

The Project Gutenberg eBook of The Botanical Magazine, Vol. 04, by William Curtis

This ebook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at www.gutenberg.org. If you are not located in the United States, you'll have to check the laws of the country where you are located before using this eBook.

Title: The Botanical Magazine, Vol. 04

Author: William Curtis

Release date: March 14, 2006 [EBook #17979]

Language: English

Original publication: LONDON: Printed by Couchman and Fry, Throgmorton-Street. For W. CURTIS, No 3, St. George's-Crescent, Black-Friars-Road; And Sold by the principal Booksellers in Great-Britain and Ireland. M DCC XCI.

Credits: Produced by University of Georgia Libraries, Jason Isbell, Janet Blenkinsip and the Online Distributed Proofreaders Europe at <http://dp.rastko.net>

*** START OF THE PROJECT GUTENBERG EBOOK THE BOTANICAL MAGAZINE, VOL. 04 ***

**THE
BOTANICAL MAGAZINE;
OR,
FLOWER-GARDEN DISPLAYED:
IN WHICH**

The most Ornamental FOREIGN PLANTS, cultivated in the Open Ground, the Green-House, and the Stove, are accurately represented in their natural Colours.

TO WHICH ARE ADDED,

Their Names, Class, Order, Generic and Specific Characters, according to the celebrated LINNÆUS; their Places of Growth, and Times of Flowering:

TOGETHER WITH

THE MOST APPROVED METHODS OF CULTURE.

A WORK

Intended for the Use of such LADIES, GENTLEMEN, and GARDENERS, as wish to become scientifically acquainted with the Plants they cultivate.

By WILLIAM CURTIS,

Author of the FLORA LONDINENSIS.

VOL. IV.

Observe the rising Lily's snowy grace,
Observe the various vegetable race;
They neither toil nor spin, but careless grow,
Yet see how warm they blush! how bright they glow!
What regal vestments can with them compare!
What king so shining, or what queen so fair.

THOMSON.

- [109]—[LAVATERA TRIMESTRIS.](#)
[110]—[MIMOSA VERTICILLATA.](#)
[111]—[LATHYRUS TUBEROSUS.](#)
[112]—[CISTUS LADANIFERUS.](#)
[113]—[CONVOLVULUS PURPUREUS.](#)
[114]—[SILENE PENDULA.](#)
[115]—[LATHYRUS SATIVUS.](#)
[116]—[LIMODORUM TUBEROSUM.](#)
[117]—[CAMPANULA CARPATICA.](#)
[118]—[SEDUM ANACAMPSEROS.](#)
[119]—[STRELITZIA REGINÆ.](#)
[121]—[NARCISSUS INCOMPARABILIS.](#)
[122]—[HYACINTHUS RACEMOSUS.](#)
[123]—[ANEMONE HORTENSIS.](#)
[124]—[IBERIS GIBALTARICA.](#)
[125]—[ALSTREMERIA LIGTU.](#)
[126]—[ALYSSUM DELTOIDEUM.](#)
[127]—[IXIA FLEXUOSA.](#)
[128]—[SCILLA CAMPANULATA.](#)
[129]—[AMARYLLIS VITTATA.](#)
[130]—[ALYSSUM UTRICULATUM.](#)
[131]—[CATESBÆA SPINOSA.](#)
[132]—[RUBUS ARCTICUS.](#)
[133]—[HYACINTHUS COMOSUS.](#)
[134]—[ADONIS VERNALIS.](#)
[135]—[GLADIOLUS CARDINALIS.](#)
[136]—[PELARGONIUM TETRAGONUM.](#)
[137]—[HYPERICUM BALEARICUM.](#)
[138]—[KALMIA HIRSUTA.](#)
[139]—[ALSTREMERIA PELEGRINA.](#)
[140]—[LUPINUS LUTEUS.](#)
[141]—[HELIOTROPIUM PERUVIANUM.](#)
[142]—[SCORZONERA TINGITANA.](#)
[143]—[PELARGONIUM GLUTINOSUM.](#)
[144]—[FERRARIA UNDULATA.](#)
[INDEX.—Latin Names.](#)
[INDEX.—English Names.](#)

Transcriber's Note: There is a departure from the usual format here with STRELITZIA REGINÆ. having two illustrations, No 119 and No 120, thus creating a gap in the sequence.

[109]

LAVATERA TRIMESTRIS. ANNUAL LAVATERA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Calyx duplex: exterior 3-fidus. Arilli plurimi, monospermi.

Specific Character and Synonyms.

LAVATERA *trimestris* caule scabro herbaceo, foliis glabris, pedunculis unifloris, fructibus orbiculo tectis. *Linn. Sp. Pl. 974. Hort. Kew. v. 2. p. 452.*

LAVATERA (*althææfolia*) foliis infimis cordato-orbiculatis, caulinis trilobis

acuminatis glabris, pedunculis unifloris, caule herbaceo. *Miller's Gard. Dict. ed. 6. 4to.*

MALVA folio vario. *Bauh. Pin. 315.*

MALVA Hispanica flore carneo amplo.

The Spanish blush Mallow. *Park. Parad. p. 366.*



Nº109

Our plant is undoubtedly the *Spanish blush Mallow* of PARKINSON, and the *Lavatera althææfolia* of MILLER according to the former, it is a native of Spain, according to the latter, of Syria.

Mr. MILLER considers it as distinct from the *trimestris*; Mr. AITON has no *althææfolia* in his *Hort. Kew.* we are therefore to conclude that the *althææfolia* of MILLER, and the *trimestris* of LINNEUS are one and the same species.

Of the annuals commonly raised in our gardens, this is one of the most showy, as well as the most easily cultivated; its seeds are to be sown in March, on the borders where they are to remain, the plants, thinned as they come up, and kept clear of weeds.

It varies with white blossoms, and flowers from July to September.

[110]

MIMOSA VERTICILLATA. WHORL'D-LEAV'D MIMOSA.

Class and Order.

POLYGAMIA MONECIA.

Generic Character.

HERMAPHROD. *Cal.* 5-dentatus. *Cor.* 5-fida. *Stam.* 5. f. plura. *Pist.* 1. *Legumen.*

MASC. *Cal.* 5-dentatus. *Cor.* 5-fida. *Stam.* 5. 10. plura.

Specific Character and Synonyms.

MIMOSA *verticillata* intermis, foliis verticillatis linearibus pungentibus. *L'Herit. fert. angl. t. 41. Hort. Kew. p. 438.*



Nº110

The radical leaves of plants usually differ in shape from those of the stalk, in some plants remarkably so; the *Lepidium perfoliatum* figured in the *Flora Austriaca* of Professor JACQUIN is a striking instance of this dissimilarity: the *Lathyrus Aphaca*, a British plant, figured in the *Flora Lond.* is still more such, as large entire leaf-like stipulæ grow in pairs on the stalk, instead of leaves, while the true leaves next the root, visible when the plant first comes up from seed, are few in number, and those pinnated. The present plant no less admirably illustrates the above remark, the leaves which first appear on the seedling plants being pinnated, as is represented in the small figure on the plate, while those which afterwards come forth grow in whorls. We have observed the same disposition to produce dissimilar leaves in several other species of *Mimosa*, which have arisen from Botany-Bay seeds, lately introduced.

This singular species, on the authority of Mr. DAVID NELSON, is a native of New South Wales, and was introduced to the royal garden at Kew by Sir JOSEPH BANKS, Bart.

We first saw it in flower, and have since seen it with ripe seed-pods, at Mr. MALCOLM'S, Kennington.

It is properly a green-house plant, and propagated only by seeds, which are to be sown on a gentle hot-bed.

It is some years in arriving at its flowering state.

[111]

LATHYRUS TUBEROSUS. TUBEROUS LATHYRUS, OR PEASE EARTH-NUT.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stylus planus, supra villosus, superne latior. *Cal.* laciniaë superiores 2 breviores.

Specific Character and Synonyms.

