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CURTIS'S
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 **JOHN SIMS, M.D.**
FELLOW OF THE ROYAL AND LINNEAN SOCIETIES.

V O L. L.
Being the Eighth of the New Series.

The FLOWERS, which grace their native beds,
Awhile put forth their blushing heads,
But e'er the close of parting day,
They wither, shrink, and die away;
But THESE, which mimic skill hath made,
Nor scorched by suns, nor killed by shade,
Shall blush with less inconstant hue,
Which ART at pleasure can renew. LLOYD.

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I N D E X.

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



- | <i>Pl.</i> | <i>Pl.</i> |
|--|--|
| 2417 <i>Acacia diffusa.</i> | 2361 <i>Iris furcata.</i> |
| 2374 <i>Achania mollis.</i> | 2435 — <i>neglecta.</i> |
| 2410 <i>Ageratum strictum.</i> | 2409 <i>Itea virginica.</i> |
| 2369 <i>Alœ acinacifolia.</i> | 2366 <i>Justicia pedunculata.</i> |
| 2421 <i>Alstrœmeria pulchra.</i> | 2423 <i>Ixora rosea.</i> |
| 2399 <i>Amaryllis cyrtanthoides.</i> | 2416 <i>Limonia parviflora.</i> |
| 2389 <i>Anagallis latifolia.</i> | 2387 <i>Lobelia pyramidalis.</i> |
| 2357 <i>Andromeda axillaris, ß.</i> | 2372 <i>Loasa nitida.</i> |
| 2364 <i>Ardisia paniculata.</i> | 2413 <i>Lupinus microcarpus.</i> |
| 2432 <i>Arum italicum.</i> | 2427 <i>Magnolia acuminata.</i> |
| 2380 <i>Astragalus stipularis.</i> | 2398 <i>Maranta angustifolia.</i> |
| 2383 <i>Azalea pontica var. albiflora.</i> | 2373 <i>Nemophila phacelioides.</i> |
| 2406 <i>Banksia latifolia.</i> | 2407 <i>Nerine pulchella.</i> |
| 2396 <i>Berberis fascicularis.</i> | 2403 <i>Oenothera odorata, ß.</i> |
| 2381 <i>Boltonia glastifolia.</i> | 2424 ———— <i>tenella.</i> |
| 2382 <i>Brodiaëa ixioides.</i> | 2419 <i>Ornithogalum gramineum.</i> |
| 2392 <i>Bromelia sylvestris.</i> | 2386 <i>Oxalis lobata.</i> |
| 2358 <i>Broussonetia papyrifera.</i> | 2415 ———— <i>rosea.</i> |
| 2393 <i>Cactus Opuntia.</i> | 2395 <i>Perilla ocymoides.</i> |
| 2418 <i>Calceolaria corymbosa.</i> | 2411 <i>Pitcairnia staminea.</i> |
| 2405 ———— <i>scabiosæfolia.</i> | 2433 <i>Phayloopsis longifolia.</i> |
| 2371 <i>Cistus Barrelieri.</i> | 2437 <i>Polygala amara.</i> |
| 2391 <i>Crassula albiflora.</i> | 2438 ———— <i>cordifolia.</i> |
| 2356 ———— <i>versicolor.</i> | 2434 <i>Prostanthera lasianthos.</i> |
| 2397 <i>Crinum augustum.</i> | 2439 <i>Protea lævis.</i> |
| 2390 <i>Cynanchum nigrum.</i> | 2422 <i>Pulmonaria mollis.</i> |
| 2365 <i>Elichrysum proliferum.</i> | 2430 <i>Pyrus Amelanchier.</i> |
| 2402 <i>Erigeron bellidifolium.</i> | 2440 <i>Rauwolfia ternifolia.</i> |
| 2423 <i>Erysimum lanceolatum, ß.</i> | 2368 <i>Ribes multiflorum.</i> |
| <i>minus.</i> | 2436 <i>Salvia nutans.</i> |
| 2431 <i>Erythrina caffra.</i> | 2404 <i>Schizanthus pinnatus.</i> |
| 2384 <i>Euonymus latifolius.</i> | 2379 <i>Schizopetalon Walkeri.</i> |
| 2400 <i>Flaveria Contrayerba.</i> | 2408 <i>Scilla amœnula.</i> |
| 2420 <i>Geranium macrorhizon.</i> | 2370 <i>Sedum spurium.</i> |
| 2377 ———— <i>wallichianum.</i> | 2359 <i>Spigelia anthelmintica.</i> |
| 2376 <i>Gunnera perpensa.</i> | 2426 <i>Spiræa bella.</i> |
| 2378 <i>Hedychium flavum.</i> | 2401 <i>Stapelia barbata.</i> |
| 2385 <i>Hibiscus militaris.</i> | 2363 <i>Statice ægyptiaca.</i> |
| 2360 <i>Hovenia dulcis.</i> | 2362 <i>Tetragonia expansa.</i> |
| 2425 <i>Hyacinthus amethystinus.</i> | 2366 <i>Thunbergia grandiflora.</i> |
| 2394 <i>Hyosecyamus niger, ß. annua.</i> | 2388 <i>Tulipa suaveolens, ß. latifolia.</i> |
| 2414 ———— <i>orientalis.</i> | 2412 <i>Vestia lycioides.</i> |
| 2375 <i>Hypericum uralum.</i> | 2429 <i>Vitis riparia.</i> |

I N D E X.

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



- | <i>Pl.</i> | <i>Pl.</i> |
|---|--|
| 2417 Acacia, Awl-leaved. | 2387 Lobelia, Branchy. |
| 2374 Achania, Lobed-leaved woolly. | 2372 Loasa, Shining-leaved. |
| 2410 Ageratum, Upright. | 2432 Lung-wort, Soft. |
| 2369 Aloe, Great Scymitar-leaved. | 2413 Lupin, Small-podded. |
| 2421 Alstrœmeria, Fair. | 2427 Magnolia, Blue, or Cucumber-tree. |
| 2399 Amaryllis, Cyrtanthus-like. | 2398 Maranta, Narrow-leaved. |
| 2357 Andromeda, Fine notched-leaved. | 2437 Milk-wort, Bitter. |
| 2364 Ardisia, Panicked. | 2438 ————Heart-leaved. |
| 2432 Arum, Italian. | 2373 Nemophila Arkansian. |
| 2380 Astragalus, Broad-stipuled. | 2407 Nerine, Pale-pink. |
| 2383 Azalea, Thompson's white. | 2403 Oenothera, Sweet-scented. |
| 2406 Banksia, Broad-leaved. | 2424 ————Slender-twigged. |
| 2396 Berberry, Fasciculated. | 2358 Paper-Mulberry-Tree. |
| 2381 Boltonia, Wood-leaved Boltonia. | 2430 Pear, Alpine. |
| 2382 Brodiaea, Ixia-like. | 2395 Perilla, Balm-leaved. |
| 2371 Cistus, Rosemary-leaved. | 2392 Pine-Apple, Narrow-leaved, Wild. |
| 2420 Cranes-bill, Long-rooted. | 2411 Pitcairnia, Long-stamened. |
| 2377 ————Wallich's. | 2433 Phayloopsis, Long-leaved. |
| 2356 Crassula, Changeable. | 2389 Pimpernel, Broad-leaved. |
| 2391 ————White-flowered. | 2434 Prostanthera, Villous-flowered |
| 2397 Crinum, Stately. | 2439 Protea, Smooth. |
| 2363 Currant, Long-spiked. | 2440 Rauwolfia, Three-leaved. |
| 2390 Cynanchum, Black-flowered. | 2436 Sage, Nodding. |
| 2402 Erigeron, Plantain-leaved. | 2404 Schizanthus, Wing-leaved. |
| 2431 Erythrina, Cape. | 2379 Schizopetalon, Walker's. |
| 2365 Everlasting, Proliferous. | 2370 Sedum, Bastard. |
| 2400 Flaveria, Broad-leaved. | 2418 Slipper-Wort, Corymbose. |
| 2378 Garland-Flower, Yellow. | 2405 ————Scabious-leaved. |
| 2376 Gunnera, Cape. | 2426 Spiræa, Comely. |
| 2423 Hedge-Mustard, Sweet-scented Alpine. | 2384 Spindle-tree, Broad-leaved. |
| 2394 Henbane, Annual-black. | 2362 Spinach, New-Zealand. |
| 2414 ————Oriental. | 2401 Stapelia, Bearded. |
| 2385 Hibiscus, Military. | 2375 St. John's Wort, Myrtle-leaved |
| 2360 Hovenia, Sweet. | 2419 Star-of-Bethlem, Grass-leaved |
| 2425 Hyacinth, Amythyst-coloured. | 2408 Squill, Few-flowered. |
| 2361 Iris, Forked. | 2363 Thrift, Egyptian. |
| 2435 ————Horneman's. | 2366 Thunbergia, Blue-flowered. |
| 2393 Indian-Fig, Common dwarf. | 2388 Tulip, Claramond. |
| 2409 Itea, Virginian. | 2412 Vestia, Box-thorn-like. |
| 2367 Justicia, Long-stalked American. | 2429 Vine, Sweet-scented. |
| 2428 Ixora, Rose-coloured. | 2359 Worm-grass, Annual. |
| 2416 Limonia, Small-flowered. | 2386 Wood-sorrel, Lobed-leaved. |
| | 2415 ————Crimson. |

I N D E X.

In which the Latin Names of the Plants contained in the *Fifty-
First* Volume are alphabetically arranged.



Pl.
 2517 Aloe africana, β angustifolia.
 2494 Alpinia tubulata.
 2448 Amethystea cærulea.
 2459 Ammobium alatum.
 2478 Angclonia salicariæfolia.
 2468 Antennaria triplinervis.
 2472 Artemisia biennis.
 2508 Arum bulbiferum.
 2499 Aspidistra lurida.
 2503 Astrapæa Wallichii.
 2509 Azalea indica.
 2511 Bellis sylvestris.
 2444 Biscutella hispida.
 2491 Bossiæa linophylla.
 2489 Bubon Galbanum.
 2492 Campanula pulla.
 2498 Canna edulis.
 2493 Centaurea spinosa.
 2488 Cissus antarctica.
 2443 ——— quinquefolia.
 2479 Coix Lachryma.
 2496 Conanthera bifolia.
 2451 Coreopsis lanceolata.
 2512 ——— tinctoria.
 2470 Coriaria sarmentosa.
 2518 Cotyledon decussata.
 2466 Crinum Careyanum.
 2522 ——— confertum.
 2463 ——— submersum.
 2456 Cyrilla racemiflora.
 2471 Cyrtanthus pallidus.
 2486 Dalea mutabilis.
 2454 Desmanthus virgatus.
 2476 Dorstenia arifolia.
 2457 Echinops strictus.
 2473 Echites nutans.
 2480 Entelæa arborea.
 2465 Erica bucciniflora.
 2504 Erinus Lychnidea.
 2445 Erodium Gussonii.
 2490 Eucrosia bicolor.

Pl.
 2467 Eulophia guincensis.
 2520 Euphorbia anacantha.
 2514 ——— carinata.
 2507 Fuchsia decussata.
 2464 Habranthus gracilifolius.
 2485 ——— versicolor.
 2475 Hippeastrum subbarbatum.
 2453 Jonidium Ipecacuanha β .
 2446 Ipomæa speciosa.
 2487 Justicia geniculata.
 2505 Ixora barbata.
 2497 Laurus aggregata.
 2519 Lobelia Rhizophyta.
 2469 Lonicera punicea.
 2462 Malpighia lucida.
 2515 Malva prostrata.
 2441 Melastoma granulosa.
 2455 Momordica Charantia.
 2513 Monarda Russeliana.
 2458 Nicandra physaloides.
 2484 Nicotiana repanda.
 2452 Ocimum canum.
 2450 Ononis hispanica.
 2516 Ophrys Arachnites.
 2510 Ornithogalum narbonense.
 2442 Oxylobium arborescens.
 2483 Oxytropis pilosa.
 2506 Pedicularis canadensis.
 2449 Phlomis Herba Venti.
 2460 Plectranthus ternatus.
 2447 Protea grandiflora α latifolia.
 2501 Psidium Cattleianum.
 2461 Rhipsalis salicornoides.
 2502 Sarcophyllum carnosum.
 2521 Schizanthus porrigens.
 2474 Sedum sempervivoides.
 2482 Serratula simplex.
 2495 Sida aurita.
 2477 Vernonia flexuosa.
 2481 Urtica involucrata.
 2500 Wulfenia carinthiaca.

I N D E X.

In which the English Names of the Plants contained in the *Fifty-First* Volume are alphabetically arranged.



- | <i>Pl.</i> | <i>Pl.</i> |
|---|--|
| 2517 Aloe, Narrow Sword-leaved. | 2464 Habranthus, Slender-leaved. |
| 2494 Alpinia, Demerara. | 2465 Heath, Trumpet-flowered. |
| 2448 Amethyst, Blue. | 2445 Heron's-bill, Gussone's. |
| 2459 Ammobium, Winged-stalked. | 2469 Honeysuckle, Crimson-flowered, upright. |
| 2478 Angelonia, Violet-flowered. | 2498 Indian-reed, Tuberous-rooted. |
| 2508 Arum, Bulb-bearing. | 2453 Ipecacuanha, White. |
| 2499 Aspidistra, Dingy-flowered. | 2446 Ipomæa, Broad-leaved. |
| 2503 Astrapæa, Wallich's. | 2479 Job's-tears. |
| 2509 Azalea, Double Rose-coloured Indian. | 2487 Justicia, Jointed-stalked. |
| 2462 Barbadoes-Cherry, Wedge-leaved. | 2505 Ixora, Bearded. |
| 2452 Basil, Hoary. | 2488 Kanguru-Vine. |
| 2497 Bay, Cluster-flowered. | 2475 Knight's-star-lily, Slightly bearded. |
| 2492 Bell-flower, Austrian. | 2519 Lobelia, Spathula-leaved. |
| 2491 Bossiæa, Narrow-leaved. | 2506 Lousewort, Canadian. |
| 2489 Bubon, lovage-leaved. | 2515 Mallow, Pimpernel-flowered. |
| 2444 Buckler's-mustard, Hispid. | 2441 Melastoma, Commerson's. |
| 2493 Centaury, Prickly-branched. | 2455 Momordica, Tuberculated. |
| 2443 Cissus, Five-leaved Brasil. | 2513 Monarda, Dotted-flowered. |
| 2496 Conanthera, Violet-flowered. | 2481 Nettle, Imbosomed. |
| 2512 Coreopsis, Arkansa. | 2458 Nicandra, Physalis-like. |
| 2451 ————— Spear-leaved. | 2516 Ophrys, Black-spider. |
| 2470 Coriaria, New-Zealand. | 2442 Oxylobium, Tall. |
| 2518 Cotyledon, Cross-leaved. | 2483 Oxytropis, Hairy. |
| 2466 Crinum, Dr. Carey's. | 2449 Phlomis, Rough-leaved. |
| 2522 ————— Crowded-flowered, | 2460 Plectranthus, Ternate-leaved. |
| 2463 ————— Lake. | 2447 Protea, Broad-leaved great-flowered. |
| 2456 Cyrilla, Carolina. | 2450 Rest Harrow, Small-leaved. |
| 2471 Cyrtanthus, Pale-flowered. | 2461 Rhipsalis, Glass-wort-like. |
| 2511 Daisy, Large Portugal. | 2502 Sarcophyllum, Cape. |
| 2486 Dalea, Changeable. | 2473 Savannah-flower, Nodding. |
| 2454 Desmanthus, Long-twigged. | 2482 Saw-wort, One-flowered. |
| 2476 Dorstenia, Arum-leaved. | 2521 Schizanthus, Spreading. |
| 2480 Entelæa, New-Zealand. | 2474 Sedum, Houseleek-like. |
| 2504 Erinus, Phlox-like. | 2495 Sida, Ear-stipuled. |
| 2490 Eucrosia, Particoloured. | 2520 Spurge, Scaly Finger-flowered. |
| 2468 Everlasting, Nepal. | 2510 Star of Bethlem, Narbonne. |
| 2467 Eulophia, Sierra Leone. | 2484 Tobacco, Stem-clasping Savannah. |
| 2514 Euphorbia, Keel-leaved. | 2477 Vernonia, Zig-zag. |
| 2507 Fuchsia, Cross-branched. | 2472 Wormwood, Biennial. |
| 2457 Globe-Thistle, Upright. | 2500 Wulfenia, Carinthian. |
| 2501 Guava, Purple-fruited. | |
| 2485 Habranthus, changeable. | |



CRASSULA VERSICOLOR. CHANGEABLE

CRASSULA.

*Class and Order.*

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5 (nunc unguibus coalitis).
Squamæ 5 nectariferæ ad basin germinis. *Capsulæ* 5.

Specific Character and Synonyms.

* *Frutescentes.*

CRASSULA *versicolor*; corollis tubulosis, foliis imbricatis lanceolatis concavis cartilagineo-ciliatis basi connato-vaginantibus, floribus umbellatis.

CRASSULA *versicolor*; erecta, ramosa, foliis oblongo-lanceolatis cartilagineo-denticulatis basi connato-vaginantibus, umbellis geminato-multifloris. *Bot. Reg.* 320.

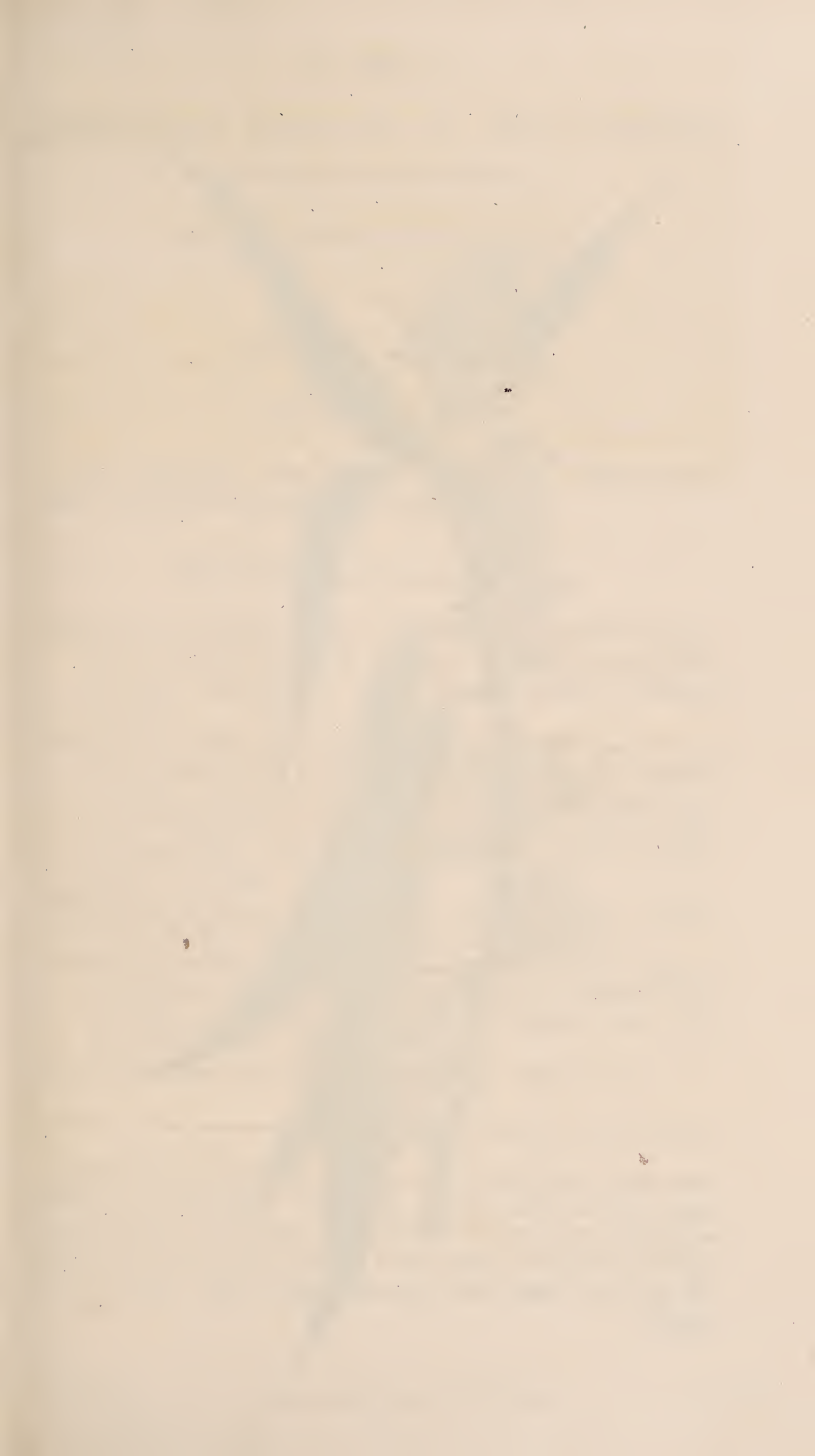
CRASSULA *versicolor*. *Burchell Mss.*

DESCR. *Stem* shrubby, erect, branched. *Leaves* imbricate, lanceolate, hollowed especially towards the base, connate, sheathing, edged with minute cartilaginous ciliæ. *Flowers* in umbels at the extremities of the branches. *Calycine leaflets* subulate, one third shorter than the tube of the corolla. *Corolla* hypocrateriform, with a long tube, formed by the adherent, but separable claws of the petals: *limb* shorter by half than the tube, five cleft: segments somewhat recurved, bright red on the outside, and white within, except a red margin, which gradually extends nearly over the whole. The flowers are sweet-scented in the evening.

This species, on account of the tubular corolla, belongs to DE CANDOLLE'S genus LAROCHEA adopted by PERSOON and

and HAWORTH, also by SCHULTES in the new edition of the *Systema Vegetabilium*. But as this tube is made simply by the adhesion of the claws of the petals, which are more or less separable in all, and in *CRASSULA jasminea* (*supra* 2178) with quite as long a tube, are not at all connected, except at the upper part, this circumstance seems hardly sufficient to found a genus upon. JUSSIEU' refers all the tubular species of *CRASSULA* to *COLYLEDON*.

CRASSULA versicolor is a native of the Cape of Good Hope, whence it was introduced by Mr. BURCHELL on his return from his travels in that country, and is indeed a very valuable acquisition to our gardens, as it flowers freely, and requires only to be protected from frost and from damps. Flowers most of the summer. Communicated by Mr. JOSEPH KNIGHT of the Exotic Nursery in the King's Road.





ANDROMEDA AXILLARIS, β . FINE NOTCHED-
LEAVED ANDROMEDA.

Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Cor.* ovata: ore 5-fido. *Caps.* 5-locularis: valvulis dissepimento contrariis.

Specific Character and Synonyms.

ANDROMEDA *axillaris*; foliis perennantibus ovato-lanceolatis spinuloso-serratis subtus ferrugineo-punctatis, racemis axillaribus sessilibus suberectis, antheris muticis.

ANDROMEDA *axillaris*; foliis oblongo-ovalibus basi acutis brevi-acuminatis cartilagineo-serratis lucidis glabris coriaceis, racemis spicatis axillaribus sessilibus squamoso-bracteatis undique confertifloris, corollis cylindraceo-ovatis, antheris muticis. *Pursh Fl. Amer. Sept. 1. p. 292.*

ANDROMEDA *axillaris*. *Willd. Sp. Pl. 2. p. 613. Hort. Kew. ed. alt. 3. p. 54. Nuttall Gen. 1. p. 265.*

ANDROMEDA *axillaris*, β . foliis lanceolatis versus apicem serrulatis coriaceis, racemis axillaribus solitariis brevissimis. *Lam. Encycl. 1. p. 157.* Ejusdem var. α . est *A. Catesbæi* (*supra* 1955.)

(β .) foliis lineari-lanceolatis longissimis. *Pursh l. c.*

ANDROMEDA *axillaris* and *Catesbæi* have been often considered as varieties of the same species, and, as both vary considerably in the form of the leaves, they may sometimes approach so near as to render it not easy to decide to which species some individuals belong, or at least not from the foliage

foliage alone ; but we believe that our present plant in all its varieties may be generally distinguished by its shorter, more erect, and more clustered racemes. In *A. Catesbæi* the racemes are longer, more or less cernuous, and are furnished with longer and more pointed bractes. We must not conceal however, that the accurate botanist Mr. NUTTALL is decidedly of opinion that *A. axillaris* and *spinulosa* (our *Catesbæi*) form but one species. To us however our present plant, which we take to be variety β of PURSH'S *axillaris*, appears to be evidently distinct from the one we have given above, No. 1955, under the name of *A. Catesbæi*.

Native of Carolina and Georgia, and though considered as hardy, is liable to be killed by our winters when severe. Flowers from May to August. Communicated by JOHN WALKER, Esq. of Arno's Grove.



**BROUSSONETIA PAPYRIFERA. PAPER-
MULBERRY TREE.**



Class and Order.

DICÆCIA TETRANDRIA.

Generic Character.

MASC. *Amentum* cylindraceum. *Cal.* 4-partitus. *Cor.* 0.

FEM. *Amentum* globosum, e receptaculis cylindraceo-clavatis compositum. *Cal.* 3- s. 4-dentatus, in apice receptaculi. *Stylus* lateralis subulatus. *Sem.* 1. calyce tectum.

Specific Name and Synonyms.

BROUSSONETIA papyrifera. *Hort. Kew. ed. alt. 5. p. 372.*
Bot. Repos. v. 8. t. 488.

BROUSSONETIA. *Vent. Regn. veg. 3. p. 547.*

PAPYRIUS japonica. *Lam. Encycl. Bot. 5. p. 5. Ejusdem*
Ill. Gen. t. 762.

MORUS papyrifera; foliis palmatis, fructibus hispidis. *Sp.*
Pl. 1399.

MORUS sativa, foliis urticæ mortuæ, cortice papyrifera.
Kæmpf. Amæn. 471. t. 472.

MORUS papyrifera sativa japonica. *Seb. Thes. 1. p. 44.*
t. 28.

