is generally called an annual Plant •, but I have frequently had the Roots live Two Years, efpecially when the Winters have proved favourable, and thofe have flowered early the following Summer : But as the Plants which come up from Seeds in the Spring, do perfedt Seeds the fame Year, fo there are few Perfons who regard the Roots after. The Stalks of this Plant are fquare, and rife a Foot and a Half high; theie are hoary, and divide into Two or Three fmaller Branches, which are garniflied with oblong Leaves, placed by Pairs oppofue at each Joint, and are hoary on their under Side, with feveral longitudinal Veins running through them. From the Wings of the Leaves the Flowers are produced in Whorles round the Stalks, having Three or Four fmall roundifh Leaves growing to the Bafe of their Footftalks, which is reprefented ac the End of the Footftalk of the Flower *a,* (thefe are what *Linnaeus* terms Brachsea) deeply fawed at the Edges, each Serrature ending in a foft Spine. The Empalement of the Flower is tubular, and of One Leaf, and (lightly cut at the Top into Five Parts. The Flower is of that Kind which *Linnaus* terms^ *ringent {grinning),* and by *Tournefort, Ray,* and others, is *Lip Flower* \ it is of One Leaf, having a long Tube, and divided at the Top into Two Lips, as is reprefented at *a*; the upper Lip is forked and ereft, the lower Lip is cut into Three Parts, *b* reprefents the tubular Empalement of the Flower, *c* fhews the Four Stamina \ Two of which ftand ereft, and the Two longer incline to the lower Lip, turning up their blunt Stigma. Theie Flowers are of a violet Colour, and appear about the End of *June* •, but there is a Succeffion of them, towards the Tops of the Stalks, near Two Months, in moderate Seafons. After the Flower is paft, the Empalement *a** becomes the Cover to the Seeds 5 which are generally Four to each Flower, as reprefented at /; thefe ftand naked round the Receptacle *e.* The whole Plant hath an aromatick Scent.

Pl. CXXIX

DRACOCEPHALUM, floribus verticillatis bracteis oblongis serratis spinosis foliis subcuneatis Hort. Upsal. 88.

Publish'd according to Act of Parliament by P. Miller Dec.r 1st 1758

Fig. 1. Helichrysum, ... Fig. 2. Kurmtvsi[illegible]

PLATE CXXX.

ECHINOPS, *Lin. Gen. Plant.* **829.** *Echinopus, Town. Inji. R. H.* **463.** *Tab. 262. Carduus Sphatrocephalus, Rait Metb. Plant.* **43. The Globe Thiftle.**

THIS Genus of Plants is ranged in the Firft Sedtion of *Linnaus's* Nineteenth Clafs, intituled, *Syngenefia Polygamia Mquatis. tournefort* places this Genus in the Fourth Section of his Twelfth Clals or Plants, intituled, *Herbs with a fiofculous Flower, wboje Florets are equally cut at the Top, and each fits in its proper Empalement.* Mr. *Ray* ranges it in his Ninth Uais, which he titles, *Corymbiferis affines.*

The Species here reprefented is,

ECHINOPS, *calkulis unifloris, caule unicapitato, Lin. Sp. Plant.* **815. Globe Thiftle with one Flower in each Empalement, and One Head upon each Stalk: 1 his** *is the Echinopus minor, J.B.3-7*-* J m f er Gl ?^ **Thiftle. By• *Label* it is titled, *Ritrojonbus c<eruleis, Icon.* 8. *CafparBauhin* titles it, *Carduus Sph^rocephalus caruleis minor. Pin.* 381. Smaller blue Globe 1 nitue.**

This Plant hath a perennial Root and an annual Stalk* The Root is compofed of many ftrong rough flefhy Fibres, which creep in the Ground; from which arife feveral white Stalks about Two Feet high, which are garnifhed with long Leaves at every Joint, which are deeply cut and jagged, and armed with fharp Spines on their Edges •, thefe are green on their upper Surface and white underneath. The Stalks divide towards the Top into Two or Three fmall Branches, which are garnilhed with Leaves of the fame Shape, but are fmaller than thofe upon the main Stem. Each of thefe Stalks is terminated by a globular Head of Flowers, which are of a fine blue Colour. The Heads are compofed of many Hermaphrodite Flowers, each having a diftinft fcaly Empalement, as is reprefented at *a.* Thefe are cut into many Segments at the Top, as is fhewn at *b* •, each of thefe fit upon an Embrio, which afterward becomes an oblong Seed, (hewn at *c*; which in dry Seafons ripen very well in *England.* This Plant flowers in *July* and *Auguft,* and the Seeds ripen in Autumn*

PLATE CXXXI.

EUCHRYSUM, *tcurn. Infi. R. H. 4P- Plant.* **34.** *Gnapbalium, Lin. Gen. PL* **850. Flower, or Golden Caflidony.**

THIS Genus of Plants is ranged in the Second Sedtion *ofTournefort's* Twelfth Clafs, intituled, *Herbs ™«h a flofculous Flower and a downy Seed.* Mr. Ray Places it in the Second Seftion of his Seventh^Clafs, vhichhe titles, *Herbs with a naked dtfmde Flow* g£ *downy Seed.* Doftor *Umvus* ranges it in ™™™yl vifion of his Nineteenth Clafs, intituled, WW g£. *gamiafuperflua.* The Flowers being competed ortier maphroditeand Female Florets, and the Stamina and Summits being joined in a cylindrical Body.

The Species here reprefented are,

Fig. , . EucH^suM i . *j f f* ^ *longtonbus foliis incanu, Hort. Amjt.* **2. J«9' >**

4 « E t e m a l Flower with narrow and longer Leaves which are hoary.

Dodor *Linnaus* fuppofes this is the fame Plant as the *Elicbryfum Oriental* C. *B. P.* 264. but thole who have feen both Sorts growing, can never doubt of their being diftinft Species: For the Oriental Sort never rifes with Stalks, but ftioots out many Heads near the Ground; whereas this Sort rifes with Stalks Four or Five Feet high, dividing into many Branches, which are garnimed with long narrow Leaves placed alternately; but the other hath Spear-lhaped Leaves, growing in Clutters without Order. The Flowers of this grow in a loofe Corymbus, having long Pedicles; but thofe of the other grow compact.

The Root of this Plant is compofed of many ligneous Fibres, from which the fhrubby round Stalk ariies, which is white and woolly; it rifes to Four or Five Feet high, which divides into feveral Branches, garnifhed with long narrow white Leaves growing clofe to the Branches, without any Footttalk, and are generally reflexed backward. The Branches are terminated by a Corymbus of Flowers, each Flower being compofed of feveral Hermaphrodite Florets, One of which is reprefented at *e i* thefe are all included in One common fcaly Empalement reprefented at *a.* The Florets expand at the Top, where they are (lightly cut into Five Segments, as are reprefented at *b* and *a* thefe are white and fil-very on their Outfide, but within are yellow, they appear all the Summer, and fometimes perfeft their Seeds.

Fig.

fig. 2. ILL rctTR YSUM font's dheartttfus c&currend'Sus fiw-tus incanis fioribus Corymbofis. Eternal FJower, with narrow running Leaves hoary on their under Side, and Flowers growing in a Corymbus.

This Plant was raifed in the *Chelfea* Garden, from Seeds which came from the *Cape of Good Hope. It* hath a Root compofed of many Fibres, from which arife many irregular Stalks which divide into many Branches; thefe are garnifhed with oblong Leaves, green on their upper Side, but white underneath ; and from each there *uns a Border or Wing along the Stalk from one to the other, fo as to form what the former Botanifts termed a winged Stalk ; but *Doftor Linnaus* ftiles thefe running Leaves. The Top of each Stalk is terminated by a compound Corymbus of Flowers compofcd of many fmall ones, which are each compofed of many fmall yellow Flowers growing very comphcft. Thefe continue in Succeffion moft Part of Summer, and perfedl their Seeds in the Autumn.