LATHYRUS *tuberosus* pedunculis multifloris, cirrhis diphyllis: foliolis ovalibus, internodiis nudis. *Linn. Syst. Vegetab. ed. 14. Murr. p. 663.*

LATHYRUS *arvensis repens tuberosus.* *Bauh. Pin. 344.*

LATHYRUS *arvensis sive terræ glandes.* Pease Earth-Nuts. *Parkins. Theat. p. 1061.*



N°111

Grows spontaneously in various parts of France and Germany; Mr. PHILIP HURLOCK lately shewed me some dried specimens of this plant, which he gathered in the corn fields, on the *Lunenburg Heide*, in *Upper Lusatia*, where it grew plentifully, and afforded a pleasing appearance to the curious traveller:—not so to the husbandman, to whom it is as noxious as the *Convolvulus arvensis* (*small Bindweed*) is with us, and equally difficult to extirpate, having powerfully creeping roots, which somewhat like the *Helianthus tuberosus* (commonly called *Jerusalem Artichoke*) produce large tubera, and which like those of that plant, are in high esteem with some as an article of food, and as such even cultivated abroad.

It flowers from June to the end of August. It is certainly a beautiful hardy perennial, similar to (but of more humble growth) than the everlasting pea, yet must be cautiously introduced on account of its creeping roots, by which it is most readily propagated, rarely ripening its seeds with us.

It is, perhaps, better suited to decorate the unclip'd hedge of the pleasure-ground, than the border of the flower-garden.

[112]

CISTUS LADANIFERUS. GUM CISTUS.

Class and Order.

POLYANDRIA MONOGNIA.

Generic Character.

Corolla 5-petala. *Calyx* 5-phyllus: foliolis duobus minoribus. *Capsula*.

Specific Character and Synonyms.

CISTUS *ladaniferus* arborescens ex stipulatus, foliis lanceolatis supra lævibus, petiolis basi coalitis vaginantibus. *Linn. Syst. Vegetab. ed. 14. Murr. p. 497.*

CISTUS *ladanifera* Hispanica incana. *Bauh. Pin. 467.*

CISTUS *Ledon*. The Gum Cistus or Sweete Holly Rose. *Park. Parad. p. 422.*



Nº112

One of the most ornamental hardy shrubs we possess; at once pleasing to the eye, and grateful to the smell; for, as MILLER observes, the whole plant in warm weather exudes a sweet glutinous substance, which has a very strong balsamic scent, so as to perfume the circumambient air to a great distance.

Its blossoms, which appear in June and July in great profusion, exhibit a remarkable instance of quickly-fading beauty, opening and expanding to the morning sun, and before night strewing the ground with their elegant remains: as each succeeding day produces new blossoms, this deciduous disposition of the petals, common to the genus, is the less to be regretted.

Is a native of Spain and Portugal, prefers a dry soil and warm sheltered situation, and in very severe seasons requires some kind of covering.

Cultivated 1656, by Mr. JOHN TRADESCANT, jun. *Ait. Hort. Kew.*

Is readily increased from cuttings; but MILLER remarks, that the best plants are raised from seeds.

Varies with waved leaves, and in having petals without a spot at the base.

Is not the plant from whence the Ladanum of the shops is produced, though affording in warmer countries than ours a similar gum, hence its name of *ladanifera* is not strictly proper.

[113]

CONVOLVULUS PURPUREUS. PURPLE BINDWEED, or CONVOLVULUS MAJOR.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla campanulata, plicata. *Stigmata* 2. *Capsula* 2-locularis; loculis dispermis.

Specific Character and Synonyms.

CONVOLVULUS *purpureus* foliis cordatis indivisis, fructibus cernuis, pedicellis incrassatis. *Linn. Syst. Vegetab. ed. 14. Murr. p. 200.*

CONVOLVULUS *purpureus* folio subrotundo. *Bauh. Pin. 295.*

CONVOLVULUS *cæruleus* major rotundifolius. The greater blew Bindweede or Bell-flower with round leaves. *Park. Parad. p. 358.*



Nº113

"Is an annual plant which grows naturally in Asia and America, but has been long cultivated for ornament in the English gardens, and is generally known by the title of *Convolvulus major*. Of this there are three or four lasting varieties; the most common hath a purple flower, but there is one with a white, another with a red, and one with a whitish-blue flower, which hath white seeds. All these varieties I have cultivated many years, without observing them to change. If the seeds of these sorts are sown in the spring, upon a warm border where the plants are designed to remain, they will require no other culture but to keep them clear from weeds, and place some tall stakes down by them, for their stalks to twine about, otherwise they will spread on the ground and make a bad appearance. These plants, if they are properly supported, will rise ten or twelve feet high in warm Summers: they flower in June, July, and August, and will continue till the frost kills them. Their seeds ripen in Autumn." *Miller's Gard. Dict. ed. 4to. 1771.*

[114]

SILENE PENDULA. PENDULOUS CATCHFLY.

Class and Order.

DECANDRIA TRIGYNIA.

Generic Character.

Calyx ventricosus. Petala 5, unguiculata coronata ad faucem, Capsula 3-ocularis.

Specific Character and Synonyms.

SILENE *pendula* calycibus fructiferis pendulis inflatis: angulis decem scabris.
Linn. Syst. Vegetab. ed. 14. Murr. p. 421.

VISCAGO hirsuta sicula, lychnidis aquaticæ facie, supina. *Dill. Hort. Elth. 421. t. 312. f. 404.*



Nº114

Grows spontaneously in Sicily and Crete; is an annual of humble growth, and hence a suitable plant for the borders of the flower garden, or the decoration of Rock-work, as its blossoms are showy, and not of very short duration.

It flowers in June and July, and if once permitted to scatter its seeds, will come up yearly without any trouble.

[115]

LATHYRUS SATIVUS. BLUE-FLOWER'D LATHYRUS, OR CHICHLING-VETCH.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Stylus planus, supra villosus, superne latior. *Calycis* laciniae superiores 2 breviores.

Specific Character and Synonyms.

LATHYRUS *sativus* pedunculis unifloris, cirrhis diphyllis tetraphyllisque, leguminibus ovatis compressis dorso bimarginatis. *Linn. Syst. Vegetab. ed. 14. Murr. p. 662.*

LATHYRUS *sativus*, flore fructusque albo. *Bauh. Pin. 343.*



Nº115

A native of France, Spain, and Italy, and distinguishable when in flower by the blue colour of its

blossoms, which are sometimes, however, milk-white; but its seed-pods afford a more certain mark of distinction, being unusually short, broad, and winged on the back.

This species grows to the height of about two feet, and is usually sown in the spring with other annuals; though not so beautiful, it forms a contrast to the sweet and Tangier Pea, and may be introduced where there is plenty of room, or a desire of possessing and knowing most of the plants of a genus.

It flowers in June and July.

Cultivated 1739, by Mr. PHILIP MILLER. *Ait. Hort. Kew.*

[116]

LIMODORUM TUBEROSUM. TUBEROUS-ROOTED LIMODORUM.

Class and Order.

GYNANDRIA DIANDRIA.

Generic Character.

Nectarium monophyllum, concavum, pedicellatum, intra petalum infimum.

Specific Character and Synonyms.

LIMODORUM *tuberosum* floribus subspicatis barbatis. *Ait. Hort. Kew. p. 301.*



N^o116

For this rare plant I am indebted to the very laudable exertions of a late Gardener of mine, JAMES SMITH, who, in the spring of the year 1788, examining attentively the bog earth which had been brought over with some plants of the *Dionæa Muscipula*, found several small tooth-like knobby roots, which being placed in pots of the same earth, and plunged into a tan-pit having a gentle heat, produced plants the ensuing summer, two of which flowered, and from the strongest of those our figure was taken.

From this circumstance we learn, that this species is a native of South Carolina, and properly a bog plant, growing spontaneously with the *Dionæa Muscipula*.

Both Mr. DRYANDER and Dr. J. E. SMITH assure me, that it is the true *Limodorum tuberosum* of LINNÆUS; the one usually called by that name is a native of the West-Indies, and treated as a stove plant.

From the little experience we have had of the management of this species, it appears to us to be scarcely hardy enough for the open border, yet not tender enough to require a stove. We have succeeded best by treating it in the manner above mentioned; we may observe, that the tan-pit spoken of was built in the open garden, not in a stove, and was for the purpose of raising plants or seeds by a gentle heat, as well as for striking cuttings and securing plants from cold in the winter.

Our figure will make a description of the plant unnecessary, its flowering stem with us has arisen to the height of a foot and a half, the number of flowers has not exceeded five. In its most luxuriant state it will probably be found much larger, and to produce more flowers.

[117]

CAMPANULA CARPATICA. CARPATIAN BELL-FLOWER.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla campanulata fundo clauso valvis staminiferis. *Stigma* trifidum. *Capsula* infera poris lateralibus dehiscentis.