The Paper-Mulberry tree is a shrub of but little beauty; but, both in Japan and in the South-sea islands, is of the utmost importance for economical purposes. In Otaheite, as we are informed by Captain Cook, in his relation of his first voyage, the finest and whitest cloth worn by the chiefs and principal persons of the island is entirely manufactured from the inner bark of this tree by a simple process of beating; and in Japan the same species is cultivated in great quantity, for the purpose of making paper of different kinds,

kinds, by a process in which the bark is reduced to a pulp, to be afterwards spread into sheets of greater or less thickness, upon similar principles, though by different contrivances, to what are used in the manufacture of European paper, except that it appears that the Japanese employ vegetable mucilages only, and neither animal gluten nor alum, which is probably the reason that their paper is more bibulous than ours. A full description of the Japanese process for making paper from the Paper-Mulberry may be seen in KÆMPFER'S *amœnitates*, which has been translated into several of the Encyclopædias and Dictionaries of the day.

In young plants the leaves are more or less divided into lobes, but in adult shrubs they are generally entire, as seen in our plate, in which the upper figure represents a flowering branch of the female, and the lower one of a male plant. This tree has been long cultivated in our gardens; according to the Hortus Kewensis before 1751, by PETER COLLINSON, Esq. It appears by M. POIRET'S account in LAMARCK'S *Encyclopédie* that it had been long cultivated also in the Paris gardens, but that the male plant only was known, till M. BROUSSONET, in his travels, met with the female in some garden in Scotland, and transmitted cuttings of it. The fruit being from that time known, it was found not to belong to the genus *Morus*, though nearly allied to it. M. L'HERETIER gave it the name of *Broussonetia*; but his unfortunate death prevented its publication, till adopted by VENTENAT, in his *Tableau du Règne Végétal*.

Native of Japan and the South-sea islands. Flowers from February to September. Propagated by layers, cuttings, or seed. Communicated by JOHN WALKER, Esq.

N. 2359



Therapsis Del

Pub by S Curtis Weirworth

Nov 11 1922.

Weddell sc

SPIGELIA ANTHELMIA. ANNUAL WORM-GRASS.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis. *Caps.* didyma, 1-locularis, polysperma.

Specific Character and Synonyms.

SPIGELIA *Anthelmia*; foliis inferioribus oppositis; superioribus quaternis, floribus spicatis secundis. *R. et P. Flor. Peruv. v. 2. p. 9.*

SPIGELIA *Anthelmia*; caule herbaceo, foliis summis quaternis. *Willd. Sp. Pl. 1. p. 824. Amæn. Acad. 5. p. 133. t. 2. Roem. et Sch. Syst. Vegetab. 4. p. 190.*

ANTHELMENTHIA quadrifolia spicis terminalibus et e centro frondis. *Browne Jam. 156. t. 37. f. 3.*

ARAPABACA quadrifolia, fructu testiculato. *Plum. Gen. p. 11. t. 31.*

ARAPABACA Brasiliensibus dicta planta. *Marcgr. Bras. 46.*

HELIOTROPIUM Brasilicum Herbæ Paridis folio. *Petiv. Gazyph. tab. 59. f. 10.—Catal. 589.*

The SPIGELIA *Anthelmia* is a plant of considerable efficacy for the cure of worms, and febrile diseases supposed to arise from the presence of worms. It was first brought into notice by Dr. PATRICK BROWNE, in his Civil and Natural History of Jamaica; but it does not seem to have been ever much in use in this country; but another species *A. marilandica* (*supra n. 80.*) under the name of Indian Pink, was at one time in considerable vogue. There can be no doubt that these plants are very efficacious remedies,

remedies, but whether from the unpleasant narcotic effects which they sometimes produce, especially on the eyes, or some other cause, they seem now to be very much neglected; though the root of the *SPIGELIA marilandica* is still retained in the College Materia Medica.

Native of the West Indies and the continent of South America. Requires the heat of the stove, or a hot-bed, and being an annual is propagated only by seeds. Flowers in July. Cultivated by MILLER in 1759. Communicated by Mr. WILLIAM ANDERSON from the Chelsea garden.

N. 2360.



HOVENIA DULCIS. SWEET HOVENIA.

*Class and Order.*

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus, persistens dentibus deciduis. *Petala* 5, convoluta, stamina obvolventia. *Caps.* 3-locularis, 3-valvis: loculis 1-spermis.

Specific Name and Synonyms.

HOVENIA dulcis. *Thunb. Jap.* 101. *Willd. Sp. Pl.* 1. p. 1141. *Lam. Illustr. Gen. t.* 131. *Encycl. Bot.* 3. p. 138. *Roem. ct. Sch. Syst. Veg.* 5. p. 429. *Bot. Reg. t.* 501. *et in Appendice, vol.* 7.

SICKU vulgo KEN. PYRUS fructu ramoso, vasculo seminali summo fructui insidente tricocco et tripyreno. *Kæmpf. Amæn.* p. 808. t. 809.

HOVENIA *dulcis* is cultivated in Japan and China for the sake of its very singular sweet *fruit*, as in common language it is called, though, it does not afford any covering to the seed, as most fruits do; but no more does the common strawberry, the succulent, eatable part of which is the enlarged receptacle, on the outside of which the seed is affixed. So in this plant, after the flowering is over the branched foot-stalks of the flowers increase in size, become succulent and contain a sweet pulp which KÆMPFER compares to the taste of our Burgamot pear. To the succulent extremities of this branched foot-stalk, the capsule containing three seeds in three cells is attached by a short pedicle.

For specimens of this very rare plant we are indebted to our friend Mr. LAMBERT, in whose greenhouse, at Boyton, it flowers freely; but the fruit has not, as yet, come to any degree of maturity.

It

It appears from the specimens preserved in the Lambertian Herbarium, that there is a considerable variety with regard to the pubescence and the serrature of the leaves, and Mr. DON remarks that as the trees advance in age they become smoother and the leaves deeper serrated. In a specimen from China, in the same collection, the branches, and in degree, the leaves also are clothed with a rust-coloured pubescence, and grow more zig-zag than in the Japan plant. Perhaps this may be a distinct species.

Flowers in July. Communicated by AYLMER B. LAMBERT, Esq. from his collection at Boyton.



IRIS FURCATA. FORKED IRIS.



Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis, alternis conniventibus. *Stigmata* 3, petaliformia.

Specific Character and Synonyms.

IRIS *furcata*; (barbata) foliis ensiformibus scapo bifurco bifloro brevioribus, germine trigono trisulco. M. B. *Flor. Taurico-Caucas. v. 3. p. 42.*—*Cent. Pl. rar. Ross. 2. t. 51. Roem. et Sch. Syst. veget. 1. p. 462. Lepech. it. 1. p. 300. Georgi it. 1. p. 196.*

IRIS *biflora*; M. B. *Fl. Taurico-Caucas. v. 1. p. 31.* Exclisus synonymis, præter Pallasii et forsan Schmidtii.

In the third volume of that excellent work, the *Flora Taurico-caucasica*, MARSCHALL A BIEBERSTEIN considers this species as distinct from the *biflora*, to which he had at first referred it. From the last named species it is distinguished by its never having a three-flowered, though it varies with a one-flowered scape; by its peduncled, not sessile flowers; by the reflexed laciniae of the corolla not being narrower than the upright; and by the three-cornered, not rounded germen.

It is upon Dr. FISCHER'S authority that we give this as the *IRIS furcata* of MARSCHALL; for not having had an opportunity of examining the plant ourselves, we could not have decided whether to refer it to that species or to *biflora*. The second volume of the *Centuria plantarum rariorum Rossicarum*, if published, is not, we believe, as yet arrived in this country.

Native of Northern Caucasus, where it grows very common in the open pastures. A hardy perennial. Flowers in May. Communicated by Mr. ANDERSON from the Chelsea garden.

N. 2362.



TETRAGONIA EXPANSA. HORNED TETRAGONIA
OR NEW ZEALAND SPINACH.



Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

Cal. 3- s. 5-partitus. *Petala* 0. *Drupa* infera, nuce 4- s. 8-loculari.

Specific Character and Synonyms.

TETRAGONIA *expansa*; herbacea, foliis ovato-rhombeis, fructibus quadricornibus. *Willd. Sp. Pl.* 2. p. 1024. *Hort. Kew. ed. alt.* 3. p. 211. *De Cand. Plantes grasses.* t. 114. *J. Anderson in trans. Horticult. Soc.* v. 4. p. 488.

TETRAGONIA *expansa*; herbacea, ramis expansis elongatis, foliis parabolicis, floribus plerumque solitariis, fructu cornuto. *Murray in Comment. Goetting.* 1783. p. 13. t. 5. *Scop. Delic. Insubr.* 1. p. 32. t. 14.

TETRAGONIA *expansa*; foliis subcordatis ovatis punctatis, floribus axillaribus solitariis. *Thunb. in Lin. Soc. Trans.* 2. p. 335.

TETRAGONIA *halimifolia*; herbacea, papulosa, foliis elliptico-rhombeis petiolatis, pedunculis axillaribus unifloris subsolitariis, fructu cornuto. *Forst. Prodr.* n. 223. *Forst. Plant. esc.* p. 67. n. 37.

TETRAGONIA *japonica*; foliis subcordatis ovatis punctatis, floribus axillaribus solitariis. *Thunb. Jap.* 208.

TETRAGONIA *cornuta*. *Gærtn. fruct.* 2. p. 483. t. 179. f. 3.
DEMIDOVIA *tetragonoides*. *Pall. enum. Hort. Demidorf.* p. 150. t. 1. teste *Willd.*

TETRAGONIA *expansa* would certainly claim little notice for its beauty, but at the same time, it is a plant of some notoriety; having been discovered by the late Sir JOSEPH BANKS in Queen Charlotte's sound, New Zealand, in Captain COOK'S

COOK's first voyage to the Pacific Ocean; at a time when from its esculent qualities, it was in no ordinary degree acceptable, and more especially at Tongatabu in the Captain's second voyage when its virtues were better known.

The first account of this plant being cultivated as an esculent herb in Europe, is given by Count D'OURCHES in the *Annâles d'Agriculture* for September 1819. In the Fourth Volume of the *Transactions of the Horticultural Society* is a dissertation on the advantage of cultivating this plant, as a substitute for summer Spinach, by Mr. JOHN ANDERSON, gardiner to the Earl of Essex; from whose account it may be gathered that it is a very valuable acquisition to the culinary garden, being by most persons preferred to Spinach, and affording a more ready succession in the hot months, when the latter is with great difficulty kept in order for supplying the table, from its running so speedily into flower.

It is not very tender, resisting at the latter end of the year a greater degree of frost than what will destroy Potatoes, Nasturtiums, and other tender annuals. It is to be first raised in a melon frame, and planted in the open air after the middle of May, in a richly manured bed. But to procure seeds by which, being a annual, it is only to be propagated, Mr. ANDERSON recommends some of the plants to be raised in poor ground or confined in pots, as is practised to procure seeds from the Ice plant.

Communicated by JOHN WALKER, Esq. of Arno's Grove.

N. 2363.



Ilartwuel

Painted by John Wainwright. No. 71822.

STATICE ÆGYPTIACA. EGYPTIAN THRIFT.

Class and Order.

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 1-phyllus, integer, plicatus, scariosus. *Petala* 5.
Sem. 1, superum.

Specific Character and Synonyms.

STATICE *ægyptiaca*; caule herbaceo, foliis radicalibus alterne pinnatifido-sinuatis, corollæ laciniis intermediis linearibus, perianthio communi bicorni. *Viviani Hort. di Negro. Pers. Syn. 1. p. 334. n. 41. Schultes Syst. Veg. vol. 6. p. 796.*

STATICE *ægyptiaca*; foliis radicalibus sinuatis lyratis; superioribus lineari-lanceolatis decurrentibus, floribus paniculatis fasciculatis, bracteis majoribus coriaceis apice bispinosis, calyce 10-denticulato, denticulis quinque alternis setaceis, corolla inclusa. *Delisle Egypt. t. 25. f. 3.*

STATICE *ægyptiaca*. *Scannagatta Hort. Bonon. 1813. Biroli Hort. Taurin. 1815. Configliacchi Hort. Mantuan. 1816. Campana Hort. Farrar. 1820. teste Dom. Webb.*

DESCR. *Radical leaves* sublyrate, sinuate-pinnatifid, mucronate, very minutely ciliate. *Stems* several, flattened, winged at the upper part, the wings somewhat elongated beyond the division, forming a sort of ear on one side. *Peduncles* about five-flowered broadly winged: wings elongated on each side into unequal horns. *Bractes* green, recurved at the point. *Calyx* superior, white, scariose, funnel-shaped; border 10-cleft: alternate segments filiform, *Corolla* yellowish, caducous, shorter than calyx, 5-petaled: petals wedge-shaped, *Stamens* short, included.

This

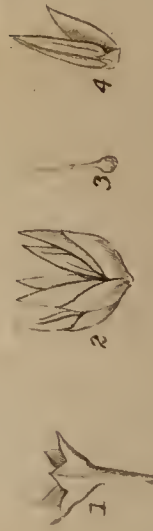
This species has a near affinity with *STATICE sinuata*, but the calyx of the latter being of a bright blue and the corolla white, that has much the advantage in point of beauty.

The Catalogues of the Italian gardens, which serve to show the dates of its cultivation there, are quoted on the sole authority of Mr. WEBB.

Native of Egypt. Communicated by P. B. WEBB, Esq. by whom it was introduced into this country.



N. 2364.



J. Hooker, Del.

Fl. by J. Curtis, W. B. Swarth, Des. 11, 1822.

W. B. Swarth, Sc.

ARDISIA PANICULATA. PANICLED ARDISIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Cor.* hypocrateriformis: limbo reflexo. *Antheræ* magnæ, erectæ. *Stigma* simplex. *Drupa* supera, 1-sperma.

Specific Character and Synonym.

ARDISIA *paniculata*; fruticosa, foliis cuneato-oblongis subsessilibus integerrimis reflexis, paniculis terminalibus ovalibus alterne decompositis. *Bot. Reg.* 638. *Roxb. flor. Ind. Mscr.*

This species of ARDISIA is probably the finest of the whole genus, growing into a small tree, with large reflexed foliage, and bearing oval-shaped panicles of rose-coloured flowers at the extremities of the branches. These remain a long time in bud, and are perhaps handsomer in that state than when the flowers are fully expanded, being of a more intense colour before, than after, expansion. Like most of the genus, as we are informed by Dr. ROXBURGH, it continues covered for a great part of the year with blossom and fruit at the same time.

We have never seen this plant any where but in the collection of the COMTESSE DE VANDES, at Bayeswater, where it came into flower for the first time in March last.

Native of Chittagong in the East Indies. Requires to be kept constantly in the stove.

The separate figures represent,

1. The *Calyx*.
2. The *Corolla* and *Anthers*; the former not thoroughly expanded.
3. The *Germen* and *Style*.
4. *Anther* attached to a segment of the corolla.



**ELICHRYSUM PROLIFERUM. PROLIFEROUS
EVERLASTING.**



Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. nudum. Pappus pilosus vel plumosus. Cal. imbricatus, radiatus: radio colorato.

Specific Character and Synonyms.

ELICHRYSUM *proliferum*; fruticosum, ramosum, diffusum, proliferum, foliis subrotundo-ovatis glabris convexis arcte imbricatis, floribus sessilibus. *Willd. Sp. Pl. 3. p. 1905. Hort. Kew. ed. alt. 5. p. 22.*

ELICHRYSUM *proliferum*; caule ramosissimo argenteo-tomentoso, ramo omni ramusculis crebris foliatura obesa minuta loricatis obsito. *Bot. Reg. 21.*

XERANTHEMUM *proliferum*; caule fruticoso prolifero, floribus sessilibus, foliis granulato-subrotundis imbricatis obsolete. *Sp. Pl. 1202. Berg. Cap. 272. Lam. Encycl. 3. p. 237. n. 8. Bot. Repos. 374.*

XERANTHEMUM *africanum*, imis Gnaphalii foliis, supernis vero cupressinis teretifoliis, flore maximo Persicæ colore. *Pluk. Amalth. 213. t. 449. f. 4.*

ELICHRYSUM *abrotani* feminæ foliis. *Breyn. Prodr. II. 28. t. 17. f. 1. Seb. Thes. 2. t. 89. f. 6. quoad figuram.*

CARLINA *Xeranthemoides africana*, abrotani feminæ foliis. *Breyn. Prodr. I. p. 20.*

CARDUUS *Xeranthemos*. *Raj. Suppl. 198.*

The beauty of the flowers, in the general sense of the word, consists in the whole genus in the rays of the Calyx, which are persistent and variously coloured. In the present species the rays are of a bright crimson, especially on the

the outside, on which account, their brilliancy is seen to the greatest advantage before the flower is fully expanded. But those who have seen the flowers of *ELICHRYSUM eximium* will hardly agree with BREYNIUS in calling it the Queen of all syngenesious plants, an expression by which he probably meant to flatter Mynheer HUYDEKOOPER, who first introduced it into the European gardens. As an everlasting flower however, for dried bouquets, it certainly stands very high. The shrub is very remarkable too for its foliage, if foliage it can be called, which LINNÆUS himself was at a loss whether he should call branchlets or leaves; we should consider them, as the former, clothed with minute imbricated leaves. The whole of the stems are covered with a white cottony tomentum.

Native of the Cape of Good Hope. Introduced in 1789. Flowers all the Summer. Requires to be kept in the most airy part of the greenhouse, being, like all cottony plants, very liable to be injured by damps.



Passiflora ... *Walp.* ... *Walp.*

**THUNBERGIA GRANDIFLORA. BLUE-FLOWERED
THUNBERGIA.**

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. duplex; exterior *Spatha* diphylla: interior 12-dentata, nunc deficiens. *Cor.* tubulosa: limbo subregulari. *Caps.* globosa, rostrata, 2-locularis, 2-valvis.

Specific Character and Synonym.

THUNBERGIA grandiflora; perennis, scandens, foliis anguloso-cordatis, calyce interiore nullo, antheris barbatis calcaratis. *Roxb. Fl. Ind. Or. inedita. Bot. Reg. 495.*

DESCR. *Stem* climbing, shrubby. *Leaves* opposite petioled, angular-cordate. *Calyx* a two valved *spathe*; *valves* ovate, roughened with small black points, oblique, with the upper margins straight, and closely applied to one another, sometimes slightly coherent; lower margins rounded, separate. *Corolla* large, bright blue, streaked. *Tube* conical, contracted upwards, then largely dilated into a bell-shaped faux, vaulted on the upper side, and convex on the lower: *Limb* 5-lobed: *lobes* rounded, spreading, two upper ones erect: lower one somewhat the largest. *Stamens* 4: longer pair much curved at the bottom: shorter pair compressed, gibbous. *Anthers* oblong, bearded, spurred. *Germen* superior, conical, seated on a lobulated annular disk: *Style* the length of the stamens: *Stigma* concave.

Native of Bengal, growing in uncultivated places, in the neighbourhood of Calcutta, and flowering in the rainy season. Requires to be kept in the stove. May be propagated by cuttings.

Our drawing of this beautiful plant was taken at Haringay House, the seat of EDWARD GRAY, Esq. in whose stove it grows luxuriantly, and flowers freely.



Scilla maritima L.

1841

JUSTICIA PEDUNCULOSA. LONG-STALKED
AMERICAN JUSTICIA.



Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cal. simplex vel duplex. *Cor.* irregularis vel subregularis. *Caps.* 2-valvis, 2-locularis: dissepimentum valvis contrarium: retinaculis seminum uncinulatis.

Specific Character and Synonyms.

* *
* *Calyce simplici, corollis bilabiatis; labiis divisis;*
B. Diantheræ.

JUSTICIA *pedunculosa*; spicis axillaribus, floribus confertis, pedunculis elongatis alternis, foliis lanceolatis. *Roem. et. Sch. Syst. Veg.* 1. p. 154. *Pursh. Fl. Amer. Sept.* 1. p. 13. *Nuttall Gen.* 1. p. 11.

JUSTICIA *americana*; cum caractere jam citato. *Vahl. Symb.* 2. p. 15.—*Enum.* 1. p. 140. *Willd. Sp. Pl.* 1. p. 92. *Hort. Kew. ed. alt.* 1. p. 38.

JUSTICIA *pedunculosa*; herbacea, caulibus erectis simplicissimis; foliis erectis lineari-lanceolatis utrinque angustato-acutis, spicis alternis longissime pedunculatis conferte paucifloris. *Michaux Fl. Bor. Am.* 1. p. 7.

JUSTICIA *linearifolia*. *Lam. Encycl. n.* 40.—*Suppl. n.* 45.—*Illustr. n.* 52.

DIANTHERA *americana*; spicis solitariis alternis. *Lin. Syst. Veg.* 63.

DIANTHERA *ensiformis*. *Walt. Fl. Carol.* p. 63.

GRATIOLEÆ affinis *floridana*, floribus et capsulis in spica brevi longis pedunculis e foliorum alis prodeuntibus innixis. *Pluk. Amalth.* p. 114. t. 423. f. 5.

JUSTICIA belongs to the natural order of *Acanthaceæ*. In several of the species, the two cells of the Anthers are distinct,

distinct, one being placed above the other on the same filament, or each filament bears two one-celled Anthers; and upon this ground, LINNÆUS established his genus DIANTHERA. But, it has been found, that this separation of the cells of the anthers takes place so very partially, that it is not in many cases possible to draw the line, on which account both genera have been again united. JUSSIEU, in the 9th volume of the *Annâles du Muséum*, has divided this too extensive genus, from the different form and mode of bursting of the capsules; by which he separated a portion of the species under the name of DICLIPTERA, which division has been adopted by ROEMER and SCHULTES in their *Systema Vegetabilium*. The very great number of the species certainly makes a division much wanted; but it would be desirable that characters should be found in some measure independent of the capsules, as these are so rarely perfected by plants under cultivation.

The species here figured has been generally known by the name of *americana*; but, as there are other North-American species, and MICHAUX's name of *pedunculosa* has been adopted by PURSH and NUTTALL, and by the authors of the new *Systema Vegetabilium*, we have thought it better to use one so appropriate, than one not exclusively applicable.

Except PLUKENET's figure, no representation of this species has been before published.

Native of North America, growing in bays and slow-flowing waters of the rivers St. Laurence, Oswego, Ohio, Kenhaway, &c. When once established in standing water, increases freely by its creeping roots, and resists our winters very well; being in its native climate subjected to much severer cold. No other species in the whole genus has been hitherto cultivated in this country in open air.

Our drawing was made from specimens communicated by Mr. ROBERT BROWN, from Lady BANKS's garden at Spring-Grove, where it has been long cultivated.

The separate figures represent,

1. The *Corolla*.

2. The *Calyx*.

but particularly in the length of the stamens, and the deep division of the style; in both which characters, it seems also to differ from all the other European species.

SCHULTES received specimens of his *multiflora* from M. KITAIBEL, who found it in Croatia. He describes the petioles as being the length of the leaves ($2\frac{1}{2}$ inches) and hairy; the width of the leaves frequently exceeding the length; the pedicles of the lower flowers as long as the reflexed calyx; the filaments capillary, smooth, and something longer than the calyx; characters which agree well with our plant, but not at all with *spicatum*. Our plant was introduced by Mr. HOWE, who writes that "he found it near the iron foundery between Brzaza and Ludwikuwka, and on the extensive mountainous estate of his much respected friend M. DE MATKOWSKI, a benevolent encourager of the arts, at the foot of the Gurgulat, on the chain of the Carpathian mountains, and in some other places; but it is found only on the northern aspect of high mountains, above the first region, but where the HAZEL and SAMBUCUS *racemosa* are still scattered." He never could find the fruit; which he attributes, to the numerous birds of passage that cross these mountains towards Greece at the season the fruit is ripe.

Mr. HOWE saw the same, or a nearly related species, in Dr. Hosts' garden in Vienna, which he was informed came from Hungary. This was probably KITAIBEL's plant.

Communicated by Messrs. WHITLEY and Co. of the Fulham nursery, where it flowered freely in the open ground, in May last, but produced no fruit. May be propagated by cuttings, and seems to require no particular care.

The separate figures represent,

1. A flower opened and displayed, to show the insertion of the petals and stamens.
2. The germen with a trifid style, but which is more usually bifid.

N. 2369.



J. Curtis, Del.

Waddell sc.

ALÖE ACINACIFOLIA. GREAT SCYMITAR-
LEAVED ALÖE.



Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. erecta, ore patulo, fundo nectarifero. *Filamenta* receptaculo inserta.

Specific Character and Synonyms.

ALÖE *acinacifolia*; acaulis, foliis distichis acinaciformibus, angulis cartilagineis aculeatis, floribus racemosis pendulis. *Jacq. Æclog. t. 31.*

ALÖE *acinacifolia*; foliis erecto-patulis, latiusculis, spiraliter distichis, inæqualiter triquetris, acinaciformibus, superne concaviusculis, subtus convexis, apice acutis; atroviridibus, albido-serialiter-maculatis glaberrimis, nitidis; margine interrupte cartilagineis, basi integerimis, apice denticulatis. *Pr. de Salm. Dyck. Cat. Rais. 23.*

GASTERIA *acinacifolia*. *Haworth Suppl. Pl. Succul. p. 49.*

The genus ALÖE has by some botanists been separated into four genera, viz. ALÖE, GASTERIA, HAWORTHIA, and APICRA; but, as this separation has not been adopted in the Hortus Kewensis, and we have not studied the subject sufficiently to judge of its accuracy, we prefer preserving the original genus; although the great difference in the habit of many of the species, renders it very probable that such a division may be made with propriety and advantage.

The present species belongs to GASTERIA of DUVAL and HAWORTH, to the section *curvifloræ* of the PRINCE DE SALM DYCK, and to the second section of ALÖE in the Hortus Kewensis (*corollis curvatis basi ventricosis*).

Our

Our drawing was taken, in July 1821, from a plant, perhaps the only one that has flowered in England, in the collection of Mr. HITCHIN, in Norwich. The leaves were nearly two feet long, the scape three feet and a half, two feet of the upper part of which were covered with the pendulous flowers, an inch and half long, curved, ventricose a little above the base.

