

*in the
7.5.19*

BOTANICAL ILLUSTRATIONS;

BEING

A SERIES OF ABOVE A THOUSAND FIGURES,

SELECTED FROM THE BEST SOURCES,

DESIGNED TO EXPLAIN THE TERMS EMPLOYED IN A

COURSE OF LECTURES ON BOTANY.

BY

←

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1837.

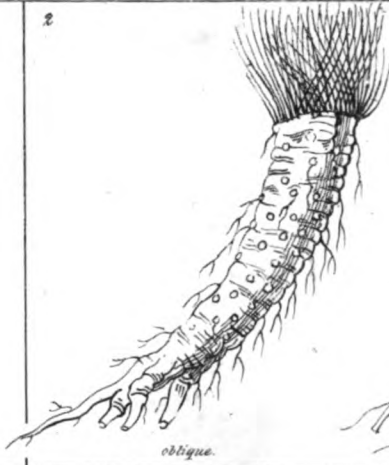


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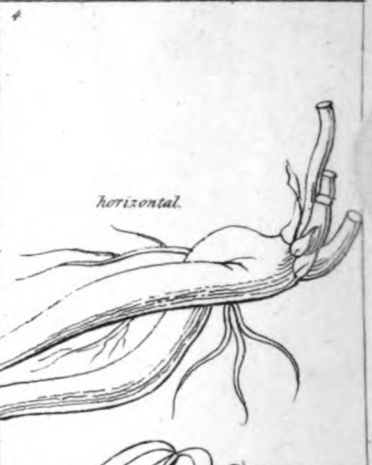
Tusi form.



oblique.



abrupt.



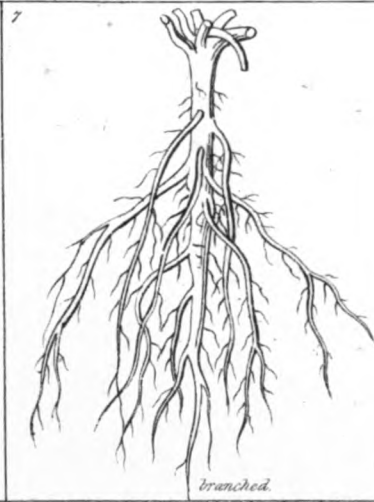
horizontal.



tortuose.



knotted.



branched.



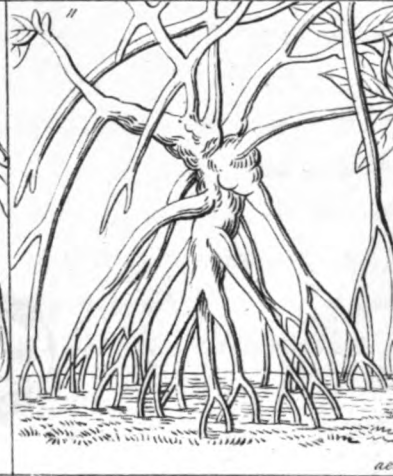
Fibres simple.



Fibres branched.



fasciculated.



aerial.



12



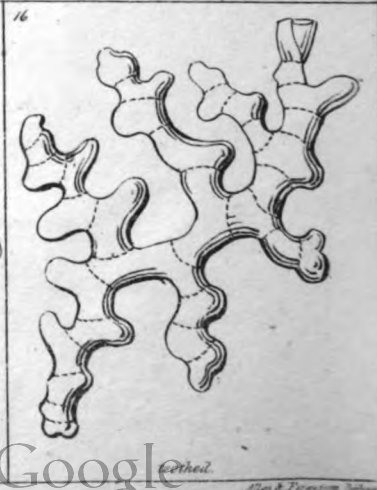
tuberulated.



creeping.



scaly.



16

TABLE I.—ROOTS.

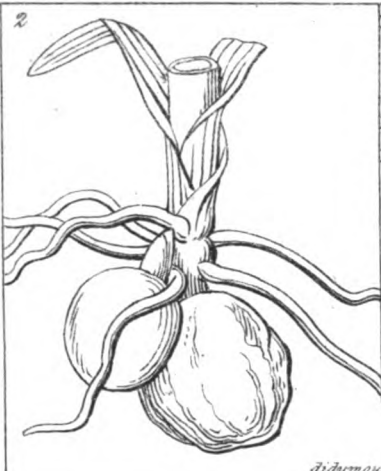
1. Perpendicular, fusiform (*Radix perpendicularis, fusiformis*). *Carrot*.
2. Oblique, fusiform (*Radix obliqua, fusiformis*). *Bald-money*.
3. Oblique, abrupt (*Radix obliqua, præmorsa*). *Devil's-bit Scabious*.
4. Horizontal (*Radix horizontalis*). *Horse-radish*.
5. Tortuose (*Radix tortuosa*). *Bistort*.
6. Knotted (*Radix nodosa*). *Ipecacuan, Cephaelis Ipecacuanha*.
7. Branched (*Radix ramosa*). *Round-leaved Mallow*.
8. Fibrous (*Radix fibrosa*), with the fibres simple, (*fibris simplicibus*). *Water-Plantain*; and
9. Fibrous (*Radix fibrosa*) with the fibres branched (*fibris ramosis*), as in numerous *Dicotyledonous* Plants.
10. Fasciculated (*Radix fascicularis*). *Pile-wort*.
11. Aerial (*Radix aerea*). *Mangrove-Tree*.
12. Aerial (*Radix aerea*). *Ivy*.
13. Tuberculated (*Radix tuberculata*). *Dodder*.
14. Creeping (*Radix repens*). *Least Spike-rush, Elæocharis acicularis*.
15. Scaly (*Radix squamosa*). *Greater Tooth-wort, Lathræa squamaria*.
16. Toothed (*Radix dentata*). *Spurless Coral-root, Corallorhiza innata*.

TABLE II.—ROOTS.

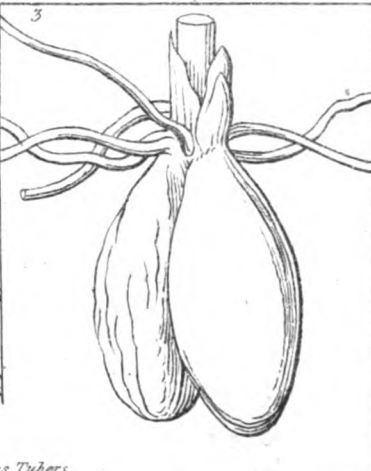
1. Solitary Tuber (Tuber solitarium). *Sow-bread, Cyclamen Europæum.*
2. Didymous Tubers (Tubera didyma), with the tubers subglobose (tuberibus subglobo-
bosis). *Green-winged Meadow Orchis, Orchis Morio, and*
3. Didymous Tubers (Tubera didyma), with the tubers oblong (tuberibus oblongis).
Early purple Orchis, Orchis mascula; and
4. Didymous Tubers (Tubera didyma) with the tubers palmated, (tuberibus palmatis).
Spotted palmate Orchis, Orchis maculata.
5. Granulated Tubers (Tubera granulata). *Granulated Saxifrage.—a. Tuber from
the Root, beginning to germinate.*
6. Subglobose, pendulous Tubers (Tubera subglobosa, pendula). *Potato, Solanum
tuberosum.*
7. Transverse section of a tunicated or coated Bulb (Bulbus tunicatus). *Common
Onion, Allium Cepa.*
8. Bulb of the *Common Onion*, showing its mode of increase by new Bulbs from
within.
9. Scaly Bulb (Bulbus Squamosus). *White Lily, Lilium candidum.*
10. Reticulated Bulb (Bulbus reticulatus). *Netted Crocus, Crocus reticulatus.*
11. Bulb of *Gladiolus tubatus*, showing its mode of increase, one above the other; the
old withered flattened bulbs of the 6 preceding years still remaining attached to
the base of the present year's bulb.
12. Calyptrate root (Radix calyptrata) of the *Duckweed, Lemna*: the calyptriform ex-
tremities are considered spongiolæ (Spongiolæ).
13. Spongiolæ of a root (Spongiolæ).
14. Lenticels (Lenticelli) of the *Willow*.



solitary Tuber.