Both thefe Sorts require Protection from Froll in Winter, and are eafijy propagated by Cuttings during any of the Summer Months.

P L A T E cxxxn.

EMERUS, *Cafalp.* 117. *Tourn. Infi. 0$o. Tab.* 418. *Colutea Scorpioides, Raii Meth.* 163. *Coronilla> Lin. Gen. Plant* 789. Scorpion Sena.

CpOURNEFORT ranges this Genus of Plants in the -* Third Seftion of his Twenty-fecond Clafs, intituled, *Trees and Shrubs with a papilionaceous Flower whofe Leaves are conjugated^ having many /mall Leaves ranged along the Midrib.* This (hould properly have been included in his Tenth Clafs, with the other papilionaceous Plants ; but he has feparated the Trees and Shrubs of this Clafs from the Herbs, and placed them in his laft Clafs; in which he has been followed by Mr. *Ray.* Doftor *Linnaus* ranges it in his Seventeenth Clafs of Plants, intituled, *Diadelphia Decandria,* the Flowers have Ten Stamina joined in Two Bodies, and he puts it under the Genus of *Coronilla* •, to which he alfo joins the *Securidaca* of *Tournefort.*

The Species here reprefented are,

Fig. 1. EMERUS *Cafalp.* 117. Scorpion Sena.

This is a low Shrub, which feldom grows more than Four Feet high, putting out many Stems from the Root; thefe, when young, are green and fmooth, but as they become older they have an Afh-coloured Bark, which is rough; they are garnifhed their whole Length fvith winged Leaves, compofed of Four Pair of fmall Leaves placed along the Midrib oppofite, and terminated by an odd one : Thefe Leaves are obtufe, and indented at their Extremities. The Flowers are produced at the Wings of the Leaves, generally Two upon each Foot-ftalk, which is often longer than the Leaves. Theie have a fhort Empalement of One Leaf, reprefented at^. The Flower is of the Butterfly Kind, as is fhewn at *b.* This is compofed of a Standard (or Vexillum) which is Heart-fliaped, reprefented at *c.* The (Ate, or) Wing*t' are fhewn at J. And the (Carina, or) Keel, at*. Thefe Flowers are yellow, and make their Appearance in *May*; but there is ufually a Succeffion of them till Autumn. They are fucceeded by long taper Pods, repre-fented at/* which ripen their Seeds in Autumn.

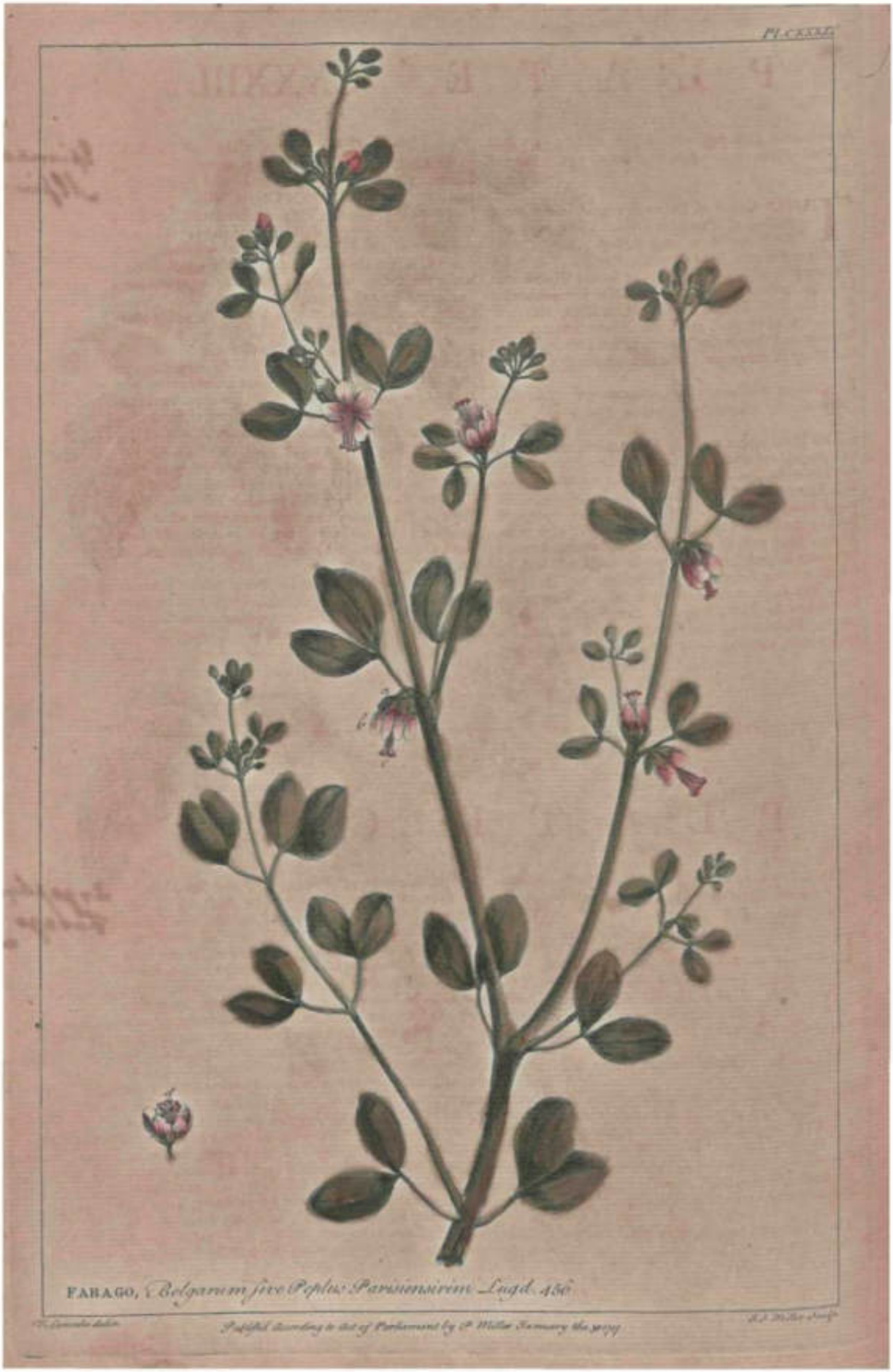
Fig. 2. EMERUS *minor> Tourn. Inft. R. H.* 650. Smaller Scorpion Sena.

This Sort is the moft common in the *Englifh* Gardens, the Firft being in very few ; nor was it known of late Years here, till I procured the Seeds from *Italy.* This Second Sort rifes to a greater Height than the Firft* but the Flowers are fmaller. The Leaves generally have One Pair of fmall Leaves more upon each Mid-rib, but they are narrower, and end in a Point; fo that there can be no Doubt of their being diftindt Species, efpecially as they continue their Difference when raifed from Seeds.

Pl. CXXXII

Fig. 1. EMERUS. Cæsalp. 117

Fig. 2. EMERUS minor Tourn. Inst. R. H. 650



FABAGO, Belgarum sive Poplus Parisiensium Lugd. 456

Published according to Act of Parliament by P. Miller January the 1st 1759

PLATE CXXXIII.

EPIMEDIUM *Bod.* 599. *Tourn. Inft. R. H.* 232. *Rail Meth. Plant.* 129. *Lin. Gen. Plant.* 138. Barrenwort.