Native of the Cape of Good Hope. Requires to be kept in the greenhouse or dry-stove in the Winter months.

The outline figure is a diminished representation of the whole plant; the coloured figures of a part of the raceme of flowers, and the superior portion of a leaf.





SEDUM SPURIUM. BASTARD SEDUM.



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 *spurium*; foliis cuneiformi-obovatis antice crenatis pubescentibus ciliatis; radicalibus fasciculatis, corymbo composito, petalis lanceolatis. *Fl. Taur. Cauc.* 1. p. 352. et 3. p. 312.

SEDUM *spurium*; foliis subrotundo-obovatis planis basi cuneatis apice crenatis margine cartilagineo-muricatis, caulibus repentibus, ramis floriferis erectis, cyma divaricata. *Willd. Enum.* p. 484.

ANACAMPSEROS ciliaris. *Haworth Succul.* p. 112?

ANACAMPSEROS minor repens flore purpureo. *Buxb. Cent.* 5. p. 33. t. 61. f. 2.

SEDUM *hybridum*, *spurium*, and *ibericum* appear to be very nearly allied, and all belong to the first section of the genus, the *Planifolia*, ANACAMPSEROS of RAY and TOURNEFORT, as well as HAWORTH; but the first is described by LAMARCK as having yellow flowers. *Ibericum* of STEVEN and *spurium* may perhaps be mere varieties of each other; but in *ibericum* the cauline leaves are described as opposite, and the margins roughish, but not ciliated; differing from our plant in the former character, and agreeing with it in the latter; in which the leaves were only slightly roughened with a cartilaginous margin, and could not be said to be ciliated.

MARSCHALL v. BIEBERSTEIN has remarked the great similarity of SEDUM *spurium* to the CRASSULA *crenata* of DES-

FONTAINES in the *Annâles du Museum*, v. 11. p. 445. t. 46. which certainly very much resembles our plant, except in the number of stamens being only five, in the cauline leaves being opposite, and in the colour of the flowers, which are described as white.

Though our plant does not correspond with the specific character, in the single circumstance of the leaves not having ciliated margins, we do not hesitate to refer it to *SEDUM spurium*; the more especially, as it agrees well with the figure quoted from BUXBAUM, and bears the strong resemblance to *CRASSULA crenata* of DESFONTAINES insisted on by MARSCHALL.

SEDUM spurium does not occur in the last edition of AITON'S *Hortus Kewensis*. Native of Caucasus; growing on the rocks about the hot springs of the Constantine mountain, and abundantly near the summit of Mount Beschtan. A hardy perennial, well adapted to ornament rock-work. Communicated last October from the Botanic Garden at Bury St. Edmunds, by N. HODSON, Esq.



CISTUS BARRELIERI. ROSEMARY-LEAVED
CISTUS.

Class and Order

POLYANDRIA MONOGYNIA.

Generic Character.

Cor. 5-petala. *Cal.* 5-phyllus : foliolis duobus minoribus. *Capsula.*

Specific Character and Synonyms.

***** Stipulati suffruticosi.

CISTUS *Barrelieri*; fruticulosus, foliis oppositis lanceolato-linearibus margine revolutis mucronulatis, stipulis binis subulatis, racemis terminalibus, corollis calyce angulato majoribus.

HELIANTHEMUM *Barrelieri*; suffruticosum, stipulatum, caulibus rigidis erectis, foliis confertis lanceolato-linearibus revolutis obtusis villosis, pedunculis villosis, petalis calyce majoribus. *Tenore prodromo della Flora Napolitana, p. xxxj. Synops. nov. plant. p. 47.*

HELIANTHEMUM *Barrelieri.* *Gussone Cat. Hort. Duc. Calabr.*
CHAMÆCISTUS luteus imis serpilli foliis. *Barrel. ic. 440. Obs. 522.*

CHAMÆCISTUS luteus Thymi foliis, polyanthos, seu major. *Ib. 443 ?*

WILLDENOW has observed that the history of this genus is above all others obscure ; but which might, he says, be elucidated, if those botanists who have an opportunity of examining the living plants would determine the following characters in each species :—

1. Whether the trunk is arborescent, fruticose, suffruticose, annual or perennial.

2. Whether the *stems* are erect or decumbent.

3. *Leaves*

3. *Leaves* opposite or alternate, and of what form.
4. *Stipules* two or none.
5. *Peduncles* one-or many-flowered, and with or without bractes.
6. Shape of *petals*.
7. *Capsules* 5-celled or 3-valved.
8. *Calyx* equal or unequal.

CISTUS Barrelieri is an upright small branched *shrub*, with opposite linear-lanceolate, revolute *leaves*, not unlike those of Rosemary, by no means crowded together, or in fascicles, terminated with a very small mucro; short *petioles* with two small, erect, subulate *stipules* to each. The branches end in a raceme of a few yellow flowers on longish *footstalks*, red at the lower part, and after the flowering is over, much reflected with a single small oval *bracte* at the base of each. *Calyx* oval, pointed, the two outer *leaflets* small, spreading, green, and might be called bractes rather than parts of the calyx; the three inner ones connivent, reddish, and persistent; with the ciliate nerves so raised, as to make the calyx appear angular. *Petals* rounded, not emarginate. *Stamens* not half the length of the petals. *Style* the length of the stamens: *stigma* capitate.

LINNÆUS united TOURNEFORT's genera *CISTUS* and *HELIANTHEMUM*. JUSSIEU and most modern botanists have again separated them, but as they remain united in the Hortus Kewensis, and we have already published some species of *HELIANTHEMUM* under the name of *CISTUS*, we still continue the Linnean appellation, contenting ourselves with the sections into which the genus is divided; if they are to be separated, this species will belong to *HELIANTHEMUM*.

The synonymy is particularly difficult to be ascertained. TENORE quotes tab. 443 of BARRELIER; but tab. 440 of the same author is certainly much more like our plant, which we have therefore quoted, adding the former as dubious.

We are indebted for the communication of this plant, and generally for the synonymy, to P. B. WEBB, Esq. who raised it from seeds given him by Professor PINEO of Palermo, author of a *Pugillus rariorum plantarum Siciliae*, and is doubtless TENORE's species. It is distinguished from some other nearly allied species, chiefly by its upright growth.

Native of the island of Capri in the Bay of Naples, and of Basilicata. It will probably require to be protected from frost. Flowers in September and October.



LOASA NITIDA. SHINING-LEAVED LOASA.

Class and Order.

POLYANDRIA MONOGYNIA.

Generic Character.

Cal. superus, 5-fidus. *Petala* 5, cucullata. *Nectaria* 5, squamæformia, petalis alternantia. *Stam.* numerosa, in fasciculos 5, petalis oppositos, digesta. *Caps.* infera, s. semiinfera, apice 3-valvis, polysperma: *Recept.* 3, parietalia.

Specific Character and Synonyms.

LOASA nitida; prostrata, foliis cordato-lobatis dentatis supra nitidis; superioribus sessilibus, pedunculis axillaribus. *Lam. Encycl.* 3. p. 581. *Juss. in Annâles du Mus.* 5. p. 25. t. 2. f. 2. *Willd. Sp. Pl.* 2. p. 1177.

The genus *LOASA* first occurs in ADANSON'S *Familles des Plantes*; but the characters were better ascertained by JACQUIN in his *Observationes Botanicae*; from whose authority only, it appears to have been inserted into the twelfth edition of LINNÆUS'S *Systema Naturæ*, where the orthography is changed to *LOOSA*, perhaps by an error of the press only; but continued in the future editions, and by SCHREBER in his *Genera Plantarum*; the original spelling is, however, restored by JUSSIEU, LAMARCK, and WILLDENOW. The name is supposed to have been given by ADANSON, in honour of some unknown Spanish botanist.

The genus was at first added by JUSSIEU to his natural order of *Onagræ*; but has been since raised by him into a separate family, under the name of *LOASEÆ*, containing, besides the present genus, only *MENTZELIA*, its near affinity with which was remarked by JACQUIN.

Our

Our plant, which was communicated by our kind friend Mr. WALKER, appears to be a different species from the one published in the Botanical Register, No. 667, under the name of *LOASA tricolor*. By a comparison both with the figure and description of *nitida* in the Annâles above quoted, and with a specimen preserved in the Lambertian Herbarium, we have very little doubt of its belonging to that species. It is particularly remarkable for the dark shining green colour of the upper surface of the leaves.

The whole genus has probably more or less of the stinging quality of the common nettle. Of the virulence of the present species we have ourselves had personal experience, the effects of a puncture at the end of the thumb being felt, not continually indeed, but at intervals, especially on first rising in the morning, for six days. The sensation was chiefly a burning heat in the part, not accompanied with the intolerable itching that sometimes follows the sting of a nettle. A tender annual. Propagated by seeds which should be sown on a hot-bed in the Spring. Native of Lima, in Peru, according to DOMBEY, where it grows among the rocks. Mr. WALKER raised it from seeds received from Chili.



J. Curtis Del.

Pubby Curtis Wabworth. Jan 1 1823.

W. B. D. C.

NEMOPHILA PHACELIOIDES. ARKANSIAN
NEMOPHILA.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. inferus, persistens, 10-fidus : laciniis alternis reflexis. *Cor.* campanulata, 5-loba : lobis emarginatis. *Nectarium* foveolæ 10 ad marginem faucis. *Stam.* brevia. *Antheræ* lunatæ. *Caps.* unilocularis. *Sem.* 4, unum supra alterum receptaculis duobus parietalibus inserta.

Specific Name and Synonym.

NEMOPHILA phacelioides. *Barton Fl. Americ.* 61.

DESCR. *Root* biennial. *Stem* succulent, procumbent, branched. *Leaves* alternate, pinnatifid : segments obtuse, slightly scabrous, margins minutely ciliate; lower ones distant, irregularly lobed. *Peduncles* solitary, rounded, one-flowered, longer than the leaf, in our plant axillary (opposed to the leaf according to BARTON). *Calyx* persistent, inferior, 10-cleft; segments ovate, acute, ciliate: 5 larger erect, 5 smaller reflexed. *Corolla* campanulate: limb, 5-cleft: laciniæ obtuse, emarginate. *Stamens* 5, much shorter than the corolla: filaments naked inserted into the short tube of the corolla: *Anthers* lunular. *Nectary* 10 small purple coloured hollows with a pubescent margin, surrounding the mouth of the tube; but we did not observe any hollows at the insertion of the filaments. *Germen* round-oval. *Style* erect. *Stigma* bifid. *Capsule* one-celled, with two parietal fleshy receptacles affixed by a longitudinal dorsal axis only, the sides being unconnected,
each

each bearing on its internal surface, two oval seeds, one above the other. By abortion one or two of the seeds are sometimes wanting.

Not having ourselves sufficiently examined the germen and capsule, we are indebted to our friend Mr. ROBERT BROWN, for our account of this organ*. This celebrated botanist, in his invaluable prodromus, speaking of the natural order of BORAGINEÆ of JUSSIEU, has remarked, that the capsular genera HYDROPHYLLUM, PHACELIA, and ELLISIA laid the foundation of a distinct order, to be separated from the BORAGINEÆ, on account of their copious, cartilagineous albumen, and deeply lobed leaves, to which he has since, in the Botanical Register, given the name of *Hydrophyllæ*.

Professor SCHRADER, ten years after the publication of the prodromus, in a paper in the Gottingen Commentaries, has published this natural order, with the same characters, having only given a slight reference to Mr. BROWN's observation. To this new order of *Hydrophyllæ* NEMOPHILA will add another genus; being nearly related to the above genera, more especially to ELLISIA.

The name we have adopted was given it by Mr. NUTTALL, from its predilection for shady woods, in which places only it is found. It appears by Mr. BARTON's account to be a hardy biennial, the seeds coming up in the autumn, and the seedling plants enduring the winters of Philadelphia, and flowering in the Spring.

This very rare plant, now probably for the first time seen in Europe, was raised from seeds received from North America by JOHN WALKER, Esq. at his seat, at Southgate, and communicated in flower in October last.

* *Ovarium* uniloculare, placentis duabus parietalibus dispermis, ovulis distantibus. *Capsula* unilocularis, placentis carnosis, axi longitudinali dorsali affixis, cæterum solutis, superficie ventrali seminiferis. *Brown Mss.*



ACHANIA MOLLIS, α . LOBED-LEAVED WOOLLY
ACHANIA.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. duplex: exterior polyphyllus. *Cor.* convoluto-clausa.
Stigmata 10. *Bacca* 5-sperma.

Specific Character and Synonyms.

ACHANIA *mollis*; foliis tomentosis, foliolis calycis exterioris patulis. *Hort. Kew. ed. I^{ma} 2. p. 459.—ed. II^{da} 4. p. 233. Willd. Sp. Pl. 3. p. 839. Pers. Syn. 2. p. 259. Bot. Repos. 452. Thomps. Bot. displ. t. 5. Bot. Reg. 11.*

MALVAVISCUS *mollis*. *Lam. Encycl. 4. p. 1.*

(α .) foliis lobatis. *Bot. Reg. l. c.*

(β .) foliis indivisis. *Thomps. Bot. displ. l. c.*

At No. 2305 of this work we have given a figure of ACHANIA *Malvaviscus*, with which ACHANIA *mollis* agrees very much in form and habit; but is at once distinguished by the soft woolliness of its leaves, so different from the rough feel of the former. There are said to be two varieties of this species, one with entire, the other with undivided leaves; but, we doubt, whether such differences are permanent, leaves of both, and intermediate forms, sometimes occurring on the same plant.

These plants very rarely produce fruit, as cultivated in our stoves; so that we were particularly gratified on receiving specimens both in flower and with ripe fruit from our friend Mr. WALKER.

The berry of ACHANIA *Malvaviscus* is represented by Professor SWARTZ, in his *Flora Indica*, as having a smooth surface,

surface, internally divided into five one-seeded cells, and is described to be of a yellow colour. In our plant the berry is remarkably different; being composed of five distinct, though coherent seeds, covered by a pulpy substance, with a scarlet external covering.

Professor SWARTZ gave the name of ACHANIA to this genus, derived from the word *αχανης*, not gaping, because the flowers never expand.

Native of South America and the West India islands, and requires to be kept in the stove. Propagated by cuttings. Flowers in August, September, and October.



HYPERICUM URALUM. MYRTLE-LEAVED
ST. JOHN'S-WORT.

Class and Order.

POLYADELPHIA POLYANDRIA.

Generic Character.

Cal. 5-partitus. *Petala* 5. *Filamenta* in 5 phalanges basi connata. *Capsula* supera.

Specific Character and Synonym.

HYPERICUM *uralum*, fruticosum, 5-gynum; foliis ellipticis mucronulatis glabris nitidis, floribus terminalibus subcorymbosis, foliolis calycinis ovalibus obtusissimis, petalis limbo orbiculatis, ramis ancipitibus. *Don Mss.*

HYPERICUM *uralum*. *Hamilton Mss.*

DESCR. *Stem* shrubby, upright, branched, round, from a foot and a half to two feet high, covered with a rough brownish bark. *Branches* numerous, spreading, two-edged; the younger ones purplish. *Leaves* oval, or oval oblong, opposite, spreading, sessile, mucronulate, smooth, green on both sides, shining above, an inch or more in length, and frequently half an inch in breadth. *Peduncles* cylindrical, 1-flowered, 3 or 5 together, arising from the summits of the branches, smooth, and furnished with one or more pairs of lanceolate acute *bractea*. *Flowers* large, golden, about an inch in diameter. *Leaflets of the calyx* oval, smooth, entire, rounded at the top. *Petals* nearly orbicular, oblique at the base, with the inner margin unequal, twice longer than the calyx. *Stamens* numerous, collected at the base into 5 bundles, half the length of the petals. *Styles* 5, erect, shorter than the stamens. *Stigmas* recurved, spreading.

This elegant species of HYPERICUM is a native of Upper Nepal, where it was first discovered by Dr. FRANCIS
HAMILTON

HAMILTON (formerly BUCHANAN). It has also been found in that country by Dr. WALLICH's collectors.

I was at first inclined to consider it the same as the *HYPERICUM patulum* of THUNBERG's *Flora Japonica*; but an examination of specimens of that plant in the Lambertian Herbarium proves them to be different. THUNBERG's plant has cylindrical branches, the leaves ferrugineous underneath with their margins revolute, and the stamens shorter than the styles. The specific name of our plant is derived from *Urala Swa*, an appellation by which it is known to the Nawars, or original natives of Nepal. The substantive *Swa*, in the Nawar tongue, signifies a flower. DON.

This very handsome and seemingly hardy shrub, for the above account of which we are indebted to Mr. DAVID DON, was communicated in October last, by Messrs. WHITLEY, BRAME, and MILNE, of the Fulham Nursery, who raised it from Nepal seeds.



GUNNERA PERPENZA. CAPE GUNNERA.

*Class and Order.*

DIANDRIA DIGYNIA.—*Vahl.* GYNANDRIA DIANDRIA.—*Lin.*

Generic Character.

Cor. 0. *Cal.* 2-dentatus. *Sem.* unum, crusta calicina corticatum. LAM.

Specific Character and Synonyms.

GUNNERA *perpensa*; foliis reniformibus dentatis scapo fructifero brevioribus, scapo petiolisque lævibus. *Lin. Mant.* 121. *Vahl. Enum.* 1. p. 308. *Willd. Sp. Pl.* 4. p. 148. *Hort. Kew. ed. alt.* 5. p. 223. *Persoon Syn.* 1. p. 30.

GUNNERA *perpensa*; scapis fructiferis foliis altioribus, racemo laxiusculo. *Lam. Encycl.* 3. p. 61.

PERPENSUM blitispermum. *Burm. Prodr. Cap.* 26.

PESASITES africanus, calthæ palustris folio. *Herm. Lugdb.* 488.

BLITUM africanum, calthæ palustris folio, caule nudo cubitali spicam pedalem sustinente. *Pluk. Alm.* 68. t. 18. f. 12.

Botanists have not been at all agreed under what class in the sexual system to arrange this plant. LINNÆUS, followed by WILLDENOW and the Hortus Kewensis, placed it in *Gynandria*; THUNBERG, VAHL, and PERSOON in *Diandria*; LAMARCK, in *Diœcia*; our individual specimen, as was observed to us by Mr. KENT, certainly belongs to *Monœcia*. The American species, which have not been introduced into our gardens, may not belong to the same genus, or, if they do, may, like some other genera of the natural order of *Urticariæ*, to which GUNNERA belongs, be one diœcious, another monœcious, and a third hermaphrodite, or polygamous.

Magnified

Magnified representations of both a male and female flower are given with our figure.

Communicated by Mr. KENT, late of Clapton, from his neighbour Mr. CHATER's garden. Native of the Cape of Good Hope, and best treated as a tender aquatic.



T. Curtis Del.

Pub by S. Curtis. Scarborough 1823.

Wardell sc.

GERANIUM WALLICHIANUM. WALLICH'S
CRANE'S-BILL.

Class and Order.

MONADELPHIA DECANDRIA.

Generic Character.

Cal. 5-phyllus. *Cor.* 5-petala, regularis. *Nect.* glandulæ 5, melliferæ, basi longiorum filamentorum adnatæ. *Arilli* 5, monospermi, aristati, ad basin receptaculi rostrati; aristis nudis simplicibus, (nec spiralibus, nec barbatis).

Specific Character and Synonym.

** *Pedunculis bifloris, perennia.*

GERANIUM *Wallichianum*; pedunculis elongatis bifloris, foliis 5-lobis utrinque cauleque sericeo-villosis: segmentis latè cuneato-ovatis inciso-dentatis, stipulis latè ovalibus obtusis, caule adscendente angulato. *Don. Mss.*
GERANIUM *Wallichianum.* *Don in Sweet's Geraniaceæ t. 90.*

DESCR. *Root* perennial, cæspitose. *Stems* many, ascending, angular, purplish, nearly simple, from a span to two feet high, which, together with the whole plant, are thickly clothed with soft villous hairs. *Leaves* cordate, 5-lobed, hoary and silky, especially underneath; the radical ones on very long nearly filiform petioles, those of the stem opposite, on shorter petioles, of which the uppermost are only 3-lobed. *Peduncles* long, axillary, cylindrical, 2-, rarely 3-flowered, twice longer than the leaves. *Pedicels* furnished at the base, with 2 small bifid (rarely trifid) bractes. *Leaflets of the calyx* lanceolate-oblong, nerved, ending in an awl-shaped point. *Petals* broad, obcordate, purple, marked with numerous dark veins.

veins. *Stamens* and *Pistills* black. *Filaments* and *Styles* very hairy. *Stigmas* long, filiform, smooth, revolute.

A showy species, not inferior in beauty to *G. Ibericum*. Native of Gosainsthan, one of the snowy peaks of the Himalaya or Emodus, the loftiest chain of the Nepalese Alps, which may be justly regarded as the Cordilleras of the ancient continent. It has been raised in several of the collections in the vicinity of the metropolis from seeds sent by Dr. WALLICH, by whose collectors it was first gathered. It appears to be perfectly hardy, and promises to be a valuable acquisition to our flower borders. I have been induced, from an examination of recent specimens, to make some little alteration in the specific definition given by me in Mr. SWEET'S *Geraniaceæ*. The form of the stipules is an important character in this tribe of vegetables. DON.

We are indebted for the above account of this interesting species to Mr. DAVID DON. Our drawing was made from a specimen, communicated by our friend ALEXANDER MACLEAY, Esq. secretary to the Linnean Society, who raised it in his garden at Tilbuster Lodge, near Godstone, from seeds sent him by Dr. WILlich.

N2378



Weddell, Sc.

Pub. by J. Curtis, Wabworth, Feb. 1. 1823.

stir. Del.

HEDYCHIUM FLAVUM. YELLOW GARLAND-
FLOWER.

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Anthera duplex. Filam. geniculatum, extra antheram non elongatum. Stylus filamento longior, filiformis, tenacissimus, in sulco antheræ receptus.

Specific Character and Synonym.

HEDYCHIUM *flavum*; foliis elliptico-lanceolatis apice elongatis subtus pubescentibus, corollæ laciniis linearibus, labello altius retuso.

HEDYCHIUM *flavum*. Wallich in Roxb. Flor. Ind. 1. p. 31.

DESCR. *Root* tuberous. *Stems* erect, two or three feet high, rather stout. *Leaves* lanceolate, very fine pointed, pubescent and pale underneath (WALLICH says smooth on both sides). *Sheaths* slightly pubescent, with an upright *stipula* nearly an inch and half long. *Spike* terminal, solitary, erect, oblong, imbricated, six or eight inches long. *Flowers* numerous, yellow, very fragrant. *Exterior Bractes* oblong, ovate, obtuse, concave, two-flowered. *Internal Bractes* much smaller, diaphanous, involving the tube of each corolla. *Calyx* superior, half the length of the tube (nearly as long. WALL.), opening obliquely, margin of the mouth entire (2- or 3-toothed. WALL.). *Tube* of corolla slender, longer than the exterior bracte; *laciniæ*, all five linear; the two interior ones broader than the rest, deeper coloured, obtuse, and not withering so soon; *labellum*, or sixth lacinia, erect, large, obcordate. *Filament* linear, and, with the two-lobed *anther*, about the length of the labellum.

*Germe*n

Germen hairy, 3-celled; *ovules* many. *Style* filiform, enclosed within the filament, and received in the groove within the lobes of the anther. *Stigma* exerted beyond the anther, funnel-shaped, with a bearded margin.

Native of the vallies amongst the Hills near Silhet in Bengal, where it is called by the natives KATTIA-RITYAM.

Our drawing was taken from a specimen sent by the Hon. and Rev. WILLIAM HERBERT from Spofforth; who informs us that it is equally hardy with *HEDYCHIUM coronarium*, and that the whole genus, as far as he has tried, will live through the winter in the greenhouse, or out of doors in front of the stove; but they require in the summer a great deal of water and some artificial heat to bring them into flower.

Mr. HERBERT transmitted another specimen, which he considered as the true *HEDYCHIUM flavum* of the Flora Indica; but we could find no specific difference whatever; the whole plant of the latter was smaller and of humbler growth; the spike less; the flowers smaller, and of a fuller yellow colour; but in the pubescence of the foliage, and all the other characters, we could not discover any difference, and are constrained to consider them as mere accidental varieties.



SCHIZOPETALON WALKERI. WALKER'S
SCHIZOPETALON.

Class and Order.

TETRADYNAMIA SILIQUOSA.

Generic Character.

Cal. cylindræus, basi æqualis, clausus. *Petala* ovata inciso-pinnatifida. *Stigmata* gibbosa, approximata. *Cætera* desunt.

Specific Name.

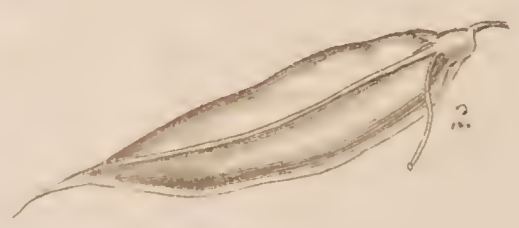
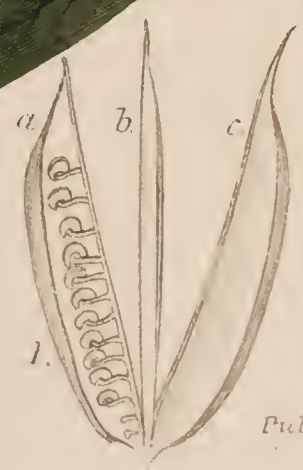
SCHIZOPETALON *Walkerii*.

Although we can give only a very imperfect generic character, yet, from the very remarkable incision of the petals, perhaps quite a solitary instance in the natural order of the *cruciferæ*, we venture to announce this curious plant, as a new genus of that family.

It grows with a rather feeble, assurgent *stem*. Lower *leaves* four or five inches long, sinuate-pinnatifid, scabrous on both sides and at the margins, distant. *Peduncles* axillary, solitary, but collected into a receme at the top. *Calyx* cylindrical, with an equal base, and connivent. *Petals* spreading, flat, the *lamina* cut into regular segments.