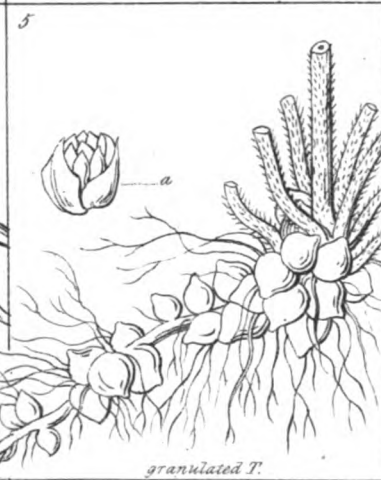
didymous Tubers.



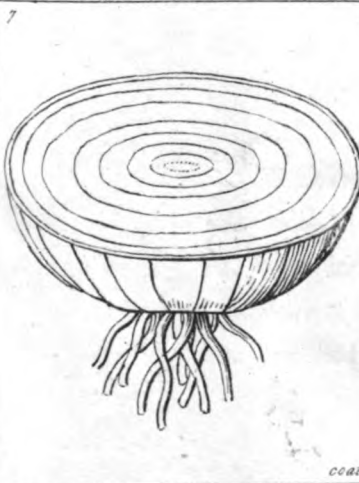
Tubers.



palmated T.



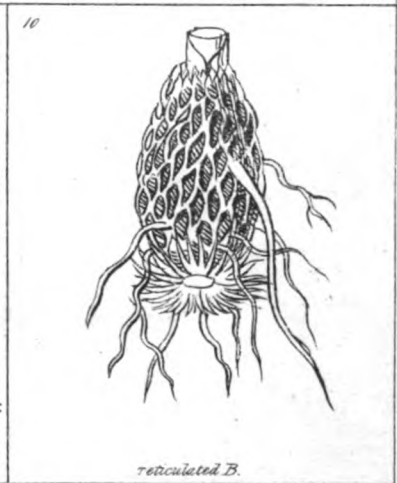
granulated T.



coated Bulbs.



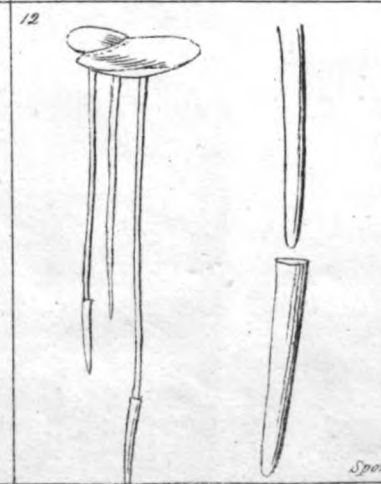
scaly Bulb.



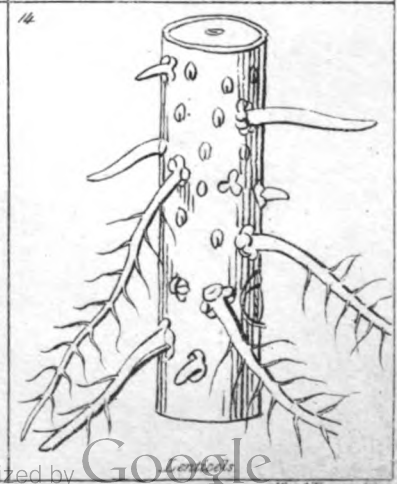
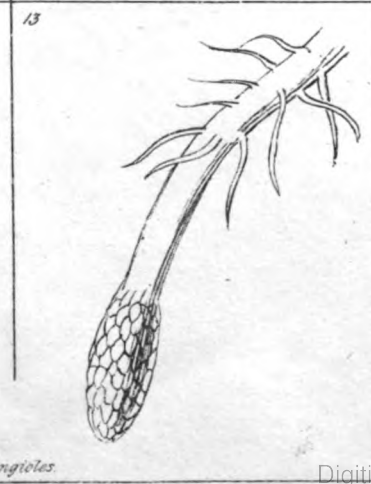
reticulated B.