THIS Genus of Plants is ranged in the Sixth Seftion of *Tournefort's* Fifth Clafs, intituled, *Herbs with a crofs-jhaped Flower, whofe Pointal turns to a Pod with One Cell* Mr. *Ray* places it in his Twenty-fifth Clafs, which contains feveral Genera that he knew not where to range. Doftor *Linnaus* ranges it in the Firft Section of his Fourth Clafs, intituled, *Tetrandria Monogynia*; from the Flower having Four Stamina and One Style. We have but One Species of this Plant in *Europe** which is here reprefented; *viz.*

EPIMEDIUM *Bod. pempt.* 599. Barrenwort. *John Bau-&z* titles it, *Epimedium quorundam, Hijl.* 2. *295'*

This Plant hath a creeping Root, whereby it fpreads and propagates very faft, fending many ftrong Fibres down into the Ground; and upward arife many fmall, ftiff, fmooth Footftalks, about Nine Inches high, divided toward the Top into Three fmaller Sprigs or Stalks; each of which is again divided into other Three ; upon each of thefe fmaller Footftalks ftands a ftifF heart-fhaped Leaf, pointed at the End, and indented on the Edges; of a pale Green on the upper Side, but Grey underneath, and full of Nerves. A little below the Firft Divifion of the Footftalk, comes out the Footftalk of the Flowers, which is near Six Inches long, dividing into feveral fmaller, each having Three Flowers, One upon each of the leaft Footftalks at the Extremity. The Flower is compofed of Four Leaves, placed in Form of a Crofs, as is reprefented at *a.* Thefe are of a reddifh Colour, with a yellowifh Stripe on the Border. They are hollow at firft, and fhaped like a Pipe, as is reprefented at *b.* The Empalement of the Flower is compofed of Four Green Leaves, reprefented at *c*\ which are fituated directly under the Petals, and clofely adhere to them, fo that a negligent Obferver would fuppofe them One. In the Center of the Flower rifes the Pointal *d*\ which afterward turns to a Pod, having Two Valves^ as is reprefented at <?, containing feveral fmall Seeds.

This Plant grows naturally upon the Mountains in *Auftria* and *Liguria.* Mr. *Ray* found it growing near *Ponteba,* which parts the *Auftrian* and *Venetian* Territories. It flowers in *April,* and the Seeds ripen the Beginning *of June,* when they are foon caft out of the Pods. It delights in a moift fliady Situation, and increafes faft by its creeping Roots. For the remarkable Oddnefs of the Flower, it deferves a Place in Gardens.

Do&or *Tournefort* found Two other Varieties of this Plant in the *Levant*; one with a greenifh white, and the other a pure white Flower; but as thefe only differ in the Colour of their Flowers, fo they are efteemed as feminal Variations.

There have been great Doubts amongft Botanifts concerning the *Epimedium* of *Diofcorides* and *Pliny* ; fome have fuppofed it to be the fame with this which is here reprefented, but others take it to be a different Plant.

PLATE CXXXIV.

FABAGO, *Tourn. Injl.* 258. *fab. 135- Capparis Fabago Raii addend.* 192. *Zygophylluvi Lin. Gen. Plant.* 474. Bean Caper.

THIS Genus of Plants is ranged in the Fourth Sedion of *Toumeforfs* Sixth Clais, intituled, *Herbs with a Rofe Flower, whofe Pointal turns to a Fruit with many Hu/ks.* Doftor *Linnaus* ranges it in the tirit Seftion of his Tenth Clafs, intituled, *Decandrta Monogynra,* the Flowers having Ten Stamina, and One Style.

The Species here reprefented is,

FABAGO *Belgamm, five Peplus Parifienfmm Lugd. 456.* The Bean Caper. This is the *Capparis Portulac* folio C. B. P.* 480. Caper with a PurQam Lear; and the *Capparis Fabago Bod. pempt.* 741- Bean Caper. Doftor *Linnaus* titles it, *Zygophyllum, capfuhs prifmatico-pentaedris. Hort. Upfal.* 103. Zygophyllum, witn a five-cornered prifmatic Seed Veffel.

This Plant hath a thick, long, perennial Root, which is covered with a brown Skin, and, as ic advances in Age, becomes more ligneous; and the Head of the Root rifes higher out of the Ground, by the Falling off of its annual Shoots, for the new Shoots come out above the Part where thofe of the former Year were placed. From the upper Part of the Root arife feveral firm, round, fmooth-jointed Stalks* which divide into Branches of the fame Form; thefe are garnifhed wifh Leaves at every Joint; whofe Footftalks are placed oppofite, and are about an Inch long; each fuftaining Two oval Lobes (or fmall Leaves), which are fucculent, like thofe of Purflane, and of a fea-grcen Colour; the Leaves which grow on the lower Part of the Stalk and Branches being much larger than thofe on the upper. From the Wings of the Leaves come out the Footftalks of the Flowers, which fometimes are fingle, and at others are double, One on each Side the Branches; each fuftaining a fingle Flower, having an Empalement compole of Five concave Leaves, repre^ Tented at *a.* The Flov/er hath Five concave Petals, which are much larger than the Empalement, as is reprefented at *b*; in the Middle of which arife the Ten Stamina, furrounding the Style, as is fhewn at f; which are ftretched out much beyond the Petals, and

are terminated by oblong Summits lying proftrate, as is reprefented at *d.* After the Flower is fallen, the Pointal becomes an oblong, five-cornered, flefliy Capfule, having Five Cells, which have Valves, and are divided by an intermediate Partition -, each inclofing Two or Three roundifht comprefled Seeds. In the Autumn the Branches decay and fall off, leaving the ftumpy Root naked, which puts out new Shoots in the Spring. In warm Years this Plant will perfedt Seeds very well in *England.*

It grows naturally in *Syria.* I have frequently received the Seeds from *Smyrna* and *Aleppo.* Some have mentioned this to grow wild in *Italy* \ but Mr. *Ray* could not find it there. The Root of this Plant is of a long Duration •, there is at prefent one growing in the *Chelfea* Garden, which is more than Forty Years old, and is yet very vigorous, putting out many Stems every Year; and, in warm Seaforts, produces many good Seeds. It requires a dry lean Soil, and a warm Situation. If thefe Roots are planted in Lime Rubbifh, they will not grow fo vigoroufly as in good Ground* fo will better endure the Winter's Cold ; for, when they are full of Juice, the Froft often deftroys them. The. *Syrian* Name of this Plant is *Morgfani.*

P L A T E CXXXV.

FILAGO, *Lin. Gen. Plant.* 891. *Gnaphalium^ Tourn. Inft.* i?.//. 461. *Tab.* 261. *Gnaphalium maritimum Raii Meth. Plant.* 38. Cottonweed, or Cudweed.

THIS Genus of Plants is ranged in the Fourth Se&ion of *Linn<eus* Nineteenth Clafs, intituled, *Syngenefta Polygamia necejfaria.* The Flowers of this being compoied of feveral Female and Hermaphrodite Florets included in One common Empalement, and the Stamina and Style coalefce in the Hermaphrodite Florets. *Tournefort* places it in the Third Sedion of his Twelfth Clafs, which includes thofe Plants which have flofculous Flowers, and Seeds without Down. Mr. *Ray* ranges it in his Eighth Clafs, which contains the Corymbiferous Plants with a naked Flower.

The Species here reprefented is,

FILAGO *tcmentofa^ Cory mho fubramofo, foliis oblongis obtnjis crenatiSy Lin. Sp. Plant.* 927. Wooly Cudweed, branching under the Flower-Heads, and oblong blunt Leaves, which are crenated. This is the *Gnaphalium maritimum.* Sea Cudweed, *C. B. P-* 263. and *thtChry-[anthemum perenne Gnaphaloides maritimum^ Mor. Hift,* 4. *p.* 81. Perennial maritime Chryfanthemum, like Cudweed. In the *Hcrtus Cliffbrtianus* it is titled, *Santolina cerymbo tetminali fubdivifo foliis oblongis integerrimis obtufis.* 398. Lavendar Cotton, with a Flower-Hcad terminating the Divifion of the Branches, and oblong blunt intire Leaves.