As we have never seen the seed vessels, even in an unripe state, tolerably perfect, our description must necessarily be very defective; but as it may be very long before other specimens of this plant may come under our notice, we are unwilling to miss the opportunity of publishing it. Should it hereafter be found to unite with any known genus, our name, derived from the form of the petals, must of course be given up as a generic, but may still be retained as a trivial one.

It was raised from seeds, received from Chili, by JOHN WALKER, Esq. and flowered in November. Is probably an annual or biennial.



ASTRAGALUS STIPITATUS. BROAD-STIPULED
ASTRAGALUS.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Legumen plerumque biloculare, gibbum. *Semina* biserialia.

Specific Character.

ASTRAGALUS *stipulatus*; foliolis multijugis ovali-oblongis obovatisve mucronulatis glabris, stipulis maximis foliaceis, spicis tenuifloris, leguminibus compressis glabris stipitatis cernuis. *Don. Mss.*

DESCR. *Root* perennial. *Stems* herbaceous, upright, rounded, smooth, striated, two to three feet high. *Leaves* remote, pinnated, five to eight inches long; *leaflets* distant, in from eight to sixteen pairs, opposite, oval-oblong or obovate, on short footstalks, five to six lines long, and two to three broad, quite entire, bright green and smooth on both sides, mucronulate; *terminal one* elevated on a much longer footstalk than the rest. *Stipules* very large, leafy, broadly elliptical, obliquely cordate at the base, sometimes three inches long, and an inch and half wide. *Petioles* and *rachis* rounded, smooth, plain, and slightly channelled above. *Spikes* issuing from the *axillæ* of the leaves, many-flowered, on a straight, smooth, cylindrical peduncle, generally longer than the leaves. *Flowers* scattered on very short pedicels, younger ones erect, older ones drooping. *Bractæ* very small, linear, membranous, pointed, shorter than the calyx. *Calyx* tubular, smooth,

smooth, 5-toothed, two *upper* teeth ovate, acute; three *lower* ones lanceolate, pointed, longer than the upper. *Corolla* greenish-white, tinged with red; *vexillum* oblong, reflexed, obtuse, slightly notched, narrowed at the base: *alæ* stipitate, widened into an oblong lanceolate pointed lamina, furnished towards the base, on one side, with a small ear-like appendage: *carina* cucullate, obtuse, shorter than the *alæ*, biauriculate, stipitate. *Pod* completely two-celled, eight- to twelve-seeded, oblong, flattened, mucronate, smooth, drooping, stipitate at the base.

This species of *Astragalus* was discovered by Dr. FRANCIS HAMILTON, in 1802, at Gorasan, in Upper Nepal. It has since been met with by Dr. WALLICH's collectors on the Himalaya Alps. Dr. WALLICH suspected it to be a new species of *Galega*; but a careful examination proves it to belong decidedly to the genus in which we have placed it. The broad leafy stipules and the stipitate pods are the distinguishing marks of this species. In general appearance it somewhat resembles the common *Astragalus glycyphyllos*. In the Lambertian Herbarium, are specimens of two other new species, natives of the Nepalese Alps. DON.

This new ASTRAGALUS was raised at the Fulham nursery, in the spring of 1822, from seeds, given by ROBERT HENRY JENKINSON, Esq. and being planted out in the open ground flowered in September and October. Mr. MILNE informs us, that he thinks it will prove to be hardy.

Fig. 1. represents the pod opened, (*a*) one valve, with the dissepiment removed to shew the seeds; (*b*) the dissepiment separated; (*c*) the other valve covered by the dissepiment.

Fig. 2. The entire pod.



J. Curtis. Del.

Pub. by S. Curtis. Walworth. Feb. 1823.

Weddell Sc.

**BOLTONIA GLASTIFOLIA. WOAD-LEAVED
BOLTONIA.**

Class and Order

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Cal. imbricatus. *Recept.* favosum. *Pappus* setis pluribus : duabus oppositis elongatis.

Specific Character and Synonyms.

BOLTONIA *glastifolia* ; foliis inferioribus serratis, floribus breviter pedunculatis, seminibus obcordatis alatis puberulis : aristis pappi duabus ipsorum longitudine. *Michaux Fl. Boreali-Amer.* 2. p. 132. *Pursh Flor. Am. Sept.* 2. p. 561.

BOLTONIA *glastifolia* ; foliis inferioribus serratis. *L'Herit. Sert. Angl.* p. 27. *Willd. Sp. Pl.* 3. p. 2163. *Hort. Kew. ed. alt.* 5. p. 101.

We have very great doubt whether there are really two species of **BOLTONIA**. Nor, if there are two species, can we certainly determine to which our plant should be referred, so inadequate are the descriptions given to ascertain the difference. If the short character adopted from **L'HERETIER**, in the **Hortus Kewensis** and **WILLDENOW**, can be depended upon we are sure to be right ; and the definition given by **MICHAUX** corresponds very well ; but from the observation of this author, after **BOLTONIA asteroides**, he seems to be doubtful whether both species may not belong to one and the same ; or, at least, he says, they altogether agree in habit, foliation, and colour of the flowers.

We have examined the **Banksian** and **Lambertian** herbariums,

riums, which contain specimens referred to both species, without being able to satisfy ourselves of their real discrimination.

It has perhaps been owing to the difficulty of deciding to which species our plant belongs, that it has so commonly gone by the name of *BOLTONIA levis* in our nurseries.

Our drawing was made from a specimen communicated from the Botanic Garden at Bury St. Edmunds, in November last.



**BRODIÆA IXIOIDES. IXIA-LIKE
BRODIÆA.**

Class and Order.

TRIANDRIA MONOGYNIA.

Generic Character.

Cal. 0. *Cor.* infera, tubulosa, limbo sexfido, regulari ;
corona triphylla in fauce. *Caps.* trilocularis, polysperma.
SMITH in *Lin. Soc. Trans.* 10. p. 2.

Specific Character.

BRODIÆA *ixioides* ; coronæ foliolis subulatis.

DESCR. Root a roundish bulb-tuber. *Leaves* linear-convex on the outside, and somewhat concave within. *Scape* rounded, longer than the leaves. *Spathe* (or *Bractes*) two valved, erect, bearing three or four flowers on longish peduncles, which come out one at a time, and are of long duration. *Corolla* tubular, inferior: *tube* three-sided-cylindrical, green: *limb* deeply divided into six ovate spreading *laciniæ* nearly equal, (the three inner ones rather the smallest) obtuse, margins serrulate ; colour greenish, tinged with violet. *Nectarium* or *crown* three awl-shaped segments, green with a dark purple point, inserted into the faux of the tube opposite the internal *laciniæ*. *Anthers* three, yellow ; sessile within the tube. *Germen* top-shaped, superior. *Style* short, erect. *Stigma* capitate.

The genus **BRODIÆA** was first established by Sir JAMES EDWARD SMITH, in the tenth Volume of the Transactions of the Linnean Society, where he has recorded two species, the *grandiflora* and *congesta*, and distinguishes the first by the leaflets of the corona or nectary being undivided, which are bifid in the second ; but the present species having also
these

these parts undivided, it becomes necessary to add the term lanceolate to the character of the former.* The president refers this genus to the first section of JUSSIEU's *Narcissi*, the *Asphodeleæ* of BROWN; with which family it agrees, in having the leaflets of the corona opposite to the inner lacinia.

Our plant was communicated by JOHN WALKER, Esq. from his collection at Arno's Grove, Southgate. Native of Chili, in South America. Flowers in October.

* The three known species of this genus may be now thus characterized:—

1. *B. grandiflora*; coronæ foliolis lanceolatis indivisis.
2. *B. congesta*; coronæ foliolis bifidis.
3. *B. ixioides*; coronæ foliolis subulatis.

N. 2383.



J. Curtis. Del.

Pub by S. Curtis. Woburn. Feb. 1823.

Weddell Sc.

AZALEA PONTICA, *var.* ALBIFLORA. THOMPSON'S WHITE-FLOWERED PONTICK AZALEA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla campanulata. *Stamina* receptaculo inserta. *Caps.* 5-locularis.

Specific Character and Synonyms.

AZALEA *pontica* ; foliis elliptico-lanceolatis pubescentibus ciliatis, pedunculis terminalibus fasciculatis calycibusque hirsutis. *Flor. Taur. Cauc.* 1. p. 144. et 3. p. 136.

AZALEA *pontica* ; foliis nitidis lanceolatis utrinque glabris, racemis terminalibus. *Schreb. Act. Nov. Upsal.* 1. p. 92. *Pall. Ross.* 2. p. 51. t. 69. *Lin. Sp. Pl. Append.* 1669. *Willd. Sp. Pl.* 1. p. 830. *Bot. Mag. supra n.* 433. ubi petenda cætera synonyma.

(β) *albiflora* ; *floribus albis luteo tinctis.*

This elegant variety of *AZALEA pontica* was communicated to us by Mr. THOMPSON, nurseryman at Mile End, in May 1821.

It is quite as fragrant as, and we think more agreeably so, than the common sort, and has the advantage of producing its leaves more early, so that the flowers are accompanied with much more foliage.

We refer to the former account at No. 433, for a more particular description and history of the species ; but must observe that the excellent botanist, Councillor MARSCHALL v. BIEBERSTEIN, doubts very much the truth of what is there recorded

recorded on the authority of Mr. ANTHONY HOVE, respecting the abundance of these plants growing about Otschakow, and treats, as entirely fabulous, this traveller's account of the great profit made there by the honey collected from their flowers, and sold in Constantinople for medical purposes; and also of the trees sometimes reaching the height of twenty feet. We learn from the Flora Taurico-Caucasica that it is extremely common in the Caucasian Mountains, but rarely ascends into the higher regions, ceasing to appear at the elevation at which the RHODODENDRUM begins.

A hardy shrub. Flowers in May.



**EUONYMUS LATIFOLIUS. BROAD-LEAVED
SPINDLE-TREE.**

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. 5-petala. *Caps.* 5-gona, 3-locularis, 3-valvis, colorata. *Sem.* calyptrata.

Specific Character and Synonyms.

EUONYMUS latifolius; floribus plerisque pentandris, cortice lævi, pedunculis filiformibus teretibus multifloris. *Hort. Kew. ed. I^{ma}.* 1. p. 273.—*Ed. alt.* 2. p. 28. *Willd. Sp. Pl.* 1. p. 1131. *Persoon Syn.* 1. p. 243. *Schmidt Arb. t.* 74. *Jacq. Austr.* 3. p. 48. t. 289.

EUONYMUS latifolius; floribus plerisque quinquefidis, petalis ovalibus, lobis capsularum acute angulosis alæformibus. *Lam. Encycl.* 2. p. 572. *Dec. Flor. Fr.* 4. p. 621.

EUONYMUS europæus, β . latifolius. *Lin. Sp. Pl.* 286.

EUONYMUS latifolius; pedunculis lateralibus; petalis subrotundis; fructibus alatis. *Scop. Carn.* 1. p. 165. *Hall. Hist.** n. 830.

EUONYMUS latifolius. *Clus. Hist.* 1. p. 56. *Bauh. Pin.* 428. *Bauh. Hist.* 1. pars alt. p. 202.

EUONYMUS latifolius was considered by LINNÆUS as only a variety of *europæus*; from which, however, not only in the size and colour of the leaves, but in the greater comparative

* By an error of the press in HALLER'S quotation from SCOPOLI, the word petalis is changed into *patulis*, and then to make some sort of sense of it, the word *foliis* is added, thus changing the character into "pedunculis lateralibus patulis, foliis subrotundis!"

length of the peduncles, which are also more cernuous; in the flowers having, for the most part, five, more oval, petals, and five stamens; and in the angles of the capsule before bursting being more acute and wing-like. It grows to a considerably larger tree than the common sort; and the wood is applied to the same purposes, and especially adapted to turner's work.

A hardy shrub. Flowers in June and July. Native of the Southern parts of Europe. First established as a distinct species by SCOPOLI, in his Flora Carniolica, confirmed by Dr. SOLANDER in the Hortus Kewensis, and since generally adopted. Communicated, both in flower and fruit, by JOHN WALKER, Esq.

N^o 2385.



J. Curtis. Del.

Pub. by J. Curtis, Walworth.

March 7, 1823.

Weddell. Sc.

HIBISCUS MILITARIS. MILITARY HIBISCUS.

Class and Order.

MONADELPHIA POLYANDRIA.

Generic Character.

Cal. duplex : exterior polyphyllus. *Stigmata* 5. *Caps.* 5-locularis, polysperma.

Specific Character and Synonyms.

HIBISCUS *militaris*; glaberrimus, foliis tri-lobo-hastatis acuminatis serratis, corolla tubulato-campanulata, capsulis ovatis acuminatis glabris, seminibus holosericeis. *Pursh Fl. Am. Sept. p. 456.*

HIBISCUS *militaris*; foliis glabris trilobis acuminatis serratis, caule herbaceo simplicissimo. *Willd. Sp. Pl. 3. p. 808.*

HIBISCUS *militaris*; foliis serratis hastatis acutissimis, floribus magnis pulcherrimis, petalis bifidis. *Cav. Diss. 6. p. 362. t. 198. f. 2.*

HIBISCUS *lævis*; herbaceus, glaber, pedunculis solitariis articulatis unifloris. *Scop. Del. Insubr. 3. t. 17.*

HIBISCUS *lævis*; glaber, herbaceus, foliis trilobis serratis acutissimis, pedunculis axillaribus. *Lam. Encycl. 3. p. 362. n. 48.*

HIBISCUS *virginicus*; foliis inferioribus cordatis acuminatis serratis; superioribus hastatis *lævibus*, floribus *subtubulosis* incarnatis. *Walter Fl. Carol. 177.*

HIBISCUS *hastatus*; glaberrimus, foliis hastatis serrulatis, corolla tubulato-campanulata carnea majuscula, capsula glabra oblongo-ovoidea acuminata, seminibus holosericeis. *Michaux Fl. Bor. Amer. 2. p. 45.*

HIBISCUS *riparius*; foliis hastatis serrulatis, capsula ovata acuminata glabra. *Pers. Syn. 2. p. 254.*

HIBISCUS *militaris* is a native of the banks of rivers in Louisiana and the Western parts of Pennsylvania and Carolina, where it flowers in August and September. It is said by

by PURSH to have purple flowers ; but the flowers of all the plants of this species, in the collection at Spofforth, from whence our specimen was taken, are invariably white, with a red centre. The outer calyx varies with eleven, twelve, or thirteen segments. It is a tolerably hardy herbaceous plant, enduring the English winter often in the open border ; but its flowers will not come to perfection without artificial heat. It should be kept in a pot, which may be preserved in the greenhouse during the winter, and removed into the stove in spring. *W. H.*



OXALIS LOBATA. LOBED-LEAVED WOOD-
SORREL.



Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* unguibus connexa. *Stam.* in-
æqualia : 5-breviora exteriora, basi connata. *Caps.* angulis
dehiscens, 5-gona.

Specific Character.

OXALIS *lobata*; acaulis, scapo unifloro petiolis longiore
foliis ternatis: foliolis bilobis, radice tuberoso.

This pretty little yellow-flowered OXALIS, is a native of
Chili, in South-America. We cannot find that it has hereto-
fore been any where described. There is another tuberous-
rooted species, native of the same country, mentioned by
MOLINA; but that is caulescent. Raised from seed by
JOHN WALKER, Esq. and communicated to us in flower, in
October 1822. Our figure represents the whole plant.

N^o 2387.



Weddell

Pub. by S. Curtis & W. J. Woodworth.

March 1 1843

Weddell. Sc.

LOBELIA PYRAMIDALIS. BRANCHY LOBELIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. 5-fidus. *Cor.* 1-petala, irregularis. *Antheræ* cohærentes. *Capsula* infera, 2- s. 3-locularis.

Specific Character and Synonyms.

LOBELIA *pyramidalis*; lævis, foliis lanceolatis serrulatis longè acuminatis; supremis linearibus attenuatis, racemis foliosis paniculatis, laciniis calycis subulatis corollam subæquantibus, caule erecto ramoso.

LOBELIA *pyramidalis*. Wallich in *Asiat. Res.* XIII. p. 376.

LOBELIA *stimulans*. Hamilton Mss.

DESCR. *Root* perennial. *Stems* herbaceous, upright, branched, three or four feet high, leafy, rounded, purple, smooth, about the thickness of a goose-quill. *Branches* many, spreading-erect, simple or divided, disposed in a pyramidal form, marked, as well as the *upper part* of the *stem*, with several narrow obtuse angles from the decurrent mid-ribs. *Leaves* lanceolate, sessile, thin, veined, finely and closely serrated at the margins, three to seven inches long, and about half an inch or one in breadth, smooth on both sides, somewhat narrowed at the *base*, and tapering towards the extremity into a long narrow point; those near the top of the stem and branches, linear and tapering: the veins and mid-rib purplish underneath. *Racemes* many-flowered, leafy, disposed in a panicle. *Flowers* alternate, unilateral, on *foot-stalks* shorter than the *bractes*, which are linear, pointed, minutely serrulate, nearly the length of the pedicels. *Segments* of the *calyx* very long, linear, pointed, very minutely serrulate, smooth, almost equal the length of the corolla.

Corolla

Corolla lurid-purple, about the size of that of *Lobelia cardinalis*: *segments* lanceolate, acute. *Filaments* united above, free below, and ciliated. *Anthers* dark blue, hairy. *Style* filiform, smooth. *Stigma* two-lobed: *lobes* rounded, entire, concave underneath.

This fine species of *Lobelia* is a native of Upper Nepal, and the mountainous district of Sylhet in the Eastern division of Bengal, where it flowers, according to Dr. WALLICH, in the early part of the season. It is called *Atia Chao* in the Kasi language, and is made use of as a stimulant by the Natives of Nepal. Dr. WALLICH has certainly been misled by the dried specimens, in attributing to this plant white, or pale violet flowers. In the Lambertian Herbarium are many fine specimens of this, as well as of two other Nepal species. This plant will prove a valuable addition to our collections. Its tall, purple, branchy stems, adorned with numerous racemes of showy purple flowers, render it a conspicuous object. DON.

Communicated by Messrs. WHITLEY, BRAME, and MILNE, of the Fulham Nursery, where it was raised from seeds received from P. A. H. JENKINSON, Esq.

N. 2388.



J. Edwards. Del.

Pub. by S. Curtis, Walworth Place, 1823.

Widdell sc.

TULIPA SUAVEOLENS, var. β . LATIFOLIA.
CLARAMOND TULIP.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, campanulata. Stylus nullus.

Specific Character and Synonyms.

TULIPA suaveolens; caule unifloro pubescente, flore erecto petalis obtusis glabris, foliis ovato-lanceolatis. *Willd. Sp. Pl. 2. p. 97.*

(α .) nana; foliis approximatis. (Supra 839.) *Redouté Lil. 111.*

(β .) latifolia; foliis remotis, caule altiori.

This early flowering sweet scented Tulip, known by the florists under the name of Claramond, is supposed to be a variety of *TULIPA suaveolens*, or the Van Toll, but grows taller, has wider and more distant leaves. Like the last mentioned, we believe it is constant in its habit and colour, and will bear forcing. In the open ground it flowers in May.



ANAGALLIS LATIFOLIA. BROAD-LEAVED
PIMPERNEL.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Corolla rotata. *Capsula* circumscissa.

Specific Character and Synonyms.

ANAGALLIS *latifolia*; caule compresso, foliis amplexicaulibus nervosis obtusis, petalis orbiculatis integerrimis.

ANAGALLIS *latifolia*; foliis cordatis amplexicaulibus, caulibus, compressis. *Sp. Pl.* 212. *Willd. Sp. Pl.* 1. p. 823. *Persoon Syn.* 1. p. 173. n. 8. *Hort. Kew. ed. alt.* 1. p. 317. *Meerb. Icon.* 1. t. 22. *Kniph. Cent.* 12. n. 8?

ANAGALLIS *hispanica latifolia*, maximo flore. *Tournef. Inst.* 143.

ANAGALLIS *latifolia* is distinguished from *A. Monelli* (*supra* n. 319) by having broader, more obtuse and nerved leaves; by the petals being more orbicular with quite entire margins and crowded closer together; by the calycine segments being too short to appear in sight, as they do in the last-named plant; and by the stem appearing flattened by two of the angles being much larger and more obtuse than the other two.

The synonym of BARRELIER (*ic.* 584,) as is observed by M. POIRET, does not belong to this species, but to *verticillata* of LAMARCK and ALLIONI, which does not, however, appear to us to differ from *A. Monelli*.

An annual. Native of Spain. Cultivated by Mr. PH. MILLER, in 1759. Flowers in July.



CYNANCHUM NIGRUM. BLACK-FLOWERED
CYNANCHUM.

Class and Order.

PENTANDRIA DIGYNIA.

Generic Character.

Asclepiadea. *Massæ Pollinis læves*, 10, pendulæ. *Coro-
na staminea duplex*: exterior 10-partita: laciniis alternis
minutis. *Cor.* subrotata. *Folliculi læves.* *Sem.* comosa.
BROWN.

Specific Character and Synonyms.

CYNANCHUM *nigrum*; caule superne volubili, corollis bar-
batis, pedicellis umbellæ simplicis pedunculo communi
vix longioribus, corona semidecemfida. *Brown Asclep.*
Mem. Wern. Soc. p. 48. Hort. Kew. ed. alt. 2. p. 78.
Schultes Syst. Veg. 6. p. 103.

CYNANCHUM *nigrum*; caule superne subvolubili, foliis ovatis
basi barbatis. *Persoon Syn. 1. p. 274.*

ASCLEPIAS *nigra*; foliis ovatis basi barbatis, caule superne
subvolubili. *Lin. Sp. Pl. 315. Willd. 1. p. 1269.*
Fabr. Helmst. 254. Decand. Fl. Franç. 3. p. 668.

ASCLEPIAS *nigro flore.* *Bauh. Pin. 303. Lob. ic. 630. f. 2.*
VINCETOXICUM *flore nigro.* *Cam. Epit. 560.*

Mr. BROWN, in his account of the natural order of *Ascle-
piadeæ*, published in the Transactions of the Wernerian
Society, has limited considerably the genus CYNANCHUM,
and has divided it into sections, which, he observes, may
probably be considered hereafter as distinct genera.

Our present plant belongs to his fifth section, containing
also *C. Vincetoxicum*, and a nearly allied species which
he calls *C. medium*.

It

It must be observed, that our plant is not the *CYNANCHUM nigrum* of CAVANILLES and WILLDENOW, now *GONOLOBUS niger*, but is generally known by the old name of *ASCLEPIAS nigra*, though it has been long ago observed to belong rather to *CYNANCHUM* than *ASCLEPIAS*, and will yet, not improbably, revert to PLINY'S name *VINCETOXICUM*.

A hardy perennial. Native of the south of Europe. Flowers from June to August. Communicated by A. MACLEAY, Esq. from his collection at Tilbuster Lodge, Surry.



CRASSULA ALBIFLORA. WHITE-FLOWERED
CRASSULA.

Class and Order.

PENTANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* 5 (nunc unguibus coalitis).
Squamæ 5, nectariferæ, ad basin germinis. *Capsulæ* 5.

Specific Character.

* Frutescentes.

CRASSULA *albiflora*; foliis carnosis ovatis acuminatis patentibus cartilagineo-ciliatis, corymbis compositis terminalibus, corollæ tubo calycem vix æquante.

DESCR. *Stem* shrubby, rounded, pubescent. *Leaves* decussate, spreading horizontally, stem-embracing, fleshy, ovate-acuminate, margins cartilaginously-ciliate. *Flowers* white, sweet-scented, terminal, in a trichotomous corymb. *Corolla* hypocrateriform; tube shorter than the calyx: *limb* spreading: *laciniæ* oval, becoming revolute at the point. *Stamens* 5, the length of the corolla, alternating with the *laciniæ*. *Anthers* red-orange before the pollen is discharged, afterwards brown. *Pistils* 5, very spreading. *Stigmas* simple, brown.

We believe this very handsome CRASSULA to be an undescribed species. It has a near affinity with *coccinea* and *versicolor*, but is very distinct from both.

Native of the Cape of Good Hope. Flowers in July. Communicated from the Fulham nursery, by Messrs. WHITLEY, BRAME, and MILNE.



H. D. Del.

Pub. by J. Curtis.

W. L. Woodr.

Apr 17 1823

Waldell Sc.

BROMELIA SYLVESTRIS. NARROW-LEAVED
WILD PINE-APPLE.



Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cal. 3-fidus, superus. *Petala* 3. *Squama* nectarifera ad basin petali. *Bacca* 3-locularis.

Specific Character and Synonyms.

BROMELIA *sylvestris*; foliis ciliato-spinosis apice longe attenuatis, racemo terminali composito: racemulis è basi bractearum vaginante vix emergentibus.

BROMELIA *sylvestris*. Willd. *Enum. Suppl.* p. 16. Link *Enum.* 1. p. 308.

Although WILLDENOW has recorded the BROMELIA *sylvestris* by name only, without any description whatever, and LINK has only added, that its leaves are like those of BROMELIA *Pinguin*, only narrower, yet there can be little doubt but that our plant is the species meant by these authors, because Mr. ANDERSON received it from Mr. OTTO, the inspector of the royal botanic garden at Berlin, under that name. Before coming into flower it is not distinguishable from Mr. LINDLEY'S BROMELIA *fastuosa*, except by the leaves being elongated to a much slenderer termination; but when the flowering stem shoots up they are at once distinguished by the length of the branchlets of *fastuosa* which, in our plant do not protrude beyond the upright sheathing bases of the bractes. A similar inflorescence may be observed in DILLENIUS'S figure of B. *Pinguin*, which seems to differ from our plant only in the greater rigidity and size, and more upright position of the leaves.

Our drawing was taken at the Apothecaries' botanic garden, at Chelsea, in July last.



CACTUS OPUNTIA. COMMON DWARF
INDIAN-FIG.



Class and Order.

ICOSANDRIA MONOGYNIA.

Generic Character.

Cal. 1-phyllus, superus, imbricatus. *Cor.* multiplex.
Bacca 1-locularis, polysperma.