Specific Character and Synonyms.

CAMPANULA *carpatica* foliis glabris cordatis serratis petiolatis, pedunculis elongatis, calyce reflexo glutinoso. *Linn. Syst. Vegetab. ed. 14. Murr. p. 207. Suppl. p. 140. Jacq. Hort. v. i. t. 57.*



N^o117

This species of Bell-flower, which takes its name from its place of growth, is a native of the Carpatian Alps, and was introduced into the Royal Garden at Kew, by *Professor* JACQUIN, of *Vienna*, in the year 1774.

It flowers in June and July.

As yet it is scarce in our gardens, but deserves to be more generally known and cultivated; its flowers, in proportion to the plant, are large and shewy: like many other Alpine plants, it is well suited to decorate certain parts of rock-work, or such borders of the flower garden, as are not adapted for large plants.

It is a hardy perennial, and propagated by parting its roots in autumn.

Our figure, from a deficiency in the colouring art, gives a very inadequate idea of its beauty.

[118]

SEDUM ANACAMPSEROS. EVERGREEN ORPINE.

Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 5-petala. *Squamæ* nectariferæ 5, ad basin germinis. *Caps.* 5.

Specific Character and Synonyms.

SEDUM *Anacampseros* foliis cuneiformibus basi attenuatis subsessilibus, caulibus decumbentibus, floribus corymbosis. *Ait. Hort. Kew. p. 108.*

SEDUM *Anacampseros* foliis cuneiformibus integerrimis caulibus decumbentibus, floribus corymbosis. *Linn. Syst. Vegetab. ed. Murr. p. 430.*

TELEPHIUM repens folio deciduo. *Bauh. Pin.* 287.

TELEPHIUM tertium. *Dodon. Pempt. p.* 130.



N^o118

Grows spontaneously out of the crevices of the rocks in the South of France; flowers in our gardens in July and August; is a very hardy perennial, and in sheltered situations retains its leaves all the year.

The singular manner in which the leaves are attached to the flowering stem, deserves to be noticed.

As many of the succulent plants are tender, and require a Green-house in the winter, cultivators of plants are apt indiscriminately to extend the same kind of care to the whole tribe, hence it is not uncommon to find this and many other similar hardy plants, nursed up in the Green-house or stove, when they would thrive much better on a wall or piece of rock-work, for the decoration of which this plant in particular is admirably adapted.

Like most of the Sedum tribe it may readily be propagated by cuttings, or parting its roots in autumn.

DODONÆUS' figure admirably represents its habit.

According to the *Hort. Kew.* it was cultivated in this country by GERARD, in 1596.

[119]

STRELITZIA REGINÆ. CANNA-LEAVED STRELITZIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Spathæ. Cal. 0. *Cor.* 3-petala. *Nectarium* triphyllum, genitalia involvens. *Peric.* 3-loculare, polyspermum.

STRELITZIA *Reginæ* Ait. *Hort. Kew. v. i. p.* 285. *Tab.* 2.

HELICONIA *Bibai* J. Mill. *ic. tab.* 5, 6.



N^o119

In order that we may give our readers an opportunity of seeing a coloured representation of one of the most scarce and magnificent plants introduced into this country, we have this number deviated from our usual plan, with respect to the plates, and though in so doing we shall have the pleasure of gratifying the warm wishes of many of our readers, we are not without our apprehensions least others may not feel perfectly well satisfied; should it prove so, we wish such to rest assured that this is a deviation in which we shall very rarely indulge and never but when something uncommonly beautiful or interesting presents itself: to avoid the imputation of interested motives, we wish our readers to be apprized that the expences attendant on the present number, in consequence of such deviation, have been considerably *augmented*, not lowered.

It is well known to many Botanists, and others, who have experienced Sir JOSEPH BANKS'S well known liberality, that previous to the publication of the *Hortus Kewensis* he made a new genus of this plant, which had before been considered as a species of *Heliconia*, and named it *Strelitzia* in honour of our most gracious Queen CHARLOTTE; coloured engravings of which, executed under his direction, he presented to his particular friends; impressions of the same plate have been given in the aforesaid work, in which we are informed that this plant was introduced to the royal garden at Kew, by Sir JOSEPH BANKS, Bart. in the year 1773, where it lately flowered—of some other plants introduced after that period from the Cape, of which it is a native, one flowered in the Pine stove of BAMBER GASCOYNE, Esq. several years ago, from whence Mr. MILLAR drew his figure, and the plant from which our drawing was made flowered this spring, in the bark stove of the garden belonging to the Apothecaries Company, at Chelsea, where it will also soon flower again.

This plant has usually been confined to the stove, where it has been placed in a pot, and plunged into the tan, as the plants in such situations usually are; it has been found that when the roots have been confined to the narrow limits of a pot, the plant has rarely or never flowered, but that when the roots have by accident extended into the rotten tan, it has readily thrown up flowering stems, the best practice therefore, not only with this, but many other plants, is to let the roots have plenty of earth to strike into. As it is a Cape plant it may perhaps be found to succeed best in the conservatory.

It has not, that we know of, as yet ripened its seeds in this country; till it does, or good seeds of it shall be imported, it must remain a very scarce and dear plant, as it is found to increase very slowly by its roots: plants are said to be sold at the Cape for Three Guineas each.



Nº120

General Description of the STRELITZIA REGINÆ.

From a perennial stringy root shoot forth a considerable number of leaves, standing upright on long footstalks, front a sheath of some one of which, near its base, springs the flowering stem, arising somewhat higher than the leaves, and terminating in an almost horizontal long-pointed spatha, containing about six or eight flowers, which becoming vertical as they spring forth, form a kind of crest, which the glowing orange of the Corolla, and fine azure of the Nectary, renders truly superb. The outline in the third plate of this number, is intended to give our readers an idea of its general habit and mode of growth.

Particular Description of the same.

ROOT perennial, stringy, somewhat like that of the tawny Day-lily (*Hemerocallis fulva*); strings the thickness of the little finger, blunt at the extremity, extending horizontally, if not confined, to the distance of many feet.

LEAVES numerous, standing upright on their footstalks, about a foot in length, and four inches in breadth, ovato-oblong, coriaceous, somewhat fleshy, rigid, smooth, concave, entire on the edges, except on one side towards the base, where they are more or less curled, on the upper side of a deep green colour, on the under side covered with a fine glaucous meal, midrib hollow above and yellowish, veins unbranched, prominent on the inside, and impressed on the outside of the leaf, young leaves rolled up.

LEAF-STALKS about thrice the length of the leaves, upright, somewhat flattened, at bottom furnished with a sheath, and received into each other, all radical.

SCAPUS or flowering stem unbranched, somewhat taller than the leaves, proceeding from the sheath of one of them, upright, round, not perfectly straight, nearly of an equal thickness throughout, of a glaucous hue, covered with four or five sheaths which closely embrace it. Two or more flowering stems spring from the same root, according to the age of the plant.

SPATHA terminal, about six inches in length, of a glaucous hue, with a fine bright purple at its base, running out to a long point, opening above from the base to within about an inch of the apex, where the edges roll over to one side, forming an angle of about forty-five degrees, and containing about six flowers.

FLOWERS of a bright orange colour, becoming upright, when perfectly detached from the spatha, which each flower is a considerable time in accomplishing. In the plant at Chelsea, the two back petals, or, more properly segments of the first flower, sprang forth with the nectary, and while the former became immediately vertical, the latter formed nearly the same angle as the spatha; four days afterwards the remaining segment of the first flower, with the two segments and nectary of the second came forth, and in the same manner at similar intervals all the flowers, which were six in number, continued to make their appearance.

COROLLA deeply divided into three segments, which are ovato-lanceolate, slightly keeled, and somewhat concave, at the base white, fleshy, and covered with a glutinous substance flowing in great quantities from the nectary.

NECTARY of a fine azure blue and most singular form, composed of two petals, the upper petal very short and broad, with a whitish mucro or point, the sides of which lap over the base of the other petal; inferior petal about two inches and a half in length, the lower half somewhat triangular, grooved on the two lowermost sides, and keeled at bottom, the keel running straight to its extremity, the upper half gradually dilating towards the base, runs out into two lobes more or less obtuse, which give it an arrow-shaped form, bifid at the apex, hollow, and containing the antheræ, the edges of the duplicature crisped and forming a kind of frill from the top to the bottom.

