ELEMENTS

OF

BOTANY.

PART II.

TERMS OF THE SCIENCE.

BY

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TERMS OF BOTANY.

PLANTS ARE OF THREE KINDS.

Kinds of

1. HERBS, as the Tulip (TULIPA). '

Plants.

2. SHRUBS, as the Lilac (SYRINGA).

Vide Plate 1.

3. TREES, any Tree.

These possess,

I. A ROOT, an organ nourishing the plant.

These are of two sorts.

Sorts.

4. Common (communis) shooting into the ground; or,

Vide Pl. 2.

5. Parasitical (parasitica) not fixing in the earth, as the Viscum, Missletoe.

Roots take a three-fold division; being either,

Kinds.

6. Fibrous (fibrosa) composed of fibres;

Vide Pl. 3.

7. Bulbous (bulbosa) fleshy, fibres at bottom; or,

8. Tuberous (tuberosa) fleshy, fibres on the side or top.

Varying in Duration.

1. Duration.

9. Annual (annua) perishing within the year.

10. Biennial (biennis) flowering the second year, and then perishing.

- 1. Duration. 11. Perennial (perennis) surviving many years.
- 🍒 Fibrous roots are,
 - 2. Figure. Vide Pl. 4.
- 12. Fibrous (fibrosa) consisting entirely of filaments, as *Field Madder* (Rubia Peregrina).
- 13. Articulate (articulata) intercepted with joints, as *Marsh Trefoil* (MENYAN-THES TRIFOLIATA).
- 14. Repent (repens) creeping and then germinating, as Wild Marjoram (ORIGANUM VULGARE).
- 15. Horizontal (horizontalis) running in an horizontal direction, opposed to a fusiform, as Common Vervain (VERBENA OFFICINALIS).
- 16. Ramose (ramosa) having branches subdivided, as trees.
- 17. Fusiform (fusiformis) in the most simple manner tapering, as Water Gipsywort.
- 18. Premorse (præmorsa) as if cut off at the apex, as Primrose (PRIMULA).

Bulbous Roots are,

- Vide Pl. 5. 19. Solid (solida) of one solid substance, as Spring Crocus (Crocus vernus).
 - 20. Scaly (Squamosa) having scales, as White Lily (LILIUM ALBUM).
 - 21. Coated (tunicata) having coats or tunicks, as the Onion.

Grumous roots are,

- Vide Pl. 6. 22. Round (globosa) nearly round, as Turnip (Brassica RAPA).
 - 23. Oblong (oblonga) oblong, as Wood Anemone (ANEMONE NEMOROSA).
 - 24. Dentate (dentata) having the appearance of teeth, as *Tooth-wort* (DENTARIA).
 - 25. Tuberous (tuberosa) the fleshy parts connected to the base by threads, (opposed to 28) as Pæony (Pæonia).
 - 26. Palmate (palmata) fleshy and lobed, as the *Palmated Orchises*.
 - 27. Twin (testiculata) two together, as in some of the Orchises.
 - 28. Grumous (grumosa) or Fascicular, as in the Ranunculus.
 - 29. Knotty (nodosa) having points, as Cat's-tail.
 - 30. Granulated (granulata) sprinkled with fleshy particles as Saxifrage (SAXI-FRAGA GRANULATA).
- II. TRUNK (Truncus) is the organ which multiplies the plant.
- Kinds.
 Vide Pl. 7.
- 31. Stem (caulis) the trunk elevating the fructification and leaves, as trees, shrubs, and most herbs.
- 32. Culm (culmus) belonging to grasses.
- 33. Scape (scapus) elevating the fructification, and not the leaves, as the NARCISSUS.

34. Stipe (stipes) the trunk passing into the leaves, used also to express the pillar in the mushroom.

2. Duration. Vide Pl. 8.

- 35. Herbaceous (herbaceus) annual, not woody, as *Plantain* (Plantago).
- 36. Somewhat shrubby (suffruticosus) permanent at the base, the branches yearly withering, as Raspberry (Rubus ideas).
- 37. Shrubby (fruticosus) perennial, with many stems, as *Red Currant* (RIBES RUBRA).
- 38. Arborcous (arboreus) perennial, with a simple stock, as trees (vide Fig. 17, Plate 7).

3. Substance.

- 39. Solid (solidus) full internally.
- 40. Pithy (inanis) spongy with an internal medulla, as ALCEA ROSEA.
- 41. Fistulous (fistulosus) tubular within.

4. *Direction.* Vide Pl. 9.

- 42. Erect (erectus) almost rising in the perpendicular direction, as Jagged-leaved Teasel (DIPSACUS LACINEATUS).
- 43. Straight (strictus) quite perpendicular, without any bending, same example.
- 44. Rigid (rigidus) impatient of flexion, ditto.
- 45. Lax (laxus) freely bending in form of a bow, as *Marsh Zannichella* (ZAN-NICHELLA PAEUSTRIS).
- 46. Oblique (obliquus) departing from the perpendicular, or horizontal line, as Common Golden Rod (SOLIDAGO VIRGA AUREA).

- 47. Ascending (ascendens) rising upwards in the form of a bow, as Officicinal Salvia (SALVIA OFFICINALIS).
- 48. Declined (declinatus) descending in the bow form, as Andrachne Tele-Phoides.
- 49. Incurved (incurvatus) nodding inwards, as Many-flowered Solomon's Seal (CONVALLARIA MULTIFLORA).
- 50. Nodding (nutans) reflexed outward at the apex, as Nodding Sage (SALVIA NUTANS.)

Vide Pl. 10. (Direction.)

- 51. Diffuse (diffusus) with spreading branches, as Yellow Fumitory (Fu-MARIA LUTEA).
- 52. Procumbent (procumbens) weak, resting on the ground, as Common Cucumber (Cucumis saliva).
- 53. Stoloniferous (stoloniferus) throwing suckers from the root, as the STRAW-BERRY (FRAGRARIA VESCA).
- 54. Sarmentous (sarmentosus) rooting with filiform joints, as the Common Grape (VITIS VINIFERA).
- 55. Repent (repens) resting on the ground, and throwing out roots, as the Strawberry.
- 56. Rooting (radicans) fixing itself with strong lateral roots, as Ash-leaved Trumpet-flower (BIGNONIA RADICANS).

Trunks.
Vide Pl. 11.
(Direction.)

- 57. Geniculate (geniculatus) intercepted with knots, as Common Missletoe (VISCUM ALBUM).
- 58. Zig-zag (flexuosus) from bud to bud, shooting here and there, as Rough Bindweed (SMILAX ASPERA).
- 59. Climbing (scandens) seeking an height, and supported in its progress.
- 60. Twisting (volubilis) spirally ascending by other bodies.

To the right (dextrorsum) from the right to the left, as the Convolvulus.

To the left (sinistrorsum) from the left to the right, as the Hop (HUMULUS LUPULUS).

4. Figure. Vide Pl. 12.

- 61. Round (teres) destitute of angles, as Dandelion (LEONTODON TARAXA-CUM).
- 62. Semicircular (Semiteres) flat on this side, on the other somewhat circular, as *Belladonna Lily* (LILIUM BELLADONNA).
- 63. Compressed (compressus) having the two lateral sides flat, as Aloe-leaved Water Soldier (STRATIOTES ALOIDES).
 - 64. Two-edged (anceps) having the opposite angles somewhat acute, as Perforated St. John's-wort (HYPERICUM PERFORATUM).
 - 65. Angular (angularis) longitudinally excavated with more than two hol-

low angles, as Hollow-stalked Monarda (Monarda Fistulosa).

Acute-angled (acutangulus) &c. from the figure of the angles.

Vide Pl. 13. (Figure.)

- 66. Three-sided (trigonus) having three longitudinal prominent angles, as Sharp-pointed Club-rush (Scirpus Mucronatus).
- 67. Triquetrous (triqueter) having three sides exactly flat.

Five-angled, six-angled, eight angled, many-angled, as Monarda fistularis, Cactus pentagonus, Cactus hexangularis, Cactus heptangularis, Cactus reptans, Cactus melocactus.

5. Cloathing. Vide Pl. 14.

- 68. Naked (nudus) opposed to No. 55, as Cassytha Baccifera.
- 69. Leafless (aphyllus) destitute of leaves.
- 70. Leafy (foliatus) having foliage, as biennial *Tree Primrose* (ÆNOTHERA BIENNIS).
- 71. Vaginate, or sheathed (vaginatus) surrounded with the sheaths of leaves, as Officinal Rhubarb (RHEUM PALMATUM.)
- 72. Scaly (squamosus) sprinkled with scales, as POLYPODIUM ACULEATUM.
- 73. Imbricated (imbricatus) so covered with scales, as to leave no nakedness, as Common House-leek (SEM-PERVIYUM TECTORUM).

Trunks.
6. Superficies.
Vide Pl. 15.

- 74. Corked (subcrosus) clothed with a soft exterior cortex, and elastic, as the Cork Tree (QUERCUS SUBER).
- 75. Chinky (rimosus) the exterior cortex going naturally into fissures, as Common Oak (QUERCUS ROBUR).
- 76. Tunicated (tunicatus) cloathed with membranes, as Common Birch Tree (Betula alba.)
- 77. Even (lævis) an equal superficies, as

 Buck-wheat (POLYGONUM FAGOPYRUM).
- 78. Striated(striatus) marked with the finest hollow lines (ARUM MACULATUM).
- 79. Furrowed (sulcatus) hollowed with deep lines, as the *Bulbous Ranunculus* (RANUNCULUS BULBOSUS).
- 80. Smooth (glaber) having a slippery superficies (Vide No. 213), as the Flowering Rush (Butomus umbellatus).
- 81. Rough (scaber) made rough with eminent points, somewhat stiff (Vide No. 239), as the Jagged-leaved Rudbeckia (RUDBECKIA LACINIATA).
- 82. Muricated (muricatus) sprinkled with subulate points, as CACTUS PARA-SITICUS.

Vide Pl. 16. (Superficies.

83. Tomentose (tomentosus) cloathed with interlacing hairs (villi) not discernible (Vide No. 234), as the *Great Mullein* (VERBASCUM THAPSUS).

- 84. Villous (villosus) covered with soft hairs (pili) (Vide No. 233), as Hairy Inula (INULA HIRTA).
- 85. Hispid (hispidus) sprinkled with rigid bristles (setæ) (Vide No. 240), as

 Jagged-leaved Teasel (Dipsacus Laciniatus).
- 86. Prickly (aculeatus) armed with prickles (aculei) (Vide No. 241), as the *Dog Rose* (Rosa Canina).
- 87. Thorny (spinosus) armed with thorns (spini) (Vide No. 382), as the Sloe (PRUNUS SPINOSA).

Vide Pl. 17. (Superficies).

- 88. Stinging (urens) defended with stings (stimuli) (Vide No. 389), as Common Nettle (URTICA DIGICA).
- 89. Stipuled (stipulatus) marked with stipules (Vide No. 289), as the Everlasting Pea (LATHYRUS LATIFOLIA).
- 90. Membranous (membranac eus) flattened in the manner of a leaf. ditto.
- 91. Bulbiferous (bulbiferus) bearing bulbs (Vide No. 648), as the Bulb-bearing Lily.
- 7. Composition. 92. Knotless (enodis) continued without Vide Pl. 18. joints, as the Bullrush (Scirpus LACUSTRIS).
 - 93. Most simple (simplissimus) scarce any branches, as *Perennial Mercury* (MERCURIALIS PERENNIS).
 - 94. Simple (simplex) extended in a continued series towards the apex, as

- Greater Stich-wort (STELLARIA HOLOSTEA).
- 95. Intire (integer) most simple with branches scarcely narrowing, as Common Birth-wort (ARISTOLO-CHIA CLEMATITIS).
- 96. Jointed (articulatus) jointed, with joints between (geniculatus internodis), as Yellow-spined Indian Fig (CACTUS TUNA).
- Vide Pl. 19. (Composition.)
- 97. Proliferous (prolifer) only emitting branches from the centre of the apex, as Scotch Fir (PINUS SILVESTRIS).
- 98. Dichotomous, or forked (dichotomus) always dividing into two, as Missletoe (VISCUM ALBUM).
- 99. Brachiated (brachiatus) the branches opposite, crossing, as *Yellow-flow-ered Clusia* (CLUSIA FLAVA).
- 100. Subramous (subramosus) with few lateral branches, as SAURURUS CERNUUS.
- 101. Branched (ramosus) many lateral branches, as CHEIRANTHUS INCA-
- 102. Much branched (ramosissimus) with many branches heaped without order, as the Apple (Pyrus Malus).
- Vide Pl. 20. 103. Twiggy, or rod-like (virgatus) the (Composition.) small branches weak and unequal, as Strawberry Blite (BLITUM).

- 104. Paniculate (paniculatus) branches variously subdivided, as Oat (Ave-
- 105. Fastigiate (fastigiatus) branches of an unequal height, as Androsace.
- 106. Spreading, patent (patens) forming an acute angle, as Fennel (Anethum fæniculatum) (Vide No. 131).
- 107. Diverging (divaricatus) making an obtuse angle (Vide No. 163), as Coffee (Coffee).

III. BRANCHES, parts of the Trunk, or Stem.

- 1. Disposition. 103. Alternate (alterni) springing like Vide. Pl. 21. steps about the trunk (Vide No. 113), as Great yellow Wolf's-bane, (ACONITUM LYCOTONUM.)
 - 109. Two-rowed (distichi) pointing two ways although every where inserted (Vide No. 114), as the *Polypody*.
 - 110. Spread or scattered (sparsi) having no determinate disposition (Vide No. 116), as Butcher's Broom (Ruscus Aculeatus).
 - 111. Crowded (conferti) numerous, nearly concealing the whole trunk (Vide No. 117) as Common Cypress (Cupressus sempervirens.)
 - 112. Opposite (oppositi) placed in pairs cross-ways (Vide No. 124), as Hollow-stalked Monarda (Monarda FISTULOSA).

Branches.
Vide. Pl. 22.
(Disposition
and Direction.)

113. Verticillate (verticillati) several, surrounding the trunk at the joints, as
Water Plantain (ALISMA PLANTAGO).

- 2. Direction.
- 114. Erect (erecti) mearly perpendicular, as the *Poplar* (Populus).
- 115. Compact (coarctati) almost incumbent towards the summit, as the Laurestine (VIBURNUM TINUS).
- 116. Divergent (divergentes) going off from the trunk at right angles, as the Common Oak (QUERCUS ROBUR).
- 117. Divaricate (divaricati) going off with an obtuse angle, ditto.
- Vide Pl. 23. (Direction.)
- 117. Deflexed (de'dexi) bent back in the manner of a bow, as Weeping Willow (SALI'X BABILONICA.)
- 118. Reflexed (reflexi) depending perpendicularly, as Yellow flowered Clusia (Clusia flava).
- 119. Retroflexed (retroflexi) bent this way and that, as Buck-thorn (RHAMNUS CATHARTICUS.)
- 120. Fulcrate (fulcrati) furnished with a fulcrum or prop (Vide No. 287), as the *Indian Fig-tree* (Ficus Ben-GHALENSIS.)

IV. LEAVES, organs of motion of the plant.

Place.
 Vide Pl. 24.

121. Radical (radicale) sitting upon the root, as *Dandelion* (LEONTODON TARAXICUM.)

Lcaves.

- 122. Cauline (caulinum) inserted on the stem, as PARTHENIUM.
- 123. Rameal (rameum) placed upon the branches, ditto.
- 124. Axillary (axillare) inserted at the base of the branch, ditto.
- 125. Floral (florale) nearest to the flower, as the *Radish* (RAPHANUS).
- 2. Number, as one (unicum) two (duo) three (tria) few (pauca) many (plurima).
- 3. Situation.
- 126. Alternate (alterna) placed like steps for climbing along the branch, as African Kiggelaria, (KIGGELARIA AFRICANA).
- 127. Two-rowed (disticha) pointing from two sides of the branch, although everywhere inserted, as *Deciduous Cupress* (Cupressus disticha).
- 128. Bifarious (bifaria) only springing from the two opposite sides of the branch, as Norway Spruce (Pinus abies).
- 129. Scattered (sparsa) placed without any certain order, as Myrtle-leaved Milk-wort (Polygala Myrtlfo-LIA).
- 130. Crowded (conferta) many, nearly concealing the whole branch or stem, as Common Yew (TAXUS BACCIFERA).
- 131. Imbricated (imbricata) covering half of each other in turn, as Common Cypress (Cupressus Sempervi-

- 132. Fasciculate (fasciculata) many, proceeding from the same point at the joints of the branches, as Common Larch (Pinus Larix).
- 133. Two together (Bina) PINUS LARIX, three together (terna), &c. as PINUS TÆDA, in fives, (quinta) as PINUS STROBULUS OF (querna), according to the number of the joints of the branches, and so on.

Vide Pl. 25. (Situation.)

- 134. Confluent (confluentia) cohering with each other at the base, as Austrian Lovage (LIGUSTICUM AUSTRIACUM).
- 135. Approximate (approximata) coming very near each other, as Common Yew (Taxus baccifera).
- 136. Remote (remota) distant from each other, as BYTTNERIA MICROPHYLLA.
- 137. Opposite (opposita) placed in pairs cross-ways, as Dog's-bane (Apocy-Num).
- 138. Dicussated (decussata) so disposed opposite, that the branches, the tops being viewed, display four rows, as Common Bastard Balm (Melittis Melissopyllum).
- 139. Stellate (stellata) more than two leaves going around the stem; with 3 leaves, as Narrow-leaved Kalmia (Kalmia Angustifolia), 4 leaved, as Campion (Cucubulus stellatus), 6

leaves, as Madder (Rubia tincto-Rum).

4. Direction. Vide Pl. 26.

- 140. Erect (erectum) nearly rising perpendicularly, as Late-flowered Chrysan-themum (Chrysanthemum sero-tinum).
- 141. Straight (strictum) altogether perpendicular, without bending.
- 142. Rigid (rigidum) impatient of flexion, as the Yellow-flowered Side-saddle Flower (SARRACENIA FLAVA).
- 143. Appressed (adpressum) by its disk approaching to the stem, as Mithridate Mustard (Thlaspi Campestree).
- 144. Spreading (patens) sitting at right angles to the stem, as Oleander Rose-bay (Nerium Oleander).
- 145. Horizontal (horizontale) going off from the stem at right angles, as Strong-scented Lettuce (LACTUCA VIROSA).
- 146. Assurgent (assurgens) archwise erect, first declining, and then erect at the apex.
- 147. Inflexed (inflexum) arched upwards towards the apex, as Quill-leaved Fig-Marygold (MESEMBRYANTHE-MUM CALAMIFORME).
- 148. Reclined (reclinatum) bent back, so that the arch is lower than the base, with the apex ascending, as Common

- Strawberry Blite (BLITUM VUL-GARE).
- 149. Recurved (recurvatum) bent back, so that the bow looks above, ditto.
- 150. Revolute (revolutum) recurved spirally, as Sweet William (DIANTHUS BARBATUS).
- 151. Depending (dependens) looking straight to the earth, as HEDYSA-RUM.
- 152. Oblique (obliquum) with the base looking to the heavens, with the apex, to the horizon, as Persian Fritillary (FRITILLARIA PERSICA).
- 153. Adverse (adversum) the upper surface looking towards the south, not the heaven, as Narrow-leaved Ginger (AMOMUM ZINGIBER).
- 154. Vertical (verticale) obverse, so that the region of the base comes out narrower than the region of the apex, vertical ovate, as Common Water Pimpernel (Samolus Valerandi); and cordate, as Common Wood Sorrel (Oxalis acetosella).
- 155. Resupinate (resupinatum) the upper surface becoming the inferior, or vice versa, as Spot-flowered Alstremeria.
- 156. Submersed (submersum) hid under the surface of the water, as Marsh

- Water Violet (HOTTONIA PALUS-TRIS).
- 157. Swimming (natans) lying upon the surface of the water, as Broad-leaved Pond-weed (Potamodeton natans).
- 158. Rooting (radicans) throwing out roots, as Rooting-leaved Spleenwort (Asplenium Rhizophyllum).
- 5. Insertion. Vide Pl. 27.
- 159. Petiolate, or Petioled (petiolatum) with a petiole, inserted at the base, as Peltated Stork's-bill (Pelargonium peltatum).
- 160. Peltate (peltatum) the petiolus inserted into the disk of the leaf, ditto.
- 161 Sessile (sessile) sitting immediately on the stem, without a petiolus, as Entire-leaved Parthenium (PARTHENIUM INTEGRIFOLIUM).
- 162. Adnate (adnatum) joined by the upper surface to the base of the branch, as Persian Fritillary (FRITILLARIA PERSICA).
- 163. Condunate (condunatum) several connected with each other, as Dark-purple Rhubarb (RHEUM ATROPUR-PUREUM).
- 164. Decurrent (decurrens) the base of the leaf extended downwards along the stem, as Decurrent Bell-flower (CAMPANULA DECURRENS).
- 165. Embracing (complexicate) going round the stem by the base, as

- Jersey Everlasting (GNAPHALIUM LUTEO-ALBUM).
- 166. Perfoliate (perfoliatum) surrounding the stem transversely with its base, nor gaping before, as Perfoliate Eupatorium (EUPATORIUM PERFOLIATUM).
- 167. Connate (connata) pairs of opposite leaves conjoined on both sides of their base, as Jagged-leaved Teasel (Dipsacus laciniatus).
- 168. Sheathing (vaginans) the base forming a tube and cloathing the stem, as *Indian Reed* (CANNA INDICA).
- 6. *Figure*. Vide Pl. 28.
- 169. Round (orbiculare) quite round, as Small Indian Cress (TROPEOLUM MINUS).
 - Roundish (subrotundum) approaching the orbicular figure, as the Sumach (Rhus).
- 170. Ovate (ovatum) the longitudinal diameter exceeds the transverse; the base a segment of a circle, with the apex narrower, as *Hottentot Cherry* (Cassine Maurocenia); sometimes the thick end is reversed, as *Common Water Pimpernel* (Samolus valerandi).
- 171. Oval (ovale) an oblong ovate, both ends being equally round, as American Mammea (MAMMEA AMERICANA).
- 172. Oblong (oblongum) the longitudinal

- diameter many times overcoming the tranverse, as EUPHORBIA LA-THEROIDES.
- 173. Parabolic (parabolicum) getting towards the apex gradually narrower, as Shrubby Horehound (MANU-BIUM PSEUDO-DICTAMNUS).
- 174. Cuneiform, or wedge-shaped (cuneiforme) gradually towards the base narrowing, as CRASSULA PORTULACOIDES.
- 175. Spatulate (spatulatum) roundish (vide 169) with a narrow linear base, as Canary House-leek (Sempervivum Canariense).
- 176. Rounded (rotundatum) destitute of angles, as Melon (Cucumis Melo).
- 177. Lanceolate (lanceolatum) oblong, lessening at both extremities, as *Hemp Dog's-bane* (APOCINUM CANNABINUM).
- 178. Elliptical (ellipticum) lanceolate, but with the breadth of an ovate leaf, as

 Two-coloured Fig-Marygold (MESEMBRYANTHEMUM BICOLOR).
- 179. Linear (lineare) equal every where in breadth, if pointed, subulate (subulare), as Belladonna Lily (LILIUM BELLADONNA).
 - 180. Acerose (acerosum) linear, (vide 179) permanent, as Scotch Fir (PINUS SYLVESTRIS).