Sect. IV. OPUNTIAE, compressæ, articulis proliferis.

Specific Character and Synonyms.

CACTUS *Opuntia*; articulato-prolifer, laxus, articulis ovatis, spinis setaceis. *Sp. Pl.* 669. *ed. Willd.* 2. p. 943. *Hort. Kew. ed. alt.* 3. p. 178. *Knorr. Thesaur.* 1. tab. F. a. *Kniph. Cent.* 8. n. 19. *Dec. Plant. Grass. Link. Enum. Hort. Berol.* 2. p. 23.

OPUNTIA foliis ovatis compressis, spinis setaceis. *Hall. Hist. n.* 1099.

OPUNTIA *vulgaris*; reptans, prostrata, articulis ovatis, spinis uniformibus numerosissimis piliformibus. *Haworth Succul. p.* 190.

The genus CACTUS, as constituted by LINNÆUS, contains plants extremely different in habit, but similar in their characters as taken from the parts of fructification, on which account LINNÆUS has united them into one genus, only dividing them according to their habit into different sections. HAWORTH has again separated them into as many distinct genera.

CACTUS *Opuntia* is a native of America, and, although now indigenous in many parts of the south of Europe, and in Barbary, was probably originally brought from thence.

This species is sufficiently hardy to bear our winters without

without protection, provided it is planted in a dry soil. It is well suited to ornament rock-work, in which situation, in the Chelsea garden, the plant from which our drawing was taken has stood several years.

Flowers in June and July. Propagated by the articulations. Cultivated by GERARD in 1596. Communicated by Mr. ANDERSON.

N. 2394.



J. Curtis. Del.

Pub. by J. Curtis. W. Swinburn & Co. 1825.

Weddell. S.

HYOSCYAMUS NIGER. β . ANNUA. ANNUAL
BLACK HENBANE.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, obtusa. *Stamina* inclinata. *Caps.* operculata, bilocularis.

Specific Character and Synonyms.

HYOSCYAMUS *niger*; foliis amplexicaulibus sinuatis, floribus sessilibus. *Sp. Pl.* 257.—*ed. Willd.* 1. p. 1010. *Sm. Flor. Brit.* 1. p. 254. *Engl. Bot. t.* 591. *Woodv. Med. Bot.* 1. t. 52. *Pollich Pal.* 1. p. 223. *Svensk. Bot.* 21.

HYOSCYAMUS vulgaris et niger. *Bauh. Pin.* 169.

(α .) *radice bienni.*

(β .) *radice constanter annua.*

This plant has been cultivated in gardens both here and on the continent, as the *reticulatus*; but is certainly not the Syrian plant described by CLUSIUS in his *Stirpes pannonicæ*, under the name of *Hyoscyamus peregrinus*, the seeds of which were communicated to him by BERNARD. PALUD. FRISIUS, on his return from his travels in Egypt and Syria, by the name of BENZE, which is the true *reticulatus* of LINNÆUS.

Our plant appears to us not to be specifically different from the common Henbane; but Mr. ANDERSON of the Chelsea garden thinks it certainly is; observing, that it is constantly annual, while the former, even under cultivation, is as constantly biennial. But Sir JAMES E. SMITH describes *Hyoscyamus niger* as having an annual root; so that we must own we have our doubts whether we have done right

in

in considering it even as a variety. There seems, however, to be a considerable difference in the descriptions of *H. niger* by different authors, and in the *Systema Vegetabilium* of ROEMER and SCHULTES, a doubt is expressed, whether the English and Swedish plants are the same species as the southern continental. The description of POLLICH corresponds with our plant. The flowers, he says, are an inch, often an inch and a half in diameter, beautifully painted with purple reticulated veins, and having a dark purple faux. It is this last character, that CLUSIUS particularly uses to distinguish the common Henbane from his *peregrinus*, the *reticulatus* of Linnæus, the latter having not a purple, but a white centre.

HENBANE has been known from ancient times as a poisonous plant; but in modern practice, is nevertheless found to be an efficacious, and, with proper caution, a safe remedy.

Native of Great Britain, and most parts of Europe. Flowers in June and July, and ripens its seed in August and September. Communicated by Mr. ANDERSON, from the Botanic garden, Chelsea.

N. 2395.



104. D. 7

Pubby J. Carter. W. & A. G. Smith.

10

PERILLA OCYMOIDES. BALM-LEAVED
PERILLA.



Class and Order.

DIDYNAMIA GYMnosPERMIA.

Generic Character.

Cal. 5-fidus (in fructu auctus, turgescens): laciniæ subæ-
quales: inferiores demum elongatæ. *Cor.* bilabiata: *lab.*
sup. subforficatum. *Stam.* distantia. *Stylus* apice bifidus.
Sem. orbiculata.

Specific Name and Synonyms.

PERILLA OCYMOIDES. *Lin. Syst. Veg. ed. 14. p. 533. Willd.*
Sp. Pl. 3. p. 83. Hort. Kew. ed. alt. 3. p. 390. Per-
soon Syn. 2. p. 120. Smith in Rees' Cycl.

MELISSA maxima; foliis ovato-oblongis serratis utrinque
acutis basibus mucronato-glandulosis, spicis secundis.
Arduin. Spec. 2. p. 28. t. 13.

MENTHA perilloides; racemis secundis lateralibus. *Lam.*
Encycl. 4. p. 112. n. 18. Saltem quoad descriptionem.

DESCR. *Root* annual. *Stem* upright, two or three feet
high, square, with rounded angles and excavated sides,
hairy, branched. *Leaves* opposite, ovate-acuminate,
coarsely serrate, rugosely veined and hairy underneath,
roughish above. *Petioles* long, channelled, hairy. *Ra-*
cemes axillary and terminal, often compound. *Bractes*
lanceolate. *Flowers* looking one way, white, very small.
Calyx five-cleft half way down: *segments* nearly equal.
Corolla very small: *upper-lip* concave. *Stamens* distant.
Style 1, divided at the tip. As the fruit ripens the calyx
is much increased in size, the tube becomes very turgid,
and the lower segments are more lengthened than the
upper.

upper. *Seeds* quite globular, and white before they are ripe. The whole plant smells strongly aromatic.

Our plant was raised by Messrs. WHITLEY, BRAME, and MILNE from Nepal seeds, and, there is no doubt, is the *PERILLA ocymoides* of ROXBURGH, which was brought from Nepal to the Calcutta garden, by Dr. HAMILTON (late BUCHANAN). It is also the same as the specimen preserved in the BANKSIAN Herbarium, from the plant introduced to the Kew garden by Mons. RICHARD, and described by LA MARCK in the *Encyclopédie Méthodique*, under *MENTHA perilloides*, but since referred to *PERILLA*, in the *Supplement*, by Mons. POIRÉT.

Neither have we any doubt but that our plant is the same species which ARDUINO has described and figured, though it did not show the upper segment of the calyx so much shorter than the rest; as appears in his figure, and both ROXBURGH and LA MARCK, describe the style as single. On this account we have attempted to give a new generic character, which is at least more applicable to the only plant now known under the name of *PERILLA ocymoides*.



BERBERIS FASCICULARIS. FASCICULATED
BARBERRY.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cal. 6-phyllus. *Petalâ* 6 : adungues glandulis 2. *Stylus* 0. *Bacca* 2- pluri-sperma.

Specific Character and Synonyms.

BERBERIS *fascicularis*; ramis inermibus, foliis impari-pinnatis: foliolis quinquejugis ovatis dentato-spinosis, racemis aggregatis filamentis denticulatis.

BERBERIS *pinnata*; foliis pinnatis spinoso-dentatis. *LAGASCA Gen. et Spec. p. 14. n. 179.*

BERBERIS *pinnata*; ramis inermibus, foliis impari-pinnatis foliolis quadri-aut quinque-jugis ovato-oblongis dentato spinosis sessilibus, racemis axillaribus geminis, floribus hexandris. *Humb. et Bonpl. nov. gen. et sp. t. 484?*

MAHONIA *fascicularis*; foliis 4—5-jugis cum impari, jugo inferiore ad basin petioli approximato, foliolis ovato-lanceolatis repando-dentatis, dentibus utrinque 4—5; racemis erectis confertissimis. *Decand. Syst. Veg. Nat. 2. p. 19.*

This fine evergreen shrub flowered at Boyton for the first time in this country, in February last. Mr. LAMBERT, to whose friendly communication we owe the specimen from which our drawing was made, raised it from seeds sent him by the celebrated Spanish botanist LAGASCA; so that there can be no doubt of its being the species described by him, and consequently the MAHONIA *fascicularis* of De CANDOLLE. Whether HUMBOLDT and BONPLAND'S plant is

is the same is not quite so certain, though it most probably is, and the small number of racemes described and figured by them has been perhaps owing to their specimen being taken from the lower part of the branch.

We were much inclined to think, that our plant was the same species as *BERBERIS Aquifolium* of PURSH; but it is described as an upright shrub five or six feet high; whereas the latter is said to be an under shrub, about a foot high, with procumbent branches, producing abundance of scions.

By the advice of our friend Mr. ROBERT BROWN, we have not adopted NUTTALL's name of MAHONIA, because there does not seem to be any constant generic characters by which the pinnated-leaved Barberries can be separated from the simple-leaved. Indeed, the simple leaf in the common Barberry, and all the other species belonging to the same section, being articulated with the petiole, proves, according to this excellent physiologist, a naturally compound nature, just as the leaf of the Jasmine, which is more usually compound, becomes in several species simple; but still shows its compound nature by its articulation with the petiole; there is therefore no more reason on this account to separate the pinnated-leaved Barberries from the simple-leaved, than there is to divide the Jasmynes with simple, from those with compound leaves. NUTTALL and DE CANDOLLE have erroneously adduced the want of glands at the base of the petioles as a distinguishing character, as Mr. BROWN finds that these exist in all the known species, though varying in size, and sometimes, as in our plant, nearly concealed by the breadth of the flat filament. The only other character of importance in the attempt to establish MAHONIA as a distinct genus, is the teeth on the filaments, which Mr. BROWN finds are present in three of the pinnated-leaved species, but entirely wanting in two; viz. *glumacea* and *nepalensis*. Another argument against separating the pinnated-leaved Barberries from the simple-leaved is afforded, by the circumstance that in DE CANDOLLE's third section of the genus BERBERIS are recorded two species, one from TOURNEFORT's, and the other from Mr. BROWN's Herbarium, which have compound leaves, but in which the petiole is terminated with a spine instead of a leaflet.

Native of New Spain, whence it was brought to the Madrid garden, by M. NEÉ. It is not improbable that this shrub may hereafter be found to be sufficiently hardy to bear our winters in the open ground.



Pub. by S. Curtis, Walworth, April 11 1822.

CRINUM AUGUSTUM. STATELY CRINUM.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.—*Vide Supra No. 2292.*Sectio I. *Patentes.* Subd. I. *Nutantes.**Specific Character and Synonyms.*

CRINUM *augustum*; bulbo columnari purpureo, foliis lanceolatis margine lævi, umbellâ 20—30-florâ pedunculatâ, floribus suaveolentibus extûs roseo-rubescens, intûs striatis, tubo saturatissimè colorato, filamentis assurgenter curvatis, stylo filamentis brevioribus.

CRINUM *augustum.* *Roxb. Mscr.*

CRINUM *augustum.* *Ker Journ. Sc. et A.*

CRINUM *augustum.* *Nobis in Appendice. p. 22 et 47.*

CRINUM *amabile, β. augustum.* *Bot. Reg. 679.*

DESCR. *Bulb* columnar, oblong-ovate, seven inches high, four wide, reddish purple. *Leaves* above three feet long, with a smooth margin, channelled, four inches wide, less acute than those of *C. amabile*, ending in a red point. *Scape* flattened, above an inch wide, two feet six inches high, green stained with purple. *Spathe* divided, about five inches long, green stained with purple. *Peduncles* an inch or more long, at first deep red, becoming greener. *Germen* oblong, at first very deep red, becoming greener. *Tube* curved, deep red, about three and half inches long. *Limb* four and half or five inches long, without, lake coloured, the margins of the petals fading to white; within, white striped with pink: the widest petals an inch wide. *Filaments* curved upwards, red; the longest at least one and half inch shorter than the limb. *Style* deeper red, like the tube in colour, shorter than the filaments. *Stigma* minute, deep red. *Anthers* and *pollen* yellow. *Bractes* numerous, white striped with red. *Ovules* indistinct; often but one perfect in each germen. *Flowers* fragrant.

This

This splendid plant is supposed to be a native of Mauritius, from whence it was sent to Dr. ROXBURG at Calcutta; but it may be doubted whether it is indigenous in that island, as no bulbs of it have since been received from thence. It is very closely allied to *C. amabile*; nor does there appear to be any decided botanical distinction between the two species; excepting that the style, which in *C. amabile* is much longer than the filaments, appears to be invariably shorter than the filaments in *C. augustum*. *C. augustum* is of humbler growth; its flowers shorter, but of a brighter colour; their fragrance very different from that of *amabile*, and less powerful; the points of its leaves less acute; its filaments of a paler red, differing from the colour of the style. Our specimen had sixteen flowers. ROXBURG describes the scape to be of a blackish purple, bearing from twenty to thirty flowers, ten or eleven inches long. *C. augustum*, though a little inferior in size, is by no means inferior to *C. amabile* in beauty. *W. H.*

P. S. Since this article was prepared for the press, a figure of *C. augustum* has been published in the Bot. Reg. under the title of *C. amabile*, β *augustum*. We have retained Dr. ROXBURG's name, because, although the affinity is great, it is separated from *C. amabile* by precisely the same features as *C. speciosum* from *C. insigne*, which has been erected into a distinct species, under the name of *AMARYLLIS insignis*, in the Bot. Reg. We have already stated (see Appendix, p. 47), that in a revision of the genus *C. augustum* might properly be considered a variety of *amabile*, *brevifolium* of *toxicarium*, *canaliculatum* and *exaltatum* of *pedunculatum*, *longifolium* of *lorifolium*, *ensifolium* of *defixum*, and *insigne* of *speciosum*. It is erroneously stated in the Bot. Reg. that *augustum* has yellow and *amabile* purple pollen. The pollen of both is orange; the anthers being purple before their inversion. We suspect that no species of CRINUM will be found with dark-coloured pollen. *W. H.*

CORRIGENDUM.

In the Specierum enumeratio (*vide* No. 2121, p. 6, l. ult.)

For *Crinum Yuccæides*, read *Crinum Broussoneti* var. *Yuccæides*. Upon examination of the inflorescence of this plant, we have no hesitation in pronouncing it to be merely a variety of *C. Broussoneti*; bulb and scape greener; leaves paler green; flower shorter; purple stripes stronger; habit more delicate; preferring less water. *W. H.*

N. 2398.



Curtis Del.

Pub. by S. Curtis, Walworth N. York

Wells

MARANTA ANGUSTIFOLIA. NARROW-LEAVED
MARANTA.

Class and Order.

MONANDRIA MONOGYNIA.

Generic Character.

Anthera simplex filamento adnata. *Stylus* petaliformis.
Stigma subtrigonum. *Sem.* 1.

Specific Character and Synonyms.

MARANTA *angustifolia*; culmo nodoso, foliis lanceolatis
basi angustatis, panícula flexuosa, bracteis internis
coloratis, calycibus ovatis.

MARANTA *graminifolia*. Ruiz et Pavon, in herbario Lam-
berti.

This undescribed species of MARANTA, which flowered in the Botanic garden, belonging to the company of Apothecaries, at Chelsea, in July 1822, was raised from seeds received from Trinidad. Though not mentioned in the Flora Peruviana of RUIZ and PAVON, a specimen of the same species collected in Peru, by these celebrated Botanists, and ticketed by them with the name of *graminifolia*, is preserved in the Lambertian Herbarium; but as the leaves can hardly be compared with those of European grasses, we have preferred calling it *angustifolia*.

MARANTA *angustifolia* is a much smaller plant than *arundinacea*; the swelled joints of the culm are more evident, being not concealed by the sheaths of the foot-stalks; the leaves are not only much smaller, but are narrowed at the base, which in *arundinacea* are rounded, and often cordate; the flowers grow in a lax, zig-zag panicle; the inner valve of the spathe or bracte is, like the corolla, of a pale blue colour, the calycine leaflets are oval, not, as in *arundinacea*, lanceolate.

Both species, in our climate, require to be cultivated in the stove. Communicated by Mr. ANDERSON.



AMARYLLIS CYRTANTHOIDES. CYRTANTHUS-
LIKE AMARYLLIS.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. hexapetaloidea, irregularis. *Filamenta* fauci tubi inserta, declinata, inæqualia proportione vel directione.

Specific Character.

AMARYLLIS *cyrtanthoides*; spatha multiflora, pedicellis cernuis, corollis infundibuliformi-campanulatis, genitalibus strictis exsertis, foliis loratis obtusis.

This handsome plant, belonging to the natural order of *Amaryllideæ*, appears not to have been hitherto described. It seems to us that it cannot be well united to any of the genera formed by Mr. HERBERT, out of the old genus AMARYLLIS, and perhaps from the straight stamens and style might be properly considered as distinct from any; but not having had any opportunity of examining the plant itself, we think it best, at least for the present, to arrange it under AMARYLLIS.

Mr. HERBERT has united AMARYLLIS *advena* (supra 1125), a native of the same country, (with which this plant, Mr. LINDLEY thinks, has some affinity) to HIPPEASTRUM; but AMARYLLIS *cyrtanthoides* wants altogether the characters of that genus.

Our drawing was taken at the Horticultural Society's garden in February last. The bulb, as we are informed by JOSEPH SABINE, Esq. was received from Chili, last spring, under the name of "Narcissus-like bulb". It formed part of a collection of seeds and bulbs presented to the society, by Mr. FRANCIS PLACE, of Charing Cross.



Aster. hel.

Det. by S. Curtis Walworth, May 11 1865

Weddell's

FLAVERIA CONTRAYERBA. BROAD-LEAVED
FLAVERIA.



Class and Order.

SYNGENESIA POLYGAMIA SEGREGATA.

Generic Character.

Calyculus 2—5-phyllus, 2—5-florus. *Cal. communis* imbricatus, squamis inæqualibus. *Flosculus* tubulosus: unus sæpius ligulatus. *Pappus* 0. *Recept.* nudum.

Specific Character and Synonyms.

FLAVERIA *contrayerba*; foliis subpetiolatis lanceolatis trinerviis mucronatis, floribus corymbosis. *Persoon Syn.* 2. p. 489. *Willd. Enum.* p. 941.

MILLERIA *contrayerba*; foliis subpetiolatis lanceolatis trinerviis mucronato-serratis, floribus terminalibus fasciculatis. *Willd. Sp. Pl.* 3. p. 2329. *Hort. Kew. ed. alt.* 5. p. 162.

MILLERIA *contrayerba*; caule sulcato, ramis oppositis decussatis, foliis lanceolatis serratis, floribus glomeratis. *Cav. Ic.* 1. p. 2. t. 4.

MILLERIA *contrahierba*; foliis oblongo-lanceolatis trinerviis, floribus dense fasciculatis subcorymbosis terminalibus. *Lam. Encycl.*

VERMIFUGA *Ruiz and Pavon Prodr. Fl. Per.* p. 114. t. 24.

EUPATORIODES *salicis folio trinervi, flore luteo, vulgo contrahierba. Feuill. Peruv.* 3. p. 18. t. 14.

FLAVERIA was established as a genus by JUSSIEU, but CAVANILLES afterwards uniting it with the genus *Milleria*, his opinion has been generally followed, till the authors of *Flora Peruviana* determined it to be generically distinct.

This

This plant was first described by Father FEUILLÉE, who found it near the City of Conception in Chili. He remarks that the natives prepare a bright yellow dye by boiling it in water. The Peruvians according to RUIZ and PAVON use a decoction of the herb for destroying the worms that breed in sores, whence its name of *Centrayerba* which signifies vermifuge.

MILLERIA angustifolia of CAVANILLES, if it be not the same species, which is very probable, certainly belongs to this genus.

Native of Peru and Chili. Flowers in the stove from July to October. Introduced by ARCHIBALD MENZIES, Esq. Communicated by JOHN WALKER, Esq. of Arno's Grove.



STAPELIA BARBATA. BEARDED STAPELIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Asclepiadea. Nect. duplici stellula tegente genitalia.

Specific Character and Synonyms.

Sect. I. *Corollis decemdentatis; alis nullis; rostris gibbosis; ligulis coalitis in scutum humile. (HEURNIÆ Brown).*

A. *Fauce simplici.*

STAPELIA *barbata*; corollis campanulatis intus punctatis, foris impunctatis, dentibus majoribus cuspidatis, ramis strictis tetragonis. *Jacq. Stap.*

STAPELIA *barbata*; corollis decemdentatis: laciniis majoribus lanceolatis acuminatis scabris clavato-barbatis, pedunculis corolla brevioribus, ramis subtetragonis erectis basi floriferis. *Willd. Sp. Pl. 1. p. 1293. Hort. Kew. ed. alt. 2. p. 95.*

STAPELIA *barbata*; ramis pluribus tetragonis pentagonisque confertis suberectis, dentibus ramorum acutis subpatentibus, corolla campanulata decemfida, laciniis acutis subpatentibus. *Masson Stap. p. 11. t. 7.*

HEURNIA *barbata*; corolla campanulata, fauce subclausa, setis clavatis rufis: ligulis oblongis rhombeis retusis, staminibus subulatis undatim subuncatis. *Haworth Succul. p. 31. Schultes Syst. Veg. 6. p. 8.*

We have before given four species of this division, which rank under the genus HEURNIA of BROWN; No. 506, *lenticinosa*; No. 1662, *reticulata*; No. 1227, *campanulata*; and No. 1661, *clavigera*; the last is erroneously given under the name of *campanulata*. The two last mentioned species and our present one *barbata* are so very nearly related, that

that though recorded as distinct by the best authority, by JACQUIN, HAWORTH, and in the Hortus Kewensis, may be thought by some to be only varieties of one species.

The flowers of *STAPELIA barbata*, smell less offensively than most of the other species; the corolla is smooth, pale, and of nearly a uniform colour on the outside, except that the tube is obscurely streaked, but within the limb is roughened by raised spots, and by scattered glandular, somewhat clubbed hairs. The branches are straight, and have sometimes four, more frequently five, and now and then six angles.

Native of the Cape of Good-Hope, whence it was introduced into this country by Mr. FRANCIS MASSON in 1795. Flowers most part of the summer. Communicated by N. S. HODSON, Esq. from the Botanic Garden at Bury St. Edmunds.



ERIGERON BELLIDIFOLIUM. PLANTAIN-
LEAVED ERIGERON.

Class and Order.

SYNGENESIA POLYGAMIA SUPERFLUA.

Generic Character.

Recept. nudum. *Pappus* pilosus. *Cor.* radii lineares, angustissimæ.

Specific Character and Synonyms.

ERIGERON *bellidifolium*; hirsutum, incanum; foliis radicalibus obovatis subserratis; caulinis paucis distantibus lanceolatis integerrimis, caule subtrifloro, radiis elongatis. *Pursh Fl. Am. Sept. 2. p. 532.*

ERIGERON *billidifolium*; foliis radicalibus obovatis serratis; caulinis lanceolatis integerrimis, caule subbifloro, radio disco longiore. *Willd. Sp. Pl. 3. p. 1958.*

ERIGERON *pulchellum*; hirsutum, subincanum, foliis radicalibus oblongo-obovalibus sive cuneato-oblongis subintegris; caulinis paucis distantibus semiamplexicaulibus, floribus majusculis: radiis numerosis, elongatis subcærulescenti-albidis. *Michaux Fl. Bor. Am. 2. p. 124.*

DESCR. *Radical leaves* several, wide-obovate, obtuse, rugose-veined, coarsely serrate from the middle upwards, rough, with rigid hairs on the upper surface, hairy along the course of the veins underneath. *Cauline leaves* distant, tongue-shaped, somewhat undulate, quite entire. *Stem* erect, hairy, streaked, simple, branching out at the upper part into from three to five long, hairy, one-flowered peduncles. *Bracte* one or two, small, subulate; but little distant from the flower. *Calyx* hemispherical: *leaflets* subulate, imbricate. *Ray* many-flowered, linear, pale blue, longer than the flat yellow disk.

In

In its native soil, the stem is frequently only one, two or three flowered, with much shorter peduncles, and smaller radical leaves than in the cultivated plant. Native of North America, in shady woods, principally throughout the mountains, from Canada to Carolina, where it is known by the name of *Poor Robin's Plantain*.

Not inserted in the last edition of the Hortus Kewensis. A hardy perennial. Communicated by N. S. Hodson, Esq. from the botanic garden at Bury St. Edmunds in September 1822.

N. 2403



Pub. by J. G. & W. J. - North May 1. 1823

ŒNOTHERA ODORATA, β. SWEET-SCENTED
ŒNOTHERA.



Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Cal. 4-fidus, tubulosus. *Petala* 4. *Caps.* 4-ocularis, 4-valvis, cylindrica, infera. *Sem.* nuda.

Specific Character and Synonyms.

ŒNOTHERA *odorata*; foliis radicalibus lineari-lanceolatis denticulatis planis; caulinis undulatis utrinque villosis, petalis obcordatis tubo calycis longioribus.

ŒNOTHERA *odorata*; foliis lineari-lanceolatis denticulatis undulatis pubescentibus glaucis, caule hirtio. *Jacq. Icon rar.* 3. t. 456. *Collect. Suppl.* p. 107. *Pers. Syn.* 1. p. 408. r. 12. *Bot. Reg.* 147.

ŒNOTHERA *undulata*; foliis lanceolatis undulatis glabris. *Hort. Kew. ed. alt.* 2. p. 342.

(α.) *caule, nervis foliorum, calyce, germineque rubentibus.*
KER.

(β.) *caule, nervis foliorum, calyce, germineque virentibus.*
KER.