STAMINA five Filaments arising from the base of the nectary, short and distinct; Antheræ long and linear, attached to and cohering by their tips to the apex of the nectary.

STYLE filiform, white, length of the nectary.

STIGMA three quarters of an inch long, attached to, and hitched on as it were to the tip of the nectary, roundish, white, awl-shaped, very viscid, becoming as the flower decays of a deep purple brown colour, and usually splitting into three pieces, continuing attached to the nectary till the nectary decays.

Mr. FAIRBAIRN, to whose abilities and industry the Companies Garden at Chelsea is indebted for its present flourishing state, being desirous of obtaining ripe seeds, I had no opportunity of examining the germen.

Such were the appearances which presented themselves to us in the plant which flowered at the Chelsea Garden; that they are liable to considerable variation is apparent from the figure of Mr. MILLAR, which appears to have been drawn from a very luxuriant specimen, as two spathæ grow from one flowering stem, the stigma is also remarkably convoluted, many other appearances are likewise represented, which our plant did not exhibit: in the figure given in the *Hortus Kewensis*, the stigma appears to have separated from the nectary on the first opening of the flower, and to be split into three parts, neither of which circumstances took place in our plant till they were both in a decaying state.

[121]

NARCISSUS INCOMPARABILIS. PEERLESS DAFFODIL.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Petala 6 æqualia: *Nectario* infundibuliformi, 1-phylo: *Stamina* intra nectarium.

Specific Character and Synonyms.

NARCISSUS *incomparabilis* spatha uniflora, nectario campanulato plicato crispo petalis dimidio brevioribus, foliis planis.

NARCISSUS latifolius omnium maximus amplo calice flavo sive Nompaille.
The great Nonesuch Daffodil, or incomparable Daffodil. *Park. Par. p. 68.*



Nº121

This species of Narcissus, though well described and figured by the old Botanists, especially PARKINSON; has been overlooked by LINNÆUS.

It is undoubtedly the *incomparable Daffodil* of PARKINSON, figured in his Garden of Pleasant Flowers; and the *incomparabilis* of MILLER'S *Dict. ed. 6. 4to.* the latter informs us, that he received roots of it from Spain and Portugal, which fixes its place of growth.

It is a very hardy bulbous plant, and flowers in April; in its single state it is very ornamental, the petals are usually pale yellow, and the nectary inclined to orange, which towards the brim is more brilliant in some than in others; in its double state, it is well known to Gardeners, by the name of Butter and Egg Narcissus, and of this there are two varieties, both of which produce large shewy flowers, the one with colours similar to what we have above described, which is the most common, the other with petals of a pale sulphur colour, almost white, and the nectary bright orange; this, which is one of the most ornamental of the whole tribe, is named in the Dutch catalogues, the *Orange Phœnix*; its blossoms are so large as frequently to require supporting; its bulbs may be had of many of the Nurseries about London, and of those who, profiting by the supineness of our English Gardeners, import bulbs from abroad.

Like most of the tribe, this species will grow well without any care, the bulbs of the double sort should be taken up yearly, otherwise they are apt to degenerate.

[122]

HYACINTHUS RACEMOSUS. STARCH HYACINTH.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla campanulata: pori 3 melliferi germinis.

Specific Character and Synonyms.

HYACINTHUS *racemosus* corollis ovatis, summis sessilibus, foliis laxis. *Linn. Syst. Veg. ed. 14. Murr. p. 336. Sp. Pl. 455.*

HYACINTHUS *racemosus cæruleus minor juncifolius.* *Bauh. Pin. p. 43.*

HYACINTHUS *botryodes 1.* *Car Clus. Hist. p. 181.*

HYACINTHUS *racemosus.* *Dodon. Pempt. p. 217.*

HYACINTHUS *botroides minor cæruleus obscurus.* The darke blew Grape-flower. *Park. Par. p. 114.*



Nº122

The *Hyacinthus racemosus* and *botryoides* are both cultivated in gardens, but the former here figured is by far the most common; *racemosus* and *botryoides*, though different words, are expressive of the same meaning, the former being derived from the Latin term *racemus*, the latter from the Greek one βοτρυς, both of which signify a bunch of grapes, the form of which the inflorescence of these plants somewhat resembles, and hence they have both been called Grape Hyacinths, but as confusion thereby arises, we have thought it better to call this species the Starch Hyacinth, the smell of the flower in the general opinion resembling that substance, and leave the name of Grape Hyacinth for the *botryoides*.

The *Hyacinthus racemosus* grows wild in the corn fields of Germany, in which it increases so fast by offsets from the root as to prove a very troublesome weed, and on this account it must be cautiously introduced into gardens.

It flowers in April and May.

We have found the Nurserymen very apt to mistake it for the *botryoides*, a figure of which it is our intention to give in some future number.

[123]

ANEMONE HORTENSIS. STAR ANEMONE, OR BROAD-LEAV'D GARDEN ANEMONE.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 0. Petala 5-9. Semina plura.

Specific Character and Synonyms.

ANEMONE *hortensis* foliis digitalis, feminibus lanatis. *Linn. Syst. Vegetab. ed Murr. p. 510. Ait. Hort. Kew. vol. 2. p. 256.*

ANEMONE *Geranii* rotundo folio, purpurascens. *Bauh. Pin. 173.*

ANEMONE *prima*. *Dodon. Pempt. 434.*

ANEMONE *latifolia* purpurea stellata sive papaveracea. The purple Star-Anemone or Windflower. *Park. Parad. p. 204.*



Nº123

We are more and more convinced, that in our eagerness, for novelties, we daily lose plants by far more ornamental than the new ones we introduce; the present, a most charming spring plant, with which the Gardens abounded in the time of PARKINSON, is now a great rarity; its blossoms, which are uncommonly brilliant, come forth in April, and, like those of many other plants, appear to advantage only when the sun shines.

It may be propagated either by seeds, or by parting its roots in Autumn, in the former way we may obtain many beautiful varieties.

It prefers a light loamy soil and moderately exposed situation.

Roots of a variety of this plant with scarlet double flowers are imported from Holland, under the name, of *Anemonoides*, and sold at a high price.

[124]

IBERIS GIBALTARICA. GIBALTAR CANDY-TUFT.

Class and Order.

TETRADYNAMIA SILICULOSA.

Generic Character.

Corolla irregularis: Petalis 2 exterioribus majoribus. *Silicula* polysperma, emarginata.

Specific Character and Synonyms.

IBERIS *Gibraltarica* frutescens foliis apice dentatis. *Linn. Syst. Veg. ed. 14. Murr. p. 589.*

THLASPIDIUM *Hispanicum*, ampliore flore folio crasso dentato. *Dill. Elth. 382. t. 287. f. 37.*



Nº124

The flowers of this plant, a native of Gibraltar, bear some resemblance to those of the Common Candy-Tuft, but when they blow in perfection, they are usually twice as large; hence they are highly ornamental in the green-house, which early in the Spring, the time of their coming forth, stands in need of some such shewy flowers.

This plant is easily raised from cuttings, and easily preserved; it may be kept through the Winter in a common hot-bed frame, and in mild Winters will stand abroad, especially if sheltered amongst rock-work; its greatest enemy is moisture in the Winter season, this often proves fatal to it, as indeed a long continued damp atmosphere does to many others; the Nurserymen about London complain of losing more plants the last mild Winter, from this cause, than they generally do from severe frosts. In a little green-house which I had in my late garden, Lambeth-Marsh, most of the plants became absolutely mouldy; in such seasons then, though in point of cold the plants may not require it, we must dissipate the superfluous moisture by a gentle heat.

[125]

ALSTRÆMERIA LIGTU. STRIPED-FLOWER'D ALSTRÆMERIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla 6-petala, sub-bilabiata: petalis 2 inferioribus basi tubulosis. *Stamina* declinata.

Specific Character and Synonyms.

ALSTRÆMERIA *Ligtu* caule erecto, foliis spathulato-oblongis, pedunculis umbellæ involucro longioribus, corolla bilabiata. *Linn. Syst. Veget. ed. 14. Murr. Suppl. p. 207. Amœn. Acad. V. 6. p. 247.*

HEMEROCALLIS floribus purpurascens striatis. *Few. Peruv. 2. p. 710. t. 4.*



Nº125

This plant receives its generic name from CLAUDIUS ALSTRÆMER (son of Sir JONAS ALSTRÆMER, a most respectable Swedish Merchant) who first found the other most beautiful species the *Pelegrina* in Spain, whither it had been transmitted from Peru; its trivial name *Ligtu* is a provincial one.