Gladiolus



Spongios







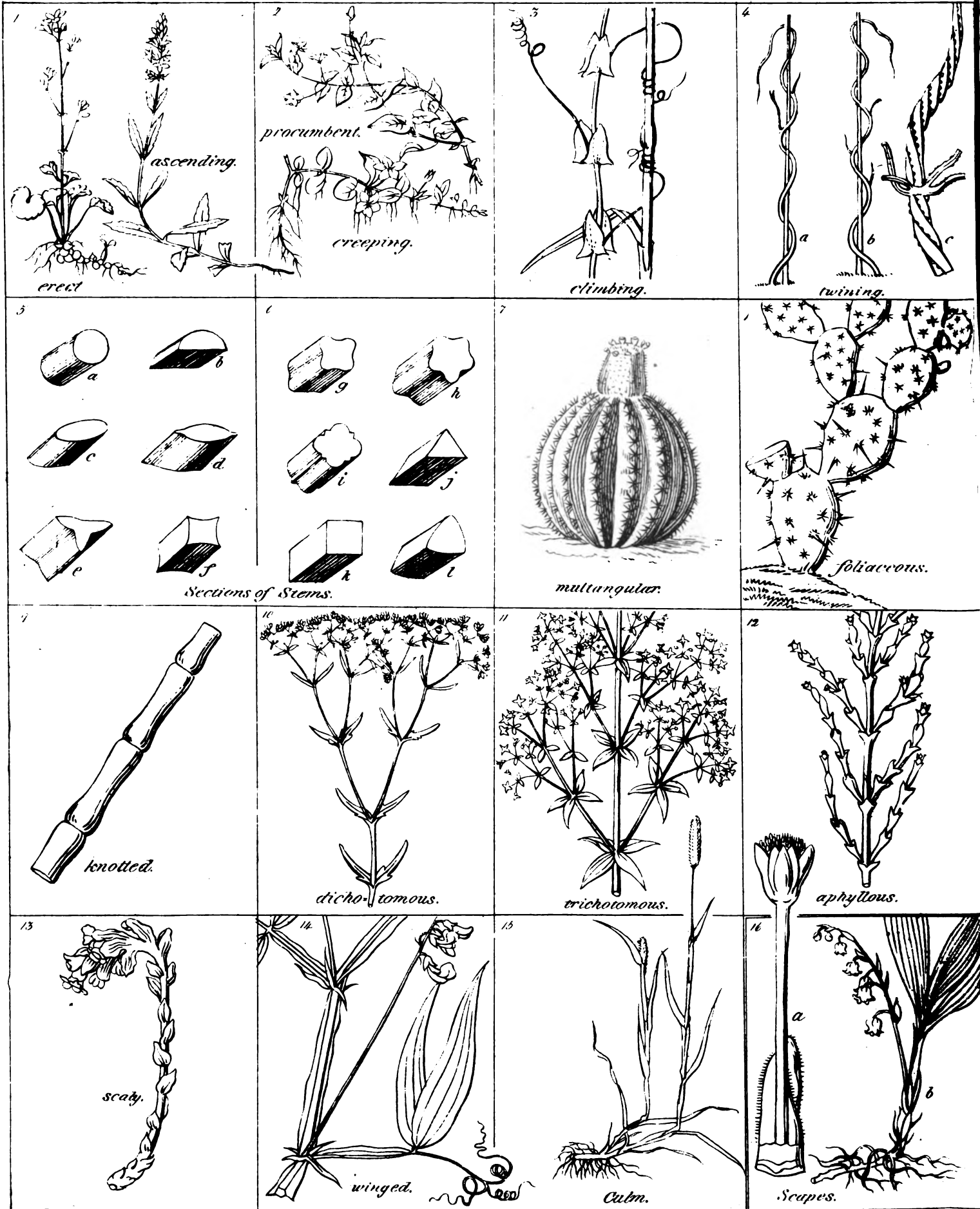
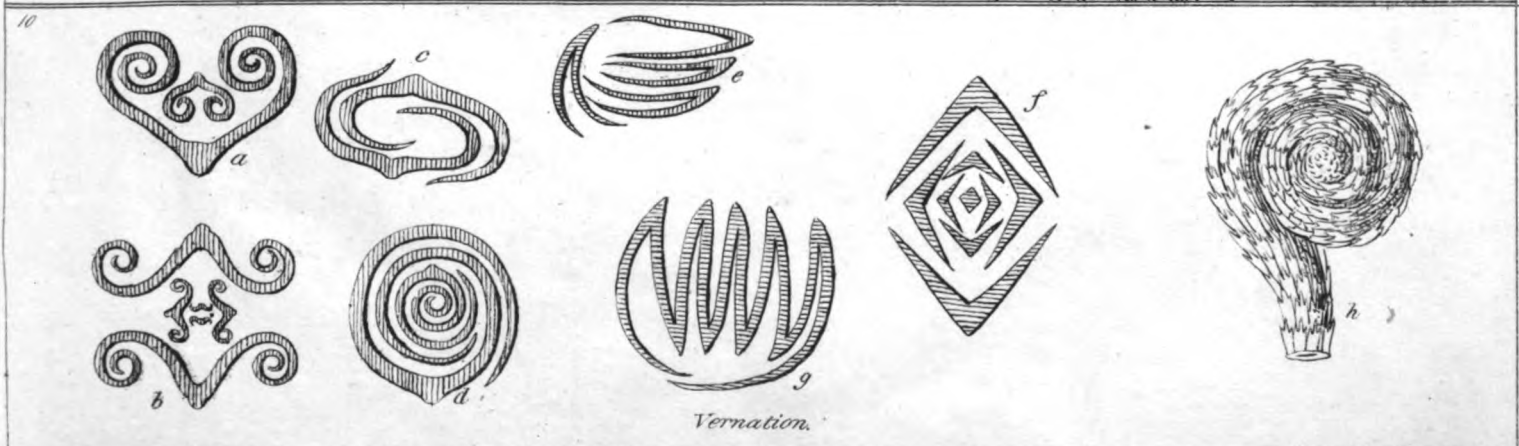
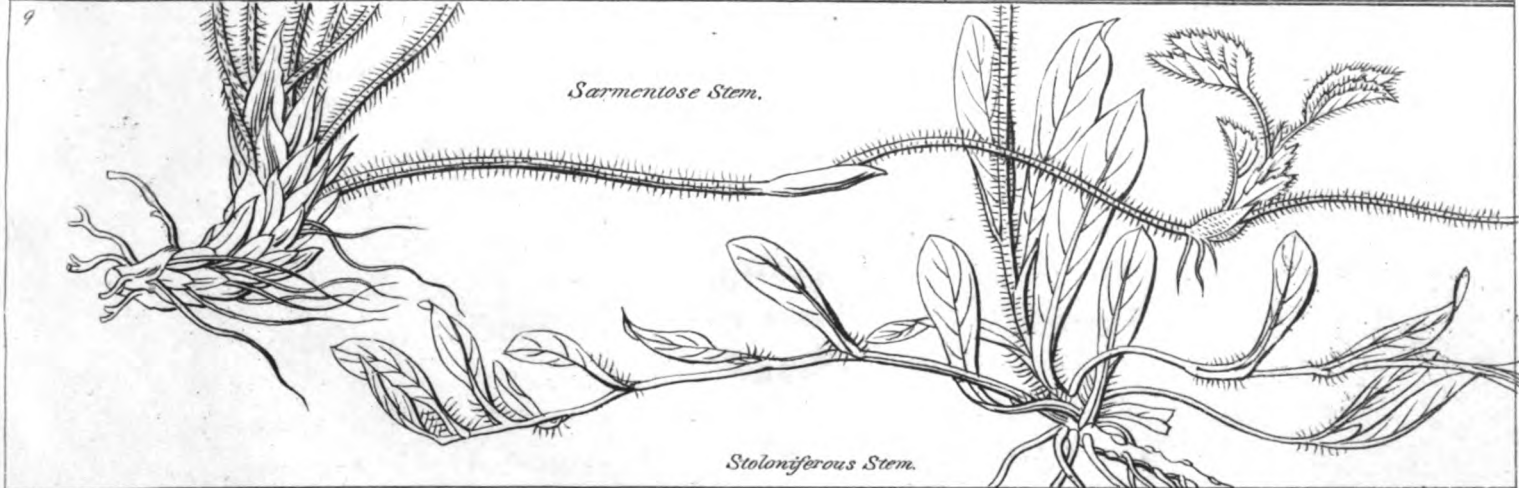
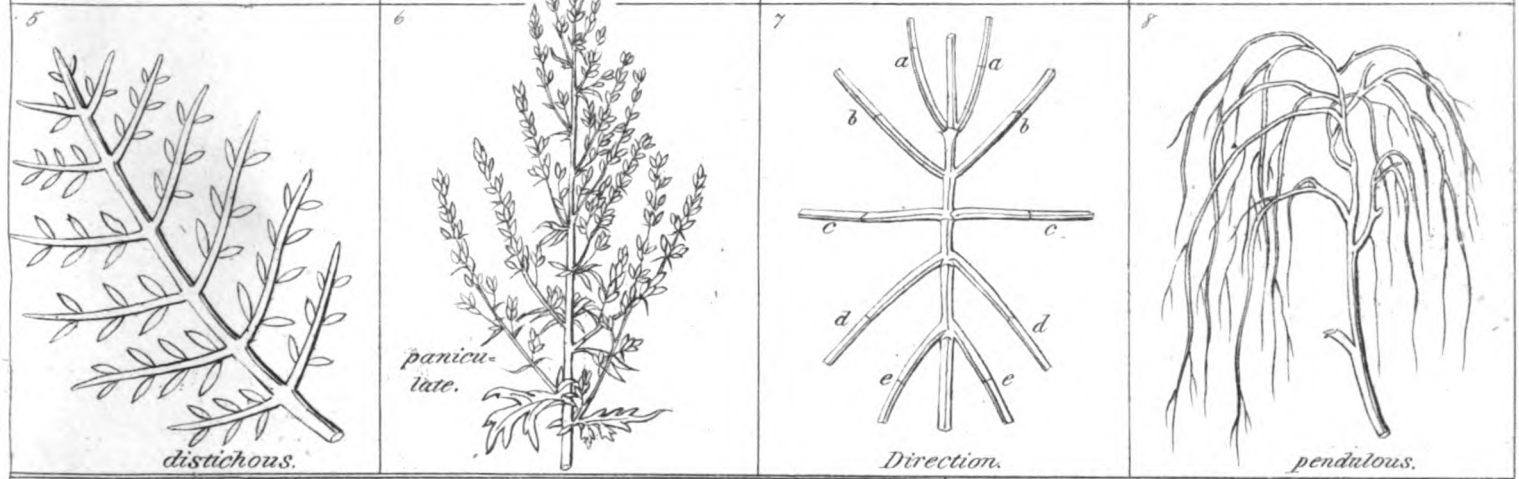
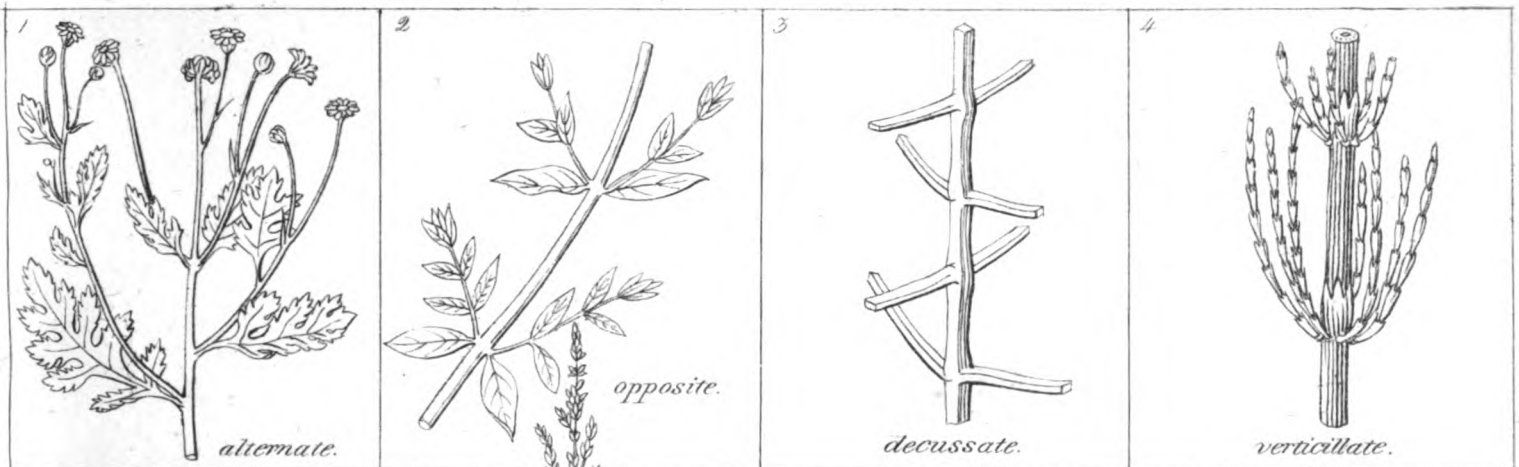


TABLE III.—STEMS.