DESCR. *Stem* two feet high, hairy, but little branched. *Radical leaves* linear lanceolate, slightly dentate-sinuate, rigid, smooth or minutely villous. *Cauline leaves* half stem-embracing, dentate-sinuate, undulate, villous on both sides. *Germen* sessile, cylindrical, villous, eight-streaked. *Calyx* villous: *tube* cylindrical: *segments* of the border adhering, reflexed, armed with a small soft mucro, inserted a little below the apex, as described by JACQUIN. *Petals* obcordate, longer than the tube of the calyx. *Stamens* shorter

shorter than the petals. *Style* longer. *Stigma* fleshy, 4-cleft: in one instance the divisions were again divided halfway down. *Capsule* sessile, cylindrical, streaked, pubescent, two inches long.

There is a considerable difference in the degree of villosity in different plants, and also in the undulation of the leaves. It is a very desirable species, both on account of the size of the flowers, which in one of our specimens, measured three inches in diameter when fully expanded, and its very fragrant odour.

First raised in Europe in 1790, from seeds collected in Patagonia, which came into the hands of Sir JOSEPH BANKS by purchase, and were through him, communicated to JACQUIN, who first published a figure of our plant in his *Icones plantarum rariorum*.

A hardy perennial of easy culture. Flowers most of the Summer. Propagated readily by seeds. Communicated by Messrs. WHITLEY, BRAMES, and MILNE, of the Fulham Nursery.



Phlox paniculata L.

SCIZANTHUS PINNATUS. WING-LEAVED
SCHIZANTHUS.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Cor.* bilabiata, resupinato, labio superiore 5-partito; inferiore 3-partito. *Stam.* 4: duo sterilia. *Caps.* 2-valvis, 2-ocularis.

Specific Name and Synonyms.

SCHIZANTHUS pinnatus. *Ruiz et Pav. Prodr. p. 4. Fl. Peruv. 1. p. 13. t. 17. Vahl Enum. 1. p. 171. Roem. et Sch. Syst. Veg. 1. p. 137.*

DESCR. *Stem* erect, branched at the upper part, rounded: *branches* covered with glandular hairs. *Leaves* interruptedly pinnate: *pinnae* pinnatifid: *leaflets* unequal, larger one denticulate, smaller entire. *Bractes* generally two at the base of the petiole, looking one way; lower ones incised at the base; upper ones quite entire. *Petiole* one-flowered. *Calyx* five-cleft: segments broadest towards the apex. *Cor.* one-petaled. bilabiate: *upper-lip* 5-cleft: *laciniæ* spreading, the upper one obovate, spotted at the base; the rest irregularly incised: *lower-lip* 3-cleft; the two lateral *laciniæ* sickle-shaped, truncate; lower one channelled, deeply emarginate. *Filaments* two, sterile, inserted into the upper lip, two fertile, inserted into the lower lip: *anthers* blue. *Germen* superior, ovate. *Style* longer than stamens, coloured; *stigma* simple, whitish.

Upon comparing our plant with the figure given of it in the *Flora Peruviana*, we were inclined to consider it as a distinct species; but upon comparing our drawing with the specimen

specimen of *SCHIZANTHIS pinnatus* in that work, we find the resemblance so near, that we cannot venture to consider them as distinct.

This very curious plant flowered, for the first time probably in Europe, in the collection of JOHN WALKER, Esq. in March last, which, and the preceding month are said to be its season of flowering in Chili, of which country it is a native.



Physalis peruviana L. f. *peruviana* L. f. 23.

Herb. Bot. J.

CALCEOLARIA SCABIOSÆFOLIA. SCABIOUS-
LEAVED SLIPPER-WORT.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cal. 4-partitus. *Cor.* bilabiata: labium inferius inflatum, calceiforme. *Caps.* semibivalvis, valvulis bifidis.

Specific Character and Synonyms.

CALCEOLARIA *scabiosæfolia*; foliis inferioribus pinnatis; superioribus pinnatifidis, trilobis simplicibusque. *Roem. et Sch.* 1. p. 187.

CALCEOLARIA *heterophylla*. *Willd. Enum.* 1. p. 29. ad calum *paginae*; nec *Ruizii* vel *Vahl.*

CALCEOLARIA *pinnata*; foliis pinnatis, caule dichotomo radicante. *Fl. Peruv.* 1. p. 14. t. 19. f. a.

CALCEOLARIA foliis *scabiosæ vulgaris*. *Feuill. Peruv.* 3. p. 12. t. 7.

DESCR. *Stem* rounded, hairy, especially at the upper part. *Leaves* opposite, with connate petioles, pinnate: pinnae sometimes confluent: young leaves hairy, adult ones smooth. *Peduncles* hairy, subcorymbose, one-flowered. *Calyx* 4-parted: leaflets round-oval, acuminate, ciliate. *Corolla* 2-lipped: upper-lip very short, concave hooded: lower-lip very large, nearly orbicular, flattened, with a narrow opening. *Stamens* two: *Filaments* with two arms attached to the corolla by the middle: one arm bears a one-celled *anther*, concealed under the hood of the upper-lip, the other sterile arm is exerted. *Germen* pubescent, bilocular: *Style* conical, a little curved. *Stigma* simple. *Ovules* many, affixed to a central receptacle.

We

We have no doubt but that this is the *CALCEOLARIA pinnata* of the Flora Peruviana, but appears to be very different from the *pinnata* of Hortus Kewensis, figured in this work, at No. 41, whatever allowance is made for the great variety of forms assumed by the leaves; which induced WILLDENOW to give it the name of *heterophylla*; a name already applied to another species.

Raised from Chili seeds, by JOHN WALKER, Esq. and communicated by him, in flower, in March last. Appears to be biennial.

Fig. 1. Represents the calyx and pistillum.

2. A front view of the corolla.

3. A side view of the same, shewing the sterile arms of the filaments.

N. 2406.



Waddell Sc.

Pub. by J. Curtis, W. Dorrseth, June 21 1823.

J. Curtis Del.

**BANKSIA LATIFOLIA. BROAD-LEAVED
BANKSIA.**



Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Cor. 1-petala. *Stam.* apicibus concavis corollæ immersa. *Squamulæ* hypogynæ. *Folliculus* ligneus, 2-ocularis : loculis 1-spermis ; dissepimento libero, bifido. *Amentum* flosculorum paribus tribracteatis. **BR.**

Specific Character and Synonyms.

BANKSIA latifolia ; foliis obovato-oblongis spinuloso-ser-ratis basi acutis subtus costatis reticulatis cinereo-tomentosis, corollæ unguibus sericeis : laminis glabris caule fruticoso. *Brown in Lin. Soc. Transac.* 10. p. 208. *Prodr.* 394. *Hort. Kew. ed. alt.* 1. p. 217. *Roem. et Sch. Syst. Veg.* 3. p. 441.

BANKSIA Robur. *Cavan. ic.* 6. p. 29. t. 543.

BANKSIA Dilleniæfolia. *Knight et Salisb. Prot.* 113.

BANKSIA uncigera. *Knight et Salisb. Prot.* 112.

M. CAVANILLES describes this shrub as a tree thirty feet high, in which he is followed by Mr. SALISBURY ; but we are informed by Mr. BROWN, in his Prodrumus, that it is only a low shrub, growing plentifully in the marshes near Sidney, New South Wales. This mistake respecting its height originated with Mr. NEEÉ, whose observations, however, with regard to altitude, texture, and utility of its timber, belong, Mr. BROWN observes, to *BANKSIA serrata*.

At the time of the publication of AITON'S Hortus Kew-ensis it appears not to have flowered in this country. In the fine conservatory belonging to EDWARD GRAY, Esq. at Haringay House, where our drawing was taken, it flowered last August.



NERINE PULCHELLA. PALE PINK NERINE.

*Class and Order.*

HEXANDRIA MONOGYNIA.

Generic Character.

Bulbus subrotundus. *Folia* bifaria, angusta, hiemalia, æstate depereuntia. *Scapus* altus, sub-præcox, autumnalis. *Umbella* sub-20-flora. *Flores* inodori. *Pedunculi* sub-erectè divaricati. *Germen* breve, rotundatè trigonum, pedunculo directè continuatum, vel (corollâ difformiore) declinatum, 3-loculare, loculis 2-14-spermis. *Corollæ* tubus nullus, lacinia sub-æquales, undulatae, angustae, patentès, usque ad germen divisae, basis medio infra filamentorum junctionem, eis adhærentes. *Filamenta* versùs basin latiora, gibbosa, et in nectarium liquore sæpe repletum coalescentia; alterna longiora, nisi casu irregularia; breviora corollæ laciniis exterioribus adhærentia. *Stigma* trifidum, superne fimbriatum. *Capsula* trilocularis, trisulca, trivalvis, difformis plerumque et seminibus immaturis disrupta. *Semina* parva, carnosa, integumento viridi non separabili, compressione angularia, parte exteriorè rotundata et aliquando sub-purpurascencia. *W. H.*

Specific Character and Synonyms.

NERINE *pulchella*; foliis glaucis, scapo bipedali, corollâ sub-difformi, pallidè subrubescence, rubro striatâ, loculis circiter 8-spermis.

NERINE *pulchella*. *Nobis in appendice, p. 19.*

DESCR. *Bulb* tinged with purple and green. *Leaves* above half an inch wide, glaucous. *Scape* in our specimen two feet three inches. *Flowers* about seven, a little distorted. *Corolla* very pale pink, striped with red, the colour

colour brighter in the bud. *Style and filaments* white, curved. *Spathe* reddish. *Cells* about 8-seeded. This species has been confounded, in the nurseries near London, with *Humilis* (supra 726), a very distinct plant, with short scape, bright red flowers, and narrow green leaves; but it approaches nearer to *flexuosa*. Its peduncles are much elongated as the flowers decay. The whole genus are natives of South Africa. The warmer the bulbs are kept during their season of rest, when left dry, in the summer, the more certainly will they bloom. *W. H.*

Reference to the Figure of the Dissection.

a. Section of the flower, shewing the gibbous union of the filaments, which characterises the genus *Nerine*.



Tulipa... 1822.

...

SCILLA AMOENULA. FEW-FLOWERED SQUILL.

*Class and Order.*

HEXANDRIA MONOGYNIA.

Generic Character.

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

Specific Character and Synonyms.

SCILLA *amœnula*; scapo quinqu-angulo, racemo trifloro, pedunculis nutantibus, corollis campanulato-patulis, bracteis brevissimis. *Horn. Hort. Hafn. p. 331.*

SCILLA *azurea*. *Goldbach in Mem. Soc. Imp. Nat. Scrut. Mosq. 5, p. 125.*

SCILLA *amœna*. *Redouté Lil. t. 130. nec. t. 298.*

SCILLA *cernua*; scapo paucifloro, floribus lateralibus nutantibus campanulatis, pedicellis coloratis brevissimis, bracteis minimis. *Flor. Cauc. t. 3. p. 266?* exclusis synonymis omnibus præter Horneman et Goldbach.

We have little doubt but that *SCILLA amœna* (*Bot. Mag. No. 341*), *sibirica* (*No. 1025*) and our present plant, are three distinct species. The latter has an ovate *bulb* with dark brown integuments, generally three *leaves*, at the time of flowering scarcely two inches long, erect, divergent, lanceolate. *Scapes* three or four, from the same root, angular, twice as long as the leaves, bearing from one to three blue flowers. *Corolla* stellately patent. *Filaments* subulate, longer than the germen, not half the length of the petals. *Anthers* oblong, blue with green *pollen*. *Germen* orbicular, obscurely trigonous. *Style* shorter than the stamens. *Stigma* simple.

SCILLA sibirica differs from *amœnula* in its greater number of leaves, which are broader upwards, and curved towards the

the

the end; it bears more flowers, which are more cernuous and do not open so wide, but remain more campanulate.

The synonymy of these plants is extremely confused, REDOUTÉ's *Liliaceæ*, t. 298 is quoted in the *Flora Caucasica*, as a synonym of *cernua*, though it certainly represents the *amæna* of the *Botanical Magazine*. In this work there are two figures under the name of *SCILLA amæna*; the other tab. 130, apparently represents our present plant, differing little, except in its greater number of leaves.

If *SCILLA cernua* of the *Flora Caucasica* be the same species, it is very common throughout all middle Russia, where spontaneous specimens bear generally one or two flowers, very rarely three.

Communicated in March last by Mr. ANDERSON of the Chelsea garden, who raised a number of plants from seeds sent by Mr. OTTO of the Berlin garden, under the name of *SCILLA amænula*.



ITEA VIRGINICA. VIRGINIAN ITEA.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Petala longa calyci inserta. *Caps.* 1-locularis? 2-valvis, margine introflexo seminiferis.

Specific Character and Synonyms.

- ITEA *virginica*; foliis ovatis acutis serratis. *Willd. Sp. Pl.* 1. p. 1146. *Hort. Kew. ed. alt.* 2. p. 37. *Trew. Ehret.* 55. t. 95. *L'Heret. Stirp.* 1. p. 138.
- ITEA *virginica*; foliis oblongis serratis, spicis pubescentibus. *Pursh. Fl. Amer. Sept.* 1. p. 171. *Michaux Fl. Amer. Bor.* 1. p. 157.
- DICONANGIA. *Mitch. Gen. n.* 5.

ITEA *virginica* forms a handsome shrub, which seldom exceeds five or six feet in height. It has been observed not to thrive well in a dry gravelly soil.

The CYRILLA of LINNÆUS has been joined to this genus by L'HERETIER, which is followed in the Hortus Kewensis, and by WILLDENOW and most modern botanists; but M. RICHARD, in MICHAUX'S Flora of North America, will not allow the propriety of this union. This author also refers ITEA to the natural order of SAXIFRAGÆ, not to the RHODODENDRA of JUSSIEU, notwithstanding its having a single style.

Cultivated in this country as long ago as the year 1744, by ARCHIBALD, Duke of Argyle. Flowers from June to August. Propagated by layers. Communicated by JOHN WALKER, Esq. Arno's Grove.

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PITCAIRNIA STAMINEA. LONG-
STAMENED PITCAIRNIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cal. 3-partitus, inferus, persistens. *Petala* 3; *squama* nectarifera ad basin petalorum (nunc deficiens). *Stigmata* 3, contorta. *Caps.* 3, introrsum dehiscentes. *Semina* alata, aut utrinque in setam longam terminata.

Specific Character.

PITCAIRNIA *staminea*; foliis lineari-lanceolatis integerrimis, laciniis corollæ revolutis, staminibus corolla longioribus.

PITCAIRNIA *staminea*. Lodd. Cab. 773.

DESCR. *Leaves* linear lanceolate, two feet long, sharp pointed, quite entire, with a smooth margin. *Scape* rising from the centre of the leaves, four feet long, jointed, with a leaf-like bracte at each joint, smaller and smaller in ascending, terminating in a pyramidal raceme of flowers, a foot and half long. A lanceolate bracte, at the base of each peduncle, grows shorter and shorter at each flower, till it becomes very minute. *Peduncles* horizontal, alternate, one-flowered, lower ones an inch and a half long. *Calyx* 3-leaved: *leaflets* acute, erect; embracing the base of the corolla very tight, and only one-third of its length. *Petals* three, linear, two inches long, conniving into a cylindrical tube, revolute at the points only. *Stamens* six, exserted. *Filaments* nearly twice the length of the petals, into the base of which they are inserted. *Anthers* erect, linear, fixed by the base to the extremity of the filament. *Germe*n superior, conical, three-sided, three-celled.

celled. *Style* the length of the stamens: *stigmas* three, spirally twisted together and revolute.

This fine plant appears to us not to have been hitherto described. It is a native of South America, whence it was sent by Sir THOMAS HARDY to Lady CAMPBELL, and given by her Ladyship to Messrs. WHITLEY, BRAMES, and MILNE, of the Fulham Nursery, in whose stove our drawing was taken, in January, 1823.



Verbena officinalis L.

AGERATUM STRICTUM. UPRIGHT
AGERATUM.



Class and Order.

SYNGENESIA POLYGAMIA ÆQUALIS.

Generic Character.

Recept. nudum. *Pappus* paleis 5, subaristatis. *Cal.* oblongus, duplici foliorum serie. *Corollulæ* 4—s. 5-fidæ.

Specific Character and Synonyms.

AGERATUM *strictum*; caule erecto simplice scabro, foliis cordatis rugoso-venosis inæqualiter serratis, pedunculis coloratis.

We believe that this plant has not been hitherto noticed in any publication, and we regret that our memoranda concerning it, and specimen have been lost. All that we know respecting it is, that it was communicated by Messrs. WHITLEY, BRAME, and MILNE of the Fulham Nursery, in November 1821; and that it was raised from seeds received from Dr. WALLICH of Calcutta, and marked as coming from Nepaul. It is probably an annual, and not having much beauty to recommend it, has not been preserved.

VESTIA LYCIOIDES. BOX-THORN-LIKE
VESTIA.

Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cal. campanulatus, 5-dentatus. *Cor.* infundibuliformis, tubo calyce triplo longiore. *Stigma* capitatum. *Caps.* 2-locularis, 4-valvis. *Sem.* nuda. *Embryo* rectus!

Specific Name and Synonyms.

VESTIA lycioides. *Willd. Enum.* 1. p. 208. *Don in Edinb. Phil. Journ.* No. 14. *Bot. Reg.* 299.

CANTUA ligustrifolia. *Juss. in Ann. du Mus. Hist. Nat.* 3. p. 118. et. 15. p. 341. *Roem. et Sch. Syst. Veg.* 4. p. 366.

PERIPHHRAGMOS fœtidus. *Ruiz. et Pav. Fl. Peruv.* 2. p. 17. t. 132. Exclusa figura capsulæ, quæ pertinet ad Cantuæ veræ speciem. *Don.*

GUEVILLGUEVILL. *Incolis.*

The genus CANTUA, to which our plant has been referred by JUSSIEU and other botanists, belongs to the natural order of *Polemoniaceæ*; but Mr. ROBERT BROWN, in the Botanical Register (No. 299) has referred VESTIA to the *Solaneæ*; the justness of which arrangement has been since confirmed by Mr. DAVID DON, from an examination of the fruit. This able young botanist has likewise pointed out its near affinity to CESTRUM, a genus also belonging to the family of *Solaneæ*.

There is only one species of VESTIA at present known, for a full description of which we refer to Mr DON's observations on the natural family of plants called *Polemoniaceæ*, published in the Edinburgh Philosophical Journal, for October 1822.

It is entirely on the authority of PAVON's specimen now in the Lambertian Herbarium, that the synonym from the Flora Peruviana is added, for the figure cited from that work is so incorrect, especially from the addition of the capsule of a true *Cantua*, that we should not have thought it intended for our plant. It was most probably owing to this error as Mr. DON remarks, that JUSSIEU was led to unite it with his *Cantua*.

This handsome, but ill-scented, shrub is a native of Chili in South America. Is generally treated as a greenhouse plant; but, if the winter prove mild, will do very well without protection. Mr. JOS. KNIGHT in the King's Road, Chelsea, had a very fine plant, which stood in the open air through the winter of 1721—2, flowered and produced fruit the following summer, but the severe frost of 1722—3 destroyed it. It is readily propagated by cuttings.

Flowers in April, May, and June. Communicated by AYLMER BOURKE LAMBERT, Esq. from his collection at Boyton, in April last.



LUPINUS MICROCARPUS. SMALL-PODDED

LUPIN.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Cal. 2-labiatus. *Antheræ* 5 oblongæ; 5 subrotundæ.
Legum. coriaceum, torulosum, compressum.

Specific Character.

LUPINUS *microcarpus*; foliis digitatis, calycibus verticillatis inappendiculatis: labio superiore emarginato inferiore bifido ter brevior, leguminibus rhombeis hirsutis dispermis.

DESCR. *Stem* branched. *Leaves* digitate: leaflets 9-10, lanceolate, hairy on the under surface, smooth on the upper: *petioles* twice the length of the leaflets, pubescent. *Stipules* subulate. *Peduncle* terminal. *Flowers* blue, in a verticillate spike: *whorls* six-flowered. *Bractes* small, hairy. *Calyx* inappendiculate (unless the bractes, which are distinct from the calyxes, are to be called appendices) bilabiate; upper-lip much the shortest, emarginate; lower-lip bifid. *Vexillum* oblong. *Alæ* equalling the vexillum: *Carina* monopetalous, sharp-pointed. *Anthers* 10, five oblong, and five orbicular. *Style* the length of the stamens. *Stigma* capitate. *Legume* small, rhomb-shaped, mucronate by the persistent style, hairy: *seeds* two, variegated with black lines and dots.

This species of Lupin is a native of Chili. It has not
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we believe been heretofore described ; and differs from all the known species by its small two-seeded pods. We regret however that we did not receive these time enough to be added to the engraving.

Raised from seeds by JOHN WALKER, Esq. of Arno's Grove. It flowered in April, and appears to be annual.



HYOSCYAMUS ORIENTALIS. ORIENTAL
HENBANE.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Cor. infundibuliformis, obtusa. *Stam.* inclinata. *Caps.* operculata, bilocularis.

Specific Character and Synonyms.

HYOSCYAMUS *orientalis*; foliis deltoideo-ovatis repandis, calycibus fructus tumidis, genitalibus exsertis. *Bieb. Fl. Taur. Cauc.* 1. p. 164. *Roem. et Sch. Syst. Veg.* 4. p. 312.

HYOSCYAMUS *orientalis* Betæ folio, tuberosa radice. *Tournef. Cor.* p. 5. ex autopsia Herb. *Tournef. M. v. Bieb.*

HYOSCYAMUS *orientalis* is very nearly related to *physaloides* (supra No. 852) but is different; the leaves are more pointed, and repand, and after the plant has flowered they grow to a very large size, having much the appearance of those of the Bete. The flowers are shorter than those of *H. physaloides*, but the calyx, stamens, and style are longer in proportion; they are not of so dark a purple colour and more conspicuously veined. MARSCHALL V. BIEBERSTEIN also remarks that the root descends deep between the clefts in the rocks, and forms a germinating head the size of the fist, uneven from the buds being mixed with the remains of former stalks and petioles.

A hardy perennial. Indigenous in Iberia and about the acidulous spring at Narzana. Flowers in April. Propagated by seeds. Communicated by A. B. LAMBERT, Esq. from his collection at Boyton.



OXALIS ROSEA. CRIMSON OXALIS.



Class and Order.

DECANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-phyllus. *Petala* unguibus connexa. *Stam.* inæqualia: 5 breviora exteriora, basi connata. *Caps.* angulis dehiscens, 5-gona.

Specific Character and Synonyms.

SECT. 7. Foliis ternatis, pedunculis multifloris ;
caulescentes.

OXALIS *rosea*; caule erecto, ramoso, pedunculis longissimis, floribus subumbellatis ante expansionem cernuis, foliolis obcordatis sessilibus.

OXALIS *rosea*; caule erecto, foliolis obverse cordatis, pedunculis divisis racemosis. *Jacq. Oxal. n. 5. p. 25.*

OXALIS *rosea*; caule erecto ramoso folioso, pedunculo foliis multo longiore bifido racemoso, foliis ternatis: foliolis obcordatis sessilibus. *Willd. Sp. Pl. 2. p. 802.*

OXYS *roseo* flore erectior vulgo CULLÉ. *Fuillée obs. 2. p. 735. t. 23.*

OXALIS *rosea* has been hitherto known to botanists only by the description and figure of FEUILLÉE, with which our plant accords in too many respects to allow us to consider it as a distinct species, though he describes the flowers as being of a pale red colour with darker streaks extending only half way along the petal; but it is not improbable that the colour may vary in intensity in different individuals; and in the inflorescence, stem, foliage, and especially the extraordinary

extraordinary length of the peduncles, the two plants perfectly accord.

FEUILLÉE describes it to be an annual plant, and observes that the Indians use it, in addition with other plants, to dye different colours; but this is perhaps only on account of the oxalic acid it may contain in common with the other species of the genus, and not from any colouring matter in its composition.

Native of Chili, growing in wet places along the sides of ditches. Communicated in April last, by JOHN WALKER, Esq. of Arno's Grove, who raised it from seeds sent from Chili.



LIMONIA PARVIFLORA. SMALL-FLOWERED
LIMONIA.



Class and Order.

DECANDRIA MONOGYNIA.

Generic Character.

Cal. 5-partitus. *Petala* 5. *Drupa* 3-locularis. *Sem.*
solitaria.

Specific Character.

LIMONIA *parviflora*; inermis, foliis bijugis: foliolis elliptico-lanceolatis integerrimis, corollis campanulatis, baccis oblato-sphæroideis obliquis.

This species of LIMONIA, though nearly allied to pentaphylla, appears to differ in having more lanceolate leaves, but more especially in the campanulate form of the corolla, the petals being erect, and only spreading a little at the points. The fruit in our plant approaches to a globular form, a little flattened, and considerably oblique. This obliquity is probably owing to one of the seeds only coming to maturity, which compresses the other two cells into a small space, and throws the insertion of the style to one side, though in the germen the style occupies the centre.

Native of China, whence it was sent to the Horticultural Society, at whose recent, but magnificent establishment, at Chiswick, our drawing was taken in March last; at which time it had both flowers and ripe fruit. Cultivated in the stove.



ACACIA DIFFUSA. AWL-LEAVED ACACIA.

Class and Order.

POLYGAMIA MONOECIA.

*Generic Character.*HERMAPHROD. *Cal.* 5-dentatus. *Cor.* 5-fida vel 5-petala. *Stam.* 4—100. *Pist.* 1. *Legum.* bivalve.MASC. *Cal.* 5-dentatus. *Cor.* 5-fida. s. 5-petala. *Stam.* 4—100.*Specific Character and Synonym.*

Sect. I. Foliis simplicibus.

ACACIA diffusa; foliis linearibus uninerviis curvatis pungenti-mucronatis, pedunculis axillaribus geminis folio brevioribus, capitulis globosis.*ACACIA diffusa*; ramis procumbenti-diffusis glabris, foliis linearibus uninerviis acumine obliquo, spinulâ marginis inferioris continuâ præfixis; stipulis minimis caducis; capitulis subgeminis globosis. *Bot. Reg.* 634.