It hath a ligneous Root, fending out many Fibres, which fpread near the Surface of the Ground \ from which come out feveral hard Stalks, which trail upon the Ground, and fend out on every Side many final! Branches, which are clofely garnifhed with oblong blunt Leaves, crenated on their Edgef, *fet* dole to the Branches without any Footftalks; thefe are covered over with a cottony Down extremely white. The Flowers are produced toward the End of the Branches, upon ihort Footftalks, as is reprefented at *g* and *h.* Theie are compofed of feveral Florets collected in a Sort of Corymbus, and included in one common fcaly Empatement, as is reprefented at *a.* The Florets are funnel-fhapsd, and divided at the Top into Five Segments which fpread open, as is fhewn at *b.* Thefe fit upon the Germen <, fituated between the gutter-(haped Lear *d.* The Germen afterward becomes a final!, oval, fmooth, comprefled Seed, as is reprefented at *e;* which hath no Down adhering to it, but is covered by a Hood marked/. The Florets are of bright yellow Colour, which, with the extreme Whitenefs of the Leaves ana Branches make a pretty Appearance.

It flowers in *June, July,* and *Augufl -,* and in warm dry Seafons the Seeds will ripen in *September* \ but it much Wet happens when the Flowers open, the Seeds prove abortive.

This Plant grows naturally in great Plenty on the Borders of the *Mediterranean* Sea \ and alfo in *Anglefa** and on the Shore in *Cornwall,* from both which Places I have received the Seeds. It is a perennial Plant, and will live abroad in mild Winters without Shelter, provided it is planted in a gravelly dry Soil; but in good Ground it is, apt to grow rank in the Summer, and then the Froft foon deftroys it.

FILAGO *tomentosa corymbo subramoso, foliis oblongis obtusis crenatis. Lin. Sp. pl. 927*

Publish'd according to Act of Parliament by P. Miller Jan. 30, 1757

Fig. 1. FUMARIA *siliquis lanceolatis tetragonis caulibus diffusis acutangulis &c. sp. plant.* 981
Fig. 2. FUMARIA *pericarpiis monospermis racemis caule diffuso &c. sp. plant.* 981

Pubd according to Act of Parliament by P. Miller June 1st 1757

P L A T E CXXXVI,

FUMARIA, *fount. Injt. R. H.* 4«- ***• 2J7- . *Raii Meth. Plant.* 130. *Lin. Gen. Plant.* 760. Fumitory, in *French, Fumeterre.*

THIS Genus of Plants is by *fournefort* ranged in the Firft Seftion of his Eleventh Clafs, which includes the Herbs with a polypetalous anomalous Flower, whofe Pointal turns to an unicapfular *t* ruit. Mr. *Ray* places it in his Twenty-fifth Clafs, which contains the anomalous Plants he knew not where to range. *Unnaus* puts it in the Firft Section of his Seventeenth Clafs, intituled, *Biadelphia Hexandna;* the Flowers having Six Stamina, which are feparated in Two Bodies; tnd he joins to this Genus the *Capnoids* of *Tournefort,* the *Cyfticapnos* of *Boerhaame,* the *Corydalis* of *Dillenius,* and the *Cucularia o(Juffeu.*

The Species here reprefented are,

Fig. 1. FUMARIA *filiquis linearibus tetragonis, cauBus diffufis acutangulis, Lin. Sp. Plant. 700.* Fumitory with narrow Pods having Four Angles and diffufed Stalks with Iharp Angles. This is the *Fumaria lutea C. B. P.* 143. Yellow Fumitory, and the *Fumaria lutea montana, Dalech. Hifl.* 1294- Mountain Yellow Fumitory.

This Plant hath a perennial Root compofed of many flefhy yellow Fibres, which ftrike deep into the GroundI, from which there arifes a great Number of fuccufent Stalks, which fpread and branch out upwardI in a diffufed Manner, and grow about Six Inches high, lhele are garnifhed with compound Leaves ftanding on long branching Footftalks ; and are compofed of many irregular Lobes (or fmall Leaves) which are indented at the Top in Three Parts. From the Divifions of the Stalks come out the Footftalk of the flower, which is naked and taller than the Leaves, fupporting Eight or Nine irregular lipp'd Flowers growing ma loofe Spike, whiclTare of a bright yellow Colour * represents the upper Lip or Standard; *, the lower Lip or Beard, ending in a Tail *c;* between thefeLips (as it were in the Pafate of a Mouth) the Stamina are fituated, furrounding the Pointal <?, which afterward becomes a Pod, as at *d,* containing feveral fmall Seeds.

The Leaves of this Plant continue green all the Year, and the Flowers continue in Succeffion moft Part of the Year, fo that the Plants are feldom deftitute *oi* Flowers, which renders them worthy of a Place in a Garden. The Seeds of this Plant are frequently caft out, by the Elafticity of the Pod when ripe, to a conliderable Height; and, when they happen to grow near Walls, they fall on the Joints of the Wall, and the Plant will grow in the Morter, where they will refift the Injuries of Weather, and multiply exceedingly •, therefore this is a very proper Plant to grow in Rockwork, or upon old Walls or Buildings, to hide their Deformity.

Fig. 2. FUMARIA *pericarpiis monofpermis racemofis, caule diffufo, Lin. Gen. Plant.* 700. Fumitory with a fingle Seed in each Pod growing in a RacemuSj and a diffufed Stalk. This is the *Fumaria officinarum & Difcoridis, C. B. P.* H3- Common Fumitory.

This is an annual Plant, which grows naturally on arable Land in moft Parts of *England.* It hath long* flender, fibrous Roots, fending out many angular Stalks, which are weak and generally trail upon the Ground -% the lower Leaves grow upon long, broad, and angular Footftalks, are deeply divided almoft after the Manner of the umbelliferous Plants, and are placed alternately on the Stalks. The Flowers are produced in loofe Spikes at the Extremity of the Branches, which are flender, and fhaped like thofe of the other Sort, as are reprefented at *k,* but are of a purple Colour. Thefe are fucceeded by round Seed Veflels, containing a fingle Seed, reprefented at /. This Sort comes early to flower in the Spring; and there is generally a Succeffion of young Plants, which continue flowering great Part *f Summer.

It is ufed in Medicine-, and is reckoned to be a great Cleanfer of the Blood. Dodor *Boerbaave* frequently prefcribed the Juice of this Plant for the Jaundice and bilious Colicks.

P L A T E CXXXVIL

GALEGA, *Tourn. Infl. R. H.* &*• *<*• **• *«» *Meth. addend.* J92. *Lin. Gen. Plant.* 770. Goats Rue.

THIS Genus of Elants is ranged in the Second Sedion *of rournefirt's* Tenth Clafs, which includes the Herbs with a Butterfly Flower, whofe Pointal turns to a long^ Pod with One Cell Dodor *Umm* places it in the^econd Section of his Seventeenth Clafs, intituled, *Diade/phia Decandria,* the Flower having ten Stamina-, Nine of which are joined, and the other is feparated.

The Species here reprefented is,

GALEGA, *Hort. Cliff. z6i. Lin. Sp. Plant* 714. Goats Rue. This is the *Galega vulgarts, C. B. P.* 352. Common Goats Rue.

There are Two Varieties of this Plant; one with a white, and the other a blue Flower, which frequently arife from the fame Seeds, fo are indifferently ufed in Medicine. But there is another Sort, with larger Flowers and thicker Pods, which came originally from *Africa,* and is preferved in many botanic Gardens.