1. Erect (*Caulis erectus*). *Granulated Saxifrage*. Ascending (*Caulis adscendens*) *Spiked Speedwell*, *Veronica spicata*.
2. Procumbent (*Caulis procumbens*). *Moneywort*, *Lysimachia Nummularia*. Creeping (*Caulis repens*). *Yellow-Pimpernel*, *Lysimachia Nemorum*.
3. Climbing (*Caulis scandens*). *Yellow Vetchling*, *Lathyrus Aphaca*.
4. Twining (*Caulis volubilis*).—*a.* twining contrary to the course of the sun (*Caulis sinistrorsum volubilis*). *Great Bindweed*, *Convolvulus sepium*.—*b.* twining according to the course of the sun (*Caulis dextrorsum volubilis*). *Climbing Buckwheat*, *Polygonum Convolvulus*.—*c.* twining and twisted (*Caulis volubilis et contortus*). *Hop*.
5. *a.* rounded or cylindrical (*Caulis teres v. cylindricus*). *Hemlock*.—*b.* semiterete or semicylindrical (*Caulis semiteres v. semicylindricus*). *Peperomia alata*.—*c.* compressed (*Caulis compressus*). *Crisped Pondweed*.—*d.* ancipitate (*Caulis anceps*). *Perforated St. John's wort*.—*e.* triangular, with the angles acute (*Caulis triangularis, angulis acutis*). *Opuntia triangularis*.—*f.* quadrangular, or square, with the angles acute (*Caulis quadrangularis, angulis acutis*). *Goosegrass*.
6. *g.* quadrangular or square, with the angles obtuse (*Caulis quadrangularis, angulis obtusis*). *Cereus quadrangularis*.—*h.* quinquangular or five-angled, with the angles obtuse (*Caulis quinquangularis, angulis obtusis*). *Gourd*, *Cucurbita Pepo*.—*i.* octangular or 8 angled, 4 of the angles obtuse, and four acute (*Caulis octangularis, angulis 4 obtusis, 4 acutis*). *Whortleberry*.—*j.* trigonous or triquetrous with the angles acute (*Caulis trigonous v. triqueter*). *Sida triquetra*.—*k.* tetragonal or square, with the angles acute (*Caulis tetragonus v. tetraqueter, angulis acutis*). *Square-stalked St. John's wort*, *Hypericum perforatum*.—*l.* trigonal or triquetrous, with the angles obtuse (*Caulis trigonus, angulis obtusis*). *Papyrus*, *Cyperus Papyrus*.
7. Many-angled (*Caulis multangularis*). *Turk's Cap*, *Melocactus communis*.
8. Foliaceous (*Caulis foliaceus*). *Prickly Fig*, *Opuntia vulgaris*.
9. Knotted (*Caulis nodosus*). *Herb-Robert*.
10. Dichotomous (*Caulis dichotomus*). *Smooth narrow-fruited Corn-salad*, *Fedia dentata*.
11. Trichotomous (*Caulis trichotomus*). *Cross-leaved Bed-straw*, *Galium cruciatum*.
12. Leafless or aphyllous (*Caulis aphyllus*). *Glasswort*.
13. Scaly (*Caulis squamosus*). *Yellow Bird's Nest*, *Monotropa Hypopitys*.
14. Winged (*Caulis alatus*). *Narrow-leaved Everlasting Pea*, *Lathyrus sylvestris*.
15. Culm (*Culmus*). *Alopecurus geniculatus*, and the rest of the *Grasses*.
16. Scapes (*Scapi*).—*a.* *Hæmanthus tigrinus*.—*b.* *Lily of the Valley*.

TABLE IV.—BRANCHES, &c.

1. Branches alternate (Rami alterni). *Common Feverfew, Pyrethrum Parthenium.*
2. Branches opposite (Rami oppositi).
3. Branches decussate (Rami decussati).
4. Branches whorled or verticillate (Rami verticillati). *Marsh Horse-tail, Equisetum palustre.*
5. Branches distichous (Rami distichi).
6. Branches paniced (Rami paniculati). *Mugwort, Artemisia vulgaris.*
7. Direction of the branches;—*a. a.* erect or appressed (Rami erecti v. appressi). *b. b.* patent (Rami patentes).—*c. c.* horizontal or very patent (Rami horizontales v. patentissimi).—*d. d.* divaricate or reclinate (Rami divaricati v. reclinati).—*e. e.* reflexed (Rami reflexi).
8. Pendulous Branches (Rami penduli). *Weeping Willow, Salix Babylonica.*
9. Sarmentose stem (Caulis sarmentosus). *Strawberry.* Stoloniferous stem (Caulis stoloniferous). *Common Mouse-ear Hawkweed, Hieracium Pilosella.*
10. Vernation or Foliation; or the arrangement of the foliage in the state of the bud: figs. *a.* to *g.* represent transverse sections.—*a.* Involute Vernation (Vernatio involuta). *Apple, Pear.*—*b.* Revolute (Vernatio revoluta). *Rosemary.*—*c.* obvolute (Vernatio obvoluta v. semi-amplexa) *Soapwort.*—*d.* Convolute (Vernatio convoluta). *Apricot, Fig, &c.*—*e.* Conduplicate (Vernatio conduplicata). *Rose, Cherry.*—*f.* Accumbent (Vernatio accumbens). *Lilac, Privet.*—*g.* Plaited (Vernatio plicata). *Vine, Beech, Gooseberry, Alchemilla, &c.*—*h.* external appearance of Circinnate Vernation (Vernatio circinnata). *Ferns.*