According to FEWILLEE, who has written on the plants of Peru, this species is found on the banks of the rivers in Chili: we treat it, and successfully, as a stove plant; its flowers, which usually make their appearance in February and March, emit a fragrance scarcely inferior to Mignonet; its leaves, contrary to most others, grow inverted, which is effected by a twist of the footstalk, and afford an excellent example of LINNÆUS's *Folium resupinatum*; the filaments, after the pollen is discharged, turn upwards, and the antheræ become almost globular.

It is usually propagated by parting its roots in Autumn.

Our figure was drawn from a plant which flowered extremely well in the stove of Messrs. GRIMWOOD and Co. Kensington.

[126]

ALYSSUM DELTOIDEUM. PURPLE ALYSSUM.

Class and Order.

TETRADYNAMIA SILICULOSA.

Generic Character.

Filamenta quædam introrsum denticulo notata. *Silicula* emarginata.

Specific Character and Synonyms.

ALYSSUM *deltoideum* caulibus suffrutescentibus prostratis, foliis lanceolato-deltoidibus, siliculis hirtis. *Linn. Syst. Vegetab. p. 591. Sp. Pl. 908.*

LEUCOJUM saxatile thymifolio hirsutum cæruleo-purpureum. *Bauh. Pin. 201.*



Nº126

Plants which flower early, and continue a long while in bloom, are deservedly preferred, more especially by those who content themselves with a partial collection; of that number is the present species of Alyssum, which begins to flower in March, and continues to blossom through April, May, and June, and, if favourably situated, during most of the summer.

It is properly a rock plant, being hardy, forming with very little care a neat tuft of flowers, and not apt to encroach on its neighbours.

May be propagated by parting its roots in Autumn, or by cuttings.

Is a native of the Levant, according to Mr. AITON; and cultivated by Mr. MILLER, in 1739, but omitted in the 6th 4to. edition of his Dictionary: has usually been considered by the Nurserymen about London as the *hyperboreum*.

[127]

IXIA FLEXUOSA. BENDING-STALK'D IXIA.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita, campanulata, regularis. *Stigmata* 3.

Specific Character and Synonyms.

IXIA *flexuosa* foliis linearibus, racemo flexuoso multifloro. *Linn. Sp. Pl. p. 51.*

Ait. Hort. Kew. p. 58.



The Ixias are a numerous tribe, chiefly natives of the Cape, and in general remarkable either for their delicacy, or brilliant colours.

The one here figured appears to be a variety of the *flexuosa* with a purple eye, its blossoms are fragrant, and come forth in April or May.

"All the sorts multiply very fast by offsets, so that when once obtained, there will be no occasion to raise them from seeds: for the roots put out offsets in great plenty, most of which will flower the following season, whereas those from seeds are three or four years before they flower. These plants will not thrive through the winter in the full ground in England, so must be planted in pots, and placed under a frame in winter, where they may be protected from frost, but in mild weather should enjoy the free air; but they must be guarded from mice, who are very fond of these roots, and if not prevented will devour them." *Millers Gard. Dict.*

[128]

SCILLA CAMPANULATA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, patens, decidua. *Filamenta* filiformia.

Specific Character and Synonyms.

SCILLA *campanulata* bulbo folido, racemo multifloro oblongo-subconico, corollis campanulatis erectis, bracteis bipartitis, pedunculo longioribus, foliis lanceolatis. *Ait. Hort. Kew. p. 444.*

HYACINTHUS Hispanicus major flore campanulæ instar.

The greater Spanish bell-flowred Jacinth. *Park. Par. 123.*



N°128

There are few old gardens which do not abound with this plant; it bears great affinity to our Hare-bell, with which it appears to have been confounded by most Botanists. *Parkinson* thus discriminates it: "This Spanish bell-flowred Jacinth is very like the former English or Spanish Jacinth, but greater in all parts, as well of leaves as flowers, many growing together at the toppe of the stalke; with many short greene leaves among them, hanging doune their heads with larger, greater, and wider open mouths, like unto bells of a darke blew colour, and no good sent." *Park. Parad.*

Though not remarkable for the fineness of its colours, or pleasing from its fragrance, it contributes with other bulbous plants to decorate the flower border or plantation in the spring, when flowers are most wanted.

It is very hardy, and increases abundantly by offsets; its seeds also ripen well.

[129]

AMARYLLIS VITTATA. SUPERB AMARYLLIS.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla hexapetaloidea, irregularis. *Filamenta* fauci tubi inserta, declinata, inæqualia proportione vel directione, *Linn. fil.*

Specific Character and Synonyms.

AMARYLLIS floribus pedicellatis, corollis cuneiformi-infundibuliformibus, petalorum exteriorum rachibus interiorum margini adnatis, scapo tereti, stigmatibus sulcatis. *Linn. fil.*

AMARYLLIS *vittata*. *L'Herit. Sert. Angl. t. 15. Ait. Hort. Kew. p. 418.*



Nº129

LINNÆUS, the Son, took much pains in new modelling the generic and specific characters of this genus; as may be seen in the *Hort. Kew.* Mons. L'HERITIER, when in England a few years since, saw this species, described and named it *Vittata*^[1].

Of what country it is a native is not known with certainty, most probably of the Cape, was first introduced into England by Mr. MALCOLM.

Our figure was drawn from a fine specimen which flowered this spring with Messrs. GRIMWOOD and Co. Kensington.

It usually flowers in April or May, but may be forwarded by artificial heat.

It rarely puts forth offsets from the root, but readily produces seeds, by which it is propagated without difficulty.

When it blossoms in perfection it truly deserves the name of superb, which Mr. AITON has given it, the stem rising to the height of three feet or more, and producing from two to five flowers.

[130]

ALYSSUM UTRICULATUM. BLADDER-PODDED ALYSSUM.

Class and Order.

TETRADYNAMIA SILICULOSA.

Generic Character.

Filamenta quædam introrsum denticulo notata. *Silicula* emarginata.

Specific Character and Synonyms.

ALYSSUM *utriculatum* caule herbaceo erecto, foliis lævibus lanceolatis integerrimis, filiculis inflatis. *Linn. Syst. Veget. ed. 14. Murr.*



Nº130

A native of the Levant, and cultivated by Mr. MILLER in the year 1739.

Is a hardy and beautiful perennial, flowering from April to June, at which time it begins to form its curiously inflated pods.

Like the *Alyssum deltoideum*, it is well adapted to the decorating of walls, or rock-work, and is readily propagated either by seeds or slips.

[131]

CATESBÆA SPINOSA. THORNY CATESBÆA, OR LILY-THORN.

Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Cor. 1-petala, infundibuliformis, longissima, supera. Stamina intra faucem.
Bacca polysperma.

Specific Character and Synonyms.

CATESBÆA spinosa. *Linn. Syst. Vegetab, ed. 14. Murr. p. 152. Sp. Pl. p. 159.*
Ait. Hort. Kew. p. 159.

Frutex spinosus, buxi foliis plurimis simul nascentibus, flore tetrapetaloide pendulo sordide flavo, tubo longissimo, fructu ovali croceo semina parva continente. *Catesb. Carol. 2. p. 100. t. 100.*



N°131

Of this genus there is only one species described by authors, and which LINNÆUS has named in honour of our countryman MARK CATESBY, Author of the Natural History of Carolina.

"This shrub was discovered by Mr. CATESBY, near Nassau-town, in the Island of Providence, where he saw two of them growing, which were all he ever saw; from these he gathered the seeds and brought them to England.

"It is propagated by seeds, which must be procured from the country where it naturally grows. If the entire fruit are brought over in sand, the seeds will be better preserved; the seeds must be sown in small pots filled with light sandy earth, and plunged into a moderate hot-bed of Tanner's-bark. If the seeds are good, the plants will appear in about six weeks; these plants make little progress for four or five years. If the nights should prove cold the glasses must be covered with mats every evening. As these plants grow slowly, so they will not require to be removed out of the seed-pots the first year, but in the Autumn the pots should be removed into the stove, and plunged into the tan-bed; in spring the plants should be carefully taken up, and each planted in a separate small pot, filled with light sandy earth, and plunged into a fresh hot-bed of Tanner's-bark. In Summer when the weather is warm, they should have a good share of air admitted to them, but in Autumn must be removed into the stove; where they should constantly remain, and must be treated afterwards in the same manner as other tender exotic plants." *Miller's Dict.*

It is more usual with Nurserymen to increase this plant by cuttings.