The genus ACACIA is referred by JUSSIEU to his natural order of LEGUMINOSÆ; but BROWN, in *Flinder's Voyage*, vol. 2. p. 551, has established a family of *Mimoseæ*, consisting of LINNÆUS'S MIMOSA, divided by WILDENOW into five genera, together with ADENANTHERA and PROSOPIS.

Mr. BROWN observes, that "nearly the whole of the Australasian species belong to ACACIA of WILLDENOW, as at present constituted, and that nine-tenths of them belong to his first division, having what he calls simple leaves, but which are in reality aphyllous, the dilated foliaceous foot-stalk performing the functions of the true compound leaf, which is produced only in the seedling plant, or occasionally in the more advanced state, in particular circumstances, or where plants have been injured. The great number of species

species of ACACIA having this remarkable property in Terra Australis forms one of the most striking peculiarities of its vegetation; nearly a hundred species have been already observed. But though the leafless Acaciæ are thus numerous and general in Terra Australis, they appear to be very rare in other parts of the world."

ACACIA *diffusa* is supposed to be a native of the newly discovered country beyond the Blue Mountains, in New South Wales. Introduced by Messrs. COLVILLE of the King's Road. Is an ornamental greenhouse shrub. Flowers in April. Communicated by JOHN WALKER, Esq.



Fig. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

CALCEOLARIA CORYMBOSA. CORYMBOSE
SLIPPER-WORT.

Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. ringens, inflata. *Caps.* 2-locularis, 2-valvis. *Cal.* 4-partitus, æqualis.

Specific Character and Synonyms.

CALCEOLARIA *corymbosa*; foliis radicalibus ovatis cordatisque petiolatis bicrenatis, caulinis cordatis semiamplexicaulibus. *Flor. Peruv.* 1. p. 14. t. 20. f. b. *Persoon. Syn.* 1. p. 15. n. 6. *Roem. et Sch. Syst. Veg.* 1. p. 181. ubi Cavanilles errore citatur.

DESC. *Stem* simple, erect, square, hairy, without leaves at the lower part. *Radical leaves* petioled, ovate sometimes cordate, obtuse, doubly crenate, white underneath, rugose-veined, hairy. *Cauline leaves* distant, opposite, half-stem-embracing. *Flowers* in a corymbose panicle, on long slender peduncles. *Calyx* four-leaved: *leaflets* ovate, spreading. *Cor.* bilabiate: *upper lip* very small: *lower-lip* large, inflated, with a small opening, where it is marked on the inside with red lines. *Filaments* inserted at the base of the upper lip, very short: *anthers* 2-lobed: lobes divaricate, one concealed under the upper lip, the other projected beyond; both fertile. *Germen* round: *style* very short.

This beautiful species of *Calceolaria* is a native of Chili, and was raised from seeds, sent from that country, by Mr. WALKER, at his seat, Arno's Grove, Southgate, where our drawing was taken in May last. It is supposed to be annual, and consequently to be propagated by seeds only.

a. Calyx with pistil. b. Corolla dissected longitudinally to shew the stamens.



London DC. Herb. Mart. Walworth. Aug. 1852.

W. J. Hooker.

ORNITHOGALUM GRAMINEUM. GRASS-
LEAVED STAR OF BETHLEM.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, erecta, persistens, supra medium patens. *Filamenta* basi dilatata. *Caps.* trilocularis. *Sem.* subrotunda, nuda.

Specific Character and Synonyms.

ORNITHOGALUM *gramineum*; scapo angulato foliis linearibus altiore, floribus umbellatis, pedunculis erectis, petalis ovatis acutis striatis.

LILIO-NARCISSUS polyanthos, albus, Phalangii flore. *Feuill. Observ. v. 3. p. 30. t. 21?*

This plant has not, as far as we can discover, been hitherto described, except the one quoted from FEUILLÉE be the same, which is doubtful, from the linear reflexed spathe represented in his figure. It appears to have a near affinity with ALLIUM *striatum* (No. 1095 and 1524); and also to ALLIUM *inodorum* (No. 1129,) both of which plants being quite destitute of the garlicky scent, having a two-valved spathe, and filaments dilated at the base, appear to us to belong rather to ORNITHOGALUM than to ALLIUM. We believe the same observation might be extended to ALLIUM *subhirsutum* (No. 774, erroneously there named *ciliatum*).

The name of *Ixioides* seemed so appropriate to our plant, that we were at first much inclined to think it might be that species, a native of California, of which we know no
more

more than the character given in the Hortus Kewensis, not having been able to find any specimen of it; but the filaments being there described to be forked, bearing the anthers in the middle, we are constrained to consider the two plants as specifically distinct.

Our present subject is a native of Chili, and was raised from seeds which came from that country, by our friend JOHN WALKER, Esq. Flowers in May. Is probably hardy enough to bear our climate in the open air provided the bulbs are protected from frost.



GERANIUM MACRORHIZON. LONG-ROOTED
CRANES-BILL.



Class and Order.

MONADELPHIA DECANDRIA.

Generic Character.

Cal. 5-phyllus. *Cor.* 5-petala, regularis. *Nect.* Glandulæ 5, melliferæ, basi longiorum filamentorum adnatæ. *Arilli* 5, monospermi, aristati, ad basin receptaculi rostrati; aristis nudis, simplicibus (nec spiralibus, nec barbatis).

Specific Character and Synonyms.

GERANIUM *macrorhizon*; pedunculis bifloris, calycibus globoso-inflatis, petalis integris, foliis quinquelobis dentatis, caule dichotomo *Willd. Sp. Pl. 3. p. 699. Hort. Kew. ed. alt. 4. p. 185.*

GERANIUM *macrorhizon*; pedunculis bifloris, calycibus inflatis, petalis integris, pistillo longissimo, scapo dichotomo. *Mant. 343. Jacq. Collect. 1. p. 258. Ic. rar. 1. t. 134. fig. mala.*

GERANIUM *macrorhizon*; foliis oppositis quinque-lobatis, calycibus inflatis sphaericis rubris, pistillo declinato longissimo. *Cav. Diss. 4. p. 212. t. 85. f. 1.*

GERANIUM *batrachioides odoratum. Bauh. Pin. 318. Moris. Hist. p. 514. Sect. 5. t. 16. f. 15.*

GERANIUM *macrorhizon. Hort. Eystt. 1. Ord. vern. t. 25.*

GERANIUM *batrachioides alterum, longius radicum. Lob. ic. 1. t. 660. f. 1. Dod. pempt. p. 63. f. 3. Ger. emend. 942. f. 4.*

Radical leaves peltate (that is, the footstalk is inserted within the margin of the leaf), five-lobed; posterior lobes divided

divided half-way down, all of them coarsely toothed: teeth rounded, and terminated with a small mucro, strongly veined; cauline leaves three-lobed. *Stem* dichotomous, somewhat longer than the leaves. *Peduncles* 1—4-flowered. *Calyx* globular, inflated: *segments* acuminate. *Petals* obovate, quite entire, beautifully netted-veined. *Stamens* 5-10, *Style* lengthening very much after deflorescence, arched at the top. *Stigmas* 5, dark purple. *Nectarial glands* green, persistent after the fall of the flower. The *Arilli* are simple, not spiral, and naked. The whole plant except the flower is covered with short hairs, which are longer on the under side of the leaf in the course of the veins. It diffuses an agreeable scent when rubbed.

In habit this species approaches nearest to *anemonefolium*, and as in that, the lower part of the stem becomes frutescent when protected from frost.

Native of Italy. A hardy perennial. Propagated by seeds, or by parting its roots in the autumn. Flowers in May and June. Cultivated in the English gardens in Lobel's time, before 1576; but is at present not so commonly met with as it deserves to be, from its beauty and easy culture.



ALSTRŒMERIA PULCHRA. FAIR

ALSTRŒMERIA.

Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. 6-petala, subbilabiata : petalis interioribus basi subtubulosis. *Stamina* declinata. *Germen* inferum, 3-6-angulare.

Specific Character.

ALSTRŒMERIA *pulchra*; caule erecto, foliis lineari-lanceolatis, pedunculis sub-umbellatis involucratis trifloris, pedicellis tortuosis, petalis exterioribus obcordatis mucronatis.

In the species plantarum of LINNÆUS only three species of ALSTRŒMERIA are recorded: in the Flora Peruviana RUIZ and PAVON have described twenty-three, and given figures of nearly the whole, yet our present plant does not appear to have been included among them, except it may be their *Ligtu*, which we have before observed appears to be different from what is now so denominated.

Of the species which have been introduced into this country there is no one exceeds, or, as we think, altogether equals in beauty, the present plant. It approaches nearest to *Pelegrina*, but can hardly be considered as a variety of that. In habit and characters it seems intermediate between it and *pulchella* (No. 2353.)

Native of Chili. Communicated by JOHN WALKER, Esq. of Arno's grove, Southgate, whose assiduity has been lately crowned with particular success in rearing so many beautiful and rare plants from that country.



PULMONARIA MOLLIS. SOFT LUNG-WORT.

Class and Order.

PENTANDRIA MONOGYNIA.

*Generic Character.**Cor.* infundibuliformis, fauce pervia. *Cal.* prismatico-pentagonus.*Specific Character and Synonyms.*

A. Calyces longitudine tubi corollæ.

PULMONARIA *mollis*; foliis ovato-lanceolatis acuminatis pubescenti-tomentosis decurrentibus; radicalibus petiolatis, calycibus tubo sublongioribus. *Hornem. Hort. Hafn. p. 179. Roem. et Sch. 4. p. 53.*

PULMONARIA *mollis*. *De Cand. Fl. franç. Suppl. p. 420. excluso synonymo Pollichii. Poir. Encycl. Suppl. 4. p. 621.*

PULMONARIA *vulgaris* γ . *Lin. Sp. Pl. 194. Willd. 1. p. 768. Kniph. Cent. 1. n. 72. Knorr Thes. 2. t. P. 2.*

PULMONARIA II. non maculoso folio. *Clus. Hist. 2. p. 169.*

PULMONARIA *mollis* is very nearly allied to *angustifolia*, the chief differences observed by authors being the proportionately greater length of the calyx, broader sinuses of the laciniaë of the corolla, and the softer more silky pubescence of the leaves; but Mr. JOHN DENSON, the very intelligent curator of the botanic garden at Bury St. Edmunds, informs us, that these two plants are remarkably different in their mode of growth; *angustifolia* sending out its flowering stems horizontally, close to the ground, and even when the flowers open being only moderately assurgent, whereas the stems of *mollis* are in all their stages quite erect.

A hardy perennial. Native of the Pyrenees, particularly on Mount Llaurenti, in shady places. Communicated by N. S. HODSON, Esq. to whose exertions the Bury garden owes its existence and progressive advancement.





ERYSIMUM LANCEOLATUM β . MINUS. SWEET-
SCENTED ALPINE HEDGE-MUSTARD.



Class and Order.

TETRADYNAMIA SILIQUOSA.

Generic Character.

Siliqua tetragona. *Semina* immarginata. *Cotyledones* incumbentes. *Stigma* capitatum, nunc emarginatum lobulis patentibus. *Calyx* clausus.

Specific Character and Synonyms.

ERYSIMUM *lanceolatum*; foliis inferioribus lanceolatis dentatis; superioribus sublinearibus integris, unguibus calyce longioribus: laminis orbiculato-obovatis, siliquis erectis, stigmatate subsessili. *De Cand. Syst. Veg. Nat.* 2. p. 502.

(α .) majus; caule simplici aut ramoso, pedali, rigido. *D. C. l. c.*

CHEIRANTHUS *erysimoides*. *Lin. Sp. Pl.* 923. *Jacq. Fl. Austr. t.* 74.

(β .) minus; caule subsimplici, interdum multicauli subadscendente. *D. C. l. c.*

ERYSIMUM *diffusum*. *Bot. Reg.* 388. exclusis synonymis.

CHEIRANTHUS *alpinus*. *Lin. Mant.* 93? *Flor. Lapp. ed. Smith,* p. 224?

ERYSIMUM *alpinum*. *Pers. Syn.* 2. p. 200.

CHEIRANTHUS *decumbens*, *C. firmus*, et *C. pumilus*. *Schleich. plant. sicc.*

LEUCOIUM *angustifolium*, *alpinum*, flore sulphureo. *Tourn. Inst.* 222. *Allioni Specim.* p. 44. t. 9. f. 2. et 3.

LEUCOIUM, sive KEIRI *alpinum* flore sulphureo odoratissimo. *Joncq. Hort.* p. 72. ex *Allioni. l. c.*

HESPERIS foliis glabris linearibus lanceolatis obiter dentatis. *Hall. Hist.* 449. t. 14.

ERYSIMUM lanceolatum majus and minus appear to us to be rather distinct species than varieties, but we do not venture to deviate from the authority of DE CANDOLLE, particularly as all authors agree that these plants are extremely subject to variation. From the *CHEIRANTHUS alpinus* of JACQUIN our plant differs in being ascendent, not erect. The pubescence both in the cultivated and wild state is simple, not bipartite; the flowers are much larger and most charmingly fragrant, which in JACQUIN'S plant are described to be without scent; the claws of the petals in our plant are much longer than the calyx, but in the other only equal to it. The figures quoted from ALLIONI are good representations of our plant in its native state; under cultivation it is sometimes branched, but is always of humble growth, never "upright and from one to three feet high." From its delicate sulphur-coloured flowers, as well as their charming fragrance, it is a plant well worth a place in the flower-garden, and is particularly adapted for ornamenting rock-work.

Native of the Alps both in the south and north of Europe. Flowers in May and June. Communicated by Messrs. WHITLEY, BRAMES, and MILNE, of the Fulham Nursery.



ŒNOTHERA TENELLA, SLENDER-
TWIGGED ŒNOTHERA.



Class and Order.

OCTANDRIA MONOGYNIA.

Generic Character.

Caps. 4-locularis, 4-valvis, infera. *Sem.* nuda.

Specific Character and Synonyms.

ŒNOTHERA *tenella*; ramis flexilibus, foliis lanceolato-spathulatis aggregatis, stylo staminibus brevioribus, calycis tubo brevissimo.

ŒNOTHERA *tenella*; caule herbaceo erecto, foliis ovato-oblongis, antheris alternis subsessilibus. *Cav. Ic.* 4. p. 66. t. 396. f. 2.

ŒNOTHERA *tenella*; foliis oblongo-obovatis, capsulis cylindricis curvatis. *Flor. Peruv.* 3. p. 80. t. 316. f. 6.

ŒNOTHERA *Romanzovii*. *Don. in Bot. Reg.* 562? *Hornem. Hort. Hafn. Suppl.* 1. p. 133? *Link. Enum. Hort. Berol.* 1. p. 378?

ŒNOTHERA *tenella* was first described and figured by CAVANILLES; but his figure being very inaccurate, the authors of the Flora Peruviana thought it necessary to give another representation of it, but likewise taken from a dried specimen.

Mr. DON, to whom we are indebted for pointing out to us that our plant was the *tenella* of RUIZ and PAVON, considers it to be the same species which has gone under the name of ŒNOTHERA *Romanzovii*; but if so, the former name has

has the right of priority, as well as being more appropriate. The figure of the latter in the Botanical Register represents a much stouter growing plant, but this may have been owing to the difference of soil, and to its being treated as a hardy annual. Our plant had the appearance of being suffruticose, as *tenella* is described to be in the Flora Peruviana.

Raised from seeds sent from Chili, at Arno's grove, the seat of JOHN WALKER, Esq. by whom it was communicated in flower, in May last.



HYACINTHUS AMETHYSTINUS. AMETHYST-
COLOURED HYACINTH.



Class and Order.

HEXANDRIA MONOGYNIA.

Generic Character.

Cor. campanulata, 6-fida. *Pori* 3 melliferi *Germinis*.

Specific Character and Synonyms.

- HYACINTHUS *amethystinus*; corollis campanulatis semisex-
fidis basi cylindricis. *Hort. Ups.* 35. *Sp. Pl.* 454.
Willd. 2. p. 167. excluso synonymo Pallasii. *Hort.*
Kew. ed. alt. 2. p. 282. *Redouté Lil.* 14.
- HYACINTHUS *hispanicus*. *Lam. Encycl.* 3. p. 191. n. 5.
- HYACINTHUS *oblongo cæruleo flore minor*. *Bauh. Pin.* 44.
Rudb. Elys. 2. p. 27. f. 8.
- HYACINTHUS *minor hispanicus*. *Clus. Append. altera, cum*
icone. Ejusdem Cur. poster. p. 35.
- HYACINTHUS *minor hispanicus angustifolius*. *Bauh. Hist.* 2.
p. 587. cum *icone Clusii*.

The HYACINTHUS *amethystinus* of M. LAMARCK is not this plant, but the *H. patulus* of DESFONTAINES, and *SCILLA patula* of DE CANDOLLE; so the *amethystina* of PALLAS is *H. pallens* of MARSCHALL v. BIEBERSTEIN.

Though cultivated by PHILIP MILLER in 1759, it is still a very rare plant. Native of Spain and Italy. Flowers in May and June. Communicated by Mr. ANDERSON, curator of the Apothecaries' botanic garden, Chelsea.



SPIRÆA BELLA. COMELY SPIRÆA.

Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Petala* 5. *Capsulæ* polyspermæ.

Specific Character.

SPIRÆA *bella*; caule fruticoso, foliis ovatis acutis argute serratis subtus tomentoso-albidis, paniculis terminalibus foliaceis.

DESCR. A *shrub* of humble growth; *branches* somewhat angular, hairy towards the extremity. *Leaves* oval, acute, finely serrate, entire at the base, smooth on the upper, and whitish-tomentose on the under surface. *Petioles* short, channelled, and ciliate. *Flowers* bright purple in a terminal panicle, intermixed with leaves. *Peduncles* pubescent. *Calyx* inferior, cup-shaped, with the five segments of the border reflexed. *Petals* five, orbicular, quite entire. *Stamens* much less numerous than in *salicifolia*. Filaments inserted in the edge of the cup of the calyx. When the flower first expands, the filaments are bowed inwards immersing the anthers within the cup of the calyx. *Nectary* a row of yellow glands within the filaments. *Germens* five, conical. *Styles* very short. *Stigmas* simple.

The glandular nectary and the immersion of the anthers within the cup of the calyx is perhaps common to all the fruticose species; we find the same organization in SPIRÆA *salicifolia* and *hypericifolia*. The glands exist also in *S. ulmaria*;

ulmaria; but the cup of the calyx in that species is much too small to contain the very numerous anthers.

This undescribed shrub promises to be a great acquisition to our gardens, the brilliancy of its flowers and delicacy of its foliage rendering it altogether beautiful.

Supposed to be native of Nepal, being raised at the Fulham nursery, from Nepal seeds, presented to Mr. MILNE by ROBERT HENRY JENKINSON, Esq. together with above three hundred other kinds from the same country. Flowers in May. Appears to be hardy.

The outline figure represents a vertical section of the flower a little magnified, shewing the insertion of the stamens, the glandular nectary, and the pistils, of which last only two of the five are seen.



Pub. by J. (sculp.) Walworth. In. 1 1827.

MAGNOLIA ACUMINATA. BLUE MAGNOLIA OR
CUCUMBER-TREE.

Class and Order.

POLYANDRIA POLYGYNIA.

Generic Character.

Cal. 3-phyllus. *Petala* 6-9. *Capsulæ* bivalves, imbricatæ. *Sem.* baccata, pendula.

Specific Character and Synonyms.

MAGNOLIA *acuminata*; foliis ovato-oblongis acuminatis.
Spec. Pl. 756. *Willd.* 2. p. 1257. *Hort. Kew. ed.*
alt. 3. p. 331. *Lam. Encycl.* 3. p. 674.

MAGNOLIA *acuminata*; foliis ovato-oblongis acuminatis
subtus pubescentibus. *Persoon. Syn.* 2. p. 93.

MAGNOLIA *acuminata*; foliis ovalibus acuminatis subtus
pubescentibus, petalis obovatis obtusiusculis. *Pursh.*
Amer. Sept. 2. p. 381.

MAGNOLIA flore albo, folio majore acuminato haud albicante.
Catesb. Car. Append. p. 15. t. 15. *Gronov.*
Virg. 4to. p. 82.

The first account that Mr. CATESBY received of this plant was from a specimen sent him by Mr. CLAYTON from Virginia, being a branch of the only tree known in that country; and it was probably from this dried specimen, that the figure in his Natural History of Carolina was taken; and it appears to us that the flower was made out from one of MAGNOLIA *glauca*, being very unlike that of our plant. CATESBY informs us, that Mr. JOHN BARTRAM of Pennsylvania afterwards met with several in that country,
some

some of which, on the north side of the Sesquehannah river, were above a hundred feet in height. The wood, he says, has a fine grain, is very tough, and of a fine orange colour, and is used by the Indians for making bowls. The tree is deciduous, and one of the hardiest of the tribe.

Native of Pennsylvania, and the forests of New York. Introduced in 1736, by PETER COLLINSON, Esq. Flowers in May and June. Communicated by JOHN WALKER, Esq. of Arno's Grove, Southgate.



IXORA ROSEA. ROSE-COLOURED IXORA.



Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Cor. 1-petala, infundibuliformis, longa, supera. *Stamina* supra faucem. *Bacca* 4-sperma (2-sperma *Roxb.*)

Specific Character and Synonyms.

IXORA rosea; foliis oblongis acutis subsessilibus, stipulis, rotundato-ovatis acuminatis, corymbis supra-decompositis trichotomis terminalibus, laciniis corollæ cuneatis acutis.

IXORA rosea; foliis subsessilibus oblongis acutis basin versus angustatis cum sinu obsoleto, subtus villosis; cymis supra-decompositis amplis laxis, terminalibus et in latere exteriori ramorum axillaribus: limbi laciniis oblongis, cuneatis acutis. *Bot. Reg.* 50. *Wallich in Roxb. Fl. Ind.* 1. p. 398.

IXORA rosea. *Lodd. Cab.* 729.

We are informed by Dr. WALLICH, in the work above quoted, that this fine shrub is a native of the hilly parts on the borders of Bengal, about Silhet, whence it was introduced into the Botanic Garden at Calcutta, in 1815, by Mr. M. R. SMITH.

“This shrub,” Dr. WALLICH observes, “is exceedingly elegant, on account of its large round corymbs, which for eight months in the year are produced in constant succession. The colour of the flowers is a pale pink, gradually becoming reddish as they grow old, beautifully contrasting with the shining dark green leaves.” There is in Roxburgh’s *Flora Indica*, a detailed description of the species.

Our

Our drawing was made from a plant, communicated by Messrs. Loddiges and Sons, in February last; and we received a specimen of the same species from Mr. Brookes, of Ball's Pond, in August 1820.

It is a very free flowerer in our stoves, and if it should approach the same perfection in the artificial heat as it arrives at in the open air in a tropical climate, we may expect, as the plants grow older, that they will produce much larger heads of flowers.

Requires to be kept constantly in the stove. Is propagated by cuttings. Should be potted in rich loam with a mixture of peat earth.



VITIS RIPARIA, *mascula*. MALE SWEET-SCENTED VINE.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Petala apice cohærentia, emarcida. *Bacca* 5-sperma, supera.

Specific Character and Synonyms.

VITIS *riparia*; (dioica) foliis inæqualiter inciso-dentatis breviuscule trifidis, petiolo, nervis margineque pubescentibus. *Michaux. Fl. Bor.-Am. 2. p. 231. Pursh. Fl. Am. Sept. 1. p. 169.*

VITIS *incisa*. *Jacq. Schænb. 4. t. 427.*

VITIS *odoratissima*. *Donn Cantab. ed. 9. p. 71.*

The American species of vine, according to MICHAUX, are all diæcious, that is, the male and female flowers are on distinct trees. The plant from which our drawing was taken being male, of course produces no grapes. Mr. PURSH remarks that the female plants are seldom found north of the Patowmac river, though the males extend very far beyond it. This observation reminds us of an analogous fact respecting the hop; the male of which are found in almost every hedge in some parts of this country, whilst the females we believe are seldom seen with us except under cultivation. The stems of this vine are finely grooved and later in the season, have a reddish brown tinge on the parts exposed to the sun. The leaves have a very broad sinus at the base, are slightly divided into three lobes, the serratures are unequal and terminated with a soft mucro, they are smooth on the upper surface, but on the under side,

side, though more shining than on the upper, have their interstices between the veins filled with a very fine greenish tomentum, and are hairy along the nerves or larger veins, and round the margins, and also along the petioles. The tendrils are long, and divided towards the extremity, which, on the flowering branches represented in our figure, of course are not seen, for being produced in the vine by abortive peduncles, when these bear flowers, no tendrils appear. The peduncles are opposed to the petioles, and bear compound racemes, on which the flowers grow several together from the same point, forming a number of little detached umbels.

JACQUIN'S *VITIS incisa*, is referred by PURSH to his *cordata*; his figure, however, evidently represents our plant, which we think must be MICHAUX'S *riparia*.

Native of North America. Introduced, we believe, by the late Mr. LYONS, at whose sale our plant was bought by Mr. WALKER, under the name of *odoratissima*, but MICHAUX'S name *riparia* has the right of priority. The flowers have a very sweet scent, which PURSH compares to that of Mignonette. It is hardy, and like other vines readily propagated by cuttings.

11. 2-130.



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11. 2-130.

PYRUS AMELANCHIER. ALPINE PEAR.

Class and Order.

ICOSANDRIA PENTAGYNIA.

Generic Character.

Cal. 5-fidus. *Petala* 5. *Pomum* inferum, 5-loculare, polyspermum.

Specific Character and Synonyms.

PYRUS *Amelanchier*; foliis subrotundo-ellipticis acutis subtus pubescentibus, floribus racemosis, petalis lanceolatis, germinibus subvillosis, calycinis segmentis glabris. *Willd. Sp. Pl.* 2. p. 1014. *Hort. Kew. ed. alt.* p. 207.

PYRUS *Amelanchier*; inermis, foliis ovalibus obtusis serratis subtus tomentosus calvescentibus, stipules lateralibus subulatis deciduis, racemo simplici paucifloro, petalis sublinearibus. *Lin. Suppl.* p. 256. *Smith in Rees Cycl. in loco.*

PYRUS foliis ovatis serratis, subtus tomentosus, calvescentibus. *Hall. Hist.* n. 1095.