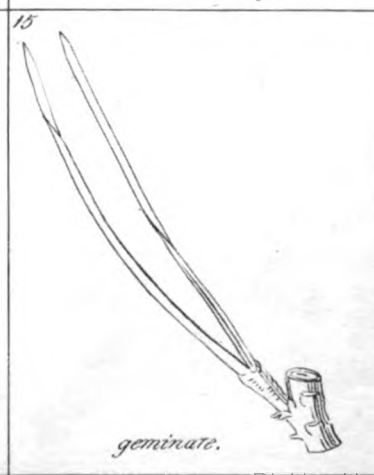
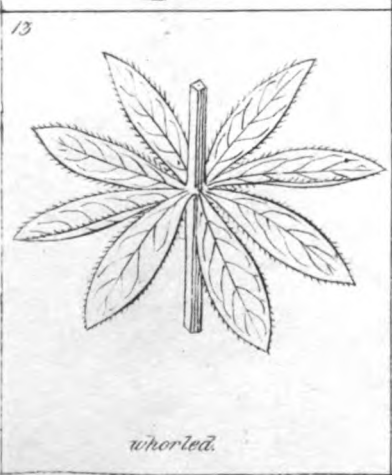
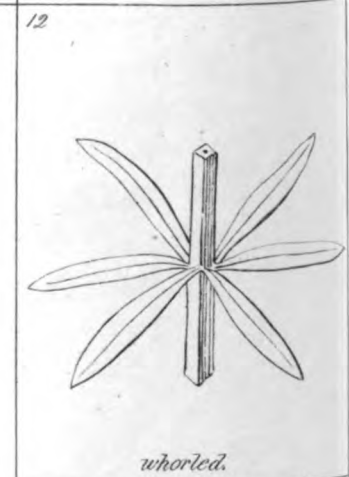
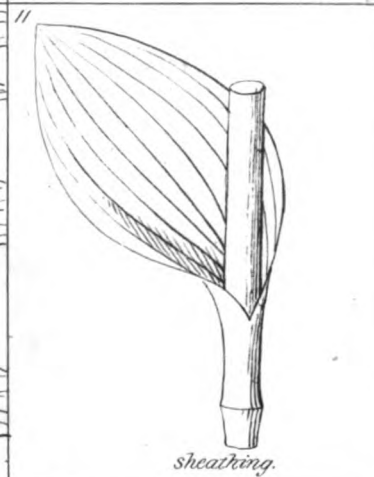
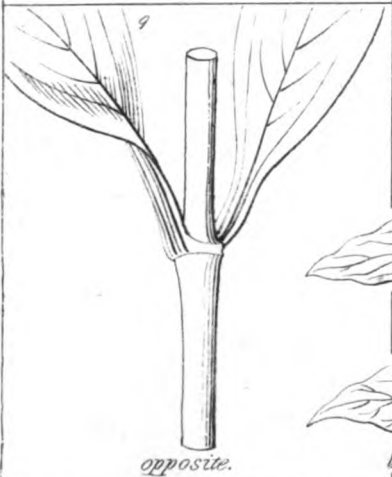
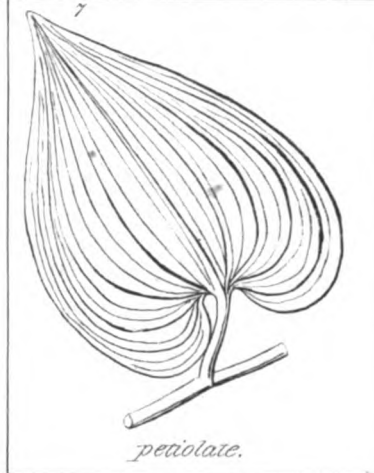
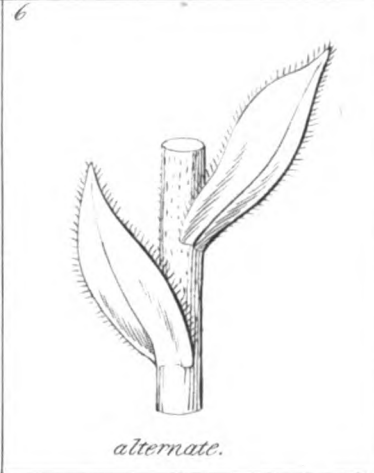
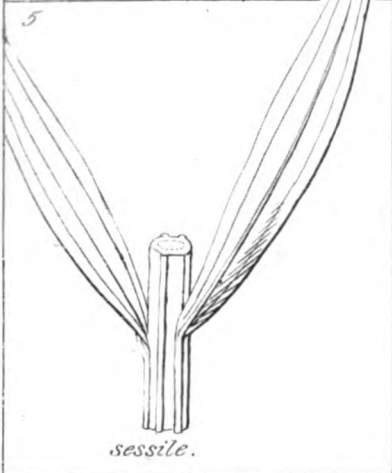
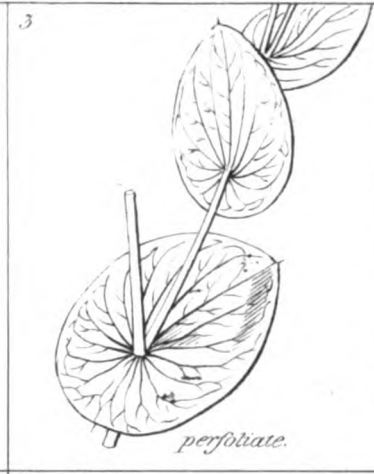


TABLE V.—LEAVES. (SIMPLE.)

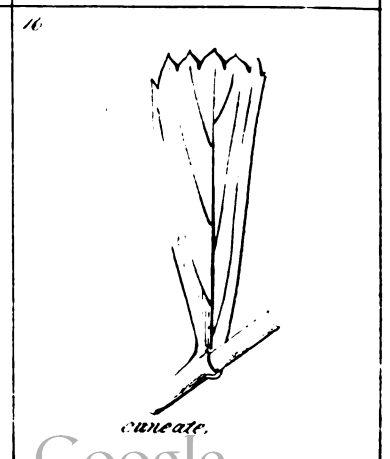
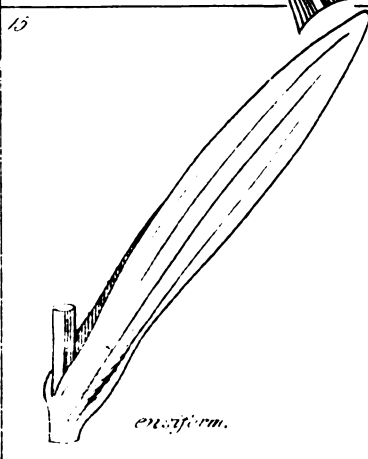
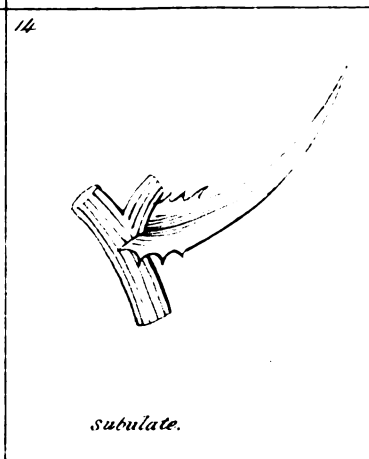
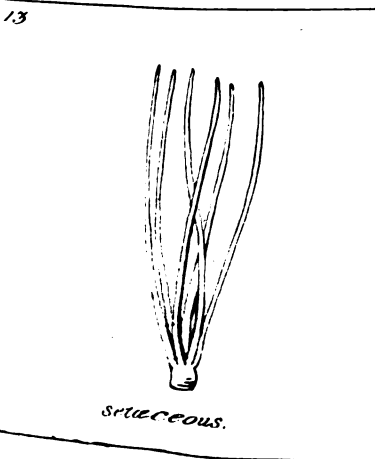
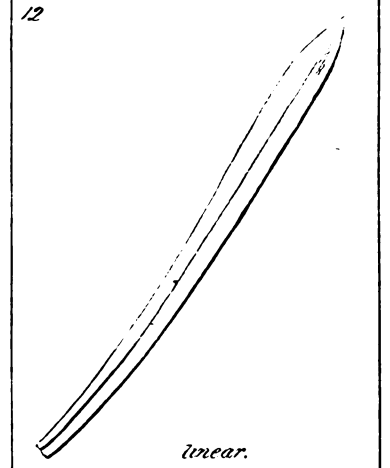
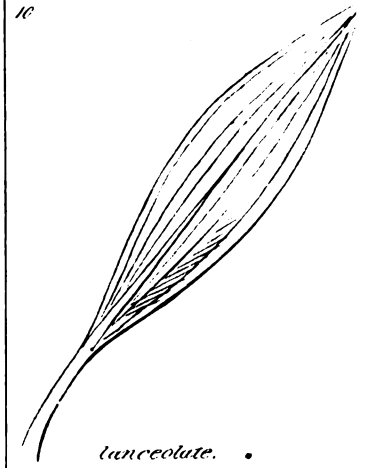
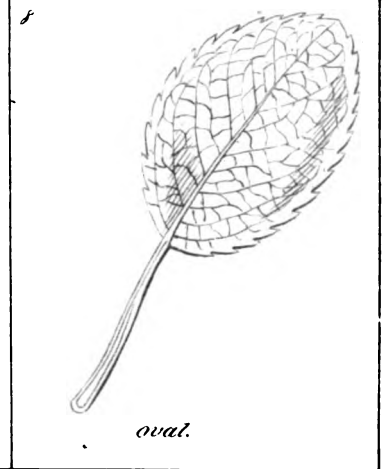
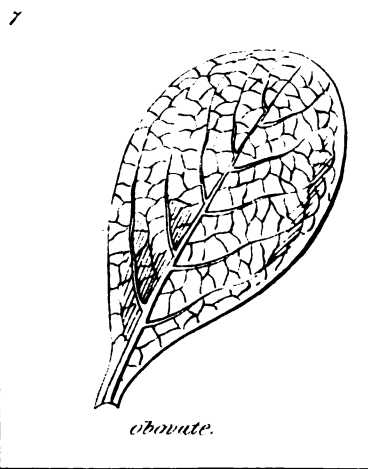
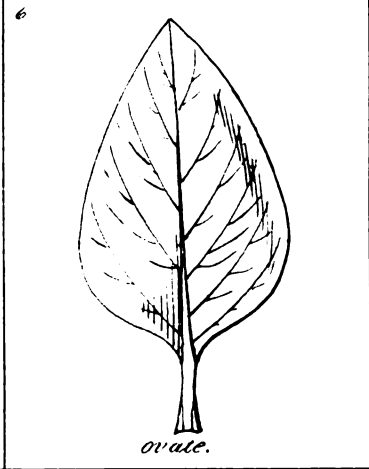
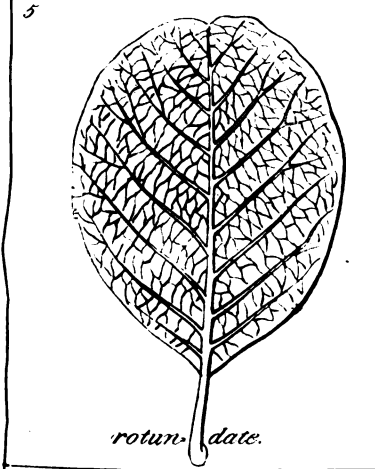
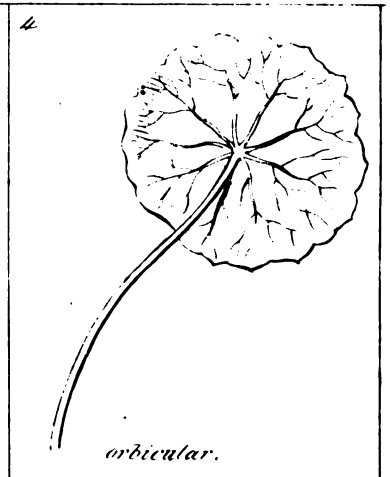
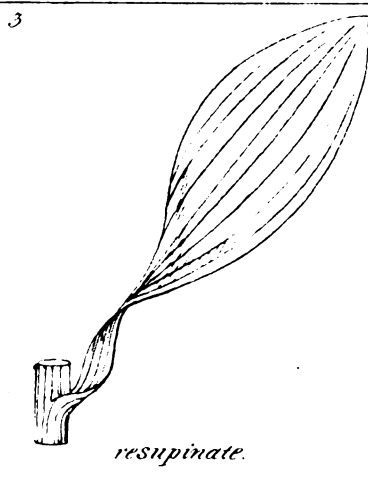
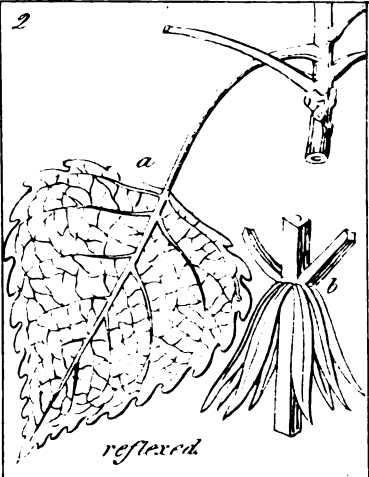
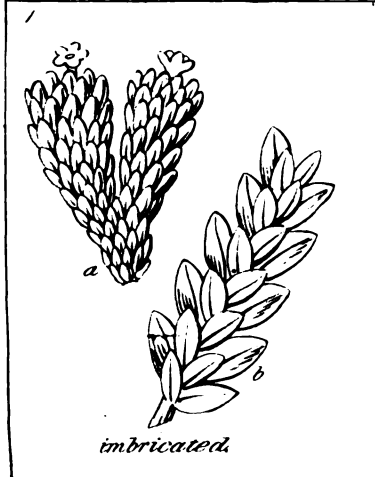
(All the leaves represented in this plate derive names, not from their form or circumscription, but from the mode in which they are inserted upon the stem, or (f. 16.) their direction).