Our drawing was made from a plant which flowered this Spring, with Mr. COLVILL, Nurseryman, King's-Road, Chelsea.

It flowers most part of the Summer, but not so freely as many other stove-plants.

[132]

RUBUS ARCTICUS. DWARF BRAMBLE.

Class and Order.

ICOSANDRIA POLYGYNIA.

Generic Character.

Cal. 5-fidus. *Petala* 5. *Bacca* composita acinis monospermis.

Specific Character and Synonyms.

RUBUS *arcticus* foliis ternatis, caule inermi unifloro. *Linn. Syst. Vegetab. p.* 476.

RUBUS *humilis* flore purpureo. *Buxb. Cent. 5. p. 13. t. 26.*

RUBUS *trifolius* humilis non spinosus, sapore et odore fragariæ, fructu rubro polycocco. *Amm. Ruth. 185.*



Nº132

The *Rubus arcticus* grows wild in the northern parts of Europe and America, in moist, sandy, and gravelly places. LINNÆUS has figured and minutely described it in his *Flora Lapponica*, out of gratitude, as he expresses himself, for the benefits reaped from it in his Lapland journey, by the nectareous wine of whose berries he was so often recruited when sinking with hunger and fatigue; he observes that the principal people in the north of Sweden make a syrup, a jelly, and a wine, from the berries, which they partly consume themselves, and partly transmit to Stockholm, as a dainty of the most delicious kind; and truly he adds, of all the wild Swedish berries this holds the first place.

Our figure does not correspond altogether with LINNÆUS's description, but it is drawn as the plant grew; culture doubtless made it produce more than its usual number of flowering stems and petals.

It grows readily and increases rapidly in bog-earth, on a north border, and flowers in May and June, but very rarely ripens its fruit in Gardens.

[133]

HYACINTHUS COMOSUS. TWO COLOURED, OR, TASSEL HYACINTH.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla campanulata: pori 3-melliferi germinis.

Specific Character and Synonyms.

HYACINTHUS *comosus* corollis angulato-cylindricis: summis sterilibus longius pedicellatis. *Linn. Syst. Vegetab. ed. 14. Murr. 336.*

HYACINTHUS *comosus major purpureus. Bauh. Pin. 42.* The purple faire haired Jacinth; or Purse tassels. *Park. Parad. p. 117.*



Nº133

Most of the old Botanists arranged this plant, the *racemosus*, and others having almost globular flowers with the Hyacinths. TOURNEFORT, struck with the difference of their appearance, made a distinct genus of them under the name of *Muscari*, in which he is followed by MILLER, and should have been by LINNÆUS, for they differ so much that no student would consider the present plant as belonging to the same genus with the Hare-bell.

This species grows wild in the corn-fields of Spain, Portugal, and some parts of Germany, and flowers in May and June.

It is distinguished more by its singularity than beauty, the flowers on the summit of the stalk differing widely in colour from the others, and being mostly barren: PARKINSON says, "the whole stalk with the flowers upon it, doth somewhat resemble a long Purse tassell, and thereupon divers Gentlewomen have so named it."

It is a hardy bulbous plant, growing readily in most soils and situations, and usually propagated by offsets.

[134]

ADONIS VERNALIS.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* quinis plura absque nectario. *Sem.* nuda.

Specific Character and Synonyms.

ADONIS *vernalis* flore dodecapetalo, fructu ovato. *Linn. Syst. Vegetab. ed. Murr. p. 514. Ait. Hort. Kew. Vol. 2. p. 264.*

HELLEBORUS *niger tenuifolius*, Buphthalmi flore. *Bauh. Pin. 186.*

BUPHTHALMUM *Dodon. Pempt. 261.*

HELLEBORUS *niger ferulaceus* sive Buphthalmum. The great Ox-eye, or the great yellow Anemone. *Parkins. Parad. p. 291. f. 6.*



N^o134

Of this plant LINNÆUS makes two species, viz. the *vernalis* and *appennina*, differing in their specific character merely in the number of their petals, which are found to vary from situation and culture; as the first name taken from its time of flowering is the most expressive, we have followed Mr. MILLER and Mr. AITON in adopting it.

It is an old inhabitant of the English gardens, and a most desirable one, as it flowers in the spring; produces fine shewy blossoms, which expand wide when exposed to the sun, is hardy and readily cultivated.

Grows wild on the mountainous pastures of some parts of Germany.

It may be increased by parting its roots in Autumn or Spring, or by seed. MILLER recommends the latter mode.

[135]

GLADIOLUS CARDINALIS. SUPERB GLADIOLUS; OR, CORN-FLAG.

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Corolla 6-partita, irregularis, inæqualis, *Stigmata* 3.

Specific Character.

GLADIOLUS *cardinalis* corollæ erectæ limbo campanulato, floribus secundis, scapo multifloro, foliis ensiformibus multinerviis.



This new species of *Gladiolus*, of whose magnificence our figure can exhibit but an imperfect idea, was introduced into this country from Holland, a few years since, by Mr. GRAFFER, at present Gardener to the King of Naples; and first flowered with Messrs. LEWIS and MACKIE, Nurserymen, at Kingsland; a very strong plant of it flowered also this summer at Messrs. GRIMWOODS and Co. which divided at top into three branches, from one of which our figure was drawn.

It obviously differs from the other more tender plants of this genus, in the colour of its flowers, which are of a fine scarlet, with large white somewhat rhomboidal spots, on several of the lowermost divisions of the Corolla; strong plants will throw up a stem three or four feet high.

It is most probably a native of the Cape, flowers with us in July and August, and is increased by offsets from the bulbs; must be treated like the *Ixias* and other similar Cape plants.

[136]

PELARGONIUM TETRAGONUM. SQUARE STALKED GERANIUM.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Cal. 5-partitus, lacinia suprema definente in tubulum capillarem, nectariferum, secus pedunculum decurrentem. *Cor.* 5-petala, irregularis. *Filamenta* 10, inæqualia: quorum 3 (raro 5) castrata. *Fructus* 5-coccus, rostratus: *rostra* spiralia, introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM *tetragonum* pedunculis bifloris, ramis tetragonis carnis, corollis tetrapetalis, *L'Herit. n. 72. t. 23.*

GERANIUM *tetragonum.* *Linn. Suppl. p. 305.*



N°136

A vein of singularity runs through the whole of this plant, its stalks are unequally and obtusely quadrangular, sometimes more evidently triangular; its leaves few, and remarkably small; its flowers, on the contrary, are uncommonly large, and what is more extraordinary have only four petals; previous to their expansion they exhibit also an appearance somewhat outrè, the body of the filaments being bent so as to form a kind of bow, in which state we have represented one of the blossoms in our figure.

When it flowers in perfection, which it is not apt to do in all places, the largeness of its blossoms renders it one of the most ornamental of the genus.

There is a variety of it with beautifully coloured leaves, of which we have availed ourselves in its representation.

It flowers from June, to August, and September; requires the same treatment as the more common Geraniums, and is readily propagated by cuttings.

Was first introduced to the Royal Garden at Kew, by Mr. MASSON, in 1774, from the Cape, of

which, it is a native. *Ait. Hort. Kew.*

[137]

HYPERICUM BALEARICUM. WARTY ST. JOHN'S-WORT.

Class and Order.

POLYADELPHIA POLYANDRIA.

Generic Character.

Calyx 5-phyllus. *Petala* 5. *Nectarium* 0. *Capsula*.

Specific Character and Synonyms.

HYPERICUM *balearicum* floribus pentagynis, caule fruticoso foliis ramisque cicatrizatis. *Linn. Syst. Veget. p. 102.*

MYRTO-CISTUS pennæi *Clus. Hist. 1. p. 68.*



Nº137

Is according to LINNÆUS a native of *Majorca*; MILLER says that it grows naturally in the Island of *Minorca*, from whence the seeds were sent to England by Mr. SALVADOR, an Apothecary at Barcelona, in the year 1718.

The stalks of this species are usually of a bright red colour, and covered with little warts; the leaves are small with many depressions on their upper sides like scars; the flowers are not always solitary, but frequently form a kind of Corymbus.