The

The Sort here repreſented grows naturally in *Italy* and *Spain*\ but is propagated in the *Engliſh* Gardens to ſupply the Markets for medicinal Uſe.

It hath ſtrong, thick, fibrous Roots, which ſpread out on every Side, and ſtſike deep into the Ground > from which ariſe ſeveral round Stalks, which are about Two Feet high, ſending out many Branches ; theſe are garniſhed with winged Leaves at every Joint, which are compoſed of ſeveral Pairs of Lobes, and terminated by an odd one. The Flowers grow in Spikes upon naked Footſtalks, which ariſe from the Wings of the Leaves, in the ſame Manner as the ſpiked *Vetch.* Theſe are of the Butterfly Kind, as are repreſented at *a*; conſiſting of a Standard £, and Two Wings, repreſented at *c* The Keel, which is ſhewn at *d,* out of the Empalement, ariſes the Ten Stamina ^ Nine of which are joined, as at £, and One is ſeparated, as is repreſented at/:, from the ſame Empalement *g,* ariſes the Pointal; which afterward turns to a long, ſlender, upright Pod, marked *h,* containing ſeveral kidney-ſhaped Seeds, repreſentWd at *i.*

This Plant is celebrated as an Alexipharmick and Sudoriſick, remarkably diſcuſſing any thing peſtilential or poiſonous. Mr. *Boyle,* in his Treatiſe of the *Wholeſomeneſs and Unwholeſomeneſs of the Air,* beſtows Three or Four Pages in celebrating the Virtues of *Goats Rue* in peſtilential and malignant Diſeaſes* from his own Obſervation and Experience. ^

It is a perennial Plant which continues ſeveral Years, but the Stalks decay every Autumn, and new ones ariſe in the Spring\ it flowers in *June*> and the Seeds ripen in *Augujl.*

P L A T E CXXXVIII.

Genista, *Lin. Gen. Plant. y66. Cytiſo-Genijla, Tourn. Jnji.* 649. Broom.

THIS Genus of Plants is ranged in the Second Seſtion of *Linnaeus'%* Seventeenth Claſs, intituled, *X)iadelphia Decandria,* the Flower having Ten Stamina; Nine of which are joined, and one Hands ſeparate. *"Tournefort* places it in his Twenty-ſecond Claſs, though it would more properly come under his Tenth, with the other papilionaceous Plants ; but he has ſeparated all the Trees and Shrubs of this Claſs from the Herbs. He has titſed this Genus *Cytiſo-Geniſta,* becauſe the Leaves < in ſome Places ſingle, and in others they are triſoliate.

The Species here repreſented is,

GENISTA *ramis triquetris ſubarticulatis, foliis tricuſpidatis, Lm. Sp. Plant.* 710. Broom with Three cornered Branches which are jointed below, and Leaves eliding in Three Points. This is the *Cytiſo-Geniſta Luſitanica magnc flore, "Tourn. Inji.* 649. *Portugal* Broom with a large Flower.

This Plant grows naturally in *Portugal,* from whence I have ſeveral times received the Seeds. It hath ſlender pliant Branches, as is repreſented at *a,* which are generally Three-cornered; and are garniſhed with Leaves coming out by Threes, as *in* the Trefoils, and *Cometim&ſc.ſiſglir* thoſe^hich terminate th^Eranches end in **Thſ *if P6^^^PpmS^F%T9^ -tike* Branches of** this Sort ſpread and turn downward ; whereas thoſe of our common Broom grow erect:, and cloſer together. The Flowers come out ſingly from the Wings of the Leaves, on ſhort Footſtalks, which are yellow, and are of the papilionaceous (or Butterfly kind), having a ſhort Empalement cut isto Five Parts, as is repreſented at r, out of which ariſes the Pointal *d.* The large Standard (or Vexillum) is marked *e* \ the Two Wings /, and the Keel *g.* The Ten Stamina are ſhewn at *h.* The Pointal *d,* afterward turns to a Pod at *U* which contains many kidney-ſhaped Seed. It flowers in the End of *April* and Beginning of *May,* and the Seeds ripen in *July.*

This Shrub grows to the Height of Six or *Seven* Feet, ſending out many Branches, ſo as to form a large ſpreading Head; and the Branches being fully garniſhed with Flowers in every Part, makes a fine Appearance during their Continuance ; it therefore deſerves to have a Place among other flowering Shrubs of the ſame Growth. It is very hardy, and propagates eaſily by Seeds.

GÊNISTA ramis teretibus subarticulatis foliis trifoliatis pedatis Lin. Sp. pl. 710.

Published according to Act of Parliament by P. Miller June 20. 1757.

Pl. CXXXIX.

Fig. 1. GALIUM, *foliis octonis linearibus sulcatis, ramis floriferis brevibus. Hort. Cliff. 34.*
Fig. 2. GENTIANA, *corollis quinquefidis rotatis verticillatis calycibus spathaceis. Hall. Helv. 479.*

Published according to Act of Parliament by P. Miller Feb. 28. 1757.

PLATE CXXXIX.

GALLIUM, *tour*. Infi. R. H.* 113./«*• 39;.J?V^ PW. 117. Cheefe-runnet, or Ladies Bcdftraw, in *French, Cailklais.*

THIS Genus of Plants is ranged in the Ninth Sedion of *Tourneforth* Firft Clafs, which includes the *Herbs with a Bell-Jhaped Flower of One Leaf, whofi Empalement becomes a* 4™*"%™* *Fruit. Linn*us* places it in the Firft Settlor, of his Fourth Clafs, *mtiwkd^etrandrhMonogynia,* thcFlowershaving Four Stamina and one Style.

The Species here reprefented is, *if*

Fig. 1 GALLIUM, *foliis oBonis linearibus fulcatts ramis floriferis brevibus, Hort. Cliff.* 34. Ladies Bedftraw with Eight narrow furrowed Leaves, and fhorter Flower Branches. This is the *Gallium caule ercBo% foliis phrimisvertidllatis linearibus, Ltn Flor. Lap.* 61. Ladies Bedftraw with an upright Stalk, and many narrow Leaves growing in Whorles.

This Plant hath a perennial Root, which creeps in the Ground, and is very tough, the Stalks are between Three and Four Feet long, growing ercft nil the Seeds are formed which by their W:a t often caufe them to

T o^tr^c Tmvincr a Furrow in the Middle, narrow Leaves, naving d x unw

SI for the moft Part are Eight, fbnd.ng togethe,-in Whorles round the Stalks, as is reprefented at *A*. They are of a lucid Green, and terminate in Po nts. At each Joint come out Two Side Branches, the lower Par ^of which are garnifhed with the fame Kindl of .Leas, but are terminated by loofe Spikes of ^ ^ ^ p * t * reprefented at *B* /each Flower is divided into Four Parts as is mewn at *a.* Thefe have an Erhpal mo rfO Leaf, cut into Four Segments, as * V?ch alle T i's becomes a dry Fruit, compofed of Two S*eds, as is Ihewn at <, and, when feparated, ™ ^ ^ ™ *t* Moon, as is (hewn at *d:* And *e* reprefents the bermen, which is iituated below the EmPalcmcnt > ». *minum*

The Plant here reprefented is the common G-&«to« of *Bauhinus,* and other *German* Wrners on, Botan > bu r I am in Doubt of its being the fame with «h« which grows naturally in *England:* For this hath much firmer Stks which are not fo hairy, and rifes ro ^ ^ J l ^ . ^ T s F in the Garden where they growin * * £ * ^ * ^h tuation, and have continued fo for Tnree 1 ca , is the whole Time I have had this Sort: growing, which I raifed from Seeds fent me from *Gema*, ' ^ r hat I imfufpecl, the Foreign Titles of W«« a ^ S ^ properly applied to thofe of our own Growt – thattheir common Plants are the &«?.™* ££ and

Gout. In *Cbejhire,* the People ufe it 1 n the r Run making of Cheefe; from whence it had the Appellation of *Cbeefe-runnet.* It flowers in *July.*

Fig. 2. GENTIANA, *Tourn. Inft. R. H.* 80. *Tab.* 40. *Lin. Gen. Plant.* 239. Gentian, or Felwort; in *French,* *Gentiane.*

This Genus of Plants is ranged in the Thir on of Tourneforts Firft Clafs, which includes the ... *Leaf, whofe Pe:ntal becomes a* lycafXLuh iJjZ haw * O«.-£ *others have Jany CeHs.* *Linntus* places it in the Second Secl.on, ot his Fifth Clafs, intituled, *Pentandrra Dtff*** from the Flower having Five Stamina and *Two bcyics.*

NUMB. XXIV.