1. Decurrent (Folia decurrentia). *Verbascum thapsiforme*.
2. Amplexicaul (Folium amplexicaule). *Turnep*.
3. Perfoliate (Folia perfoliata). *Common Hare's-Ear*, *Bupleurum rotundifolium*.
4. Connate (Folia connata). *Pale perfoliate Honeysuckle*, *Lonicera Caprifolium*.
5. Sessile (Folia sessilia). *Tiger-lily*, *Lilium bulbiferum*.
6. Alternate (Folia alterna). *Houseleek*.
7. Petiolate (Folium petiolatum). *Convallaria trifolia*.
8. Equitant (Folia equitantia). *Iris*.
9. Opposite (Folia opposita). *Soapwort*, &c.
10. Decussate (Folia decussata). *Great Yellow Loose-strife*.
11. Sheathing (Folium vaginans). *Broad-leaved Helleborine*.
12. Verticillate, 6 in a whorl (Folia verticillata, sena). *Field Woodruff*.
13. Verticillate, 8 in a whorl, (Folia verticillata, octona). *Sweet Woodruff*.
14. Fasciculate (Folia fasciculata). *Berberry*.
15. Geminate or binate (Folia geminata v. binata). *Scotch Fir*.
16. Distichous (Folia disticha). *Yew*.

TABLE VI.—LEAVES. (SIMPLE.)

(Figs. 1—3 represent leaves which derive names from their direction, or the manner in which they lie).

1. Imbricated (*Folia imbricata*):—*a.* imbricated on all sides (*Folia undique imbricata*). *Aretia Helvetica*.—*b.* imbricated in four rows (*Folia quadrifariam imbricata*). *Lycopodium denticulatum*.
 2. Reflexed (*Folia reflexa*);—*a.* *Populus monilifera*.—*b.* *Yellow Bedstraw*.
 3. Resupinate (*Folium resupinatum*). *Alstræmeria*.
- (Figs. 4—16 receive names from their form or circumscription).
4. Orbicular (*Folium orbiculare*);—this is, besides, a peltate leaf (*Folium peltatum*).
Marsh Pennywort.
 5. Round, rounded or rotundate (*Folium rotundatum*). *Round-leaved Winter-green*.
 6. Ovate (*Folium ovatum*). *Greater Periwinkle*.
 7. Obovate (*Folium obovatum*). *Bog Whortleberry*.
 8. Oval or elliptic (*Folium ovale v. ellipticum*). *Pyrus Amelanchier*.
 9. Oblong (*Folium oblongum*). *Brassica orientalis*.
 10. Lanceolate (*Folium lanceolatum*). *Ribwort Plantain*.
 11. Spathulate (*Folium spathulatum*). *Daisy*.
 12. Linear (*Folium lineare*). *Potamogeton acutifolium*.
 13. Setaceous (*Folia setacea*). *Larch*.
 14. Subulate (*Folium subulatum*). *Prickly Saltwort*.
 15. Ensiform (*Folium ensiforme*). *Iris*.
 16. Cuneate or wedge-shaped (*Folium cuneatum*). *Cliffortia cuneata*.