Leaves. 7. Angles.

- 181. Entire (integrum) undivided, destitute of any division.
- 182. Triangular (triangulare) from the number of angles, as Great Shrubby Orach (ATRIPLEX HALIMUS); three-sided, triquetrum, as Flowering Rush (BUTOMUS UMBELLATUS); four-angled, as Field Horsetail (EQUISETUM CAMPESTRE).
- 183. Deltoid (deltoideum) rhomboid (vide 183) with four angles, of which the lateral ones are less distant from the base than the others, as Great Shrubby Orach (ATRIPLEX HALIMUS); five-angles (pentangulare), as Peltated Geranium (Pelargonium Peltatum).
- 184. Rhomboid (rhombeum) of the form of a rhomb, as *Rhombus-leaved Sida* (SIDA RHOMBOIDEUM).
- 185. Trapeziform (trapeziforme) in the form of a trapezium, as *Maidenhair* (ADEANTHUM).

8. Sinuses. Vide Pl. 29.

- 186. Cordate (cordatum) subovate, cut out in the base with a sinus, without posterior angles, as Common Black Bryony (TAMUS COMMUNIS); and Cordato-Sagittate, as Buck-wheat (POLYGONUM FAGOPYRUM).
- 187. Reniform (reniforme) roundish, cut out with a sinus at the base without posterior acute angles, as *European Asarabacca* (ASARUM EUROPÆUM).

- 188. Lunate (Lunatum) roundish cut out with a sinus at the base with posterior acute angles, as Passion-flower (Passiflora Lunata).
- 189. Sagittate (sagittatum) triangular, divided into posterior acute angles, as

 Common Arrow-head (SAGITTARIA SAGITTIFOLIA).
- 190. HASTATE (hastatum) sagittate (vide 187) divided into posterior angles, projecting laterally, as Sweet-scented Cacalea (CACALEA SUAVEOLENS).
- 191. Runcinate (runcinatum) pinnatifid (vide 199) so that, the lobes convex before, behind are transverse (concave) as Common Dandelion (LEONTODON TARAXACUM).
- 192. Panduriform (panduriforme) oblong, with the sides below narrowed, as Dock (Rumex pulcher).
- 193. Cleft, or bifid (sissum) divided into two parts by linear sinuses, with margins straight, as Climbing Mountain Ebony (BAUHINIA SCANDENS); also three-cleft, or trifid, and many cleft, as the BULBOUS RANUNCULUS.
- 194. Lobed (lobatum) divided to the middle, making distinct segments, as Common Maple (ACER CAMPES-TRIS).
- 195. Two, five-cleft, &c. (bi-quinquefidum) according to the number of fissures—

three-lobed, as Laurus Saxifra-GA; and five-lobed, as Humulus Lupulus.

Vide Pl. 30.

- 196. Partite (partitum) divided nearly to the base, faintly lobed, difform, 3, 4, 5, and much parted.
- 197. Palmate (palmatum) divided beyond the middle into nearly equal lobes, as Blue Passion-flower (Passiflo-RA CŒRULEA).
- 198. Lyrate (lyratum) divided transversely into laciniæ, of which the inferior ones are less and more remote, as *Winter Cress* (ERYSIMUM BARBA-REA).
- 199. Pinnatifid (pinnatifidum) transversely divided into horizontal and oblong laciniæ; as Star-thistle Centaury (Centaure Calcitrapa).
- 200. Sinuated (sinuatum) having dilated sinuses on the sides, as Common Oak (QUERCUS ROBUR).
- 201. Laciniated (laciniatum) cut into segments variously and indeterminately, as Bee Lurkspur (DELPHINIUM ELATUM).
- 202 Squarrose (squarrosum) divided into elevated segments, not parallel to the plane of the leaf, as Aloz Districha.

9. Margin. Vide Pl. 31. 203. Very intire (integerrimum) the margin linear, nor in the least cut, as

- Brompton Stock (CHEIRANTHUS INCANUS).
- 204. Crenate (crenatum) the margin cut with incisions, without regard to the extremities, as Shrubby Bramble (Rubbs fruticosus); obtusely, as Betonica; acutely, as Saxifrage; sawed-crenate, as entire leaved Parthenium.
 - 205. Serrated (serratum) all the incisions looking at the extremity, acutely, as Perennial Mercury (MERCURIALIS PERENNIS); obtusely, as Black Stinking Horehound (BALLOTA NIGRA); inversely, as DANDELION.
 - 206. Ciliated (ciliatum) having parallel longitudinal setæ at the margin, as Sedum Album.
 - 207. Dentate, or toothed (dentatum) with remote spreading points along the margin, as BLITUM VIRGATUM.
 - 208. Thorny (spinosum) having subulate rigid points at the margin, as Spiny Acanthus (ACANTHUS SPINOSUS).
 - 209. Cartilaginous (cartilagineum) having a subosseous margin, as Lóndon Pride (SAXIFRAGA UMBROSA.)
 - 210. Repand (repandum) having a flexuose margin, yet flat.
 - 211. Jagged (lacerum) the margin variously divided, with different shaped segments, as *Hawkweed-leaved Ground*sel (SENECIO HIERACIFOLIUS).

- 212. Eroded (erosum) sinuated (Vide 200), with very small obtuse sinuses, and unequal laciniæ, as Woolly Sage (Salvia Æthiops).
- 213. Dedalus (dædaleum) both flexuous and jagged.
- 10. The Apex. Vide Pl. 32.
- 214. Obtuse (obtusum) terminated within the segment of a circle, as Obtuse-leaved Pepper (Piper obtusifo-Lium).
- 215. Emarginate (emarginatum) terminated by a notch, as Silver Fir (PINUS PICEA).
- 216. Retuse (retusum) terminated with an evident obtuse sinus at top, as Broad-leaved Hermannia, (Hermannia, LATIFOLIA); all round, as Common Penny-wort (Hydrocotyle vulgaris); scarce perceptible, as Yellow-flowered Clusia (Clusia flava).
- 217. Præmorse (præmorsum) terminated obtusely with unequal incisions, as Chamærops mitis.
- 218. Truncated (truncatum) terminated by a transverse line, as Common Tulip Tree (LIRIODENDRON TULIPERA).
- 219. Acute (acutum) terminated by an acute angle, as Hemp Dog's-bane (APOCYNUM CANABINUM).
 - 220. Cuspidate (cuspidatum) terminated by a setaceous point, as *Indian Fig* (FICUS RELIGIOSUS).

- 221. Mucronate (mucronatum) terminated by a prominent point, like an arrow, as Rough Bind-weed (SMILAX ASPERA); ending very acute, as Tartarian Statice (STATICE TARTARICA); obtuse, as Canadian Asarabacca (ASARUM CANIDENSE).
 - 222. Cirrhose, or tendrilled (cirrhosum) ternated by a tendril, as Superb Lily (GLORIOSA SUPERBA).
- 11. Surface. Vide Pl. 33.
- 223. Upper surface (pagina superior) commonly points to the heaven, under surface (pagina inferior) to the carth.
- 224. Naked (nudum) destitute of hairs or bristles, as Orange (CITRUS AU-RANTIUM).
- 225. Smooth (glabrum) the surface slippery, ditto.
- 226. Shining (nitidum) a shining smoothness, as *Broad-leaved Orchis* (OR-CHIS LATIFOLIA).
- 227. Lucid (lucidum) bright, as if illumined, as Sweet-bay Laurel (LAURUS NOBILIS).
- 228. Coloured (coloratum) any other colour than green, as Three-coloured Amaranth (AMARANTHUS TRICOLOR).
- 229. Nerved (nervosum) with most simple vessels running from the base to the apex, as ALISMA PALUSTRIS.
- 230. Three-nerved, (trinerve) having three

- nerves meeting above the base of the leaf, as CLEANOTHUS AMERICA-NUS.
- 231. Triple-nerved (triplinerve) three nerves meeting this side the base of the leaf, as Jerusalem Artichoke (Helianthus tuberosus).
- 232. Nerveless (enerve) opposed to nerved (Vide 229), as Climbing Butcher's-broom (Ruscus and Rogynus).
- 233. Sheathed, or lined (lineatum) with depressed nerves, as GLORIOSA SUPERBA.
- 234. Striated (striatum) lightly hollowed with parallel lines, as Sea Club-rush (Scirpus Maritimus).
- 235. Furrowed (sulcatum) hollowed with deep lines, as *Iron-coloured Fox-glove* (DIGITALIS FERRUGINEA).
- 236. Veined (venosum) having vessels variously divided, as *Black Bryony* (TAMUS COMMUNIS).
- 237. Wrinkled (rugosum) filled with wrinkles, as Officinal Sage (SALVIA OFFICINALIS).
- 238. Bullate (bullatum) a wrinkled leaf (Vide No. 237.), with contracted veins, with the other side concave, as Green-Tea (THEA VIRIDIS).
- 239. Pitted (lacunosum) having a depressed disk among interspersed veins, as BRASSICA SUBAUDEA.

- 240. Veinless (avene) opposed to veiny (Vide No. 246).
- 241. Dotted, or punctate (punctatum) sprinkled with hollow points, as Perforated St. John's-wort (Hypericum Perforatum).
- 242. Pimpled, or papillous (papillatum) covered with fleshy points, as the *Ice plant* (Mesembryanthemum Crystallinum).
- 243. Papulous (papulosum) covered vith vesicular points, as Viper's Bugloss (Echium).

Vide Pl. 34.

- 244. Viscid (viscidum) covered with a tenacious humour, as Clammy Groundsel (Senecio viscosus).
- 245. Villous (villosum) covered with soft hairs, as Villous Deadly Carrot (THAPSIA VILLOSA).
- 246. Tomentose (tomentosum) covered with interwoven hairs, hardly to be discerned, as *Great Mullein* (Verbease).
- 247. Silky, or sericeous (sericeum) covered with the softest hairs pressed close down, as Silver Protea (PROTEA ARGENTEA).
- 248. Woolly, or lanated (lanatum) cloathed as with a cobweb, the hairs spontaneously curling, as Æthiopian Sage (Salvia Æthiops).
- 249. Bearded (barbatum) beset with parallel hairs, as the Shrubby-bearded

- Mesembryanthemum (MESEM-BAR-BATUM).
- 250. Hairy, pilose (pilosum) covered with distinct elongated hairs, as *Pilose Hawkweed* (HIERACIUM PILOSUM).
- 251. Rough, scabrous (scabrum) defended with stiff projecting points, as the Hop.
- 252. Hispid (hispidus) sprinkled with rigid bristles, as Bristly-stalked Mesembryanthemum (Mesem-Hispidum).
- 253. Prickly (aculeatum) armed with prickles, as Solanum Mammosum.
- 254. Strigose (strigose) armed with stiff lanceolate prickles, as Anchusa Strigosa;—stinging and powdered are added by some.
- 12. Expansion. 255. Flat (planum) having an equal super-Vide Pl. 35. ficies, as Climbing Butcher's-broom (Ruscus androgynus).
 - 256. Channelled, or caniculate (caniculatum) hollowed above longitudinally with a deep furrow, as Virginian Spiderwort (TRADESCANTIA VIRGINIANA).
 - 257. Concave (concavum) having a margin narrower than the disk, and the disk depressed, as Pelargonium Peltarum.
 - 258. Convex, having a margin narrower than the disk, with the disk elevated, as MARTYNEA PERENNIS.
 - 259. Cowled, cuculated (cuculatum) the

- sides conniving at the base, but dilated at the apex, as GERANIUM CUCULATUM.
- 260. Plaited, or plicate (plicatum) the disk alternately bent in acute folds. as White Hellebore (VERATRUM ALBUM).
- 261. Waved, or undulate (undulatum) the disk alternately bent in obtuse folds, as ALETRIS CAPENSIS.
- 262. Curled, or crisped (crispum) with a luxuriant margin, so that the disk comes out longer than its midriff, as Curl-leaved Mallow (MALVA CRIS-PA).
- 263. Perforated (perforatum) open cuts, as Perforated Dragon (DRACONTIUM PERTUSUM).
- Vide Pl. 36.
- 13. Substance. 264. Membranaceous (membranaceum) stiff, like parchment, as Indian Reed (CANNA INDICA).
 - 265. Scariose (scariosum) the substance dry, and sonorous to the touch.
 - 266. Gibbous (gibbuin) both surfaces convex, from abundance of pulpy matter in the middle, as Flat-leaved Cacalea (CACALEA FICOIDES).
 - 267. Round, cylindrical, or columnar (teres) nearly round, as the Onion (ALLIUM CEPA).
 - 268. Depressed (depressum) pulpy, with the disk more flattened than the sides,

- as Depressed Mesembryanthemum (Mesem-depressum).
- 269. Compressed (compressum) pulpy, with sides more flattened than the disk, Compressed Mesembryanthemum (Mesem-compressum).
- 270. Keeled (carinatum) the under part of the disk prominent, longitudinally, as ALOE DISTICHA.
- 271. Compact (compactum) composed of a solid substance, as Compact Rhubarb (RHEUM COMPACTUM).
- 272. Tubular (tubulosum) internally concave or hollow, as Purple-flowered Side-saddle flower (SARRACENIA PURPUREA).
- 273. Pulpy (pulposum) filled with a tenaceous material, as Succotrine Aloe (Aloe succotrina).
- 274. Fleshy (carnosum) internally filled with a more solid pulp, as *House-leek* (SEMPERVIVUM TECTORUM).
- 275. Three-sided, or triquetrous (triquetrum) three longitudinal sides in a subulate leaf, as *Flowering Rush* (BUTOMUS UMBELLATUS).
- 276. Two-edged, or ancipitate (anceps) with two prominent longitudinal angles, the disk somewhat convex, as Ber-MUDA SISYRINCHIUM.
- 277. Tongue-shaped, or lingulate (lingulatum) linear, fleshy, beneath convex, as ALOE DISTICHA.

- 288.*Sword-shaped, or ensiform, two-edged, gradually tapering from the base to the apex, as Aletris Uvaria.
- 289. Subulate, or awl-shaped (subulatum) linear at the base, and attenuated towards the apex, as Mesembry-Anthemum Bicolor.
- 290. Sabre-shaped, or acinaciform (acinaciforme) compressed, fleshy, one margin convexed, thin, the other more straight and thicker, as Mesem. Acinaciforme.
- 291. Hatchet-shaped, or dolabriform (dolabriforme) compressed, roundish, outwardly gibbous, with the edge sharp and roundish beneath, as Mesem. Dolabriforme.
- 14. Duration. 292. Deciduous (deciduum) falling off at the end of one summer.
 - 293. Caducous (caducum) falling off early, certainly not remaining a whole summer.
 - 294. Persisting, permanent, or abiding, (persistens) not falling off at the end of summer.
 - 295. Perennial (perenne) flourishing for many years.
 - 296. Evergreen (sempervivens) flourishing at all times of the year.
- * From page 27 to 32, there has been an error in the marking, as plate 33 has, by mistake of the engraver, been marked 34; hence, 10 must be added to all the numerals in those pages, to make the letter-press and plates correspond.

- 15. Composition. Compound, the petiole supporting more leaves than one.
- Vide Pl. 38. 297. Jointed or articulate (articulatum) a leaf growing out of the apex of a leaf, as *Field Horse-tail* (Equise-Tum Arvense).
 - 298. Conjugate (conjugatum) pinnate, with only two lateral leaflets, as Everlasting Pea (LATHYRUS LATIFOLIUS).
 - 299. Digitate (digitatum) a simple petiole connecting several leaflets at the apex, as VITIS AGNUS CASTUS.
 - by two leaslets, as Gypsophila Fabago; in threes, as Citisus Cajan, and Rhus Lucidum; in fives, as Rubus Fruticosus.
 - 301. Pedate (pedatum) the petiole bifid, and connecting many leaflets by the inner side only, as *Dragon Arum* (ARUM DRACUNCULUS).
 - •302. Pinnate (pinnatum) the petiole simple, connecting many leaflets to its sides.
 - 303. Double-paired, two-paired, or bijugous (bijugum) as Beech-leaved Mimosa (M. FAGIFOLIA); thrice-paired (trijugum) as oval-leaved Cassia (C. TORA); four-paired (quadrijugum) as CASSIA FOLIATA; and so on.

- a. Pinnate with an odd one (cum impari pinnatum) terminated by a single leaflet, as Mountain Ash (Sorbus Aucuparia).
- b. Abruptly pinnate (abrupte pinnatum) neither terminates with a leaslet nor tendril, as two-flowered Cassia (C. BIFLORA).
- c. Cirrhous or tendrilled (cirrhosum) when terminated by a tendril, as Common Pea (PISUM SATIVUM).
- d. Oppositely (foliolis oppositis) the leaflets opposite, as Cassia Biflora.

Vide Pl. 39.

- e. Alternately (foliolis alternis), as Amor-PHA INDIGOPHERA.
- f. Interruptedly (foliis interruptis) the alternate leaflets smallest, as Common Agrimony (AGRIMONIA EUPATORIUM).
- g. Decursively (foliis decursivis) having the leaflets running down the petiole, as GREAT HONEY FLOWER.
- h. Articulately, as FRAGRARIA FRAGODA.
- 11. Decompound. Doubly compound, as RANUNCULUS BULBOSUS.
 - 304. Bigeminate (bigeminum) the petiole dichotomous, connecting several leaflets at the apex, as Four-leaved Mimosa (MIMOSA UNGUIS CATI.)
 - 305. Biternate (biternatum) twice ternate, as Alpine Barrenwort (EPIMEDIUM ALPINUM).

Leaves. Vide Pl. 40.

- 306. Bipinnate (bipinnatum) twice pinnate, as Guilandina Dioica; ending with an odd leaf, ditto.
- 307. Tergeminate (tergeminum) triply-geminate, a bifid petiole bearing on each apex two leaflets, and moreover two leaflets at the fork of the common petiole, as RUTA GRAVEOLENS, and FUMARIA LUTEA (Yellow Fumitory).
- 308. Triternate (triternatum) thrice ternate, as Aralia Nudicaulis.
- 309. Tripinnate (tripinnatum) thrice pinnate.

PROPS (Fulcra) the appendage to Plants for their better sustentation.

- 310. Petiole (petiolus) the fulcre that supports the leaf.
- 311. Stipule (stipula) a scale standing at the base of nascent petioles.
- 312. Tendril, or cirrhus (cirrhus), a spiral filiform bond, by which a plant is fixed to another.
- 314. Pubescence (pubes) every kind of hairiness observed in plants.
- 315. Arms (arma) points driving away animals, lest they should injure the plant.
- 316. Bractea (bractea) the floral-leaf, in appearance differing from other leaves.

Props.

317. Peduncle (pedunculus) the fulcrum which supports the fructification,

PETIOLES (Petioli) Vide 310.

Varying in 1. Figure. Vide Pl. 41.

- 318. Linear (Linearis) every where of equal breadth, as the Lemon (CITRUS MEDICA).
- 319. Winged (alatus) dilated at the side, as the Orange (CITRUS AURAN-TIUM).
- 320. Club-shaped (clavatus) thicker towards the apex, as Floating Water Caltrops (TRAPA NATANS).
- 321. Membranous (membranaceus) flattened, as Fennel (ANETHUM FÆNI-CULUM).
- 322. Circular (teres) nearly round, Canada Moon-seed (MENISPERMUM CANADENSE).
- 323. Semi-circular (semiteres) as Sweetscented Violet (VIOLA ODORATA).
- 324. Triquetrous (triqueter) three flat sides, as the Flowering Rush; Channelled, as Monk's Hood.
- Vide Pl. 42.
- 2. Magnitude, 325. Very short (brevissimus) much shorter the leaf, as Garlic-scented than Guinea-hen-weed (PETIVERIA AL-LEAREA).
 - 326. Short (brevis) not so long as the leaf, as Curl-leaved Dock (RUMEX CRIS-PUS).

Petioles.

- 327. Middle-sized (mediocris) as long as the leaf, as the Hop.
- 328. Long (longus) longer than the leaf, as **Pondweed** (Potamogeton NA-TANS).
- 329. Very long (longissimus) much longer than the leaf, as Canadian Assara-bacca (Asarum Canadense).

3. Insertion. Vide Pl. 43.

- 330. Inserted (insertus) sitting perpendicular to the branch, as *Palmated Rhubarb* (RHEUM PALMATUM).
- 331. Adnate (adnatus) joined by the upper surface to the branch.
- 332. Decurrent (decurrens) the base of the petiole running down the stem, as the EVERLASTING PEA.
- 333. Amplexicaul and stem-clasping (amplexicaulis) surrounding the stem with its base, as SAGITTARIA, and CANNA INDICA.
- 334. Appendaged (appendiculatus) having leafy films at its base, as Ononis Cernua; Sheathed, as Indian Reed.

4. Direction. Vide Pl. 44.

- 335. Erect (erectus) almost in a perpendicular line, as Chrysanthemum Serotinum.
- 336. Spreading (patens) rising from the stem at an acute angle, as NERIUM OLEANDER.
- 537. Assurgent (assurgens) arch-wise erect, first declining and then becoming erect, as SIDA RADIATA.

Petioles.

538. Recurved (recurvatus) bent down so that the bow, or convexity is upwards, as the *Passion Flower* (Passiflora).

5. Surface. Vide Pl. 45.

- 339. Smooth (glaber) with a slippery surface, as Canada Moon-seed (MENI-SPERMUM CANADENSE).
- 340. Prickly (aculeatus) armed with prickles, as the BRAMBLE;—thorny, armed with Thorns, as TOURNEFORTIA SPINOSA.
 - 341. Naked (nudus) without hairs, or bristles (vide Fig. 339).
 - 342. Jointed (articulatus) intercepted with joints, as Lentiscus-leaved Fagara (F. PTEROTA).
 - 343. Spinescent (spinescens) growing hard and pointed.

STIPULES (Stipulæ). Vide No. 311.

- Vide Pl. 46. 344. In pairs (geminæ) two together, as EVERLASTING PEA.
 - 345. Solitary, or single (solitariæ) single, as Melianthus Major.
 - 346. None (nullæ).
 - 347. Lateral (laterales) inserted on the sides, as PASSIFLORA CŒRULEA.
 - 348. Intrafoliaceous (interfoliaceæ) placed beneath the leaf.
 - 349. Opposite the leaf (oppositifoliæ) as MERCURIALIS PERENNIS.
 - 350. CADUCOUS (caducæ) falling soon,

Stipules.

- before the end of summer, as Mo-RUS NIGER.
- 351. Deciduous (deciduæ) falling off at the end of one summer.
- 352. Permanent (persistentes) remaining after defoliation.
- \$53. Spinescent (spinescentes) becoming hard and sharp, as Petiveria Al-
- 354. Sessile (sessiles) sitting immediately on the stem, as SORBUS AUCUPA-
- 355. Adnate (adnatæ) united to the stem, as Rosa Canina.
- 356. Decurrent (decurrentes) the base extended along the stem, as CLIF-FORTIA ILLICIFOLIA.
- 357. Vaginant (vaginantes) sheathing the stem.
- 358. Subulate (subulates) awl-shaped, as PETIVERIA ALLIACEA.
- 359. Lanceolate (lanceolatæ) oblong, tapering at each end.
- 360. Sagittate (sagittatæ) triangular with posterior acute angles, and an indentation at the base.
- 361. Lunate (lunatæ) crescent-shaped, roundish, hollowed out at the base, and without posterior angles, as Humulus Lupulus.
- 362. Erect (erectæ) placed almost perpendicularly.
- 363. Spreading (patentes) rising from the

Stipules

- stem at an acute angle, as PLATA-NUS OCCIDENTALIS.
- 364. Very intire (intergerrimæ) the margin linear and not in the least cut.
- 365. Serrate (serratæ) all the incisions in the margin looking at the extremity, as SORBUS AUCUPARIA.
- 366. Ciliate (ciliatæ) having parallel bristles disposed along the margin longitudinally, as Red-topped Sage (Salvia horminum.)
- 367. Dentate (dentatæ) with remote spreading points along the margin.
- 368. Cleft (fissæ) divided by linear indentations, the margins being straight, as AGRIMONIA EUROPŒA.