It is a hardy green-house plant, and readily propagated by cuttings.

It flowers during most of the Summer.

CLUSIUS informs us in his *Hist. pl. rar. p. 68.* that he received from THOMAS PENNY, a Physician of London, in the year 1580, a figure of this elegant plant, and who the next year shewed a dried specimen of the same in London, which had been gathered in the Island of Majorca, and named by him μυρτο κίσου, or Myrtle-Cistus^[2] it appears therefore that this plant has long been known, if not cultivated in this country.

We may remark that CLUSIUS's figure of this plant is not equally expressive with many of his others.

[138]

KALMIA HIRSUTA. HAIRY KALMIA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Calyx 5-partitus. *Corolla* hypocrateriformis: limbo subtus quinquecorni *Caps.* 5-ocularis.

Specific Character.

KALMIA *hirsuta* foliis ovato-lanceolatis hirsutis sparsis, floribus racemosis.



N^o138

This new species of *Kalmia* which we have called *hirsuta*, the stalk, leaves, and calyx, being covered with strong hairs, was imported from Carolina in the Spring of 1790, by Mr. WATSON, Nurseryman at Islington, with whom several plants of it flowered this present Autumn, about the middle of September, from one of which our drawing was made.

The plants were brought over with their roots enclosed in balls of the earth in which they naturally grew, which on being examined appeared of a blackish colour, and full of glittering particles of sand; similar indeed to the bog-earth which we find on our moors and heaths; there is therefore little doubt (for no account accompanied the plants) but this *Kalmia* grows on moorish heaths, or in swamps.

In its general appearance it bears some resemblance to the *Andromeda Dabœcii*; from the specimens we have seen its usual height would appear to be from two to three feet; it grows upright; the flowers which are about the size of those of the *Kalmia glauca*, are of a purple colour, and contrary to all the other known *Kalmia*'s grow in racemi.

It is propagated by layers, and requires the same treatment as the rest of the genus, that is, to be planted in bog-earth, on a north border: as this however is a new, and of course a dear plant, it will be most prudent till we know what degree of cold it will bear, to keep it in a pot of the same earth, plunged in the same situation, which may be removed in the Winter to a green-house or hot-bed frame.

[139]

ALSTREMERIA PELEGRINA. SPOTTED-FLOWER'D ALSTREMERIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Corolla 6-petala, supera, irregularis. *Stamina* declinata.

Specific Character and Synonyms.

ALSTREMERIA *Pelegrina* caule erecto, corollis campanulatis rectis, foliis lineari-lanceolatis sessilibus. *Linn. Syst. Veg. p. 338. ed. Murr. Amœn. Acad. 6. p. 247. cum icone.*

HEMEROCALLIS floribus purpurascens maculatis vulgo *Pelegrina*. *Feuill. Peruv. 2. p. 711. t. 5.*



Nº139

Father FEUILLEE^[3] figures and describes three species of *Alstrømeria*, viz. *Pelegrina*, *Ligtu*, and *Salsilla*, common names by which they are severally distinguished in Peru: the present species, which is much valued by the natives on account of its beauty, he informs us is found wild on a mountain to the north of, and a mile distant from Lima.

From Peru, as might be expected, the present plant found its way into Spain, from whence by the means of his beloved friend ALSTRØMER, LINNÆUS first received seeds of it; the value he set on the acquisition is evident from the great care he took of the seedling plants, preserving them through the winter in his bed-chamber.

According to Mr. AITON, this species was introduced to the Royal Garden at Kew, by Messrs. KENNEDY and LEE, as long ago as the year 1753.

Being a mountainous plant, it is found to be much more hardy than the *Ligtu* already figured, and is generally treated as a green-house plant; it is found, however, to flower and ripen its seeds better under the glass of a hot-bed frame, where air is freely admitted.

It flowers from June to October, and, though a perennial, is generally raised from seeds, yet may sometimes be increased by parting its roots, which somewhat resemble those of the asparagus: the seeds should be sown in the spring, in a pot of light earth, on a gentle hot-bed, either of dung or tan.

[140]

LUPINUS LUTEUS. YELLOW LUPINE.

Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Calyx 2-labiatus. *Antheræ* 5 oblongæ, 5 subrotundæ. *Legumen* coriaceum.

Specific Character and Synonyms.

LUPINUS *luteus* calycibus verticillatis appendiculatis: labio superiore bipartito; inferiore tridentato. *Linn. Syst. Vegetab. ed. 14. Murr. p. 656.*

LUPINUS *sylvestris*, flore luteo. *Bauh. Pin. 348.*

The Yellow Lupine. *Park. Parad. p. 336.*



Nº140

The present, with many other species of Lupine, is very generally cultivated in flower gardens, for the sake of variety, being usually sown in the spring with other annuals; where the flower-borders are spacious, they may with propriety be admitted, but as they take up much room, and as their blossoms are of short duration, they are not so desirable as many other plants.

It is a native of Sicily, and flowers in June and July.

We have often thought that the management of the kitchen garden, in point of succession of crops, might be advantageously transplanted to the flower garden; in the former, care is taken to have a regular succession of the annual delicacies of the table, while in the latter, a single sowing in the spring is thought to be all-sufficient; hence the flower garden, which in August, September, and part of October, might be covered with a profusion of bloom, exhibits little more than the decayed stems of departed annuals.

[141]

HELIOTROPIUM PERUVIANUM. PERUVIAN TURNSOLE.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla hypocrateriformis, 5-fida, interjectis dentibus: fauce clausa fornicibus.

Specific Character and Synonyms.

HELIOTROPIUM *peruvianum* foliis lanceolato-ovatis, caule fruticoso, spicis numerosis aggregato-corymbosis. *Linn. Syst. Vegetab. p. 184.*

HELIOTROPIUM foliis ovato-lanceolatis, spicis plurimis; confertis, caule fruticoso. *Mill. Dict. ed. 6. 4to. Icon. t. 143.*



Nº141

This plant recommends itself by its fragrance rather than its beauty, so delicious indeed is the odour it diffuses, that it is considered as essential to every green-house and stove.

"It grows naturally in Peru, from whence the seeds were sent by the younger Jussieu to the royal garden at Paris, where the plants produced flowers and seeds; and from the curious garden of the Duke d'Ayen, at St. Germain's, I was supplied with some of the seeds, which have succeeded, in the Chelsea garden, where the plants have flowered and perfected their seeds for some years."
Miller's Gard. Dict.

You may consider it either as a stove or a green-house plant, the former is more congenial to it in the winter season.

A pure atmosphere is essential to its existence, as I experienced at Lambeth-Marsh, where I in vain endeavoured to cultivate it.

It is propagated by cuttings as easily as any Geranium, and requires a similar treatment; in hot weather it must be well supplied with water, and in winter carefully guarded against frost, so fatal to most of the natives of Peru.

[142]

SCORZONERA TINGITANA. TANGIER SCORZONERA, OR POPPY-LEAV'D VIPERS GRASS.

Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Receptaculum nudum. *Pappus* plumosus. *Calyx* imbricatus, squamis margine scariosis.

Specific Character and Synonyms.

SCORZONERA *tingitana* foliis omnibus runcinatis amplexicaulibus. *Linn. Syst. Veg. ed. 14. Murr. p. 711.*

SONCHUS *tingitanus* papaveris folio *Raii Suppl. 137.*

CHONDRILLA *tingitana*, floribus luteis papaveris hortensis folio. *Herm. lugdb. 657. t. 659.*



N^o142

I am indebted for seeds of this plant to my very worthy and liberal friend NICH. GWYN, M. D. of Ipswich, to whose penetrating genius, and learned researches, Botany owes much.

As its name implies, it is a native of the province of Tangier, on the Barbary coast; appears to have been cultivated here, according to the *Hort. Kew.* in 1713, but is not mentioned in the 6th 4to. edit. of MILLER'S Dictionary.

It may be considered as forming a valuable addition to our stock of annuals, being a beautiful plant, and easily cultivated: it thrives best on a moderately dry soil, warmly situated: should be sown in the spring with other annuals.

I have observed, that in the middle of summer, a hot unclouded sun, which is favourable to the expansion of most of the flowers of this class, is too powerful for those of the present plant, which then appear to the greatest advantage in warm hazy weather.

[143]

PELARGONIUM GLUTINOSUM. CLAMMY CRANE'S BILL.