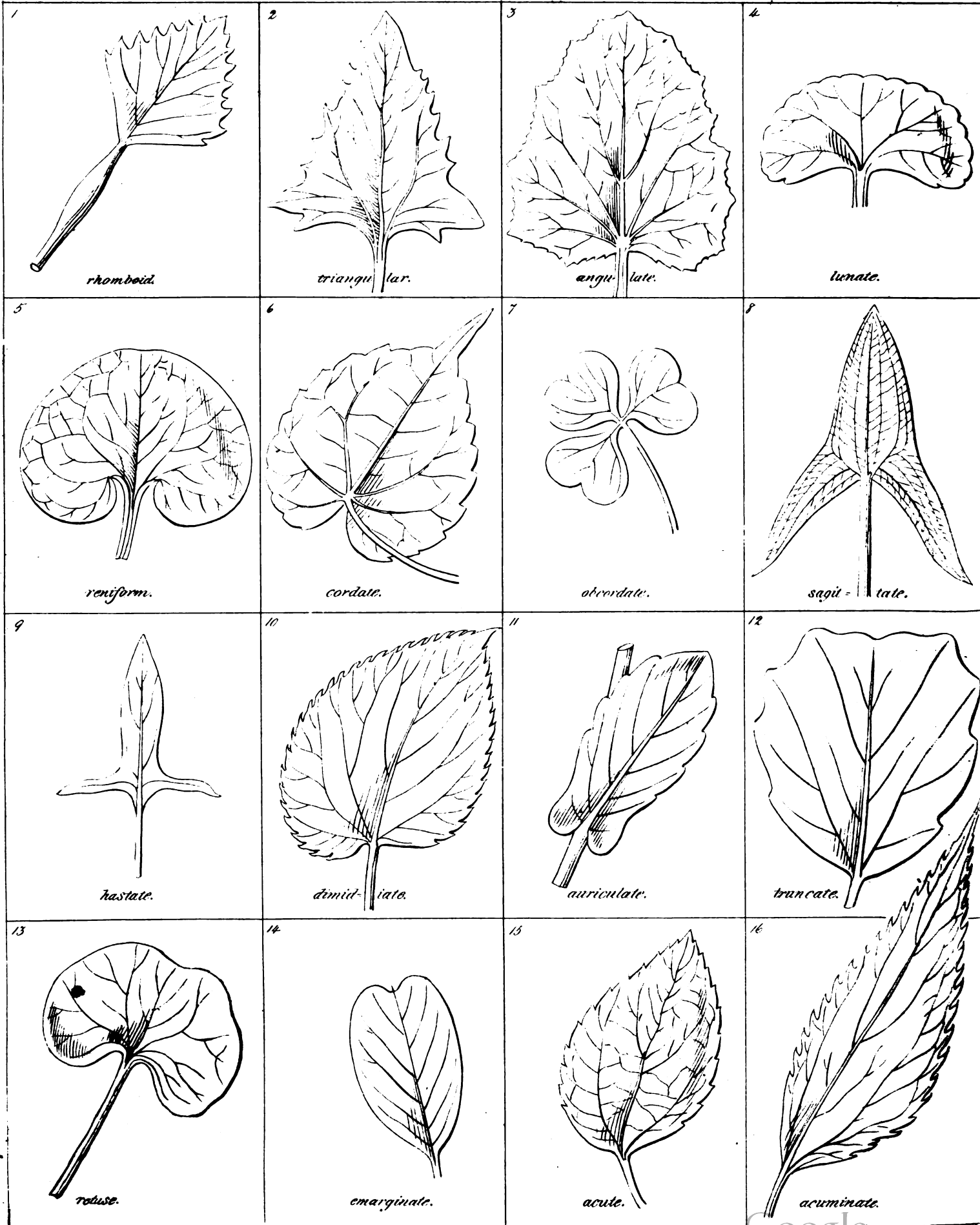


TABLE VII.—LEAVES. (SIMPLE, fig. 7. Excepted).

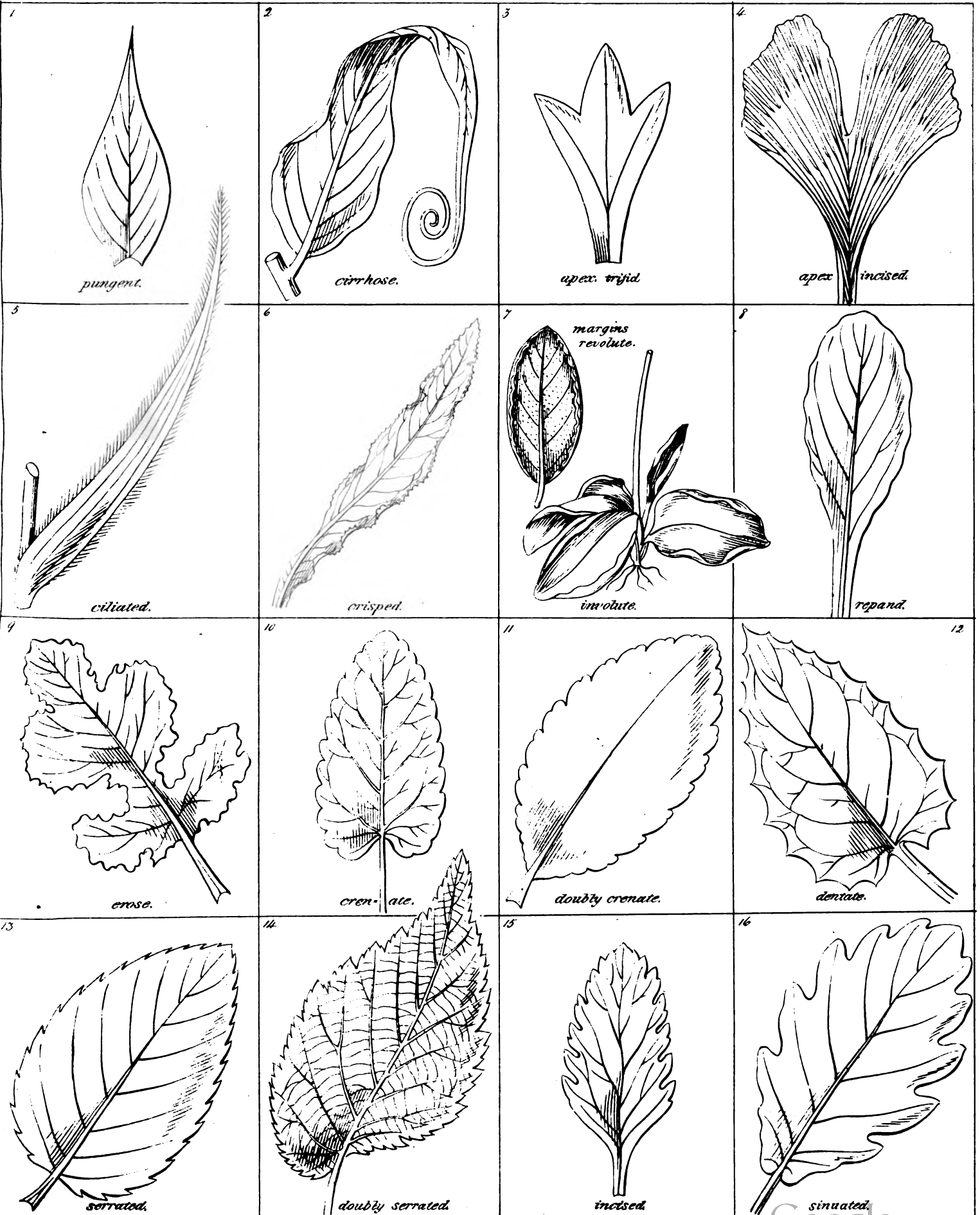
(Figs. 1—10 receive names from their form or outline—f. 11 from that at the base).

1. Rhomboid (Folium rhomboideum). *Water Caltrops.*
 2. Triangular or deltoid (Folium triangulare seu deltoideum). *Atriplex patula.*
 3. Angulate or angled (Folium angulatum). *Colt's foot.*
 4. Lunate (Folium lunatum). *Hydrocotyle lunata.*
 5. Kidney shaped or reniform (Folium reniforme). *Asarum Europæum.*
 6. Heart shaped or cordate (Folium cordatum). *Sida Abutilon.*
 7. Obcordate Leaflets (Foliola obcordata). *Trefoil Woodsorrel.* [I am not aware of the existence of a truly obcordate leaf; but in compound leaves obcordate leaflets are not uncommon.]
 8. Sagittate (Folium sagittatum). *Marsh Arrowhead.*
 9. Hastate or halberd-shaped (Folium hastatum). *Sheep's-Sorrel, Rumex Acetosella.*
 10. Dimidiate (Folium dimidiatum). *Lime-Tree.*
 11. Auriculate (Folium auriculatum). *Arabis auriculata.*
- (12—14 receive names from the nature of the apex).
12. Truncate or abrupt (Folium truncatum seu præmorsum). *Pavonia præmorsa.*
 13. Retuse (Folium retusum). *Mountain Sorrel.*
 14. Emarginate or notched (Folium emarginatum). *Box.*
 15. Acute (Folium acutum). *Celtis occidentalis.*
 16. Acuminate (Folium acuminatum). *Celtis australis.*

TABLE VIII.—LEAVES. (SIMPLE.)

(1—4 are named from circumstances connected with the apex).

1. Pungent (Folium pungens). *Butcher's-Broom*.
 2. Cirrhose (Folium cirrhosum). *Gloriosa superba*.
 3. Apex trifid (Folium apice trifidum). *Saxifraga tridactylites*.
 4. Apex incised (Folium apice incisum). *Salisburia Gingko*.
- (5—16 are named from peculiarities in the margin).
5. Ciliated (Folium ciliatum). *Great Hairy Woodrush*.
 6. Crisped (Folium crispatum). *Potamogeton crispum*.
 7. Margins revolute (Folium marginibus revolutis). *Cowberry, Vaccinium Vitis-Idea*;—margins involute (Folium marginibus involutis). *Common Butterwort*.
 8. Repand (Folium repandum). *Common Bugle*.
 9. Erosee (Folium erosum). *White Mustard*.
 10. Crenate (Folium crenatum). *Common Betony*.
 11. Doubly crenate (Folium duplicato-crenatum). *Bryophyllum calycinum*.
 12. Dentate or toothed (Folium dentatum). *Garlic Hedge-mustard*.
 13. Serrated (Folium serratum). *Mealy Guelder-Rose*.
 14. Doubly serrated (Folium duplicato-serratum). *Broad-leaved Elm*.
 15. Incised (Folium incisum). *Teucrium Chamædryis*.
 16. Sinuated (Folium sinuatum). *Oak*.









panduriform.



entire.



laciniated.