The Species here reprefented is,

GENTIANA *corolla quinquefid" rotatis, verticillatis, calycibus fpatbaceis, Hall. He'h.* 479. Gentian with a quinquefid Petal, growingin Wnorles about the Stalk, and *I* hooded Empalement. This is the *Gentttuna major lulea, C. B. P.* 187. Greater yellow Gentian, or Felwort.

This Plant hath a large thick Root of a yellowilh

the End, ... of a yellowifh Green, and have Five large Veins on the Back of each. The Stalk rifes to the Height of Three or Four Feet, which is garnifhed with Leaves, growing by Pairs at each Joint, almoft embracing the Stalk at their Bafe; thefe are of the fame Form with the lower, but diminifh gradually in their Size to the Joir ing on Whorl ... One Leaf which is divided almoft to the Bottom ... as is Ge en os

at *A* filled with fmall Seeds, reprefented at *g*. The Figures *b* and *c* fhew the firft Appearance of the Flowers

This Plant grows naturally in the Paftures in *Switzerland,* and in the mountainous Parts of *Germany* from whence the Roots are brought to *England* for medial Ufe; there is a compound Water, and an Extract made of them. The Root of the *Gentian* is alfo One of the principal Ingredients in Bitters, and is frequently uled in many Diforders.

But a few Years ago, there was a Mixture of *Henbane* Roots brought over with *Gentian,* which was unhapprly ufed, and occafioned great Diforders in the Perfons to whom it was adminiftered •, upon which, great Enquiry was then made to find out what that Root could be; fome fufpefting it to be the Root of *Deadly Ntghijhade,* and others believing it to be fome of the poifonous umbelliferous Roots; but on comparing it with fome dried Roots of the *Henbane,* I found they were the fame. We have likewife an Account of the noxious Quality of theie Roots, printed in the *Synopfis Stirpium Hibermcarum,* which was communicated to the author by Doftor *Thomas Molynem,* Phyfician to the State. It was as follows:

The Dean of *Clonfert* was making fome Alterations in his Garden, and, looking over his Workmen, he obfered them to dig up many Roots, which he took for *Shrrets,* and therefore ordered fome of them to be carried in and drefled for Dinner; which was accordingly done; but all thofe who eat of them were in a fhort time feized with DLJnefs in their Head^ Sicknefs at the Stomach, attended with an unufual Heat and Drinefs in their Tnroats • and Two, who had eaten a larger Share than the reft, loft the Ufe of their Reafon and became delirious which continued for fome Days. And as it appeared evident, thefe Diforders were occafioned by the Roots, fo the Dean caufed fome of them to be planted, That he might be afiured what the Plant was whofe Roots had fhis bad Quality » and in the Spring, when they put out their Leaves, they proved to be the *Henbane),* which has been noticed by old Writers to be poffefled of thefe Qualities. And as the Diforders which were occafioned by thefe (Bp-pSfiS *f?T*^™ nVarly the fame, as is above related, fo I bought it S be of Ufe to infert it here, to cauoon others r^nfteatingofRootsw^ichtheyareunacqua:ntedw,^

PLAT

PLATE CXL.

GERANIUM, *Lin. Gen. Plant.* 746. *Tourn. Infi. R. H. 266. Tab.* 142. Cranefbill; in *French, Bee de Grue.*

THIS Genus of Plants is ranged in the Second Se6tion of *Linn*us*& Sixteenth Clafs, intituled, *Monodelphia Decandria*; the Flowers of this Clafs have the Stamina joined at their Bafe to a hollow Column, and thofe of this Section have Ten diftindfc Stamina at the Top. *Tournefort* places it in the Sixth Sedlion of his Sixth Clafs, which includes the *Herbs 'with a Rofe Flower, whofe Pointal turns to a Fruit compofed of many Cells.*

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

The Species here reprefented is,

GERANIUM *calycibns monophyllis, foliis quinquelobis integerrimis glabris peltatis, Hort. Cliff.* 345. Cranefbill with an Empalement of One Leaf, and Leaves having Five Lobes, which are fmooth, intire, and Target-fhaped. This is the *Geranium Africanum foliis inferioribus afari, Juperioribus Jlaphydis agri^e, *maculatis [plendentibus, &? acetofa fapore, Com. Rar. PI.* 52. *African* Cranefbill with under Leaves like Afarabacca, upper Leaves like Staves-acre, which are refplendent, fpotted, and tafte like Sorrel.

This Plant hath a round, (lender, branching Stalk, which requires ibrne Support; this at firft is Green, but afterward becomes Reddifh •, and, when older, turns to a dark Brown. The Joints are pretty far diftant, fometimes Three or Four Inches •, at each of thefe come out Three or Four Leaves, (landing upon pretty long Footftalks, which are joined to the Middle of the Leaves, like thofe of the *Water Lily,* which refemble an antient Target. The Leaves have Five roundifh Lobes, are thick, fucculent, and of a lucid Green, being marked with a Spot in the Middle, and have an acid Tafte: Toward the upper Part of the Branches come out the Footftalks of the Flowers, which are near fix Inches long, fuftaining at the Top Two, Three, Four, or Five Flowers, growing in a Sort of Umbel, each (landing on a feparate (horter Pedicle. Thefe are compofed of Five unequal Petals, reprefented at *b* 5 the Two upper being broader than the under, and are of an incarnate red Colour. Thefe have an Empalement of One Leaf, divided into Five Parts almoft to the Bottom, as is (hewn at *c* aiflkrf; in the Center is fituated the hollow Tube or Columella, which was joined the Ten Stamina, with the Style arifing from tr^mid&i£,*^mcic TO^|rninated by Five reflexed Stigmas, as is reprefented at *e.* The Empalement afterward becomes a Capfule inclofirig Five Seeds, which have long Beaks joined together, as is (hewn at /; when the Seeds are ripe they open at the Bottom,, and continue joined to the Apex of the Style, as reprefented at *g* \ and afterward, by the fpiral Screw of the Beak, twill, as reprefented *2Xh*\ when the Seeds are caft off by the Elafticity of the Screw to fome Diftance ; and the Seeds, being the heavier Part, fall firft to the Ground, and, by the turning of the Beak, are forced into the Ground, *a* reprefents the Leaf with its Five Lobes.

This Plant continues in Flower near Eight Months, therefore is worthy of a Place in every good Greenhoufe. It is eafily propagated by Cuttings during any of the Summer Months, and it frequently perfedts Seeds here ; but the other Method being the moil expeditious, few Perfons trouble themfelves with fowing of the *Setds.* It grows naturally at the *Cape of Good Hope,* and requires a good Greenhoufe in Winter ; but, in Summer, may be placed abroad in a (heltered Situation. If the'Branches are properly fupported, they will rife to the Height of Three or Four Feet.