MESPILUS *Amelanchier*; inermis, foliis ovalibus serratis, cauliculis hirsutis. *Sp. Pl.* 685. *Jacq. Austr.* 3. p. 55. t. 300. *Schmidt. Arbor.* t. 85. *Mill. Icon.* t. 178. f. 1. *Mart. Mill. Dict.* n. 4.

ARONIA *rotundifolia*. *Persoon. Syn.* 2. p. 39.

AMELANCHIER. *Lindley Pomac. in Lin. Soc. Trans.* v. 13. p. 100.

SORBUS *Amelanchier*. *Crantz. Austr. ed. fasc.* 2. p. 53.

VITIS *IDEA* III. *Clus Hist.* 1. p. 62. *Clus. Pan.* 81.

ALNI *effigie lanato folio minor.* *Bauh. Pin.* 452.

AMELANCHIER. *Lob. Ic.* 2. p. 191. f. 1. *Barrel. ic.* 527.

DIOSPYROS. *Bauh. Hist.* 1. p. 75. *Raj. Hist.* 1461

This

This is a very elegant shrub when in flower, and still more so in fruit. When the leaves first come out in the spring they are covered with a white cottony pubescence, which falls off from their upper surface as the leaves attain their full growth, and by the time the fruit is ripe, nearly disappears altogether. The fruit is at first green, then red, and, when ripe, black, and contains a juicy sweet pulp.

Our list of synonyms will shew how much authors have differed in their ideas to what genus it should be referred. LINNÆUS at first made it a MESPILUS, but in the Supplementum Plantarum it was placed under PYRUS; CRANTZ referred it to SORBUS. PERSOON added it to his genus ARONIA. Mr. LINDLEY, the last author that has published on the subject, following MEDICUS, considers AMELANCHIER to form a distinct genus, containing, besides the present plant, PYRUS *Botryapium*, *ovalis*, and *cretica*. The chief character he adduces to establish the genus, is the ovarium being ten-celled, with one seed in each cell. But the value of this character appears to be considerably diminished, by the author's own observation, that the dissepiments dividing the cells of the ovarium are spurious, rather than real dissepiments, and are "quickly obliterated by the growth of the ovula: so that the ripe fruit does not differ, in this respect, from the rest of the order." But in so natural a family as the POMACEÆ, or first section of the ROSACEÆ of JUSSIEU, it will be ever difficult to assign proper limits to the genera. Sir JAMES EDWARD SMITH perceiving how inadequate the number of styles was to distinguish one genus from another, has thought it best to reduce the whole order to two genera, viz. MESPILUS and PYRUS: Mr. LINDLEY, on the other hand, divides the POMACEÆ into twelve, which he has defined with much ability.

PYRUS *Amelanchier* is a hardy ornamental shrub, easily propagated by the young scions, which plants, that have been raised from seeds, put forth from the roots; but it is not unusual to graft them upon other stocks, which, however, do not make so handsome plants as those raised from seeds. It is a native of the South of Europe, where it grows among the rocks in subalpine regions. Communicated by JOHN WALKER, Esq. of Arno's Grove.





ERYTHRINA CAFFRA. CAPE ERYTHRINA.



Class and Order.

DIADELPHIA DECANDRIA.

Generic Character.

Calyx bilabiatus. *Cor.* vexillum longissimum, lanceolatum. *Legumen* torulosum.

Specific Character and Synonyms.

ERYTHRINA *caffra*; caule arboreo, ramis petiolisque spinosis, foliis ternatis rhomboideis acuminatis inermibus, calyce quinquedentato.

ERYTHRINA *caffra*; foliis ternatis inermibus, foliolis obtusis, caule arboreo aculeato. *Thunb. Prodr.* 121. *Willd. Sp. Pl.* 3. p. 914.

DESCR. *Rootstock* gouty. *Stem* erect, woody, roughened by the vestiges of fallen leaves. *Branches* green, armed with recurved prickles. *Petioles* alternate, horizontal, armed with a few distant prickles, longer than the *leaves* which are ternate, rhomb-shaped, acuminate with an obtuse point: the lateral leaves are attached to the petiole by very short fleshy pedicels, the terminal one is carried a good way forward by the prolongation of the common petiole, to which it is attached in the same way. There are two glands at the base of each pedicel. *Peduncles* axillary, longer than the leaves, erect, rounded, studded with white linear warts. *Flowers* in a subverticillate spike, of the most inimitable brilliant scarlet, fading to purple. The half whirls about five-flowered. *Calyx* five-toothed, bilabiate, arranged, the lower tooth much the longest. *Vexillum* an inch and half long, when displayed, obovate, quite

quite entire, or only obsolete emarginate, but naturally the sides are folded together, only opening a little near the upper extremity, streaked, broad-scymitar-shaped. *Alæ* and *Carina* very minute and entirely concealed by the base of the vexillum. *Stamens* diadelphous $\frac{2}{1}$: *filaments* scarlet towards the extremity. *Anthers* incumbent, scarcely exerted. *Germen* linear. *Style* a little longer than the stamens.

This beautiful shrub is a native of southern Africa, and flowered for the first time, we believe, in this country in the COUNT DE VANDES stove in July last, where our drawing was taken, we have heard that it has also flowered this summer at Wormleybury. No figure, has to our knowledge, been hitherto published of this very beautiful species.

N 2432.



Pub. by J. Curtis, Walsworth, Sep. 1 1822.

Ar. D. A.

W. 1122.

ARUM ITALICUM. ITALIAN ARUM.

*Class and Order.*

MONÆCIA POLYANDRIA.

Generic Character.

Spatha monophylla, cucullata. *Spadix* supra nudus, inferne femineus, medio stamineus.

Specific Character and Synonyms.

ARUM *italicum*; acaule, foliis albo-venosis hastato-sagittatis: lobis auriculatis divaricatis, spadice clavato spatha brevior. *Willd. Sp. Pl.* 4. p. 484. *Hort. Kew. ed. alt.* 5. p. 309. *Pers. Syn.* 2. p. 574. n. 18.

ARUM *italicum*; acaule, foliis sagittato-hastatis: auriculis divaricatis, spadice cylindrico luteolo. *Lam. Encycl.* 3. p. 9.—et *De Cand. Flore franç.* 3. p. 152.

ARUM *italicum*; foliis hastatis acutis, petiolis longissimis spatha maxima erecta. *Mill. Dict.*

ARUM venis albis *italicum* maximum. *Tourn. Inst.* 158.

ARUM venis albis. *Bauh. Pin.* 195. *Raj-Hist.* 1209.

ARUM maculatum, γ . *Mart. Mill. Dict.*

ARUM folio lato atro-viridi margine albicante cincto, sparsis maculis albis variegato. *Sabbati Hort. rom.* 2. t. 75.

ARUM *italicum* has been frequently confounded with the ARUM *maculatum*, or common Cuckow-pint; yet, if any tolerable figure had ever been given of it, this mistake could hardly have been made. The whole plant is nearly double the size; the *leaves* are not only larger and veined with white, but the posterior *lobes* go off at nearly right angles from the footstalk, or are hastate, not sagittate; the spathe is very large, of a yellowish pale green colour, at first erect, afterwards rolled back at the point; *germens* nearly globular, aggregate, sessile, occupying about an inch of the base

base of the *spadix*, a short distance above these is a ring of sessile anthers, occupying about a quarter of an inch, and both above these, and between them and the germens, about an equal space is occupied by filiform cirri or sterile stamens; the upper part of the *spadix* is club-shaped, as in the common *Arum*, but always of a pale yellow colour.

It was in this species that M. LAMARCK observed an extraordinary degree of heat, amounting almost to burning, in the *spadix*, at a certain epoque; probably that, when the fecundation of the germens takes place. This high temperature continues only for a few hours, and when several *spadices* come from the same root, the heat is evolved from each, in succession, as they arrive at the proper epoque, while the rest remain at the same temperature as the surrounding atmosphere. This observation is said to have been confirmed by DESFONTAINES.

We are not informed, however that the fact was proved by the thermometer; and, if not, it is possible that some pungent vapour might occasion the sensation of heat in the fingers, without really increasing the temperature of the surrounding air. We hope some of our readers may be induced to attend to this curious phenomenon.

A hardy perennial. Native of Italy and Spain, and the south of France. Communicated by JOHN WALKER, Esq.



PHAYLOPSIS LONGIFOLIA. LONG-LEAVED
PHAYLOPSIS.

Class and Order.

DIDYNAMIA ANGIOSPERMIA.

Generic Character.

Cal. inæqualis, lacinia dorsali maxima. *Cor.* ringens: labio superiore minimo bifido. *Ovarii* loculi 2-spermi. *ÆTHEILEMA* *Brown Prodr.* p. 478. *MICRANTHUS* *Wendland obs.* p. 39.

Specific Character.

PHAYLOPSIS *longifolia*; caulibus erectis, foliis oblongo-ovatis acuminatis reflexis, spicis axillaribus brevibus laxiusculis, lacinia calycis dorsali corolla longiore.

MR. ROBERT BROWN, in his invaluable Prodrömus, p. 478, has observed, that JUSSIEU has very properly separated RUELLIA *Blechum* and *Blechioides* from RUELLIA, restoring the original name of BLECHUM, first given to the genus by Dr. PATRICK BROWN, in his history of Jamaica; but, at the same time, this excellent botanist has remarked, that JUSSIEU'S BLECHUM *anisophyllum* ought not to be joined with this genus, on account of its having very unequal calycine segments, an ovarium with two-seeded cells, a capsule with the segments of the dissepiment spontaneously separable, and a different inflorescence; he consequently proposed the establishing it as a new genus, under the name of ÆTHEILEMA, but has since satisfied himself that WILLDENOW'S PHAYLOPSIS, though not accurately defined by him, is the same genus; this name has therefore the right of priority. RUELLIA *imbricata* of Forsköhl, and some other species, natives of India and of Africa, belong to this genus; but not having had an opportunity of examining the plant
itself,

itself, we are not able to determine whether it belong to a species already discovered, or should be considered as quite new. It differs from *BLECHUM anisifolium* of JUSSIEU in having an upright, not a diffuse stem, and lax, leafy, not compact strobiliform spikes.

The seed was transmitted from Sierra Leone to the Horticultural Society by their collector, Mr. GEORGE DON, and our drawing was made at their garden in March last. Being a tropical production it must of course require to be preserved in the stove.

The outline figures represent,

1. A magnified dissection of the Corolla, shewing the insertion of the Stamens.
2. The Pistil.
3. The Calyx.



PROSTANTHERA LASIANTHOS. VILLOUS-
FLOWERED PROSTANTHERA.



Class and Order.

DIDYNAMIA GYMnosPERMIA.

Generic Character.

Calyx bilabiatus: fructûs clausus, *tubo* striato, labiis indivisis. *Cor.* ringens, galea semibifida, labii inferioris lacinia media majore, biloba. *Antheræ* subtus calcaratæ.
BROWN.

Specific Character and Synonyms.

PROSTANTHERA *lasianthos*; foliis lanceolatis dentato-serratis glabris, racemis paniculatis, corollis utrinque hirsutis, calcare longiore lobum bis superante. *Br. Prodr. Nov. Holl.* 508. *Bot. Reg.* 143.

PROSTANTHERA *lasianthos*; foliis lanceolatis serratis, paniculis axillaribus terminalibusque, corollis hispidis. *Labill. Nov. Holl.* 2. p. 18. t. 157.

DESCR. A tallish *shrub*: *branches* opposite, square. *Leaves* petioled, lanceolate, dentate-serrate, dark green on the upper, glaucous and dotted on the under surface. *Panicles* of flowers terminal and axillary. *Bractes* subulate, minute. *Pedicels* shorter than calyx. *Calyx* bilabiate: *lips* undivided persistent, closing when in fruit. *Cor.* bilabiate: *upper-lip* shorter, vaulted, emarginate: *lower-lip* 3-cleft; the intermediate segment longest, two-lobed, with the lobes divaricate. *Faux* somewhat dilated, marked within with blood-red spots. *Stamens* four, didynamous, inserted by pairs within the faux: *anthers* purple bilocular, both lobes bearded at the base with a pencil of hairs, one of them terminating in a spur, with a bristly point,

point, more than twice the length of the anther. *Germens* four, orbicular: *Style* ascending with bifid *stigma*.

Of this genus belonging to the natural order of *Labiatae*, Mr. BROWN has recorded in his *Prodromus* thirteen species.

Native of New South Wales and Van Diemen's island. Flowers in June and July. Requires the protection of the greenhouse.

We were favoured with the specimen of this beautiful shrub, from which our drawing was taken, by our friend EDWARD GRAY, Esq. in June last, when it flowered for the first time after having been in his fine conservatory about seven years.

The outline figures represent,

1. The Pistil. This ought to have shewn the four separable germens.
2. The Stamen with the long spur from one of the lobes of the anther, somewhat magnified.



Iris sibirica

Walworth Oct. 1 1821.

W. Add.

IRIS NEGLECTA. HORNEMAN'S IRIS.

Class and Order

TRIANDRIA MONOGYNIA.

Generic Character.

Cor. 6-partita: laciniis alternis reflexis. *Stigmata* petaliformia.

Specific Character and Synonyms.

IRIS *neglecta*; caule multifloro foliis altiore, corollæ laciniis erectis integerrimis, deflexis subemarginatis. *Horn. Hort. Hafn.* 1. p. 55. *Roem. et Sch. Syst. Veg.* 1. p. 461. *Link Enum. Hort. Berol.* 1. p. 58.

DESCR. *Stem* many-flowered, taller than the ensiform leaves. *Spathes* sheathing, imbricated, one to each flower. *Germen* six-angled: angles rounded. *Tube* of corolla but little longer than the germen; *reflexed laciniæ* bearded, violet-coloured at the margins, white streaked with violet in the middle, very obtuse, sometimes emarginate: *erect* ones broad-oval, pale blue, quite entire, incurved, terminated in a claw. *Upper lip* of the stigma deeply divided, acute.

The native country of this handsome and agreeably scented Iris is unknown. It was first taken up as a distinct species, by Professor HORNEMAN. It is a hardy perennial. Communicated by Mr. ANDERSON from the Chelsea garden, in June last.



J. Curtis Del.

Pub. by J. Curtis. Walsworth. Oct. 1782.

Wed. 1782.

SALVIA NUTANS. NODDING SAGE.



Class and Order.

DIANDRIA MONOGYNIA.

Generic Character.

Cor. inæqualis. Filamenta transverse pedicello affixa.

Specific Character and Synonyms.

SALVIA *nutans* ; foliis cordatis inæqualiter basi excisis grosse crenatis, caule subaphyllo, spicis nutantibus ebracteatis.

SALVIA *nutans* ; foliis oblongo-cordatis grosse crenatis, caule subaphyllo, spicis florentibus pendulis, calycibus hirtis. *Willd. Enum. p. 45.*

SALVIA *nutans* ; foliis cordatis inæqualiter basi excisis, caule subnudo spicis ante florescentiam cernuis. *Sp. Pl. p. 39. Flor. Taur-Cauc. 1. p. 23.*

SALVIA *nutans* ; foliis cordatis obsolete quinquelobis erosis, caule subrotundo, racemis nutantibus. *Willd. Sp. Pl. 1. p. 151. Etling Salv. n. 47. Vahl Enum. 1. p. 280. Hort Kew. ed. alt. 1. p. 65.*

SALVIA *nutans* ; foliis oblongo-cordatis, caule simplicissimo subaphyllo, racemis florentibus pendulis. *Waldst. et Keit. Hung. 1. p. 63. t. 62. Roem. et Sch. Syst. Veg. 1. p. 246.*

SALVIA caule nudo, spica florente pendula. *Hall. Comm. Goett. 1. p. 210. t. 11.*

The *leaves* of SALVIA *nutans* are very subject to vary ; in our plant they were undulated, somewhat sinuate, coarsely crenate, and, as seems common to the species, unequally excised at the base, one side being considerably larger and more uneven than the other ; but in some cases they are so much incised, as to become variously lobed,

in

in so much that MARSCHALL VAN BIEBERSTEIN considers both *hastata* and *betonicæfolia* as mere varieties of this; but if the latter has coloured bractes, this character seems quite sufficient to remove it from *nutans*; *pendula* is likewise suspected to be only a variety. Except one or two pair of generally imperfect leaves the *Stem* is aphyllous, obtusely 4-cornered, pubescent. *Calyx* striate, bilabiate, hairy. *Corolla* violet-blue: *galea* oblong, compressed, inclosing the stamens and pistil: *lower-lip* 3-lobed: middle lobe crenate, concave, lateral ones straight; but from the nodding of the spike the flowers are reversed. The arms of the *filaments* are unequal, the shorter one bearing an imperfect, the longer a perfect *anther*. *Stigma* exerted, bifid.

A hardy perennial. Native of Russia, Hungary, and Galicia. Flowers from June to September. Introduced in 1780, by the Chevalier PALLAS. Communicated by Mr. JOSEPH KNIGHT of the exotic nursery, King's Road, who is always ready to give his assistance to the promotion of science.



POLYGALA AMARA. BITTER MILK-WORT.

Class and Order.

DIADELPHIA OCTANDRIA.

Generic Character.

Cal. 5-phyllus: foliolis duobus alæformibus, coloratis.
Legumen obcordatum, biloculare.

Specific Character and Synonyms.

POLYGALA amara; floribus cristatis racemosis, alis calycinis trinerviis obtusis corolla longioribus, caulibus erectiusculis (erectis), foliis obtusis, radicalibus obovatis. *Willd. Sp. Pl. 3. p. 872. Hort. Kew. ed. alt. 4. p. 242.*

POLYGALA amara; floribus cristatis racemosis, caulibus erectiusculis, foliis obtusis; radicalibus obovatis. *Sp. Pl. 987. Jacq. Austr. 5. p. 6. t. 412.*

POLYGALA Amarella foliis circa radicem sparsis obovatis magnis. *Crantz Austr. 438.*

POLYGALA buxi minoris folio. *Vaill. Paris. 161. t. 32. fig. 2?*

POLYGALA vulgaris, foliis circa radicem rotundioribus, flore cæruleo, sapore admodum amaro. *Bauh. Pin. 215.*

The common *Polygala* is so very variable a plant, and is found with leaves sometimes so broad and rounded at the point, that it has been frequently mistaken for our present plant, which has been sometimes supposed to be a mere variety of *P. vulgaris*. But whatever difficulty there may be in finding good distinguishing characters, the taste will at once decide the species, for all the varieties of *vulgaris* when chewed, are slightly acrid, but with
hardly

hardly any bitterness ; but the leaves of *amara* when chewed soon give out an intense bitter, which is very durable. We suspect therefore that VAILLANT's plant, always quoted as a synonym of *amara*, is only a variety of *vulgaris*, as he describes the taste to be mucilaginous with but little stypticity and bitterness. Besides *POLYGALA amara* is a much smaller plant with larger radical leaves, the stems are quite simple and erect, the flowers and seed vessels smaller. We have specimens of this species from Austria, which exactly agree in appearance with our drawing.

A hardy perennial. Native of Austria in subalpine regions. Introduced in 1773, by Drs. PITCAIRN and FOTHERGILL. Communicated by Mr. ANDERSON from the Chelsea garden, in June last.



POLYGALA CORDIFOLIA. HEART-LEAVED
MILKWORT.



Class and Order.

DIADELPHIA OCTANDRIA.

Generic Character.

Cal. 5-phyllus: foliolis duobus alæformibus, coloratis.
Legumen obcordatum, biloculare.

Specific Character and Synonyms.

POLYGALA *cordifolia*; fruticosa, cristata, foliis cruciatis oblongo-ovatis mucronatis erectis glabris internodiis longioribus margine reflexis, floribus subumbellatis.

POLYGALA *cordifolia*; floribus cristatis, racemo terminali, caule fruticoso, ramis pubescentibus, foliis cordatis mucronatis oppositis. *Willd. Sp. Pl. 3. p. 885.*

POLYGALA *cordifolia*; floribus cristatis, foliis cordatis glabris. *Thunb. Prodr. 120.*

POLYGALA *fruticosa*; floribus cristatis subumbellatis, foliis oppositis cordato-lanceolatis acutis, caule fruticoso. *Berg. Cap. 183.*

POLYGALA *latifolia*. *Bot. Reg. 645?*

DECR. Shrubby: *Branches* rounded, pubescent, divided at the upper part into several short *branchlets*, terminated with a few flowers, collected into a sort of umbel. *Leaves* opposite crosswise, oblong-ovate, cordate, mucronate, erect, with recurved margins, pale green, villous underneath. *Peduncles* erect, with several small concave *bractes*: *Pedicels* shorter than the flower. *Calycine* outer segments three, the upper one smallest; the wing-shaped segments large, shewy, oblique, mucronate, greenish, streaked on the outside, bright purple within. *Carina* of one petal with a white branched pencilled appendix below the point. *Stamens* eight. *Filaments* all united at the base. *Style* curved.

curved. *Stigma* furnished with a glandular, two-lipped appendix.

BERGIUS's accurate description of this plant leaves us no doubt but that it is his *fruticosa*, always quoted as a synonym of *cordifolia*, otherwise the definitions of WILLDENOW and THUNBERG are too imperfect alone to ascertain the species; and we do not find any specimen of *P. cordifolia* in the Banksian Herbarium.

It differs from *oppositifolia* by the erect, not reflexed leaves, by the flowers being larger and more collected together. The intensity of colour in this and the related species varies, especially according to the degree of light they are exposed to.

A greenhouse shrub. Native of the Cape of Good Hope. Flowers from March to August. Communicated by Mr. JOSEPH KNIGHT, of the exotic nursery.



PROTEA LÆVIS. SMOOTH PROTEA.



Class and Order.

TETRANDRIA MONOGYNIA.

Generic Character.

Petala 4, quorum 3 superne cohærentia. *Antheræ* apicibus concavis corollæ immersæ. *Nux* supera, undique barbata, stylo persistente coronata.

Specific Character and Synonyms.

PROTEA *lævis*; caulibus nanis decumbentibus, foliis elongato linearibus lævibus aveniis marginibus (ex desiccatione?) recurvis, involucro hemisphærico: bracteis obtusis subsericeis, calycibus, (petalis) subuncialibus muticis. *Brown in Lin. Soc. tr.* 10. p. 91. *Roem. et Sch.* 3. p. 352. *Poir. Encycl. Bot. Suppl.* 4. p. 562. n. 96.

ERODENDRUM *longifolium*; caule decumbente: foliis 2-3 lineas latis, 5-8 pollices longis, lineari-lanceolatis, acutiusculis, adultis lævibus, supra concavis: bracteis ultimis retusis. *Salisb. et Knight Proteæ.* p. 46.

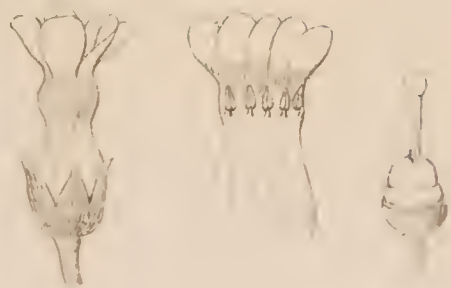
PROTEA *longifolia*. *Salisb. Parad. Lond.* 37.

DESCR. *Stem* decumbent, smooth. *Leaves* secund, a span long, two or three lines broad, acute, pale green, smooth, flat towards the base, somewhat concave upwards, margins smooth, not thickened, recurved when dried. *Involucrum* sessile, erect, hemisphærical. *Bractes* very obtuse, somewhat silky while young, minutely ciliate. *Claws* of the *petals* (calyx Br.) smooth externally with woolly margins; *limb* villous.

Mr. BROWN took up his PROTEA *lævis* from a specimen in the Banksian Herbarium, collected at the Cape by Mr. FRANCIS MASSON, and by his friendly assistance we are enabled

enabled to determine our plant to belong to that species. It was called *longifolia* by Mr. SALISBURY, a name already occupied by a very different species, of which there are three varieties figured in the botanist's repository.

Native of the Cape of Good Hope. Flowers, in the conservatory, in May. Introduced from the mountains of Lange Kloof, by J. NEVIN, Mr. HIBBERT's collector. Upon the breaking up of this gentleman's valuable collection the plant came into the possession of Mr. KNIGHT, at whose nursery, in the King's Road, our drawing was made several years ago by the late Mr. SYDENHAM EDWARDS.



RAUWOLFIA TERNIFOLIA. THREE-LEAVED
RAUWOLFIA.



Class and Order.

PENTANDRIA MONOGYNIA.

Generic Character.

Contorta. *Cal.* minimus, 5-dentatus, persistens. *Cor.* infundibuliformis, tubo cylindrico basi globoso; fauce esquamata, barbata. *Germina* 2, connata basi annulo hypogyno cincta. *Styli* 2, connati. *Stigma* subcapitatum. *Drupæ* duæ, connatæ, uniloculares, monospermæ.

Specific Character and Synonyms.

RAUWOLFIA *ternifolia*; foliis verticillato-ternis oblongis acuminatis glabris, floribus interpetiolaribus subcorymbosis. *Kunth Syn. Pl. æquinoc. 2. p. 298. Humb. et. Bonpl. Pl. Æquin. 3. p. 131.*

RAUWOLFIA *ligustrina*; foliis ternis oblongis acuminatis glabris, racemo terminali, ramis dichotomis. *Herb. Willd. Roem. et Sch. 4. p. 805.*

RAUWOLFIA *ternifolia* is one of the plants collected in South America by those learned and indefatigable travellers MESSRS. HUMBOLDT and BONPLAND, and described, but not figured, in their *Plantæ æquinoctiales novi orbis*. Our drawing was taken at the garden of the Horticultural Society in July last, from a plant sent to the Society by Mr. CALEY from the Botanic Garden at St. Vincent's, in the West Indies.

Being

Being native of a tropical climate, will of course require to be kept in the stove in this country.

The outline figures represent,

1. A flower magnified.
2. The corolla laid open to shew the insertion of the stamens and the bearded faux.
3. The pistil; shewing the glandular body on which the germens or ovaries are situated, the united styles, and stigma.