TENDRIL. (Vide No. 312.)

- Vide Fig. 48. 369. Axillary (axillaris) inserted at the base of the leaf.
 - 370. Foliar (foliaris) sitting on a leaf, as GLORIOSA SUPERBA.
 - 371. Petiolar (petiolaris) sitting on a petiole, as PISUM SATIVUM.
 - 372. Peduncular (peduncularis) sitting on a peduncle, as VITIS VINIFERA.
 - 373. Simple (simplex) undivided. (Vide Fig. 368).
 - 374. Trifid (trifidus) divided into three parts. (Vide Fig. 370.)
 - 375. Many-cleft (multifidus) many times divided. (Vide Fig. 37%)

376. Convolute (convolutus) contorted into rings, as Passiflora Cœrulea.

Tendril.

Vide Pl. 50.

377. Revolute (Revolutus) the spiral taking half way a contrary course. (Vide Fig. 376). PUBESCENCE (Pubes). Vide No. 314. Pubes. Hairs. 378. HAIRS (pili) setaceous excretory Vide Pl. 49. ducts of the plant, as Pilose Hawkweed (HIERACIUM PILOSUM). Wool. 379. WOOL (lana) dense curved hairs, as Æthiopian Sage (SALVIA ÆTHI-OPICA). Beard. 380. BEARD (barba) parallel hairs, BEARDED FIG-MARYGOLD. 381. DOWN (tomentum) soft interwoven Down. hairs, scarce discernible, as White Mullein (VERBASCUM LYCHNITES). 382. STRIGÆ (strigæ) hairs somewhat Strigæ. rigid and flat. Bristles. 383. BRISTLES (setæ) hairs somewhat rigid and round, as Grain-rooted Saxifrage (SAXIFRAGA GRANULATA). 384. Simple (simplices) extended longitutudinally and undivided, as Great Melon-thistle (CACTUS CACTUS). 385. Hooked (hamosæ) easily adhering to animals, as Clinging Forskolea (Fors-KOLEA TENACISSIMA).

386. Branched (ramosæ) subdivided as it

Sage (SALVIA ÆTHIOPICA).

were into branches, as Æthiopian

- Pubescence.
- 387. Feathery (plumosæ) hairy and compounded, as VERBASCUM LYCH-NITES.
- 388. Stellate (stellatæ) placed crossways, as Common Buckthorn (HIPPO-PHÆRHAMNOIDES).
- Hooks.
- 389. HOOKS (hami) points with a crooked point, recurved, as Forskole TENACISSIMA; incurved, as Arctium Lappa.
- Barbs.
- 390. BARBS (glochidæ) points bent back at the apex, many-toothed, as Common Hop (Humulus lupulus); toothed, as Marsh Triglochim (TRIGLOCHIN PALUSTRE).
- Glands.
- 391. GLANDS (glandulæ) small glands secreting a fluid, as in the Stock (CHEIRANTHUS).
- $m{Bladders.}$
- 392. BLADDERS (utriculi) vessels replete with moisture, appendaged to the leaves, as the Side-saddle flower (SARRACENIA).
- 393. Foliaceous (foliacea) inserted in the leaves, as the Almond Tree (AMYG-DALUS COMMUNIS), and PASSION-FLOWER.
- 394. Petiolar (petiolaris) sitting upon the petiole, as the *Blue Passion flower* (Passiflora cœrulea).
- 395. Peduncular (peduncularis) sitting on the peduncle.
- 396. Stipular (stipularis) inserted on the stipule, as *Divaricated Mountain*

Pubescence. Viscidness.

Ebony (BAUHINIA DIVARICATA.) 397. VISCIDNESS (viscositas) having the quality of a tenaceous humour, as Clammy Campion (Cucubulus

viscosus).

Glutinosity.

398. GLUTINOSITY (glutinositas) having the quality of a slippery fluid, as Yellow-flowered Sage (SALVIA GLU-TINOSA.)

ARMS (Arma). Vide No. 315.

Prickles. Vide Pl. 52. 399. PRICKLES (aculei) pricking points affixed only to the cortex of plants.

400. Straight (recti) without flexure, as SOLANUM MAMMOSUM.

401. Incurved (incurvi) as BRAMBLE.

402. Recurved (recurvi), as Common Toothach Tree (XANTHOXYLUM CLAVA HERCULIS).

Forks.

403. FORKS (furcæ), as Gooseberry (RI-BES GROSSULARIA).

404. Bifid (bifidæ), and trifid (trifidæ).

Thorn. Vide Pl. 53. 405. THORN (spina) a point protruded from the wood of the plant.

406. Terminal (terminalis) placed at the apex of the plant, as Box-leaved Staff-tree (CELASTRUS BUXIFO-LIUS).

407 Axillary (axillaris) placed betwixt the peduncle of the leaf and stem, as Black-thorn, or Sloe (PRUNUS SPINOSA).

Arms.

- 408. Calycine (calycina) sitting upon the calyx, as Musk Thistle (CARDUUS NUTANS); on the Fruit, as the THORN APPLE.
- 409. Foliar (foliaris) placed on the leaf, as Broad-leaved Adam's Needle (Yuc-CA GLORIOSA).
- 410. Simple (simplex) undivided. (Vide No. 407).
- 411. Divided (divisa) parted at the apex, as Two-spined Arduina (ARDUINA BISPINOSA).

Stings.

- 412. STINGS (stimuli) points, making inflammatory and painful punctures, as Common Nettle (URTICA DIOICA).
- Vide Pl. 54. BRACTEA (Bracteæ) (Vide No. 316).
 - 413. Coloured (coloratæ) as Red-topped Sage (Salvia Horminum).
 - 414. Caducous (caducæ) as GALENIA AFRICANA.
 - 415. Deciduous (deciduæ) as Virginian Poke (Phytolacca decandra).
 - 416. Permanent (persistentes) as Common Lime Tree (TILIA EUROPŒA).

Tuft.

- 417. TUFT (coma) bracteas terminating the stem, and remarkable for magnitude, as *Crown Imperial* (FRITILLARIA IMPERIALIS).
- Peduncle. PEDUNCLE (Pedunculi) (Vide No. 317).
- Vide Pl. 55. 418. Simple (simplex) all the peduncles arising from the same receptacles, as

Peduncle.

- Scarlet Geranium (PELARGONIUM SANGUINEUS).
- 419. Common (communis) common to many flowers, as *Fennel*, (a) *partial*, having pedicels (b).
- 420. Pedicel (pedicellus) proper, to each floret, attached to the common peduncle, as *Fennel* (b).

Varying. 1. In Place.

- 421. Radical (radicalis) attached to the root, as Aloe-leaved Water Soldier (STRATIOTES ALOIDES).
- Vide Pl. 56.
- 422. Cauline (caulinus) attached to the stem, as Many-flowered Solomon's Seal (CONVALLARIA MULTI-FLORA.)
- 423. Rameal (rameus) attached to branches, as Scarlet-flowered Pentapetes (P. PHŒNICEA).
- 424. Petiolar (petiolaris) attached to the petiole, as *Elm-leaved Turnera* (T. Alnifolia).
- Vide Pl. 57.
- 425. Tendril or clasper-bearing (cirrhiferus) having a tendril, as Common Vine (VITIS VINIFERA).
- 426. Terminal (terminalis) ending the branch, as Nine-leaved Coronilla (CORONILLA VALENTINA.)
- 427. Axillary (axillaris) inserted betwixt the branch or leaf, as Corn Bind-weed (Convolvulus Arvensis).
- 428. Opposite the leaf (oppositifolius) as Officinal Comfrey (SYMPHYTUM OFFICINALE.)

Peduncle.

- 429. Side of the flower (lateriflorus) as Officinal Swallow-wort (Asclepias Vincetoxicum).
- 430. Within the leaf (interfoliaceus) as Prickly Butcher's-broom (Ruscus ACULEATUS.)
- 431. Without the leaf (extrafoliaceus).

Vide Pl. 58. 2. Situation.

- 432. Alternate (alternus) first on one side, then on the other, as *Broad-leaved Cluytia* (C. Pulchella).
- 433. Scattered (sparsus) irregularly placed, as European Nettle-tree (CELTIS AUSTRALIS).
- 434. Opposite (oppositus) opposite the leaf, as Fly Honey-suckle (LONI-CERA XYLOSTEUM).
- 435. Verticillate (verticillatus) as Yellow Gentian (GENTIANA LUTEA).

Vide Pl. 59. 3. Number.

- 436. Single (solitarius) as Large red-flowered Aniseed-tree (ILLICIUM FLO-RIDANUM).
- 437. Double (geminatus) in pairs, as Scarlet-flowered Pentapetes (P. PHŒ-NICIA).
- 438. Umbellett sessile (umbellula sessilis)
 little umbel without peduncles, as
 Common Dog-wood (Cornus sanGuineus.)

Vide Pl. 60. 4. Direction.

- 439. Appressed (adpressus) pressed towards the stem, as the *Monk's-hood* (Aco-NITUM NAPELLUS).
- 440. Erect (erectus) as Four-leaved Herb-Paris (Paris Quadrifolia).

Peduncle.

- 441. Patent (patens) spreading, as Tamarind-leaved Mimosa (M. TAMA-RINDIFOLIA).
- 442. Drooping (cernuus) the apex pointing to the earth, as *Drooping-flowered Trillium* (T. CERNUUM).
- 443. Crowded (confertus) compacted together, as *Linear-leaved Savory* (SA-TUREJA JULIANA.)
- 444. Declined (declinatus) descending archwise, as Hairy Snake-gourd (Momordica Charantia.)
- 445. Ascending (ascendens) ascending archwise, as the Passion Flower.
- Vide Pl. 61.
- 446. Nodding (nutans) less bent down than drooping. Vide Fig. 442.
- 447. Flaccid (flaccidus) weak, so as to appear to hang down from the weight of the flower, as the Momondica Charantia.
- 448. Pendulous (pendulus) loose, so as to tend downwards, as the *Laburnum* (CYTISIS LABURNUM).
- 449. Straight (strictus) stiff, as Annual Xeranthemum (X. ANNUUM).
- 450. Flexuose (flexuosus) bending from flower to flower, as Narrow-leaved Tillandsia (TILLANDSIA TENUIFOLIA).
- 451. Retrofracted (retrofractus) appearing as if suddenly bent down by art.
- Vide Pl. 62. 452. Round (teres) as Cultivated Cherrytree (PRUNUS CERASSUS).

Peduncle. Vide Pl. 62.

- 453. Triquetrous (triqueter) three-sided, as Bear's-foot (HELLEBORUS FŒTI-DUS).
- 454. Four-cornered (tetragonus), as Grass of Parnassus (PARNASSIA PALUSTRIS).
- 455. Filiform (filiformis) resembling a thread, as *Yellow-vetchling* (LATHYRUS APHACA).
- 456. Tapering (attenuatus) gradually lessening, as the *Pontic Rhododendron* (R. PONTICUM).
- 457. Clubbed (clavatus) considerably thicker towards the top, as Annual Sunflower (Helianthus annuus).
- 458. Incrassated (incrassatus) increasing gradually in thickness towards the extremity, as Virginian Witchhazel (HAMAMELIS VIRGINICA).

Vide Pl. 63.

- 459. Naked (nudus) without hairs or bristles, as Smooth Napæa (N. LÆVIS).
- 460. Scaly (squamosus) as Hyssop-leaved Starwort (ASTER HYSSOPIFOLIUS).
- 461. Leafy (foliatus) garnished with leaves, as Shrubby Chironia (C. FRUTES-CENS).
- 462. Bracteated (bracteatus) furnished with a bractea, as the *Lime-tree* (TILIA EUROPŒA).
- 463. Geniculate (geniculatus) jointed, as Hibiscus Zeylandica.
- 464. Articulated (articulatus) knotted, as Morisonia Americana.

Size is often noticed, as very short, a. Vide Pl. 64. -short, b.-long, c.-very long, d.

465. INFLORESCENCE (inflorescentia) Inflorescence. is the manner in which plants are joined to the plant by their pe-

duncles.

Verticil. Vide Pl. 65, and 66.

466. VERTICIL (verticillus) several flowers surrounding the stem like a ring.

467. Sessile (sessilis) sitting immediately on the stem, as Yellow-flowered Sage (SALVIA GLUTINOSA).

468. Peduncled (pedunculatus) furnished with peduncles, as Black Stinking Horehound (BALLOTA NIGRA.)

Naked (nudus) without involucre or bractea. Vide Fig. 467.

469. Involucred (involucratus) furnished with an involucre, as Perennial Yellow Dead-Nettle (GALEOBDOLON LUTEUM.)

- 470. Bracteated (bracteatus) furnished with a bractea.
- 471. Crowded (confertus) the peduncles approximate.
- 472. Remote (distans) the peduncles distant.

Head. Vide Pl. 67. HEAD (capitulum) several flowers collected into a globular form.

473. Roundish (subrotundum) almost gloas Clover bular, (Trifolium PRATENSE).

Head.

- 474. Round (globosum) round on every side, as Great Globe Thistle (ECHINOPS SPHÆROCEPHALUS).
- 475. Halved or half-round (dimidiatum) round on one side, flat on the other, as *Dutch Clover* (Trifolium repens).
- 476. Leafy (foliosum) leaves intermixed with the flower, as Round-headed Trefoil (TRIFOLIUM GLOMERATUM).
- 477. Naked (nudum) without leaves or bristles, as Alpine Trefoil (TRIFO-LIUM ALPINUM).

Fascicle.

FASCICLED (fasciculatum).

478. A bundle (fasciculus) having erect, parallel, fastigiate, and parallel flowers, as Sweet William.

Spike. Vide Pl. 68.

- 479. SPIKE (spika) alternate sessile flowers, on a common simple peduncle.
- 480. Simple (simplex) continued, undivided, as CYPERUS.
- 481. Compound (composita) consisting of many spikelets growing on the peduncle, as *English Mercury* (CHENOPODIUM BONUS HENRICUS.)
- 482. Glomerate (glomerata) consisting of spikelets variously heaped together, as Round-headed Club-rush (Scir-Pus Holoschenus).
- 483. Ovate (ovata) the longitudinal diameter exceeding the transverse, as Oval-spiked Hares'-tail Grass (LAGURUS OVATUS).

Spike.

- 484. Ventricose (ventricosa) gibbous at the side, as Common Canary-Grass (PHALARIS CANARIENSIS).
- 485. Cylindrical (cylindrica) every where of the same diameter, as *Meadow Cat's-tail Grass* (Phleum Pratense).

Vide Pl. 69.

- One-sided (secunda) as Mat Grass (NARDUS STRICTA).
- 486. Interrupted (interrupta) consisting of smaller alternate distant spikes, as Spreading Chaff-flower (ACHYRAN-THES ASPERA).
- 487. Imbricated (imbricata) covering half of each other in turn, as Spanish Sage (Salvia Hispanica).
- 488. Articulated (articulata) with internodes and joints, as TRIPSACUM DACTYLOIDES.
- 489. Branched (ramosa) variously divided, as Broad-leaved Cotton Grass (ERI-OPHORUM POLYSTACHYON).
- 490. Linear (linearis) every where of an equal breadth, as Couch Grass (TRITICUM REPENS).

Vide Pl. 70.

- 491. Ciliate (ciliata) having parallel bristles disposed along the margin longitudinally, as MEADOW CAT'S-TAIL GRASS.
- 492. Foliaceous (foliacea) intermixed with leaves.
- 493. Tufted (comosa) terminated by leaflets, as Betony-leaved Vercain (Verbena orubica).

Corymbus. Vide Pl. 71.

- 494. CORYMBUS (corymbus) formed from a spike, each flower being furnished with its proper peduncle and proportionally elevated.
- 495. Simple (simplex) when each flower is furnished with its proper peduncle, as Virginian Guelder-rose (Spiræa opulifolia).
- 496. Compound (compositus) when all the flowers are elevated upon pedicels, sitting upon the common peduncles, as Common Ragwort (Senecio Jacobæa).

Thyrse. Vide Pl. 72.

- 497. THYRSE (thyrsus) a panicle condensed into an ovate form.
- 498. Spread (diffusus) scattered, as Common Lilac (SYRINGA VULGARIS).
- 499. Leafy (foliatus) clothed with leaves, as *White-flowered Colt's-foot* (Tussi-LAGO ALBA).

Raceme. Vide Pl. 73.

- 491. RACEME (racemus) a peduncle furnished with lateral branches.
- 492. Simple (simplex) undivided, as Virginian Poke (PHYTOLACCA DECANDRA).
- 493. Compound (compositus) divided into several, as the *Vine* (VITIS VINIFERA).
- 494. Unilateral (unilateralis) one-sided, all the flowers inserted on one side, as Peruvian Turnsole (Heliotro-PIUM PERUVIANUM).
- 495. One-rowed (secundus) all the flowers

Raceme.

turned to one side, as Everlasting Pea (LATHYRUS LATIFOLIA).

Vide Pl. 74.

- 496. Pedate (pedatus) the peduncle bifid, and connecting several flowers by the inner side only, as LIMONIUM SINUATUM.
- 497. Conjugate (conjugatus) ditto, with two flowers yoked together. Vide Fig. 496.
- 498. Erect (erectus) placed almost in the perpendicular line, as *Brompton*Stock (CHEIRANTHUS INCANUS).
- 499. Lax (laxus) or limber, easily bent into a bow, as Common Laburnum (Cytisus Laburnum).
- 500. Depending (dependens) or dependent, looking straight on the earth, as Red Currants (RIBES RUBRA).
- 501. Naked (nudus) without leaves. Vide Fig. 500.
- 502. Leafy (foliatus) furnished with leaves, as Common Strawberry-tree (ARBUTUS UNEDO).

Panicle.
Vide Pl. 75.

- PANICLE (panicula) scattered flowers on differently divided peduncles.
- 501.*Diffuse (diffusa) having the pedicels spreading out more than simply spreading (patens) and irregularly, as Wild Oat (AVENA FATUA).
- 502.*Compact (congesta) crowded or heaped, having numerous florets, as Soft Brome Grass (BROMUS NOL-LIS).

Fructification. 503. FRUCTIFICATION (fructificatio) a temporary part of vegetables for the purpose of reproduction.

Calyx. Vide Pl. 76.

Perianth.

- 504. CALYX (calyx) the bark of the plant, present in the fructification.
- 505. PERIANTH (perianthium) a calyx, contiguous to the fructification.
- 506. of the fructification (fructificationis) including the stamens and germen, as Common Bramble (Ru-BUS FRUTICOSUS).
- of the flower (floris) con-*507.* taining the stamens, but not the germen, as Dog's Mercury (MERCU-RIALIS PERENNIS) a stameniferous flower.
- of the fruit (fructus) con-508. taining the germen, without the stamens, ditto, pistilliferous flower.
- 509. proper (proprium) belonging to a single flower, as Hemlock Water-drop-wort (ENANTHE CRO-CATA).
- 510. One-leaved, or monophyllous (monophyllum) consisting of one foliole, or leaf, as the Orange (CITUS AURAN-TIUM).
- 511. Many-leaved, or polyphyllous (polyphyllum) consisting of several leaves, as Smooth Old-man's-beard (GERO-POGON GLABER).
- 512. Bifid, a. (bifidum) three-cleft (trifidum) as GREAT CURLED DOCK, b. four-

Perianth.

- cleft, c. (quadrifidum) as PROCUM-BENT PEARL-WORT; five-cleft, d. (quinquefidum) as GREATER STICH-WORT; many-cleft, e. (multifidum) as Smooth-seeded Horn-wort (CERATO-PHYLLUM DEMERSUM).
- 513. Two-parted, or bipartite (bipartitum) as Tuberose Moschatel; three-parted, a. (tripartitum) as Dog's Mercury; four-parted, b. (quadripartitum) as Mulberry; five-parted, c. (quinquepartitum) as Grass of Parnassus (Parnassia Palustris).
- 514. Intire (integer) not cut, as Sand Boxtree (HURA CREPITANS).
- 515. Tubular (tubulosum) internally hollow, as Monarda Fistulosa.
- 516. Spreading (patens) rising from the flower at an acute angle, as *Herb*Paris (Paris QUADRIFOLIA).
- Vide Pl. 77.
- 517. Reflexed (reflexum) the parts bent back, as GLOBE THISTLE.
- 518. Inflated (inflatum) hollow like a bladder, as Alder-leaved Hermannia (H. ALNIFOLIA).
- 519. Short (abbreviatum) or abbreviated, not as long as the tube of the corol.
- 520. Long (longum) longer than the tube of the corol, as Biennial-tree Primrose (ENOTHERA BIENNIS.)
- 521. Obtuse (obtusum) terminated within the segment of a circle, as Common-Rose-root (Rhodiola rosea).

Perianth.

- 522. Acute (acutum) terminating in an acute angle, as Great-curled Dock (RUMEX CRISPUS).
- 523. Thorny (spinosum) armed with thorns, as Star-thistle (CENTAUREA CAL-CITRAPA).
- 524. Prickly (aculeatum) armed with prickles, as Fuller's Teasel (DIPSACUS FULLONUM).
- 525. Above, or superior (superum) when the germen is under the calyx, as *Indian Reed* (Canna Indica).
- 526. Beneath, or inferior (inferum) when the germen is within the calyx, as Caper Euphorbia (E. LATHYRIS).
- 527. Common (communis), (Vide Fig. 523) containing several flowers collected together.
- 528. Imbricated (imbricatum) (Vide Fig. 523) covered with scales placed over each other.
- 529. Squarrose (squarrosum) with scales diverging on every side, as *Plowman's Spikenard* (CONYZA SQUARROSA).
- 530. Scariose (scariosum) composed of a substance, dry, parched, and sounding when touched, as Eastern Centaury (Centaurea Orientalis.)
- 531. Turbinatum (turbinatum) or topshaped, inversely conical, as Buck IVheat (Polygonum fragopy-RUM).

Perianth.

- 532. Gibbous (gibbum) having two surfaces convex, as Annual Honesty (Lu-NARIA ANNUA).
- 533. Cylindrical (cylindricum) round, without angles, as Red-stalked Erigeron (E. SICULUM).
- 534. Calyculate (calyculatum) or calycled, surrounded with another smaller calyx at the base, as Purple-flowered Prenanthes (P. PURPUREA).

Involucre. Vide Pl. 78.

- 535. INVOLUCRE (involucrum) a calyx remote from the flower.
- 536. Universal (universalis) placed beneath an universal umbel, as MARSH SE-LINUM.
- 537. Partial (partiale) placed beneath a partial umbel. (Vide Fig. 536).
- 538. Proper (proprium) placed beneath each flower, as Common Blue Passion-flower (Passiflora CERULEA).

Glume. Vide Pl. 79.