PLATE CXLI.

€EUM, *Tourn. Inft. R.H.251. Tab.* 129. *Saxifraga, Lin. Gen. Plant.* 494. London Pride, or None-fo-pretty.

THIS Genus of Plants is ranged in the Third Seftion of *Tournefort*9^* Sixth Clafs, which includes the *Herbs with a Rofe Flower whofe Pointal becomes a Fruit, for the moft part bicapfular.* Do<5tor *Linnaeus* has joined the Plants of this Genus to the Saxifrage, and ranges them in the Second Se£lion of his Tenth Clafs, intituled *Decandria Digynia,* the Flowers having Ten Stamina and Two Styles.

The Characters are exhibited in *The Gardeners Dictionary,* under the Article of *Aretium.*

The Species here reprefented are,

Fig. I. GEUM *rotundifoliummajus,Tourn. Infi. R. H.* 251. Greater round-leaved Geum, or fpotted Saniele. This is the *Saxifraga foliis caulinis reniformibus dentatispetiolatis, Lin. Sp. Plant.* 403. Saxifrage with Kidney-Ihaped Leaves on the Stalks, which are indented and Hand on Footftalks.^ *Cafftar Bauhin* titles it, *Sanicula montanarotundifoliaimpr, Pin.* 243. Greater round-leaved Mountain Sanicle.

The lower Leaves of this Blunt are almoft round, refembling thofe of *Golden Saxifrage,* (landing upon long Footftalks, and are deeply divided on their Borders j they are hairy and Green above, and pale on their under Side ; the Stalks rife about a Foot high, which are hairy, and divide above into feveral fmall Branches, under each of thefe is placed a fingle Leaf; the Flowers are produced in loofe Panicles at the End of the Branches : Thefe are compofed of five Petals which fpread open, as is reprefented at *a,* which are White, and fpotted with Red ; ia the Center is placed the Style, with Ten Stamina furrounding it; Five lying on the Middle of the Petals, apd Five between, as is (hewn at *b* ; thefe have an Empalement of One Leaf, divided into Five Parts, represented at *c* ; which is permanent and funounds the Germen, and becomes a Fruit with Two Horns, reprefented *X.d% which fwells to a Capfule, (hewn at *, opening into Two Parts, as at/; having Two Cells, reprefented at *g,* which are filled with fmall Seeds, (hewn at *h.*

This Plant grows naturally on the *Alps,* and other mountainous Places, but is preferved in Gardens for the Beauty of its Flowers, which appear in *May* and *June.* It mud have a moid Soil and a fhady Situation.

Fig. 2. GEUM *folio fubrotundom$mi, piftilk floris rubro* Tourn Inft. R. H.* 251. Geum with a larger roundifh Leaf, and a Red Pointal. This is the *Sedum montanum ferratum guttato ficre, Park. Theat.* 738. Sawed Mountain Houfelcck with a fpotted Flower, commonly called *None-fo-pretty,* or *London Pride.*

This

GERANIUM, calycibus monophyllis, foliis quinquelobis integerrimis glabris petiolis Hort Cliff 241

Fig. 1. GEUM rotundifolium majus Tourn. Inst. R. H. 331.
Fig. 2. GEUM, folio subrotundo [illegible] pistillo flore rubro Tourn. Inst. 331.

Fig 1. GLADIOLUS foliis ensiformibus floribus unguiculatis distantibus

Fig 2. GLADIOLUS foliis linearibus floribus distantibus corollarum a. labiis longiore. Lin. Sp. plant. 37.

Published according to Act of Parliament by P. Miller Feb. 1. 1759.

This Sort grows naturally on a Mountain in the County of *Kerry* in *Ireland,* but has been long cultivated in the *Englijb* Guldens.

This Piant lends out many Heads or Off-fets compoird of flat roundifli Leaves, fpread open like a Rofe, as at *a*; thcfe continue Green all the Year. From the Center of the Heads arife (lender, hairy, branching Stalks a Foot and a Half high, oi a reddifh Colour, dividing into many Branches toward the Tou, which fuftain loole Panicles of Flowers, compofed of Five Petals, reprefented at *b*\ which are of a pale Red, and marked with many bloody Spots toward their Bafe. Thefe have Terl Stamina; Five fpreading on the Petals, and Five lying between; they are of a Flefh Colour, and are terminated by round Summits. The Petals are at firft clofed into a round Head, as is reprefented at *d*, but afterward fpread open like a Rofe.

It flowers in *May* and *June,* at which time it makes a pretty Appearance. This requires a Ihady Situation, and propagates very fall by Off-iets*

L A T E CXLII.

GLADIOLUS *Li, G^n Plant.* 55- *«*"> ¥ R\ H'J6?' *Tab. rye* Cor.iflag, or, by fome, toxglove, in *French, Glaieul.*

THIS Genus of. Plants is rangld in the Firft Section of *U^us's* Third Clafs, intituled, *Tnandna Monogyvia,* the Flower having Three Stamina and One Style. *Turnefort* places it in the Second Se^on of h's Ninth Clafs, which includes the *Herbs wttb a Ltly Flower cf One Leaf cut into Six Parts, wbofi hmpalement becomes a* ...

The Charaters of this Genus are exhibited in the *Gardeners Diflionary.*

The Species here reprefented are,

Fig. 1. GLADIOLUS ... *majoribus drftantibus.* Cornflag, with Sword-fhaped Leaves, and larger Flowers ftanding diftant. *Gladiolus major Byzantinus, C. B. P.* 41. Greater Byzantine Cornflag.

This Plant hath a large ... bulbous Root, which is prefled and covered with a Ruffet Skin. ... of an herbaceous Colour in the Summer ... and channelled, as is reprefented ... arife long, flat, Sword-fhaped Leaves ... rowed and inferted into one another, and ... Stalk, which comes out from between the ... about Three Feet high, and is terminated ... Diftances Six Flowers, which are above each other on one Side of the Stalk, each coming out of a ... or Hood, reprefented at *c*, which ... The Flower consists of One Petal, being joined ... cut into Six Parts, which are ... Lip Flower, the upper Segment *d*, being much ... which are ... are terminated by long upright Summits ... joined at their Bafe to the Style, which fupports a trifid Stigma. ... The Germen ... Flower, afterward becomes an oblong ... three-cornered Capfule, marked *e*, with ... Cells, reprefented at *f*, and opens in ... filled with roundifh Seeds, as is ...

when fully blown. It flowers in *June,* and the Seeds ripen in *September.* This has been fuppofed only a Variety of the common Sort; but I have propagated both, by Seeds, but have never found them vary, fo that I am convinced they are diftinct Species.

Fig. 2. GLADIOLUS *foliis linearibus florihis dijlantibus, corollaruni tubolimbis longiore, Lin. Sp. Plant.* 37. Cornflag with narroiy Leaves, Flowers growing diftant, and the Tube of the Flower longer than the Border of the Petal. This is the *Gladiolus caule fimpliciffimo, foliis linearibus > floribus alternii, Prod. Leyd.* 19. Cornflag with a fingle Stalk, very narrow Leaves, and Flowers growing alternate.