Class and Order.

MONADELPHIA HEPTANDRIA.

Generic Character.

Calyx 5-partitus: lacinia suprema definente in tubulum capillare nectariferum fecus pedunculum decurrentem. *Corolla* pentapetala, irregularis. *Filamenta* 10 inæqualia, quorum 3 raro 5 castrata. *Fructus* pentacoccus, rostratus, rostra spiralia introrsum barbata.

Specific Character and Synonyms.

PELARGONIUM *glutinosa* umbellis paucifloris foliis cordatis hastato-quinquangulis viscosis. *L'Herit. Ger. Ait. Hort. Kew. v. 2. p. 426.*

GERANIUM *glutinosa*. *Jacq. ic. collect. 1. p. 85.*

GERANIUM *viscosum*. *Cavanill. Diss. 4. p. 246. t. 108. f. 2.*



Nº143

The leaves of this species exhibit, on being touched, a manifest viscosity, or clamminess, which, independent of their shape, serves to characterize the species; the middle of the leaf is also in general stained with purple, which adds considerably to its beauty; but this must be regarded rather as the mark of a variety, than of the species.

With most of its congeners, it is a native of the Cape, and of modern date in this country, being introduced to the royal garden at Kew, by MESSRS. KENNEDY and LEE, in the year 1777.

It flowers from May to September; is readily propagated by cuttings, and sometimes raised from seeds, from whence several varieties have been produced.

[144]

FERRARIA UNDULATA. CURLED FERRARIA.

Class and Order.

GYNANDRIA TRIANDRIA.

Generic Character.

Monogyna. *Spathæ* unifloræ. *Petala* 6, undulato-crispata. *Stigmata* cucullata. *Caps.* 3-ocularis, infera.

Specific Character and Synonyms.

FERRARIA *undulata* caule multifloro. *Linn. Syst. Vegetab. p. 820. ed. 14. Murr. Ait. Kew. p. 305. v. 3.*

FLOS INDICUS e violaceo fuscus radice tuberosa. *I. B. Ferrar. Flora, ed. nov. p. 167. t. 171.*

GLADIOLUS INDICUS e violaceo fuscus radice tuberosa nobis. *Moris. hist. f. 4. t. 4. f. 7.*

NARCISSUS INDICUS flore saturate purpureo. *Rudb. Elys. 2. t. 49. f. 9.*

IRIS stellata cyclamine radice pullo flore. *Barrel. Icon. 1216.*



N^o144

The old Botanists appear to have been wonderfully at a loss to what family they should refer this very singular plant, as will appear on consulting the synonyms; BURMAN at length made a distinct genus of it, naming it *Ferraria* in honour of JOH. BAPTISTA FERRARIUS, by whom it was described, and very well figured, in his *Flora feu de Florum Cultura*, published at Amsterdam, in 1646.

Mr. MILLER informs us, that he received roots of this plant from Dr. JOB BASTER, F. R. S. of Zirkzee, who obtained it from the Cape, of which it is a native.

In the vegetable line, it is certainly one of the most singular and beautiful of nature's productions; much it is to be regretted that its flowers are of very short duration, opening in the morning and finally closing in the afternoon of the same day; a strong plant will, however, throw out many blossoms in succession.

In its structure and œconomy, it approaches very near to the *Sisyrrinchium*.

It flowers very early in the spring, from February to May, and is usually propagated by offsets, which its bulbs produce in tolerable plenty. It requires a treatment similar to the *Ixias* and other Cape bulbs. Our figure was drawn from a plant which flowered this spring, in the possession of R. FORSTER, Esq. of Turnham-Green.

INDEX.

In which the Latin Names of the Plants contained in the *Third Volume* are alphabetically arranged.

Pl.

- [134](#) Adonis vernalis.
- [125](#) Alstroëmeria Ligtu.
- [139](#) ———— Pelegrina.
- [126](#) Alyssum deltoideum.
- [130](#) ———— utriculatum.
- [129](#) Amaryllis vittata.
- [123](#) Anemone hortensis.
- [117](#) Campanula carpatica.
- [131](#) Catesbæa spinosa.
- [112](#) Cistus ladaniferus.
- [113](#) Convolvulus purpureus.
- [144](#) Ferraria undulata.
- [135](#) Gladiolus cardinalis.
- [141](#) Heliotropium peruvianum.
- [122](#) Hyacinthus racemosus.
- [133](#) ———— comosus.
- [137](#) Hypericum balearicum.
- [124](#) Iberis gibraltarica.
- [127](#) Ixia flexuosa.
- [138](#) Kalmia hirsuta.
- [111](#) Lathyrus tuberosus.
- [115](#) ———— sativus.

[109](#) *Lavatera trimestris*.
[116](#) *Limodorum tuberosum*.
[140](#) *Lupinus luteus*.
[110](#) *Mimosa verticillata*.
[121](#) *Narcissus incomparabilis*.
[136](#) *Pelargonium tetragonum*.
[143](#) ————— *glutinosum*.
[132](#) *Rubus arcticus*.
[128](#) *Scilla campanulata*.
[142](#) *Scorzonera tingitana*.
[118](#) *Sedum Anacampseros*.
[114](#) *Silene pendula*.
[119](#) *Strelitzia Reginae*.

INDEX.

In which the English Names of the Plants contained in the *Third Volume* are alphabetically arranged.

Pl.

[134](#) *Adonis Spring*.
[125](#) *Alstroemeria striped-flowered*.
[139](#) ——— spotted-flowered.
[129](#) *Amaryllis superb*.
[130](#) *Alyssum bladder-podded*.
[126](#) ——— purple.
[123](#) *Anemone star*.
[117](#) *Bell-flower Carpatian*.
[113](#) *Bindweed purple*.
[132](#) *Bramble dwarf*.
[124](#) *Candy-tuft Gibraltar*.
[114](#) *Catchfly pendulous*.
[131](#) *Catesbæa thorny*.
[112](#) *Cistus gum*.
[143](#) *Crane's-bill clammy*.
[121](#) *Daffodil peerless*.
[144](#) *Ferraria curled*.
[136](#) *Geranium square-stalked*.
[135](#) *Gladiolus superb*.
[122](#) *Hyacinth starch*.
[133](#) ——— two-coloured.
[127](#) *Ixia bending-stalked*.
[138](#) *Kalmia hairy*.
[111](#) *Lathyrus tuberous*.
[115](#) ——— blue-flowered.
[109](#) *Lavatera annual*.
[116](#) *Limodorum tuberous-rooted*.
[140](#) *Mimosa whorl'd-leaved*.
[118](#) *Orpine evergreen*.
[142](#) *Scorzonera Tangier*.
[137](#) *St. John's-wort warty*.
[119](#) *Strelitzia Canna-leaved*.
[128](#) *Squill bell-flowered*.
[141](#) *Turnsole peruvian*.

FOOTNOTES

- [1] From the gaiety of its flowers, which, from their stripes, appear like an object decorated with ribbands.—*Vitta*, a ribband; *vittata*, dressed with ribbands. *Ainsw*.
- [2] The leaves being somewhat like those of the Myrtle, and a gummy substance exuding from the plant as in the Gum Cistus.
- [3] In his *Journal des Observations Physiques, Mathematiques, et Botaniques, faites sur les Côtes Orientales de l'Amérique meridionale*, &c. printed in 1714.

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE
THE FULL PROJECT GUTENBERG LICENSE
PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg™ License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg™ electronic works

1.A. By reading or using any part of this Project Gutenberg™ electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg™ electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg™ electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg™ mission of promoting free access to electronic works by freely sharing Project Gutenberg™ works in compliance with the terms of this agreement for keeping the Project Gutenberg™ name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg™ License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg™ work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg™ License must appear prominently whenever any copy of a Project Gutenberg™ work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed,

viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg™ electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg™ trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg™ electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg™ License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg™ License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg™.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg™ License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg™ works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg™ electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg™ works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg™ trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”
- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain “Defects,” such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the “Right of Replacement or Refund” described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg™ work, (b) alteration, modification, or additions or deletions to any Project Gutenberg™ work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg™

Project Gutenberg™ is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg™’s goals and ensuring that the Project Gutenberg™ collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg™ and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation’s EIN or federal tax identification

number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg™ electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg™ concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg™ eBooks with only a loose network of volunteer support.

Project Gutenberg™ eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.