- 539. GLUME (gluma) the calyx of a grass with embracing valves.
- VERNAL GRASS; and so on, two-flowered (biflora); three-flowered (triflora); many-flowered (multiflora), as Wild Oats (AVENA FATUA).
- 541. One-valved (univalvis), two-valved (bivalvis), a. as Scirpus La-
 - Three-valved (trivalvis), b. as CA-

Glume.

- NARY GRASS; many-valved (multivalvis) as BOBARTIA INDICA.
- 542. Coloured (colorata) of any colour but green, as MAT GRASS.
- 543. Smooth (glabra) having a slippery surface, ditto.
- 544. Hispid (hispida) beset with rigid bristles, as BOBARTIA INDICA.
- 545. Unarmed (nudica) without awn, as MILLET GRASS.
- 546. Awned (aristata) having an awn.
- 547. An awn (arista) a subulate thorn fixed on the glume.
- 548. Terminal (terminalis) or terminating, fixed to the top of the glume, as Feather Grass (STIPA PINNATA).
- 549. Dorsal (dorsalis) fixed on the outside of the glume, as Sweet Vernal Grass (Anthoxanthum odoratum).
- 550. Twisted (tortilis) twisted like a cord, as WILD OAT.

Ament. Vide Pl. 80. 551. AMENT (amentum) consisting of a common, chaffy, gemmaceous receptacle, as HAZEL.

Spathe.

- 552. SPATHE (spatha) a calyx bursting longitudinally, having only one leaf, as Wake Robin) ARUM MACULATUM).
- 553. One-valved (univalvis).
- 554. Two-valved, having two leaves, as Flowering Rush (Butomus umbellatus).

Calyptra.

555. CALYPTRA (calyptra) the calyx of a moss.

Calyptra.

- 556. Straight (recta) on every side equal.
- 557. Oblique (obliqua) bent on one side, as BRYUM CÆSPITOSUM.

Volve.

- 558. VOLVE (volva) or curtain, the membranous calyx of a fungus.
- 559. Approximate (approximata) near the head or pileus, as Field Mushroom (AGARICUS CUMPESTRIS).
- 560. Very remote (remotissima) distant from the head or pileus.

Corolla. Vide Pl. 81.

- 561. COROLLA (corolla) the inner bark or liber of the plant, present in the flower.
- 562. One-petalled, or monopetalous (monopetala) composed of a single petal, as Annual Worm-grass (Spigelia Anthelmintica).
- 563. Two-petalled, or dipetalous (dipetala) two petals, as *Prickly Atraphaxis* (A. SPINOSA).
- 564. Three-petalled, or tripetalous (tripetala) three petals, as Virginian Spider-wort (TRADESCANTIA VIRGINICA).
- 565. Four-petalled, or tetrapetalous (tetrapetala) four petals, as BROMPTON STOCK.
- 566. Five-petalled, or quinquepetalous (quinquepetala) five petals, as White-beam Hawthern (CRATÆGUS ARIA).
- 567. Six-petalled, or hexapetalous (hexapetala) six petals, as *Poetic Narcis-*sus (N. POETICUS).

Corolla.

- 568. Many-petalled, or polypetalous (polypetala) many petals, as Spring Adonis (A. VERNALIS).
- 569. Tube (tubus) the lower hollow part of a one-petalled corolla, as Cow-slip (PRIMULA OFFICINALIS.)
- 570. Claw (unguis) the lower part of a many-petalled corolla, fixed to the receptacle, as Stock.
- 571. Limb (limbus) the upper dilated part of a one-petalled corolla, as the Cowslip.
- 572. Lamina (lamina) the upper spreading part of a many-petalled corolla, as the STOCK.
- 573. Regular (regularis) equal in the figure, magnitude, and proportion of the parts, as Fig. 565.
- 574. Irregular (irregularis) the parts of the limbus, or lamina, differing in figure, magnitude, and proportion, as VIOLET.
- 575. Unequal (inæqualis) when the parts correspond in proportion, but not in size, as Canada Rhodora (R. CANADENSIS).
- 576. Globular (globosa) a globose resembling a globe, as HEATH.
- 577. Bell-shaped (campanulata) or campanulate, ventricose without a tube, as Canterbury Bell (CAMPANULA TRACHELIUM).
- 578. Funnel-shaped (infundibuliformis)

Corolla.

- conical, fixed upon a tube, as Officinal Comfrey (SYMPHATUM OFFICINALE).
- 579. Salver-shaped (hypocrateriformis) or hypocrateriform, flat, fixed upon a tube, as Narrow-leaved Kalmia (Kalmia Angustifolia).
- Vide Pl. 82.
- 580. Rotate, or wheel-shaped (rotata) flat, without a tube, as Winter Cherry (Solanum Pseudo-Capsicum).
- 581. Ringent (ringens) irregular, gaping with two lips, as Common Sage (SALVIA OFFICINALIS).
- 582. Helmet of a ringent corolla (galea ringentis corollæ) the upper lip, as Wolf's-bane (ACONITUM NAPELLUS).
- 583. The lip (labium) is frequently used to denote the lower lip.
- 584. Throat (faux) the opening between the segment of the corol, as the termination of the tube, as Fig. 586.
- 585. The gape (rictus) the opening betwixt the lips, as Fig. 586.
- 586. Personate (personata) ringent, but with the palate closed, as Common Purple Fox, glove (DIGITALIS PURPUREA.)
- 587. Papilionaceous (papilionacea) irregular, consisting of keel, standard, and wings, as EVERLASTING PEA.
- 589 Keel (carina) the lowest petal, boatshaped. (Vide No. 587.)

Corolla.

- 590. Standard (vexillum) the upper petal ascending. (Vide No. 587.)
- 591. Wings (alæ) the lateral petals. (Vide No. 587.)
- 592. Cruciform (cruciata) or crossed, spreading with four equal petals, as Brompton Stock.
- 593. Concave (concava) having the margin more contracted than the disk, and the disk depressed, as CRA-TÆGUS ARIA.
- 594. Compound (composita) consisting of several florets, within a common perianth, upon a common receptacle, as Chinese Aster.
- 595. Radiate (radiata) the florets tubular, nearly equal in the centre, in the disk ligulate florets, as Chinese Aster.
- 596. Tubular (tubularis) all the florets tubular, as ASPARAGUS.
- 597. Ligulate (ligulata) or strap-shaped, the petal of the florets flat towards the end, as *Dandelion* (LEONTODON).
- 598. Imbricated (imbricata) placed one partly over the other, as Dande-

Nectary. Vide Pl. 83.

- 590. NECTARY (nectarium) the honeybearing part, proper to the flower.
- 600. Proper (proprium) distinct from the petals and other parts, as Daffodil (NARCISSUS PSEUDO NARCISSUS).
- 601. Horn-shaped, (corniculatum) or spur-

Nectary.

- red; or spur-shaped (calcaratum shaped like an horn or spur, as Columbine (AQUILEGIA).
- 602. Petaline (petalinum) inserted in the petal, as the *Crow-foot* or *Butter-cup* (RANUNCULUS).
- 603. Calycine (calycinum) fixed on the calyx.
- 604. Receptacular (receptaculaceum) attached to the receptacle, as the STOCK.
- 605. An hollow in the petal (cyathus in petalum) as Crown Imperial.
- 606. Rayed (radiatum) spread out, as Ne-RIUM OLEANDER.
- 607. Pedicelled (pedunculatum) raised on pedicels, or peduncles, as Monk's-hood (ACONITUM).

Stamen. Vide Pl. 84.

- 608. STAMEN (stamen) an organ for the formation of farina.
- 609. FILAMENT, a. (filamentum) the elevating thread, and b. the Anther (anthera) connected to it.
- 610. Equal (æqualis) all of the same length, as in the Tulip.
- 611. Unequal (inæqualis) some longer than others, as in the STOCK and DIGITALIS.
- 612. United (connata) conjoined into one body, as in the GERANIUM.

Anther.

613. ANTHER (anthera) a part of the flowers forming and containing the farina, which, when ripe, bursts.

Anther.

- 614. Distinct (distincta) not cohering with other anthers, as in most flowers.
- 615. United (connata) or connate, several joined together, as in *Cardinal-flower* (LOBELIA CARDINALIS).
- 616. Incumbent (incumbens) fixed by the middle upon the filament, as the White Lily.
- 617. Lateral (lateralis) connected by the whole side to the filament, as in the Indian Reed.
- 618. Globular (globosa) round, as in the Common Juniper.
- 619. Twin (didymæ) two together, as in the Willow.
- 620. Awl-shaped (subulata) tapering to a point.
- 621. Two-horned (bicornis) rising up like two horns, as in the HEATHS.
- 622. Bursting (erupta) throwing off elastic atoms, called pollen, or fovilla.

Pistillum. For these Vide Plates in Vol. I.

- 623. PISTILLUM, an organ adhering to the fruit for the reception of the pollen.
- 624. Above (superum) or superior, the germen placed within the corol, as Thyrse-flowered Wackendorfia (W. THYRSIFLORA).
- 625. Beneath (inferum) the germen placed beneath the corol, as *Tree Primrose* (ŒNOTHERA BIENNIS).
- 626. Pedicelled (pedunculatum) standing on a pedicel, as Spurge (EUPHOR-BIA).

Pistillum.	627. Filiform (filiforme) like a thread, as
1 istilium.	Common Bastard Balm (MELIT-
	tis melissophyllum).
	628. Awl-shaped (subulatum) like an awl.
	629. Clubbed (clavatum) like a club, as
	Leucojum.
، ر ق	630. Erect (erectum) upright.
	631 Declining (declinatum) or declined,
	descending archwise, as Shrubby
	Nissolia (N. FRUTICOSA).
	632. Ascending (ascendens) rising archwise
	upwards, as Four-leaved Kidney-
	wetch (ANTHYLLIS TETRAPHYLLA).
-	633. Stigma simple (simplex) not cleft, as
	TEASEL.
: ,	634. Bifid (bifidum) divided into two at
	top, as MARYGOLD.
	635. Trifid (trifidum) into three, as Ber-
	mudian Sisyrinchium (S. BERMU-
•	DIANA).
•	636. Four-cleft (quadrifidum) into four, as
	BLACK POPLAR.
	637. Five-cleft (quinquefidum) into five, as
	GERANIUM.
	638. Many-cleft (multifidum) into many
	parts, as Hollyhock.
•	639. Headed (capitatum) stigma large like
	a head, as POMEGRANATE.
Pericarp.	640. PERICARP (pericarpium) an organ
	of the plant filled with seeds.
Capsule.	641. A CAPSULE (capsula) an hollow
	pericarp, opening in a determinate
	manner, as Stichwort.
	642. Valve (valvula) the coat or covering
	of the fruit

Capsule) .
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- 643. One-celled (unilocularis) having one cell.
- 644. Two-celled (bilocularis) a. as Lobe-LIA; three-celled (trilocularis) b. as Spurge.
- 645. Four-celled (quadrilocularis) having four cells, as TREE PRIMROSE.
- 646. Five-celled (quinquelocularis) five cells, as SARRACENIA.
- 647. Six-celled (sexlocularis) six cells, as Birth-wort (ARISTOLOCHIA).
- 648. Eight-celled (octolocularis) eight cells, as Rose-root (Rhodiola).
- 649. Nine-celled (novemlocularis) nine cells, as *Orange* (CITRUS AURAN-TIUM).
- 650. Ten-celled (decemlocularis) ten cells, as Flax (LINUM).
- 651. Twin (didyma) two together, as Dog's MERCURY.
- 652. Cleft around (circumcissa) as ΛNA-GALLIS.
- 653. Elastic (elastice erumpens) as IMPA-TIENS BALSAMINA.

654. Inflated (inflata) as BLADDER SENNA.

Siliqua.

carp, with seeds fixed to both sutures, longer than broad, scarce any style observable at the extremity, as the STOCK.

Silicle.

656. SILICLE (silicula) same as the last, but broader than long, and furnished with a permanent style, as FUMATORY.

Silicle.

- 657. Torulous (torulosa) or torose, having protuberances here and there, as Radish (RAPHANUS).
- 658. Jointed (articulata) intercepted with knots, as *Procumbent Hypecoum* (H. PROCUMBENS).
- 659. A parallel dissepiment (dissepimentum parallelum), placed in the same direction with the valves.
- 660. An articulated ditto (D. articulatum), having joints, as H. Pro-CUMBENS.
- 661. Transverse ditto (D. transversum)
 running across from one valve to
 the other, as Myrtle-leaved
 Polygala.

Legume.

- 662. A LEGUME (legumen) a two-valved pericarp, fixed along one suture only.
 - 663. Intercepted with isthmusses (isthmis interceptum) divided transversely within two different cells.
 - 664. Open (apertum) having no divisions.

Follicle.

665. FOLLICLE (folliculus) a one-valved pericarp, opening longitudinally on one side, the seed not fixed to the suture, as Periploca.

Drupe.

- 666. DRUPE (drupa) a stuffed valveless pericarp containing a nut, as CHERRY.
- 667. A dry drupe (drupa sicca) juiceless at last, opposed to a juicy (D. suclenta).

Apple.

668. An APPLE (pomum).

Berry.

- 669. A BERRY (bacca) a stuffed valveless pericarp, containing seeds irregularly disposed.
- 670. Seeds nestling (semina nidulantia) dispersed throughout the pulp, as Gooseberry (RIBES GROSSULARIA).

Strobile.

671. A STROBILE (strobilus) a pericarp formed from an ament, the scales becoming indurated, CONE OF PINE.

Seed.

- 672. SEED (semen) composed of 1, the Scar (HILUM); 2, the Corcule (Conculum); 3, Plume (Plumula); 4, Rostel (Rostellum); and 5, Cotyledons, or Lobes (Cotyledones) the rudiment of a new plant.
- 673. Crowned (coronatum) a calycle adhering to the seed, as TEASEL.

Pappus.

- 674. PAPPUS (pappus) a feathery or hairy crown, as THISTLE.
- 675. Stipitate (stipitatus) furnished with a thread connecting the pappus and seed.
- 676. Awned (aristatus) as Annual Sun-
- 677. Naked (nudus) not awned.
- 678. Hairy (capillaris) or capillary, the hairs undivided, as Mouse-EARED HAWK-WEED.
- 679. Feathery (plumosus) consisting of feathered hairs, as PALE-FLOWERED CRICUS.

Tail.

680. The TAIL (cauda) a thread terminating the seed, as ALPINE ATRA-

681. HOOK (hamus) the pubescence, Hook. whereby it adheres to animals, as Carrot (DAUCUS CAROTA). Aril. 682. ARIL (arillus) the outer proper coat of the seed, falling off spontaneously, as Common Spindle Tree. 683. WING (ala) the membrane affixed Wing. to a seed, whereby it flies, and is disseminated, as Scotch Fir. 684. NUT (nux) a seed covered with a Nut. bony cuticle, as HAZEL-NUT. 685. RECEPTACLE (receptaculum) the Receptacle. base, which connects the parts of fructification.

- 686. Common (commune) sustaining many flowers and their fruit, as MARY-GOLD.
- 687. Punctated (punctatum) punctate or dotted, sprinkled with hollow points, as DANDELION.
- 688. Hairy (pilosum) covered with distinct long hairs, as THISTLE.
- 689. Chaffy (paleaceum) the florets separated by interposed scales, like chaffs, as Purple Rudbeckia.
- 690. Flat (planum) vide Fig. 686, with an equal surface.
- `691. Conic (conicum) or conical, columnar, attenuated towards the apex, as TEASEL.
 - 692. Subulate, or awl-shaped (subulatum)

 · linear at the base, tapering towards
 the point, as Mouse Tail.
 - 693. Of the flower (floris) the base on which the parts of the flower are

Receptaclo.

- fixed, without the germen, as BRAMBLE.
- 694. Of the fruit (fructus) the base for the fruit, remote from the receptacle of the flower, ditto.
- 695. An aggregate flower (flos aggregatus) here the receptacle is dilated, and the florets somewhat petioled, as Scabious.

Umbel.

- 696. An UMBEL (umbella) a receptacle from the same centre, elongated into proportionate filiform pedunctles.
- 697. Simple (simplex) all the peduncles arising from one and the same receptacle, as ANDROSACE.
- 698. Compound (composita) all the peduncles supporting umbellets on the summit, as BUPLEURUM ROTUNDIFOLIUM.
- 699. Proliferous (prolifera) an umbel more than decompound, as ENANTHE CROCATA.

Cyme.

700. CYME (cyma) a receptacle elongated into fastigiate peduncles, from the same universal centre, but with unequal partial ones, as LAURESTINE.

Rachis.

701. RACHIS (rachis) a filiform receptacle, connecting the florets longitudinally, so as to form a spike, as Scotch Fir.

Spadir,

702. SPADIX (spadix) the receptacle of a palm and some other plants, issuing from within a spathe, as ARUM.

Spadix.

703. Simple (simplex) not branched.

704. Branched (ramosus) as the BALMS.

Bulb.

- 705. BULB (bulbus) the hybernacle of a plant, sitting upon the root.
- 706. Tunicated (tunicatus) or coated, one coat upon another, as the ONION.
- 707. Scaly (squamosus) imbricated with scales, as the LILY.
- 708. Cauline (caulinus) sitting on the stem, as the Bulb-bearing Lily (LILIUM BULBIFERUM).

Bud.

- 709. BUD (gemma) or gem, the hybernacle of a plant from the rudiments of future leaves on the stem or branches.
- 710. Foliar (foliaris) including leaves only, as Alder-tree (Betula alnus.)
- 711. Floral (floralis) including flowers only, as *Hazel* (Corylus Avellana).
- 712. Common (communis) including both flowers and leaves, as *Peach-tree* (AMYGDALUS PERSICA).

Vernation.

- 713. VERNATION (vernatio) the disposition of leaves within the bud.
- 714. Convolute (convoluta) rolled spirally like a cowl, as CANNA INDICA.
- 715. Involute (involuta) the edges rolled in spirally on both sides towards the upper surface, as ALISMA PLANTAGO.
- 716. Revolute (revoluta) the edges rolled in spirally on both sides towards the under surface, as PRIMULA.
- 717. Obvolute (obvoluta) the margins al-

Vernation.

- ternately embracing the straight margin of the opposite leaf, as DIANTHUS.
- 718. Convolute (convoluta) as PRUNUS CERASUS.
- 719. Imbricated (imbricata) the leaflets lying crosswise upon one another in their turns, as CAMPANULA.
- 720. Equitant (equitans) converging with their edges in an opposite situation, so that one includes the other, as IRIS PSEUDACORUS.
- 721. Plaited (plicata) the leaf folded in various plaits, as VERATRUM ALBUM.
- 722. Doubly convolute, as ARUM.
- 723. Opposite involute, as Pyrus Malus.
- 724. Alternate involute.
- 725. Opposite revolute.
- 726. Doubly convolute.
- 727. Trebly convolute.
- 728. Spiral (circinalis) or circinal, the leaf rolled in spirally downwards, so that the apex occupies the centre, as Ferns.*

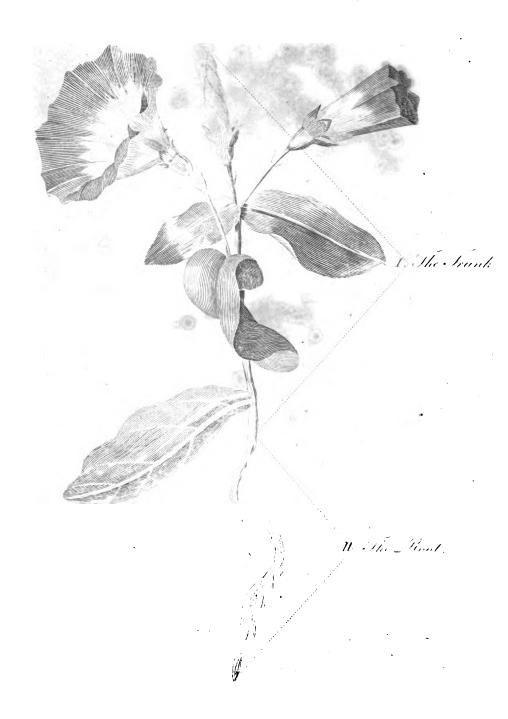
^{*} For any other terms not inserted here, consult MILNE's Botanical Dictionary, or MARTYN'S Language of Botany.



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ILLUSTRATIVE Plates.

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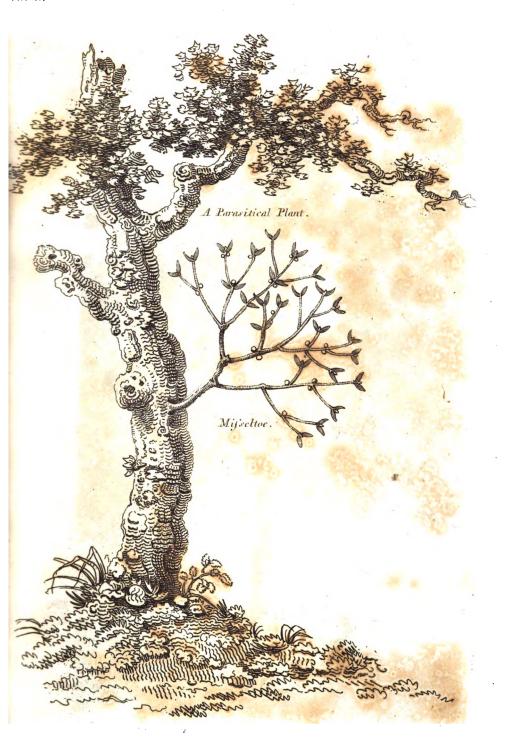


Course bulus.



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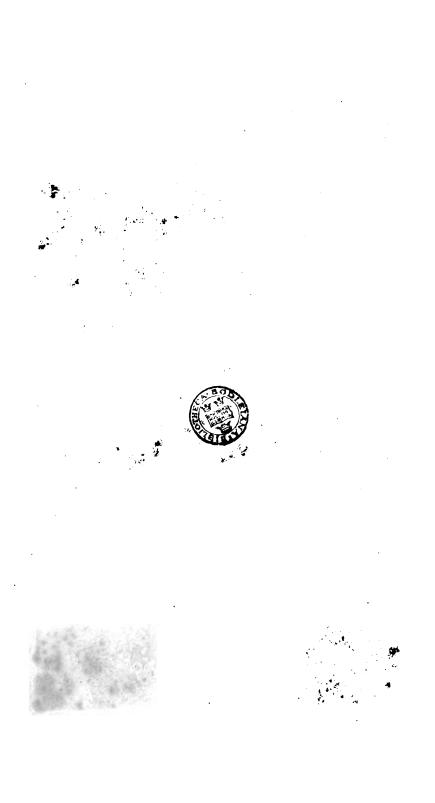
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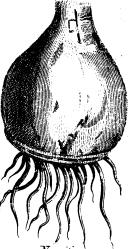
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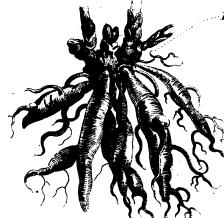
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I. FIBROUS.