This Sort grows naturally at the Cape of Good Hope, from whence I received the Seeds, which fucceeded in the *Chelfea* Garden; where the Plants annually produce their Flowers. ... fmooth bulbous Root, mark'd *a*; which is covered with a thin dark-coloured Skin, from which come out in the Autumn Two or Three very narrow graffy Leaves, folded over each other at their Bafe, but open flat above; thefe rife near Two Feet high. In the Spring of the Year arifes a fingle Stalk from between the Leaves, about Two Feet long, which always bends on one Side, as is here reprefented in the Figure. Toward the upper Part of this come out Two or ... Flowers, ranged on one Side of the Stalk, ftanding upright, each having a narrow Spatha, or Hood, and long flender Tubes, which fwell large upward; and divided into Six parts, which are nearly equal. The Colour of the Flower is a dufky Yellow, and each Segment of the Petal has a rhomboidal Mark of a dark Red: Afterward the Tube of the Flower opens, and the deep Divifion of the Petals is feen, as reprefented at *c*, and the Three Stamina, with their Summits ... from the Germen ... This Plant flowers in *May* and *June.* As this Plant is the Native of a warm Country, fo it requires Protection from the Froft in Winter; therefore the Bulbs fliould be planted in Pots filled with light Earth, and placed in the Greenhoufe in Winter; where there is not fuch Conveniency, they may be put under a Hot-bed Frame in Winter, where they may have Air ... Weather, and be fcreened from the Froft. In fuch Situations I have had them thrive and flower very well.

PLATE CXLIII.

GLAUCIUM, *Tourn. Injl. R. H.* 254. *Tab.* 130. *Cbetidonium, Lin. Gen. Plant.* 572. Horned Poppy.

THIS Genus of Plants is ranged in the Third Se&ion *of Tournefor t's* Sixth Clafs, which includes the *Herbs with a Rofe Flower whofe Pointal turns to a Fruity for the mojt part having Two Cells.* Doftor *Linnaeus* joins this Genus to the *Chelidoniummajus,* and places it in the Firft Section of his Thirteenth Clafs, intituled, *Polyandria Monogynia,* the Flower having many Stamina and a fingle Style. The Characters are exhibited in the *Gardeners Bilfionary.*

The Species here reprefented is,

GLAUCIUM *birfutum ftore phanicio, Tourn. Inft.* 254. Hairy Glaucium with a Scarlet Flower. This is the *Cbelidoniumpediinculis unifloris, foliisfejfiltbus pinnatifidis cattle bifpido, Lin. Sp. Plant.* 506. Celandine with One Flower on each Footftalk, many pointed winged Leaves fet clofe to the Stalks, and a rough Stalk. *Cafpar Baubin* titles it, *Papaver corniculatumphcenicium bbfutum. Pin. ij\.* Hairy Scarlet Horned Poppy.

This is an annual Plant, which grows naturally in *Spain, Italy,* and fome Parts of *Germany,* from whence the Seeds have been brought to *England.* The Leaves of it are deeply jagged and hairy, of a pale Green, and grow clofe to the Stalks; thofe at the Bottom lie on the Ground, and are broader than thofe above. The Stalks a Foot and Half high, having a fingle jagged Leaf placed at each Joint ; thefe have many Divifions from the Origin to the Point, which is extended longer than the lower Leaves. The Flowers come out from the Bofom of the Leaves, as is reprefented at *a* ; thefe are compofed of Five broad obtufe Petals, which are of a dark Scarlet Colour, and foon fall off. In the Center of each is fituated an oblong Germen, having no Style, buc fupports a bifi<4 Stigma, as is reprefented at *b* ; this is attended by a great Number of fliort Stamina, terminated by obtufe Summits, as reprefented at *c:* The Germen afterward becomes a long taper Pod, marked *d,* on the Apex of which the bifid Stigma *e* remains, fitting on the middle Partition, which divides the Pod into Two Cells, as is (hewn at/, which are filled with fmall Seeds, reprefented at *g.* The Flower hath an Empalement compofed of Two hollow Leaves, which are clofeJy fet with fhort Prickles, reprefented at *b* -, this falls away when the Flower is expanded. It flowers in *June* and *July,* and the Seeds ripen in Autumn. As the Flowers of this Plant are but of (hort Duration, fo they do not make any confiderable Figure ; but the Foliage of the Plant is very elegant, and might be introduced by way of Ornament to Furniture with great Advantage, being very pidurefque. Itmayalfo be wrought in to Patterns for Silks, and painted upon Porcelanc, where it would have a very good EfFeft. If the Seeds of this Plant are fown in the Autumn, they will more certainly grow than thofe which are fown in the Spring; which frequently in dry Seafons do not come up the fame Year, or at leaft not before the Autumn ; whereas thofe fown in the Autumn frequently come up foon after, or, if not at that Seafon, do not fail coming up in the Spring ; and thefe Plants come early to flower, fo that good Seeds may be always obtained from them. They lhoyld be fown where the Plants are to remain 5 and they will require no ether Care but to thin them where they are too clofe, and keep them €lean from Weeds.

PLATE CXLIV.

HELIOTROPIUM, *Tourn. Infi. R. H.* 138. *Lin. Gen. Plant.* 164, Turnfole, or Heliotrope 5 in *French, Herbe aux Venues.*

THIS Genus of Plants is ranged in the Fourth Seftion of *Tourmfort's* Second Clafs, which includes the *Herbs with a Bell or Wheel-fhaped Flower of One Leaf, whofe Pointal is fituated between Four Germina, which become fo many Seeds incbfed in the Empalement. Linnaeus* places it in the Firft Se&ion of his Fifth Clafs, intituled, *Pentandria Monogynia,* the Flower having Five Stamina and One Style. The Characters of this Genus are exhibited in the *Gardeners Dictionary.*

The Species here reprefented is,

HELIOTROPIUM *foliis ovatc-lanceolatis, fpicis plurimis confer tis^caule fruticofo.* Heliotrope, or Turnfole, with oval Spear- fhaped Leaves, many Spikes of Flowers in Clutters, and a fhrubby Stalk.

This Shrub grows naturally in *Peru,* from whence the Seeds were fent to *Paris* by the younger *Be Jujffieu.* The Seeds of it were fent me from the curious Garden of Duke *V'Ayen* at *St. Germain,* which have fucceeded in *the Cbelfea* Garden -, where the Plants have flowered, and ripened their Seeds, for fome Years pad.

This rifes with a ligneous Stalk to the Height of Three or Four Feet, dividing upward into feveral fmaller Branches, which are garnifhed their whole Length with oval Spear-fliaped Leaves, which come out without Order ; thefe are about Three Inches long and One and a Half Broad in the Middle, *of* a light Green, foft, and covered with very fmall Hairs : The upper Part of the Stalks have a few fmaller Leaves of the fame Form, and the Branches are terminated by loofe Panicles of Flowers, which are ranged in fhort reflexed Spikes, growing in Clutters. The Flowers are tubulous, of One Petal, which fpreads open at the Top, where it is flightly indented in Five Parts : Thefe have permanent Empalements of One Leaf, having a fhorc Tube, reprefented at *a* ; which is little more than a Third of the Length of the Tube of the Petal, marked *b*; in each Flower is fituated Five Stamina, reprefented at *c* ; the upper Part of the Petal fpreads flat like the Wheel-fhaped Flowers, as is Ihewn at *d:* The Flower, with its Tube taken out of the Empalement, is reprefented at *e*\ and the fhorc Empalement is fhewn at/; this, opened, is reprefented at£; and *b* fliews the Four Germina, which are fituated round the Style, and afterward b<$ome *ib* many Seeds, marked *u* The Flowers are of a pale Blue, and have a mufk> Odour. This being a Native of a warm Country, requires Prote&ion from the Cold of our Winters in *England-,* but is fo hardy as to thrive in the open Air in Summer, if placed in a flickered Situation ; and, in Winter, will live in a good Greenhoufe without any artificial Heat; -and as it continues flowering moft Part of the Year, *fo it* is worthy of a Place in every Garden where there is Conveniency for keeping it. This is propagated by Seeds.

Glaucium luteum flore Phoeniceo Amoen. Acad. N. 221

Published according to Act of Parliament by B. Maund, February 1st 1833