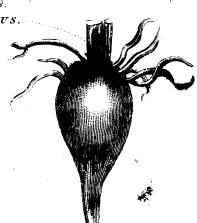




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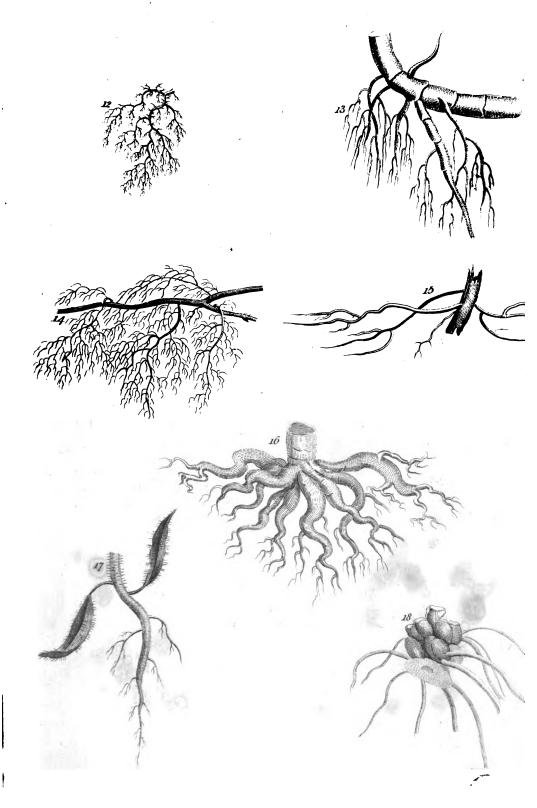


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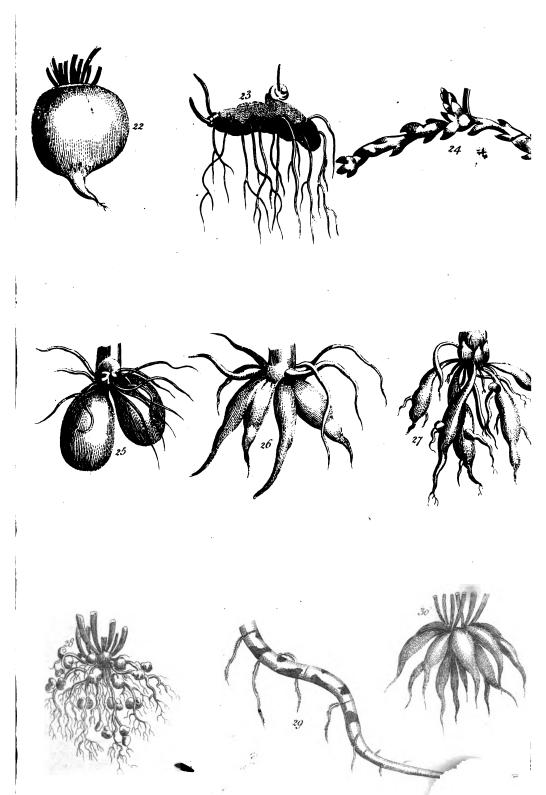
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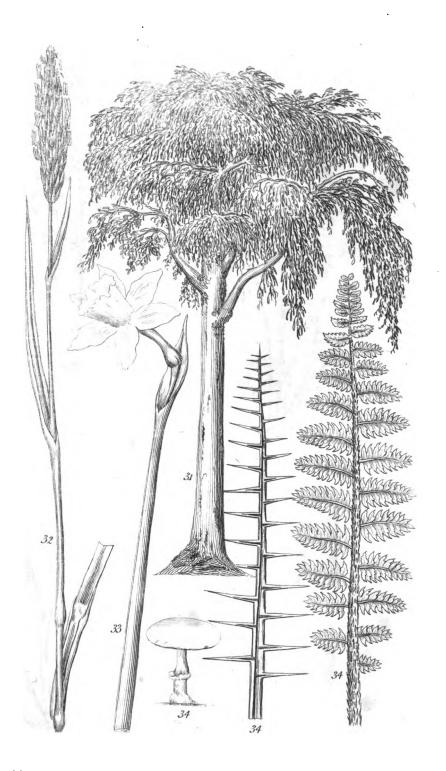






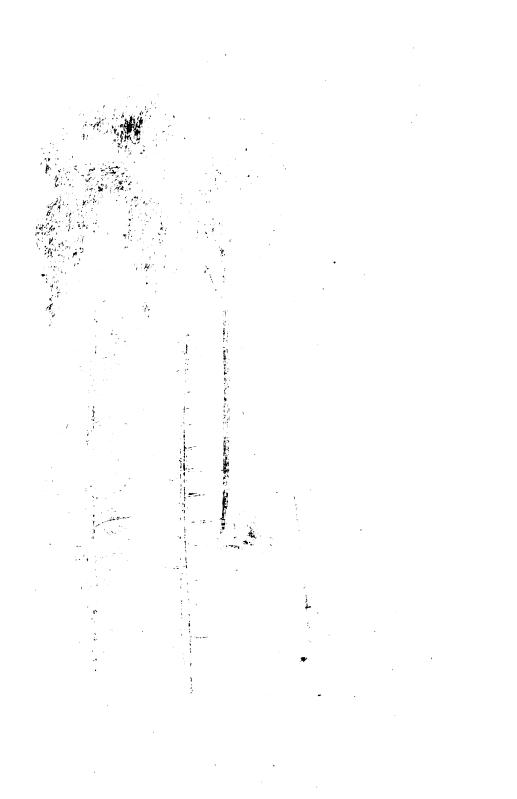
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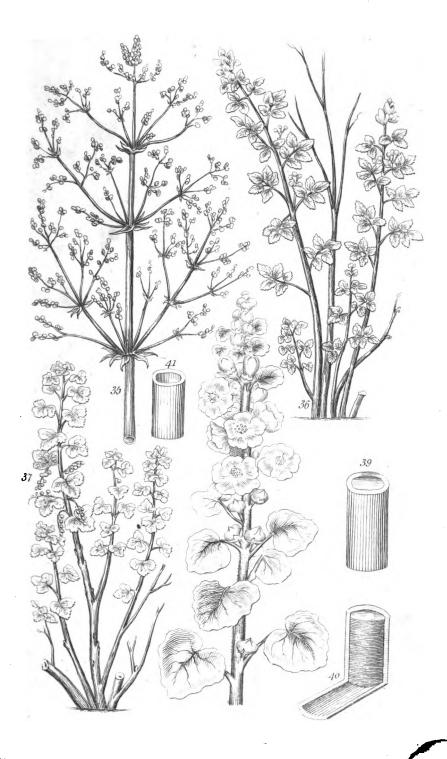




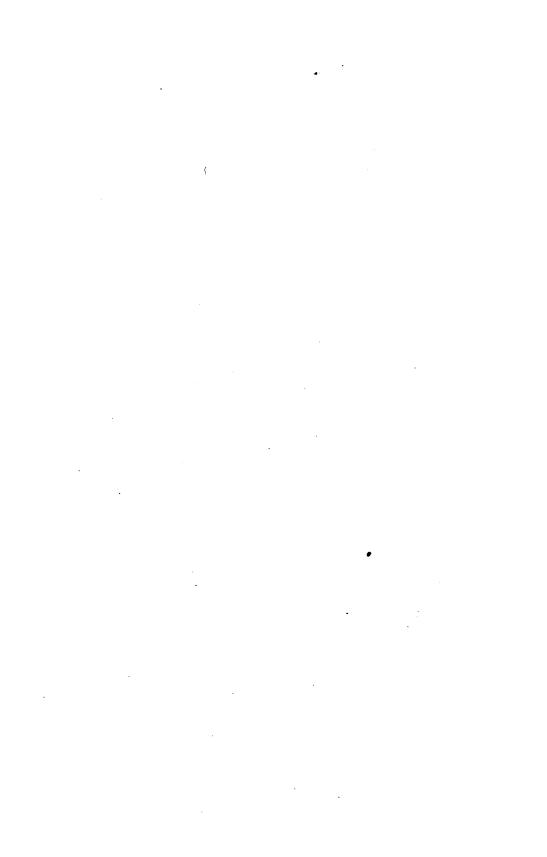
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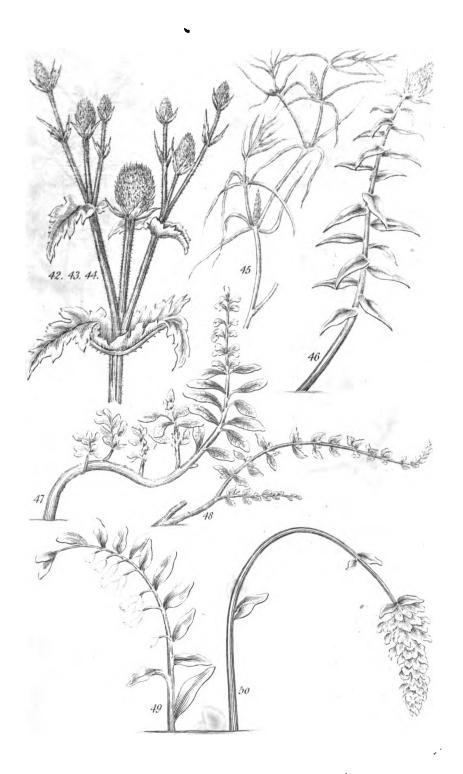
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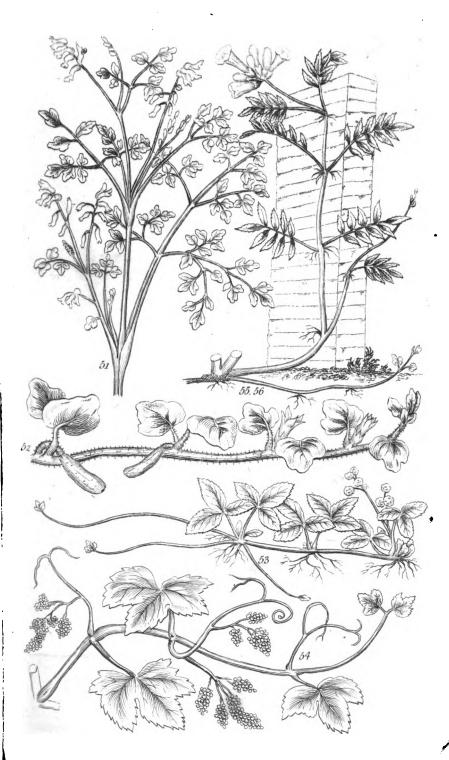




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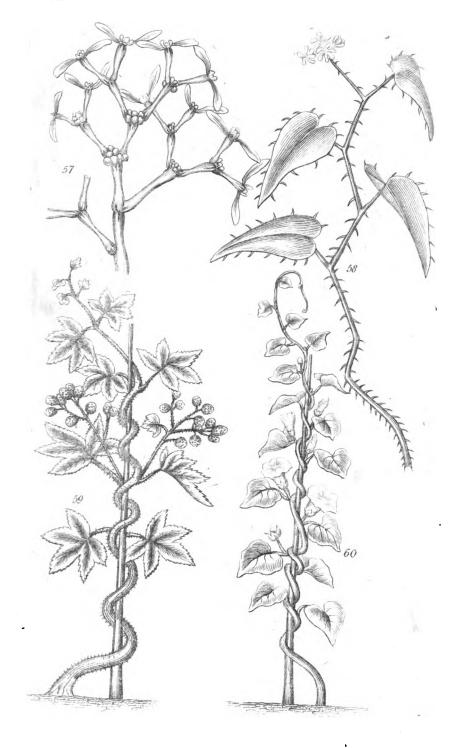
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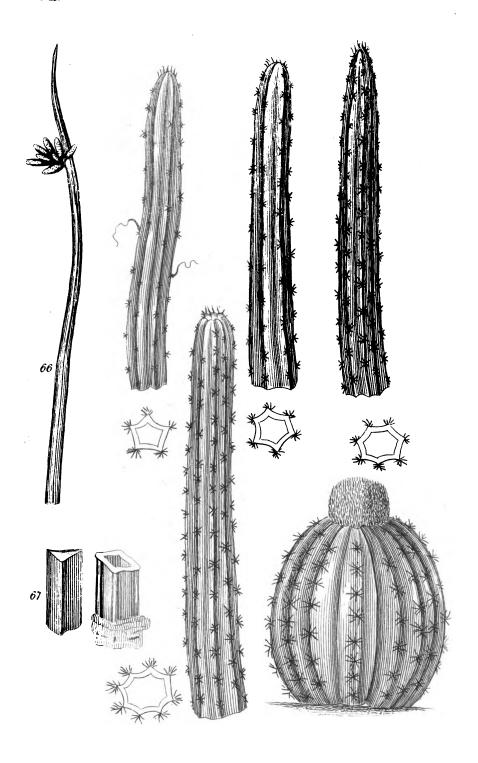
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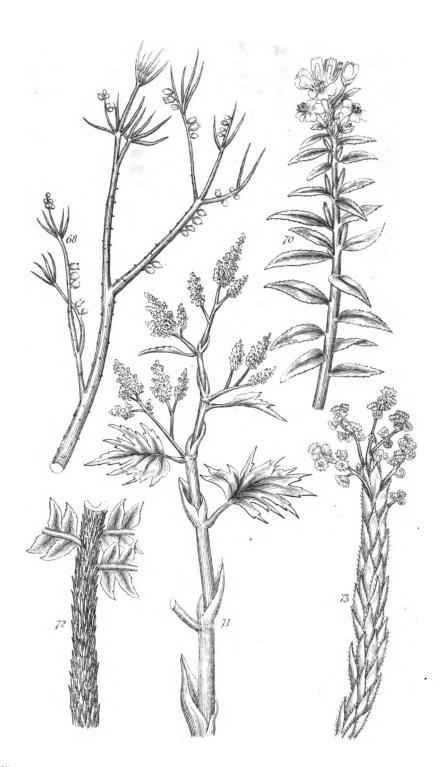
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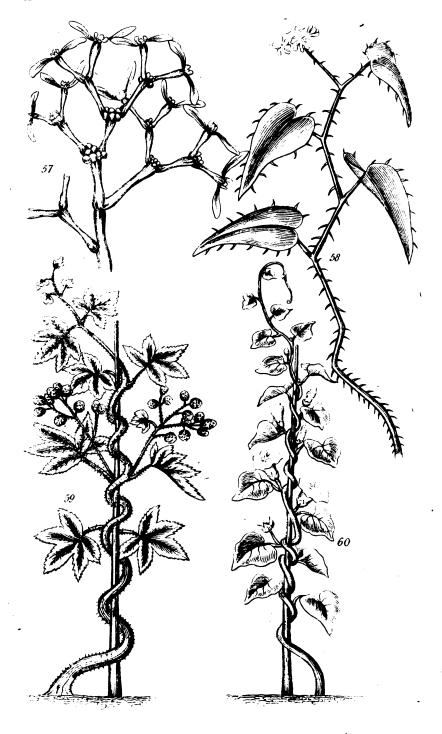
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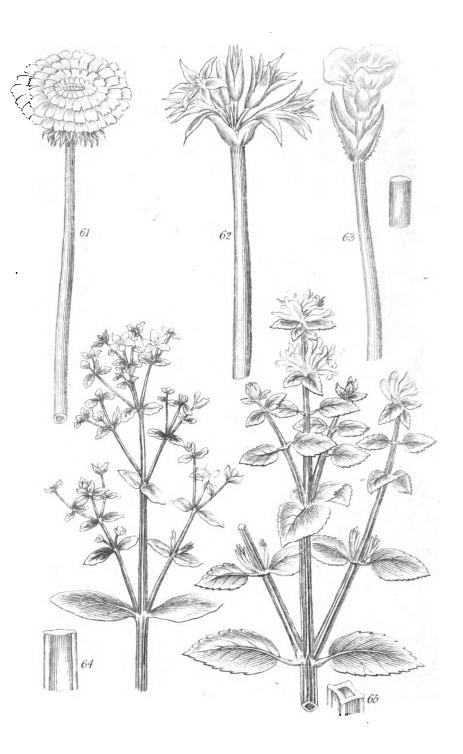
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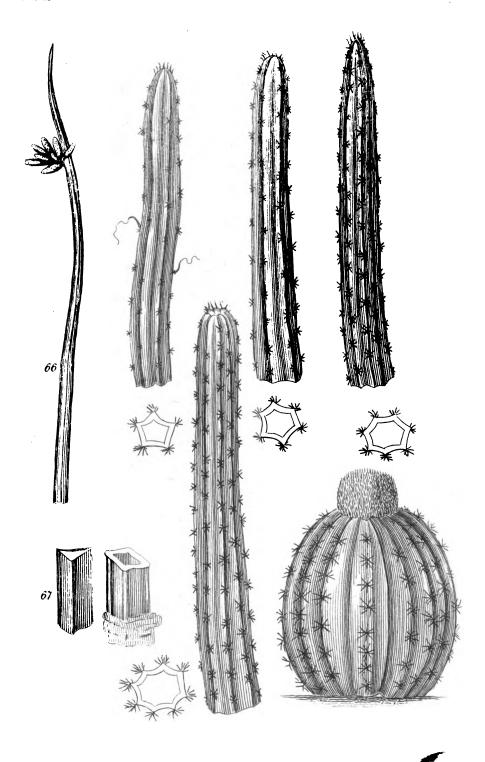
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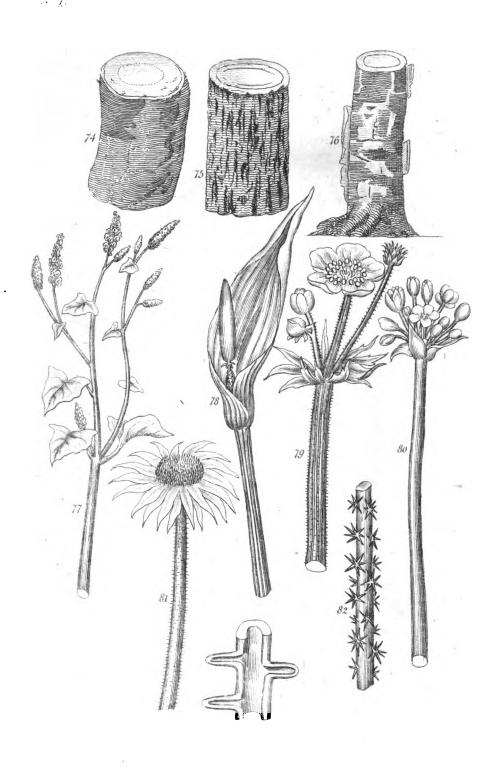


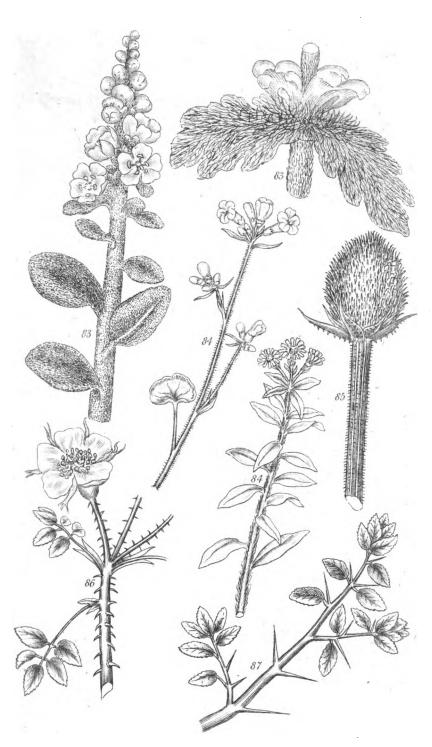
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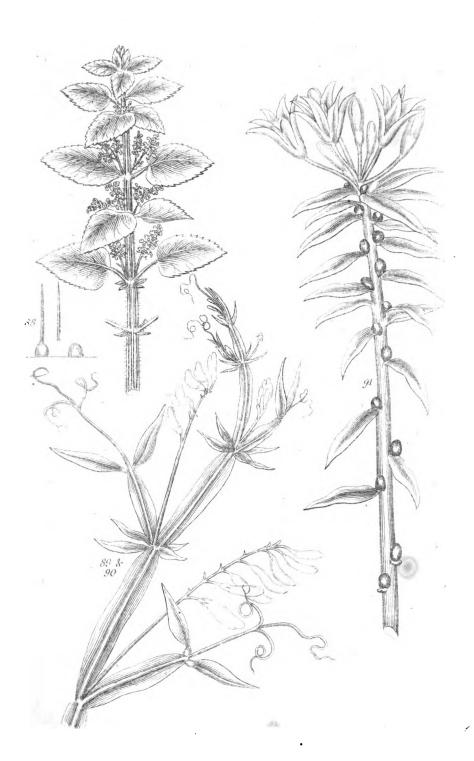
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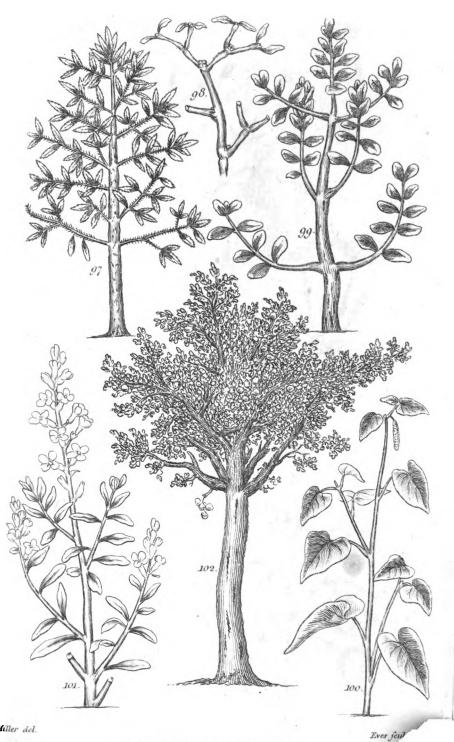




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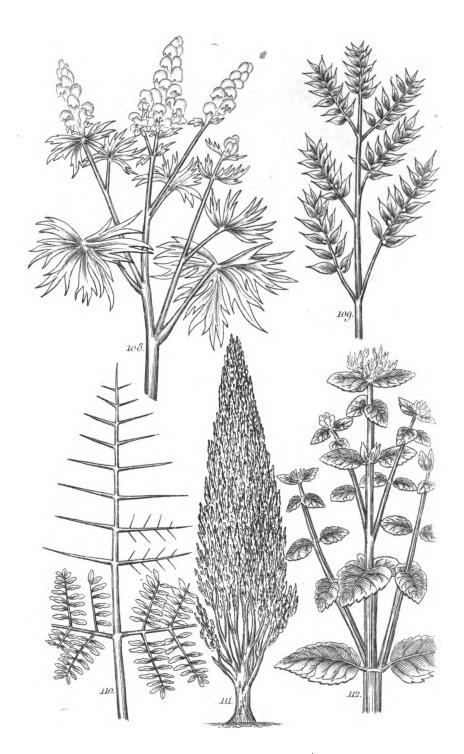




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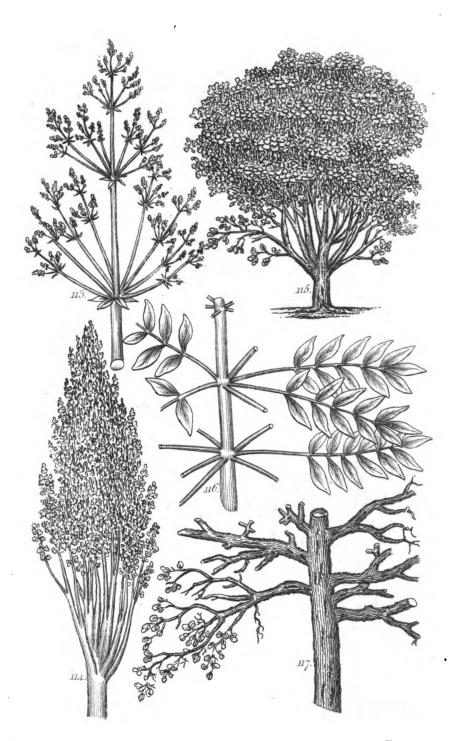
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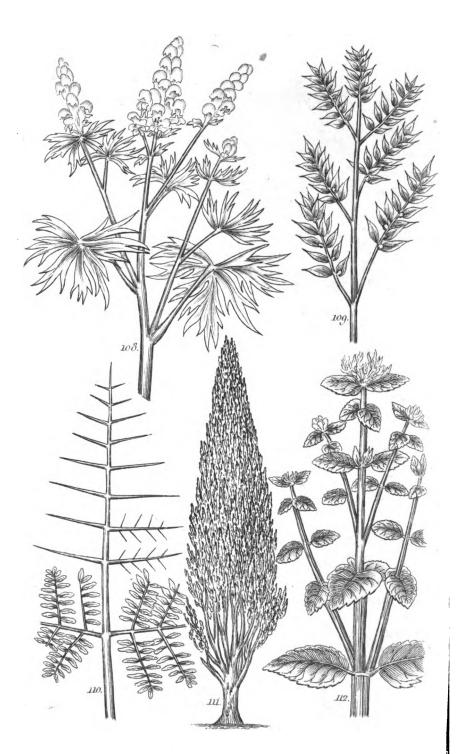
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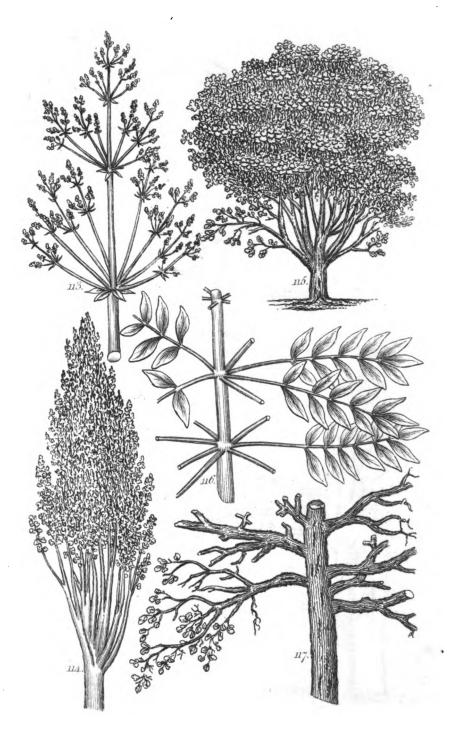
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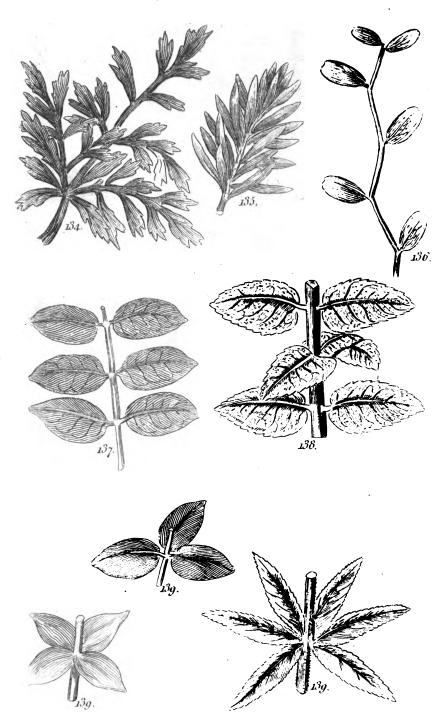
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Plate 24.



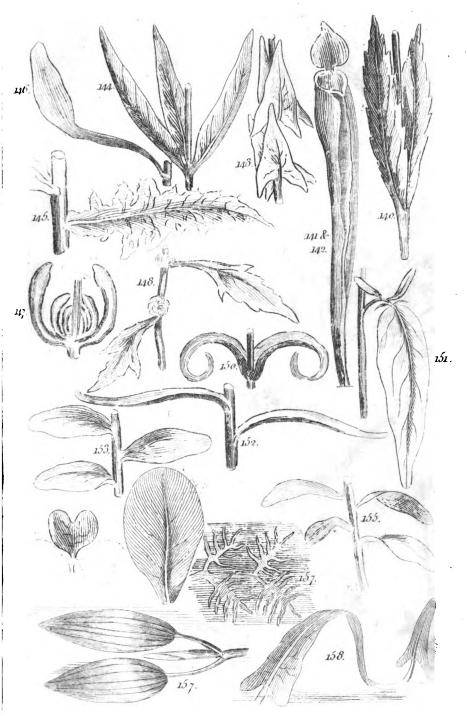
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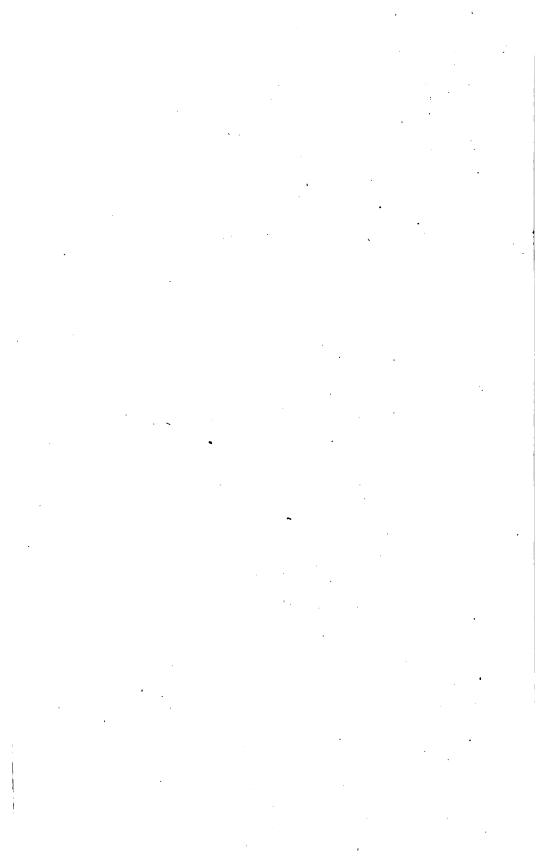
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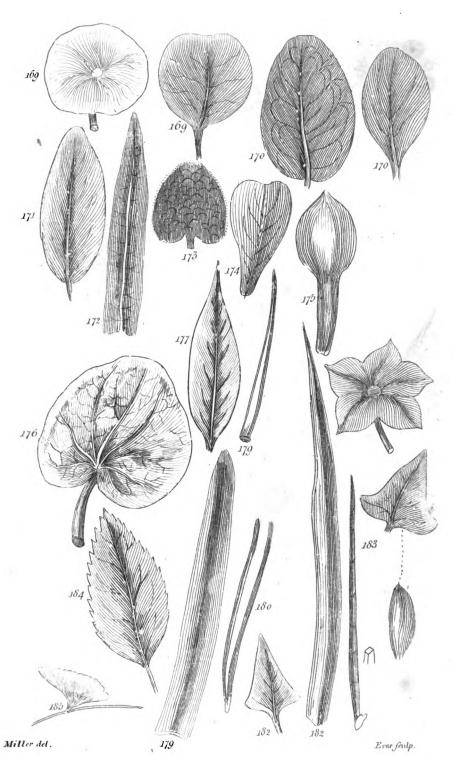
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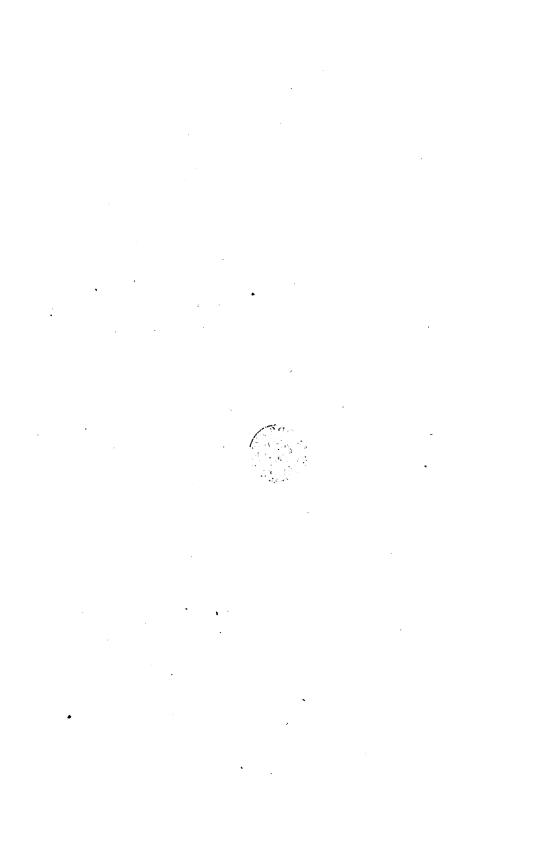
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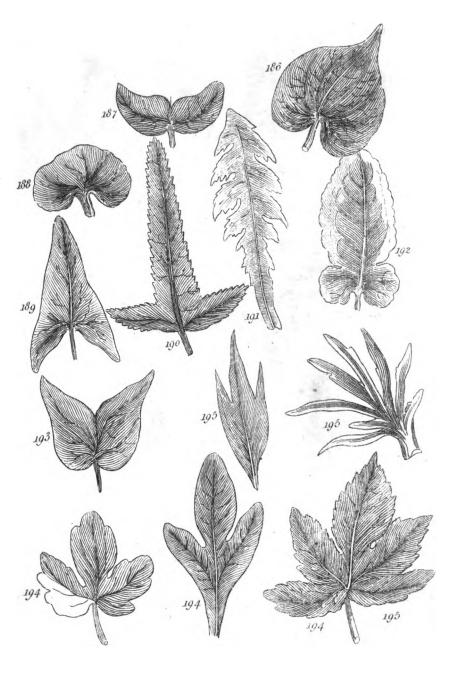
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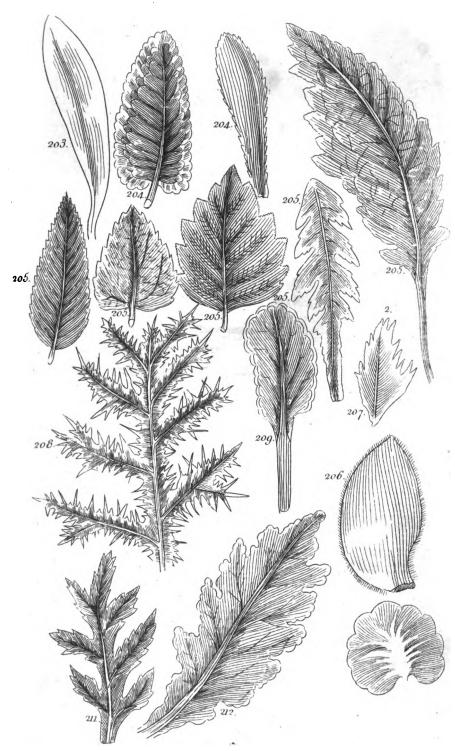


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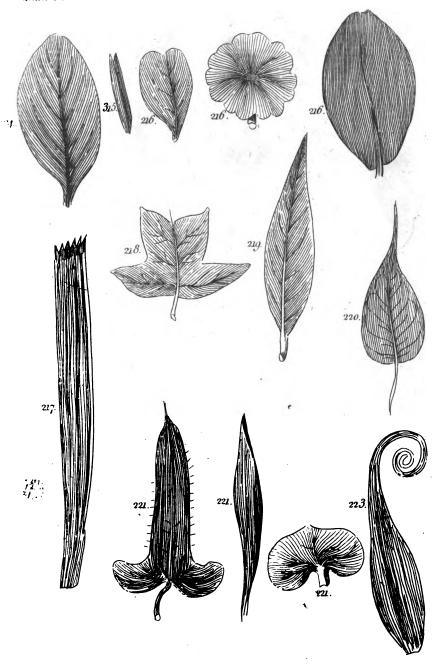
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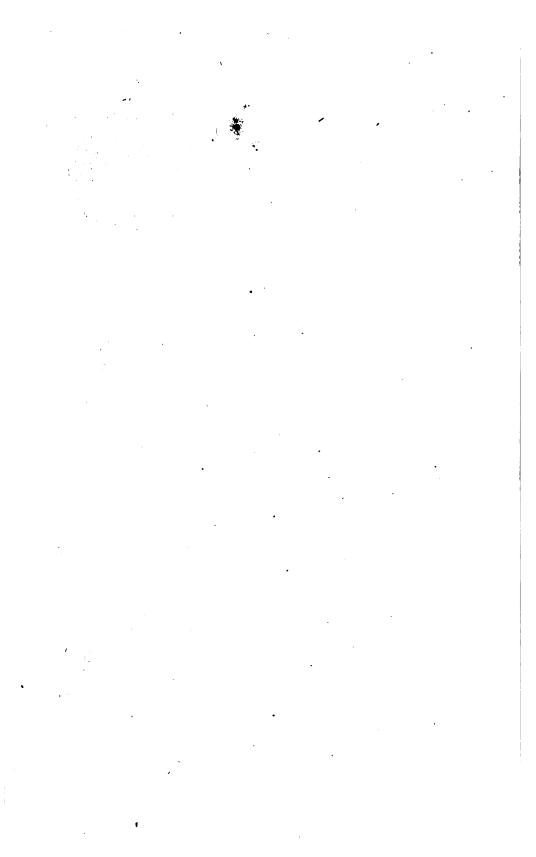


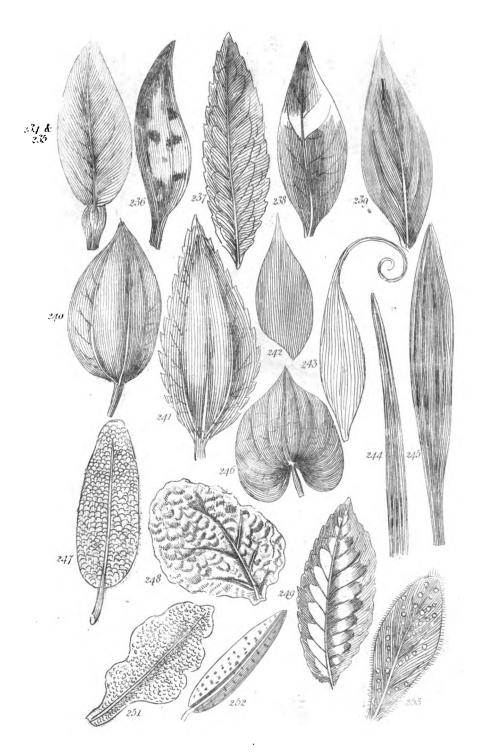
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Plate 32.







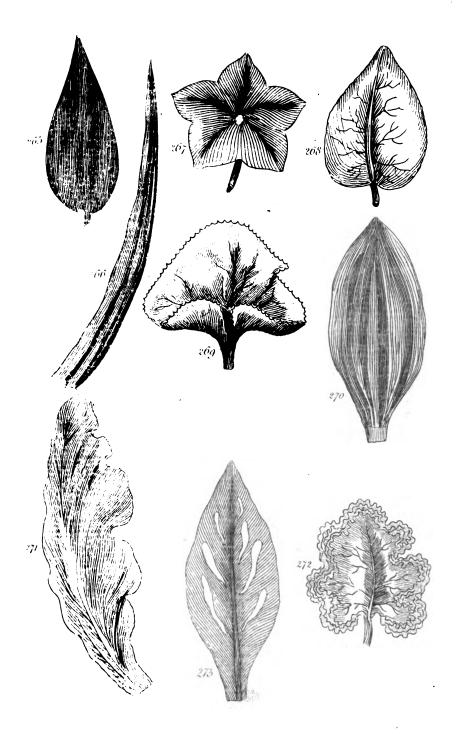
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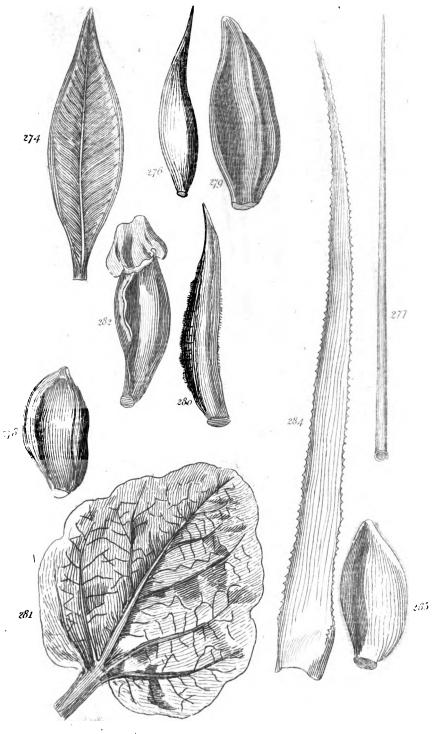


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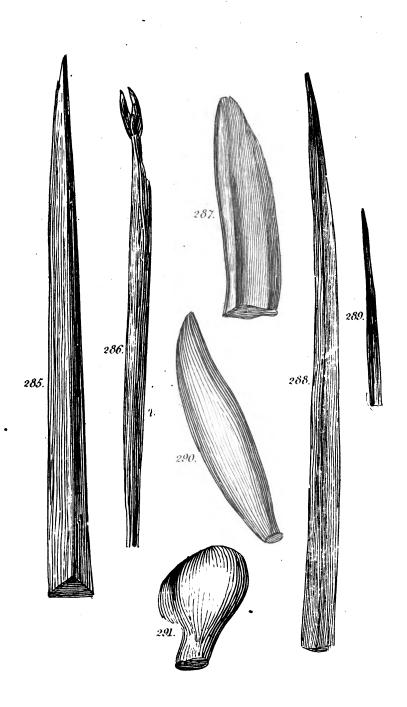
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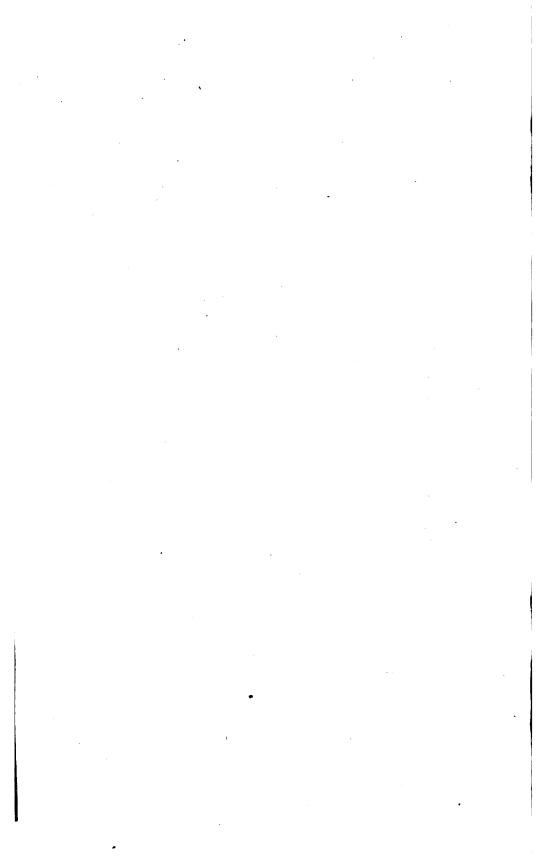
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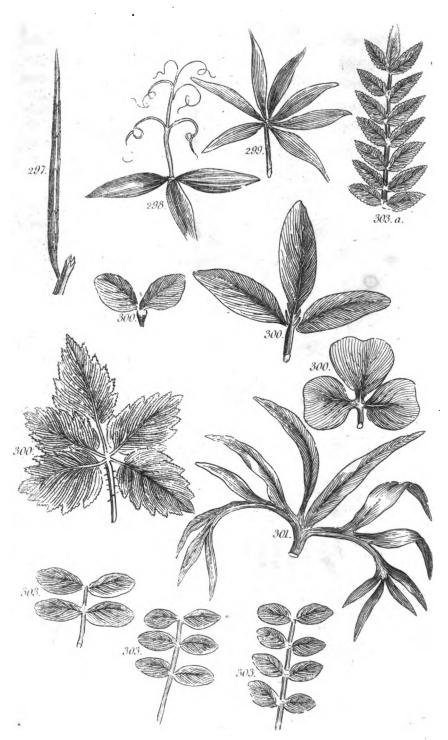
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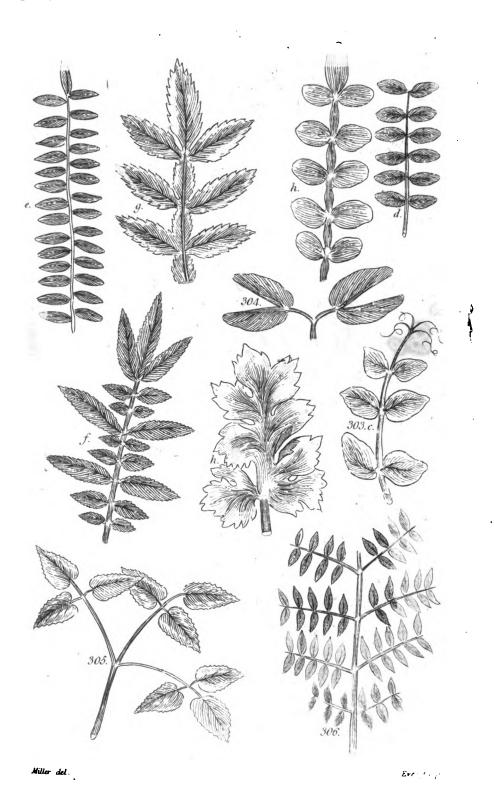
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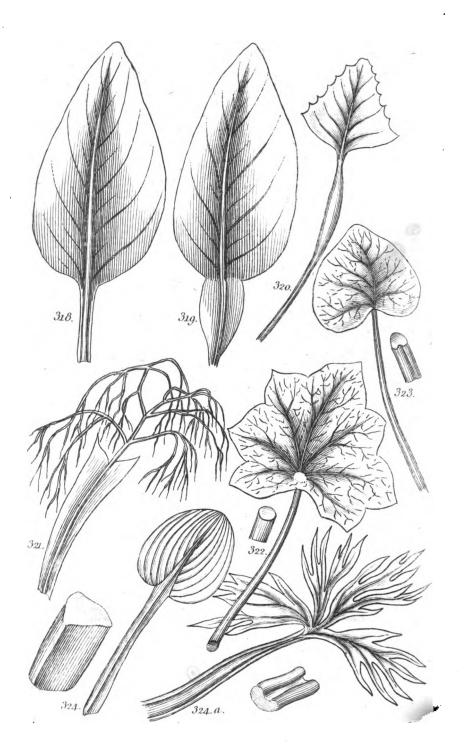
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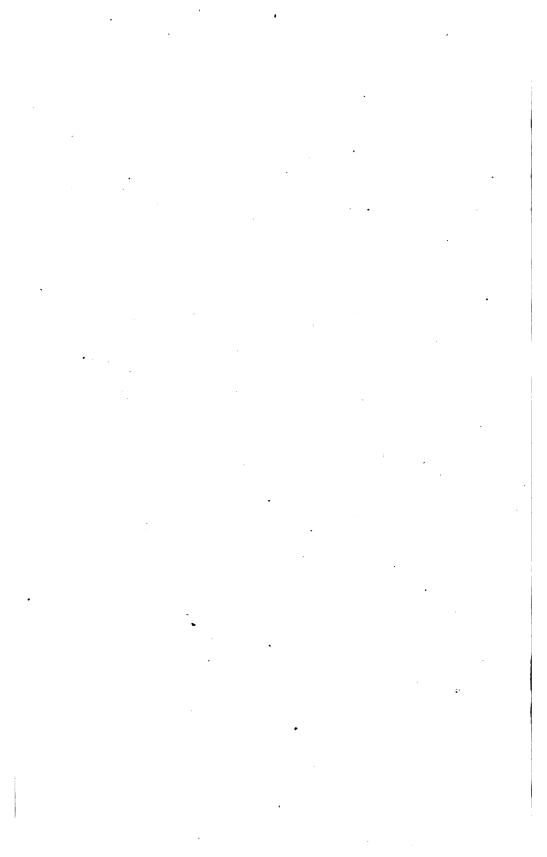


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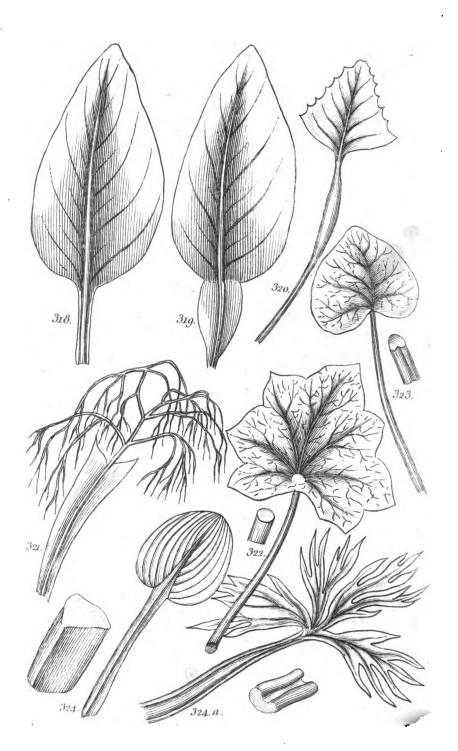


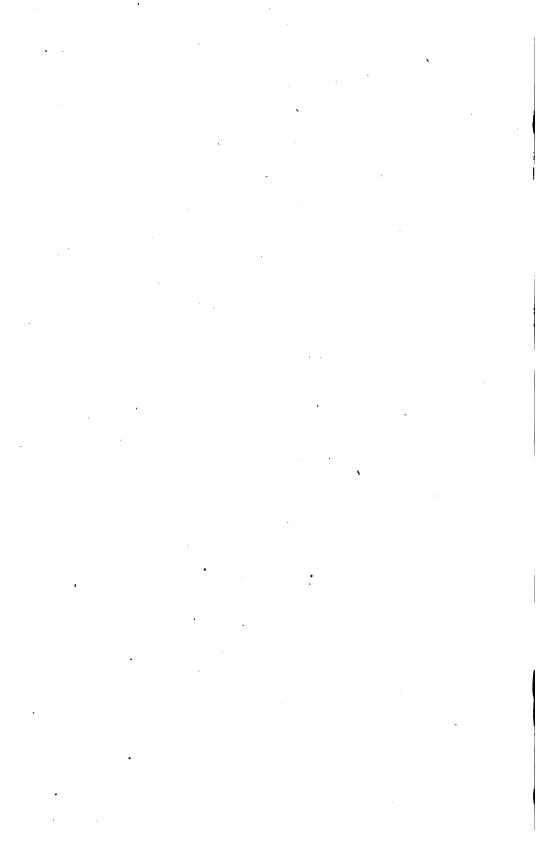


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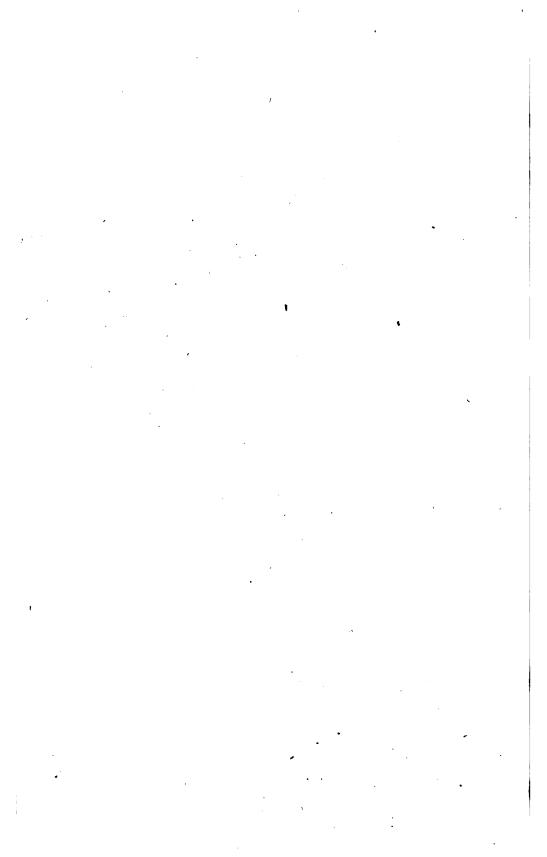


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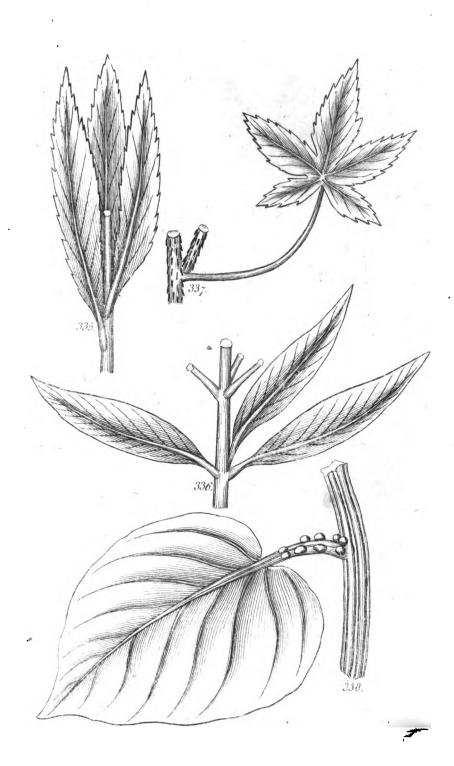






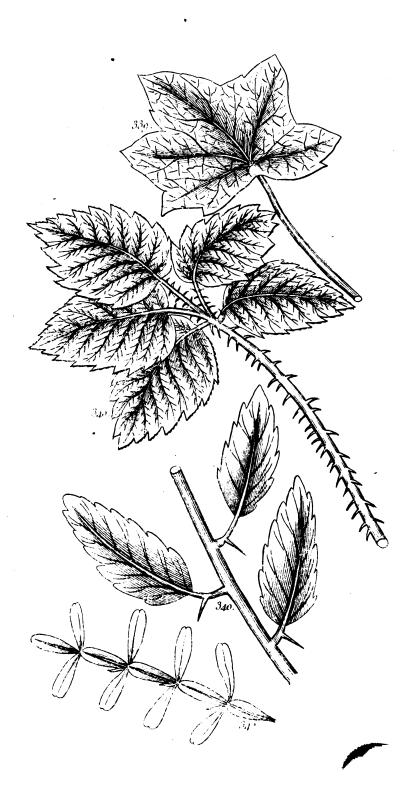


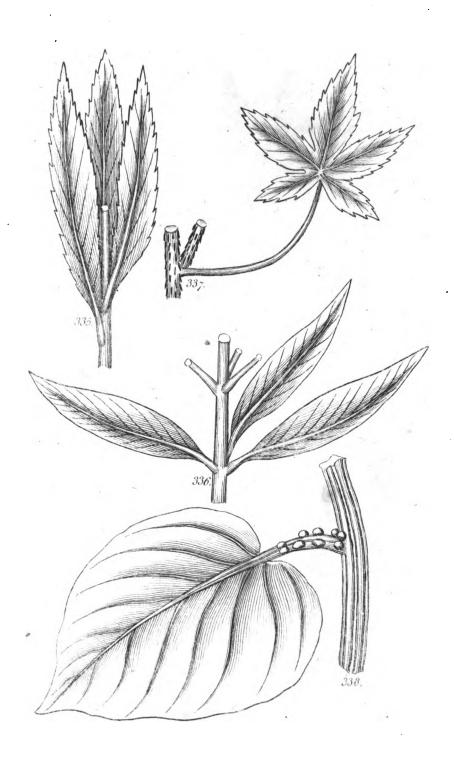
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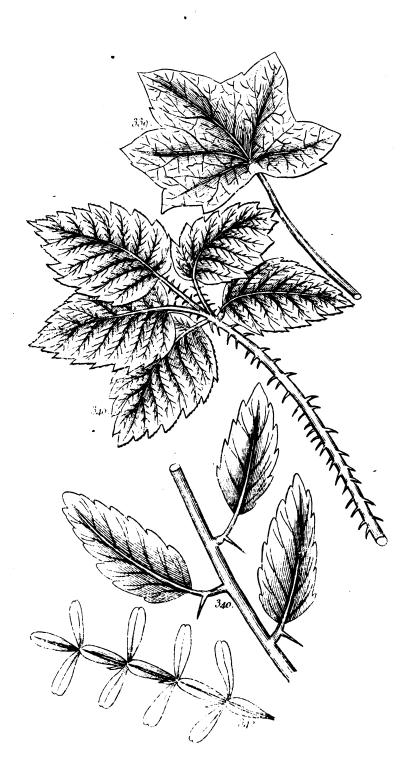


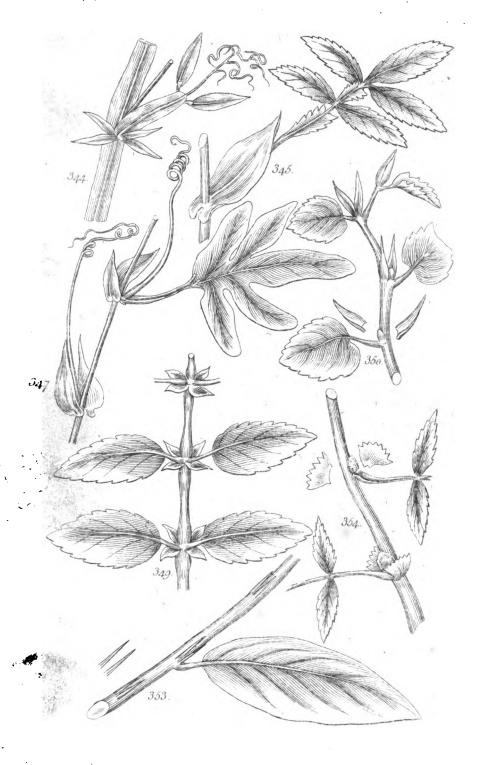




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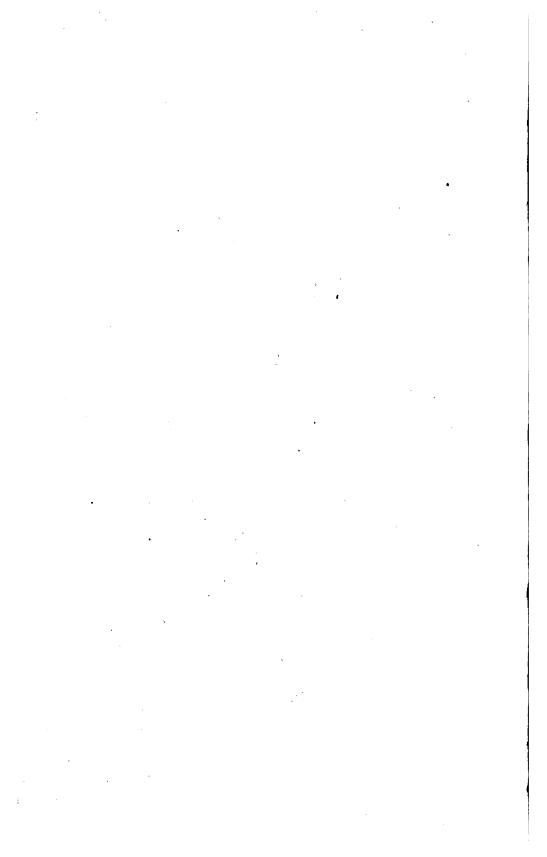


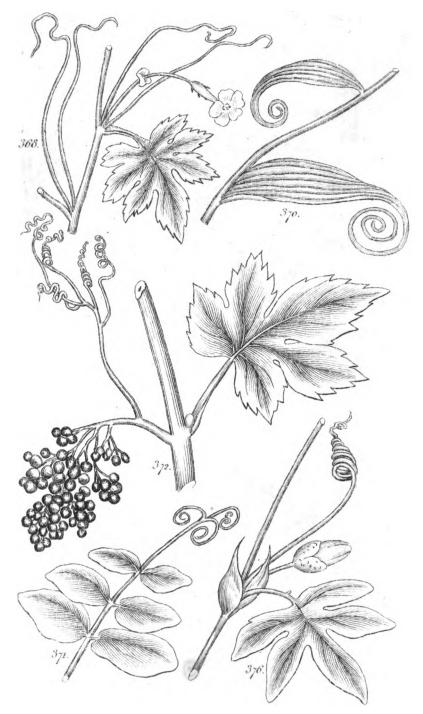
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Plate 47.



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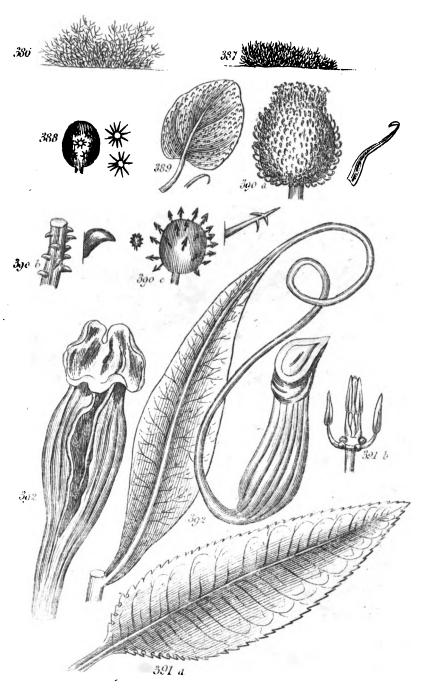
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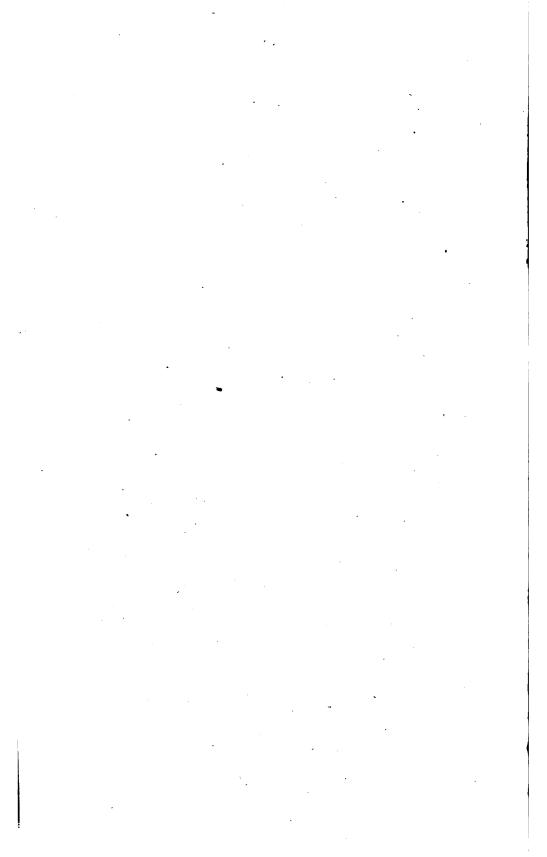
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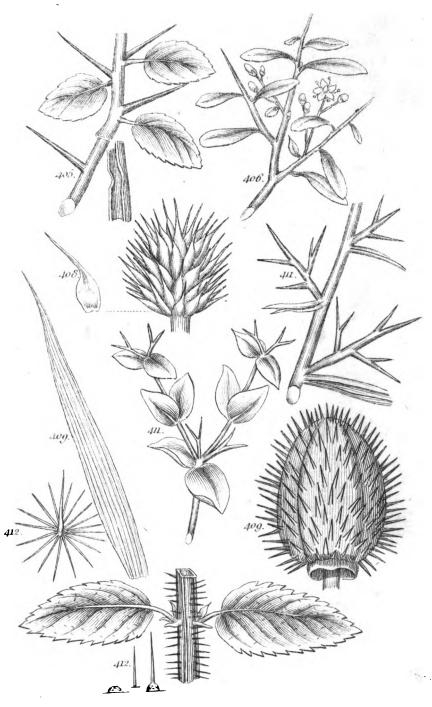
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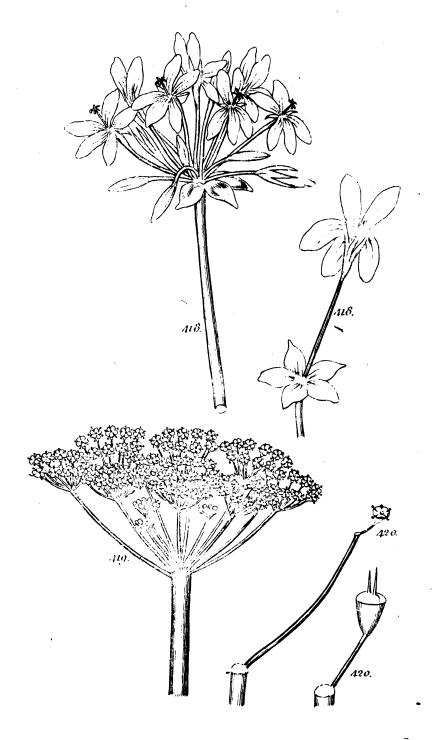
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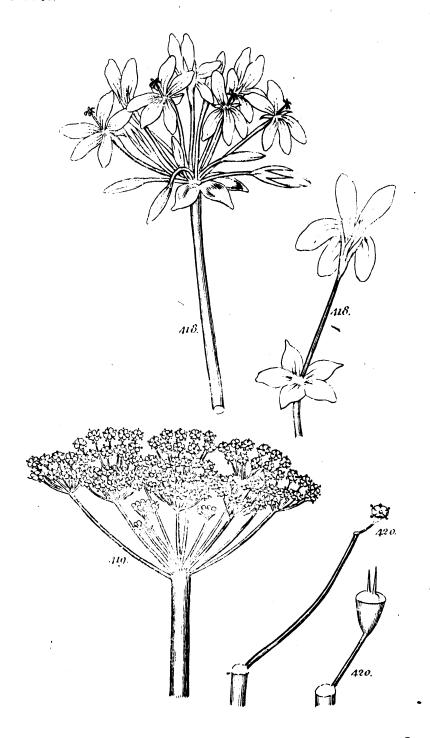
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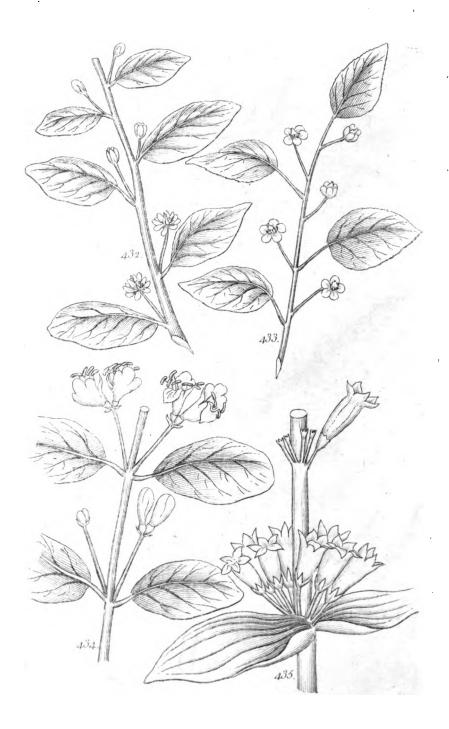


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Plate 57.



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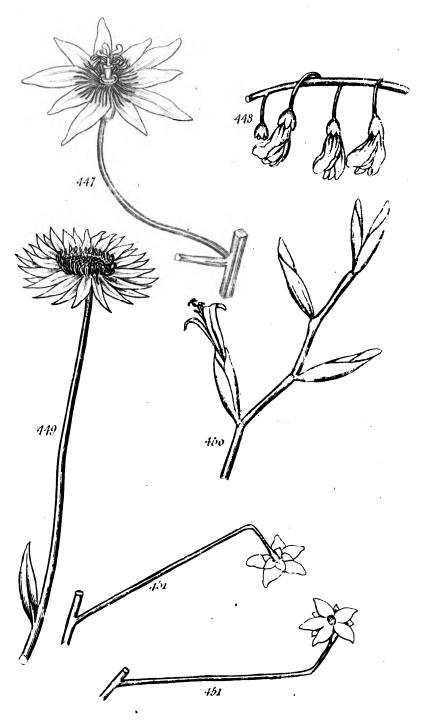


Plate 60.



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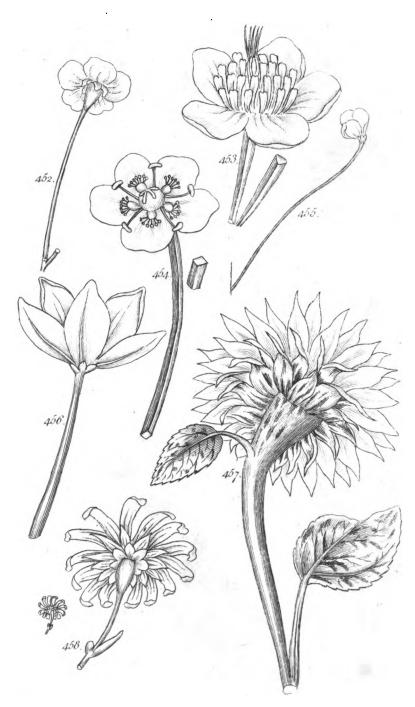
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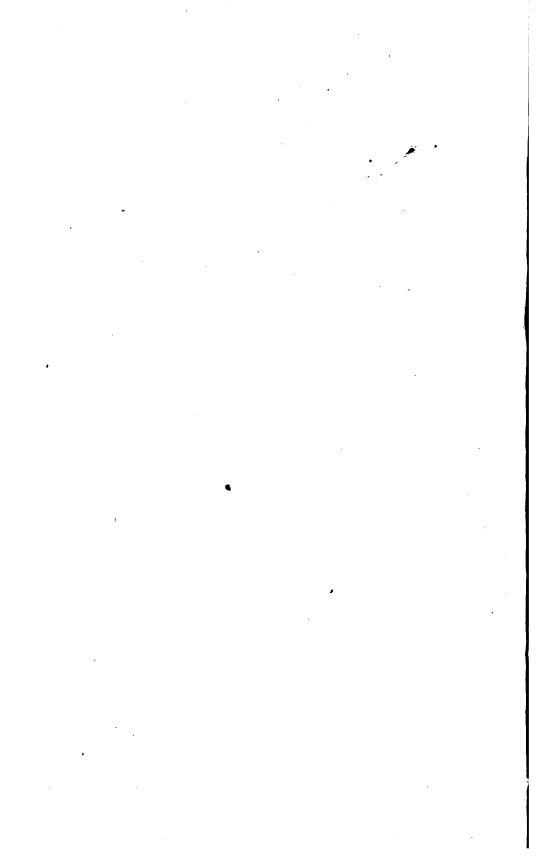
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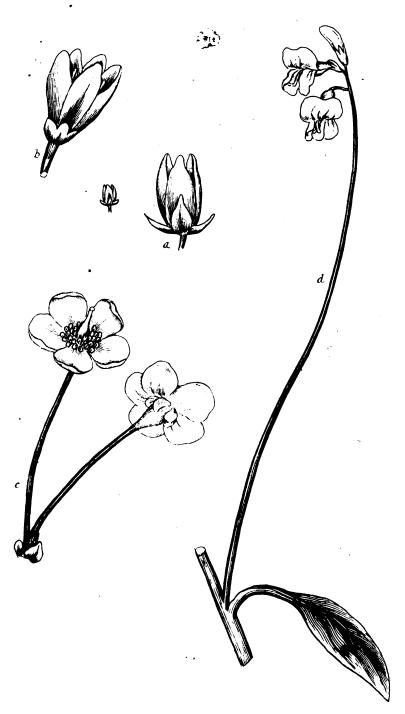
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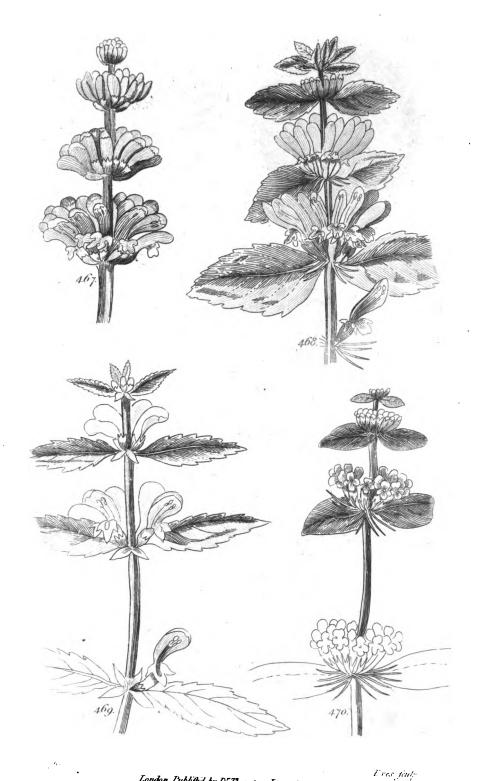
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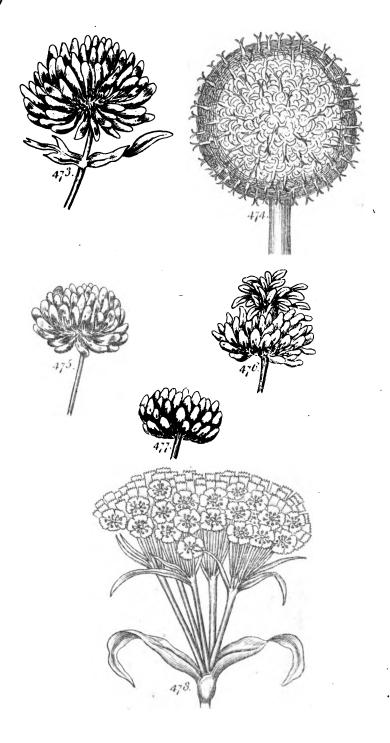


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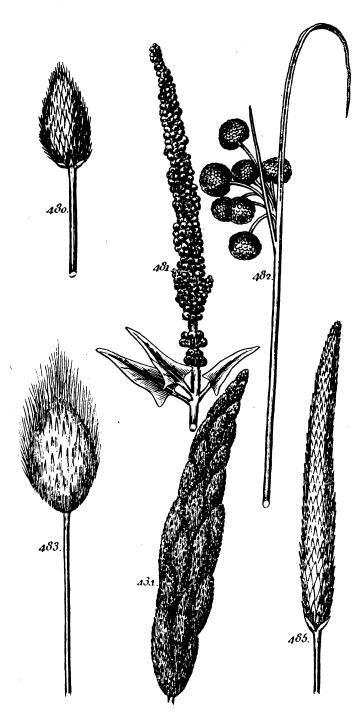
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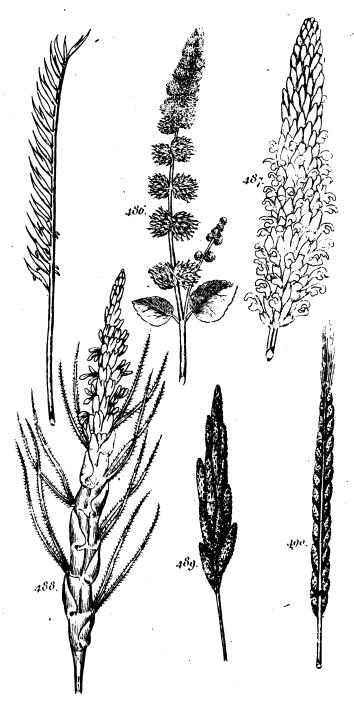
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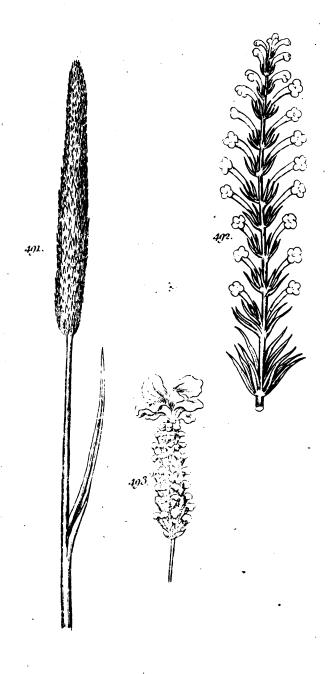
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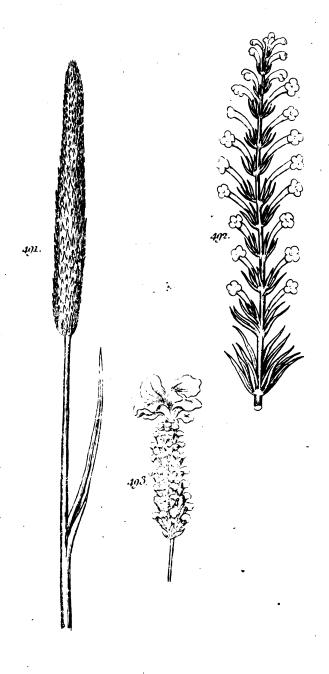


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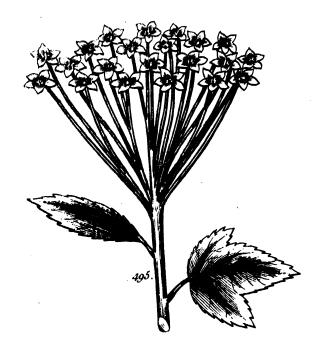
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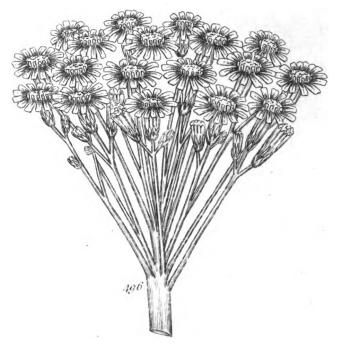
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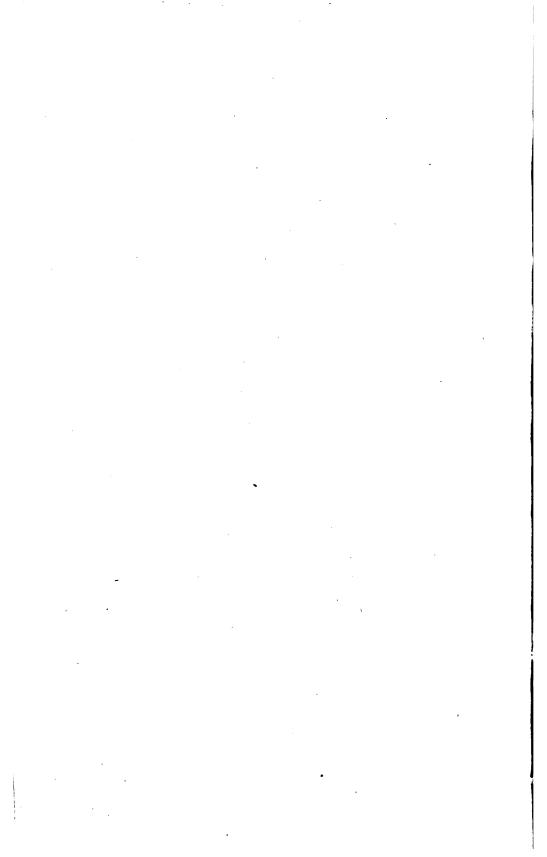


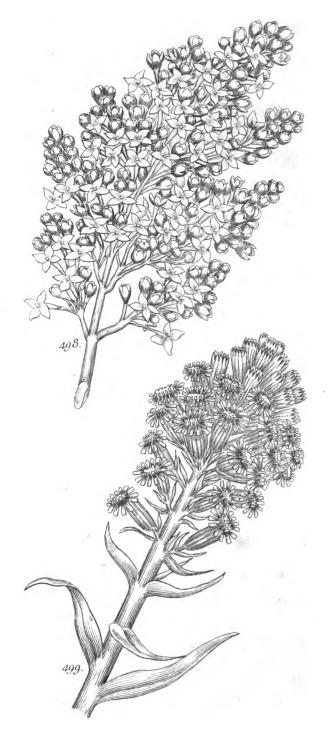
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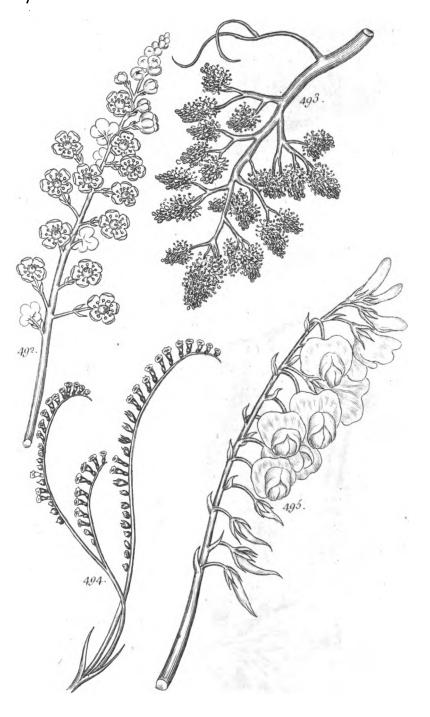




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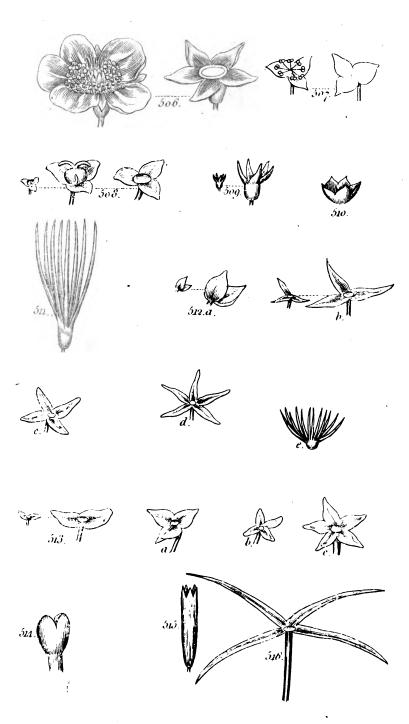
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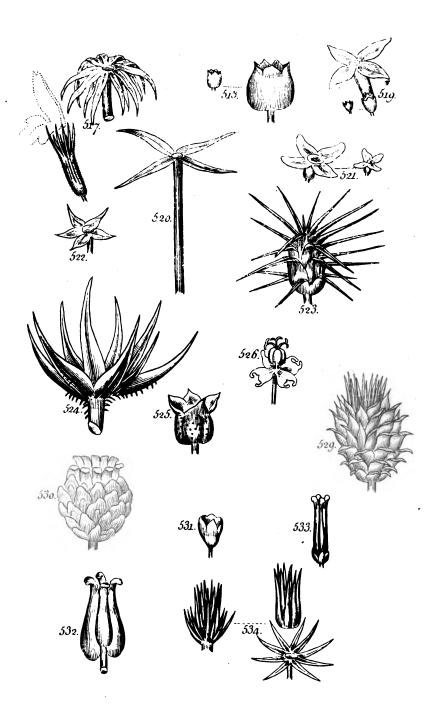


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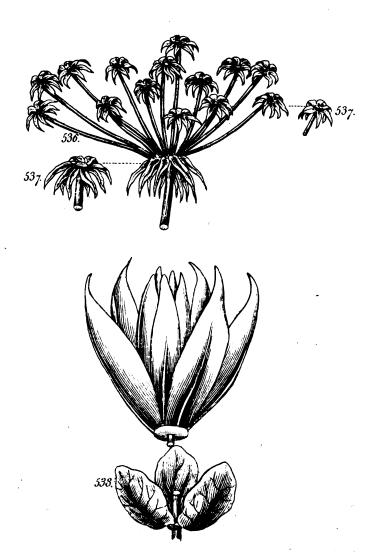


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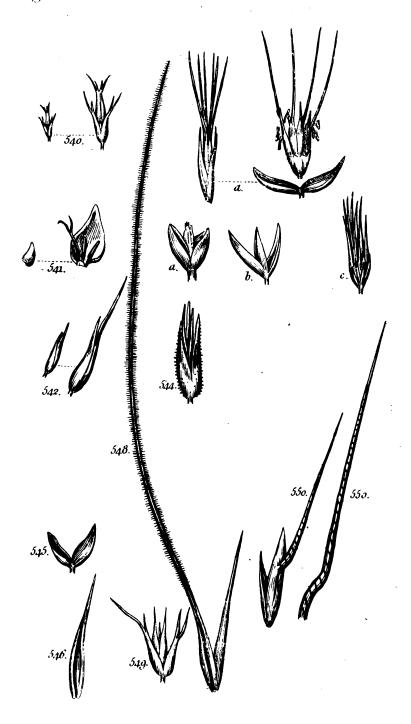


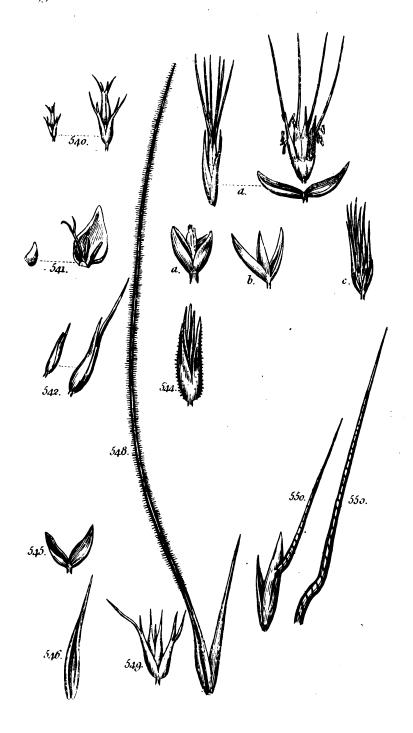
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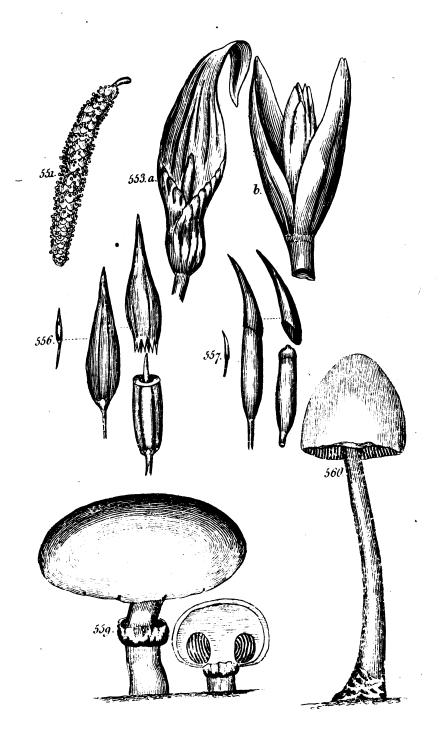




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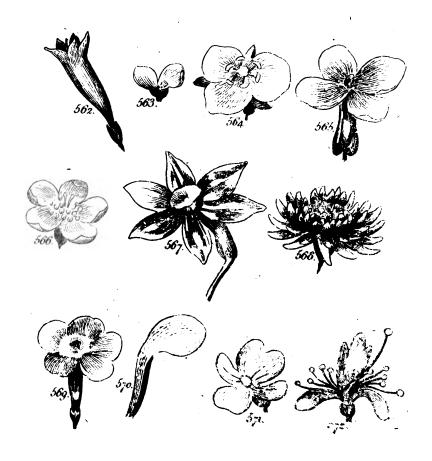
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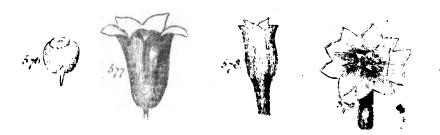




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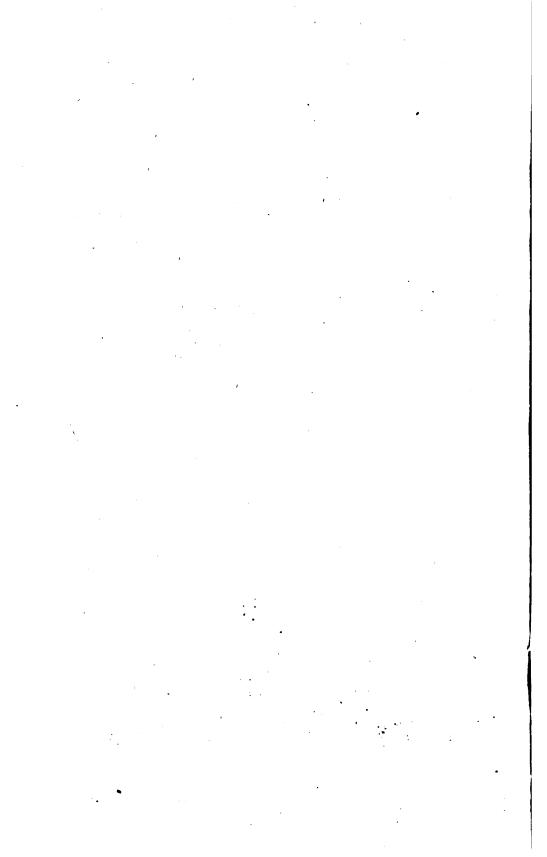
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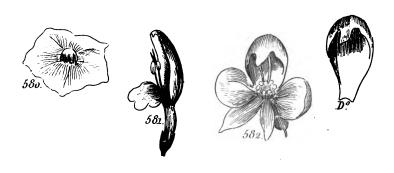


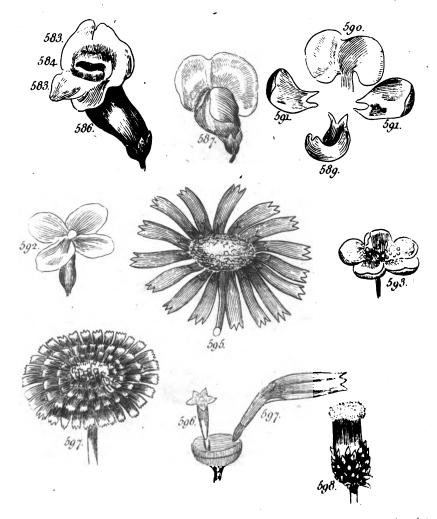


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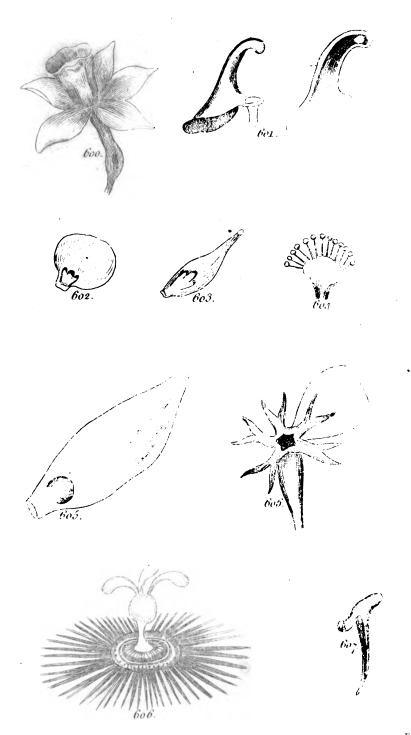




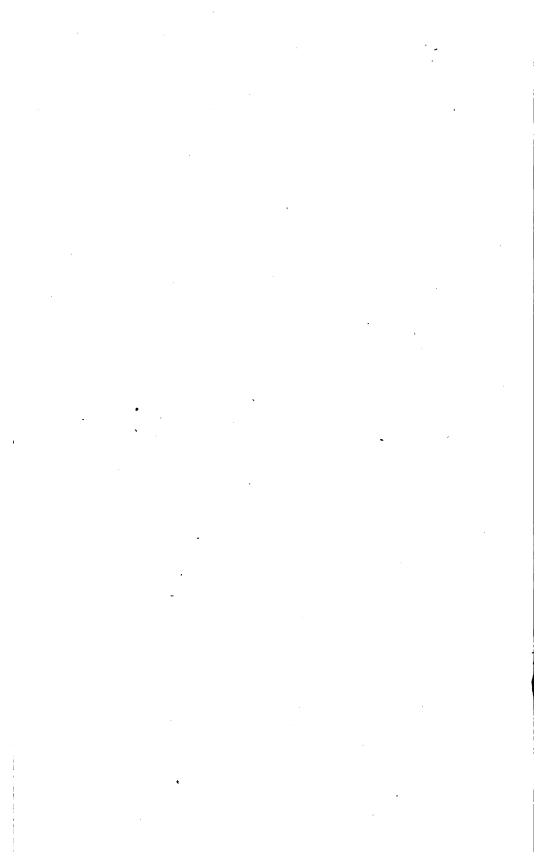
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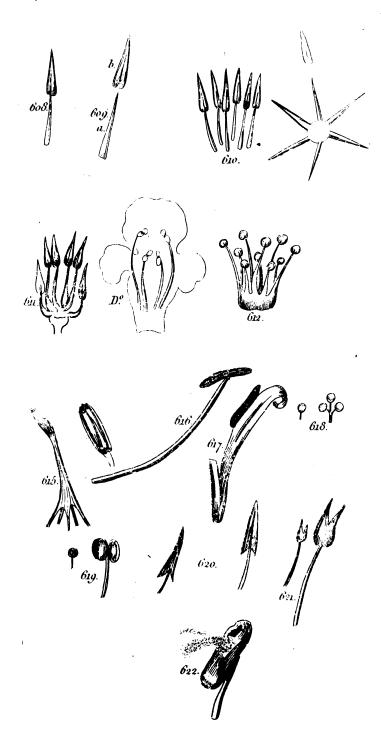
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