2-lobed.



5-lobed.



bi-fid.



5-angl.



3-partite.



pub-male.



pe-ãate.



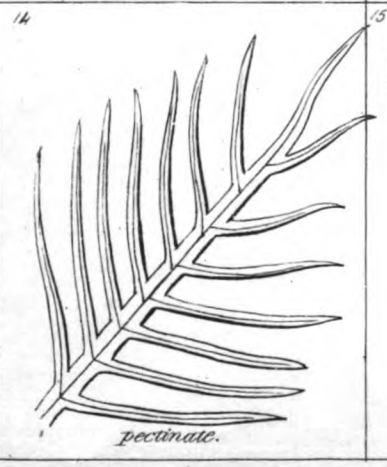
dissected.



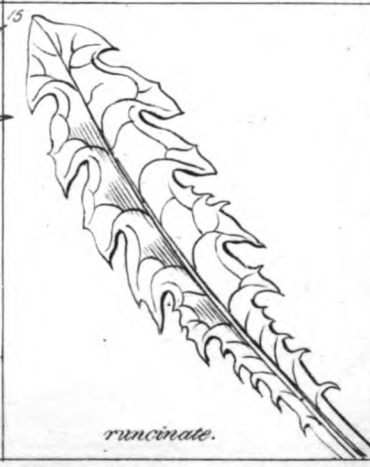
capil-laceo-multifid.



pinnatifid.



pectinate.



runcinate.



lyrato-pinnatifid.

TABLE IX.—LEAVES.

(Simple:—all named from their more or less divided or entire character).

1. Panduriform (Folium panduriforme). *Fiddle-Dock, Rumex pulcher.*
2. Entire, i. e. at the margin (Folium integerrimum).—*a.* 3-lobed and entire (Folium 3-lobum, integerrimum).—*b.* undivided and entire (Folium integrum, integerrimum).
3. Lacinated (Folium laciniatum) *Hieracium murorum.*
4. Two-lobed (Folium bilobum).—*a.* with the lobes erect (lobis erectis). *Bauhinia porrecta.*—*b.* lobes spreading (lobis divaricatis). *Desmodium Vespertilio.*
5. Five-lobed (Folium quinquelobum). *Red Currant.*
6. Bifid (Folium bifidum). *Passiflora Mexicana.*
7. Five-cleft (Folium quinquefidum). *Leonurus Cardiaca.*
8. Tripartite (Folium tripartitum). *Astrantia Caucasica.*
9. Palmate (Folium palmatum). *Passiflora cærulea.*
10. Pedate (Folium pedatum). *Stinking Hellebore.*
11. Dissected (Folium dissectum). *Aconitum Tauricum.*
12. Capillaceo-multifid (Folium capillaceo-multifidum). *Water-Crowfoot, Ranunculus aquatilis.*
13. Pinnatifid (Folium pinnatifidum). *Centaurea Scabiosa.*
14. Pectinated (Folium pectinatum). *Water Violet.*
15. Runcinate (Folium runcinatum). *Dandelion.*
16. Lyrato-pinnatifid (Folium lyrato-pinnatifidum). *Arabis Halleri.*

TABLE X.—LEAVES.

(1—8. compound).

1. Articulated (*Folium articulatum*); or a compound leaf reduced to a single leaflet.
Orange.
2. Unijugate (*Folium unijugatum*). *Zygophyllum Fabago.*
3. Trifoliolate or ternate (*Folium trifoliolatum seu ternatum*). *Cytisus Laburnum.*
4. Digitate (*Folium digitatum*). *Horse-Chesnut.*
5. Paripinnate (*Folium paripinnatum*). *Cassia Senna.*
6. Alternately pinnate (*Folium alterne pinnatum*). *Vicia Cassubica.*
7. Imparipinnate (*Folium imparipinnatum*). *Liquorice. Glycyrrhiza glabra.*
8. Interruptedly pinnate (*Folium interrupte pinnatum*). *Geum montanum.*

(9—15. Decomound).

9. Bigeminate (*Folium bigeminatum*). *Inga Unguis Cati.*
10. Biternate (*Folium biternatum*). *Lardizabala biternata.*
11. Conjugato-pinnate (*Folium conjugato-pinnatum*). *Sensitive Plant, Mimosa sensitiva.*
12. Digitato-pinnate (*Folium digitato-pinnatum*). *Humble Plant, Mimosa pudica.*
13. Bipinnate (*Folium bipinnatum*). *Gum-Arabic Plant, Acacia Arabica.*
14. Triternate (*Folium triternatum*). *Isopyrum thalictroides.*
15. Tripinnate (*Folium tripinnatum*). *Thalictrum fœtidum.*
16. Supradecomound (*Folium supradecompositum*). *Laserpitium hirsutum.*



articulated.



unijugate.



trifoliate.



digitate.



paripinnate.



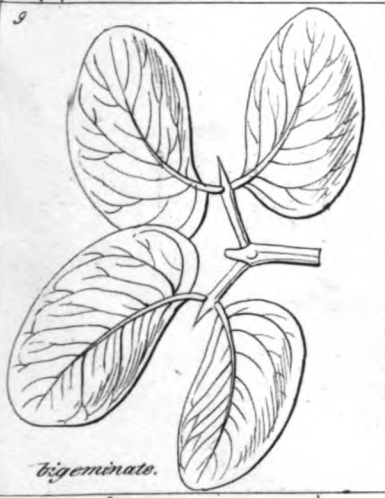
alternately pinnate.



impari-pinnate.



interruptedly pinnate.



bigeminate.



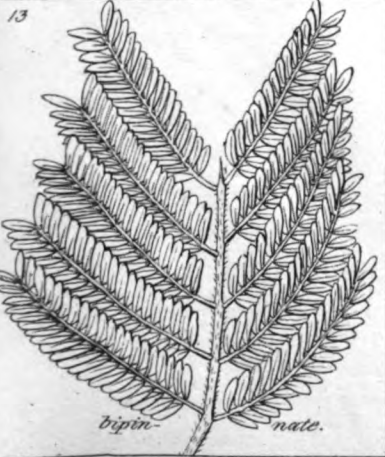
biternate.



conjugato-pinnate.



digitato-pinnate.



bipinnate.



tritemate.



tripinnate.



supra-decompound.





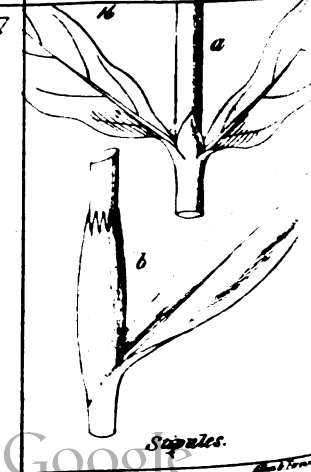
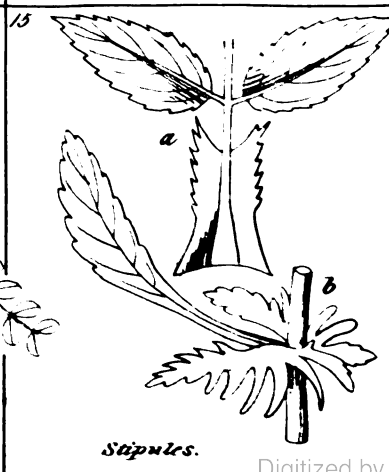
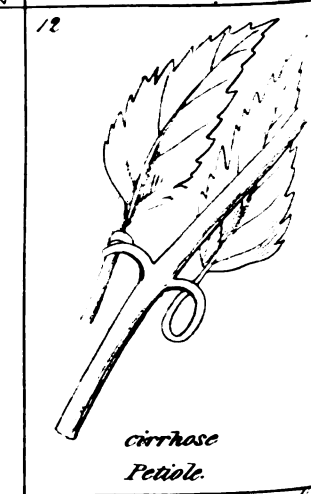
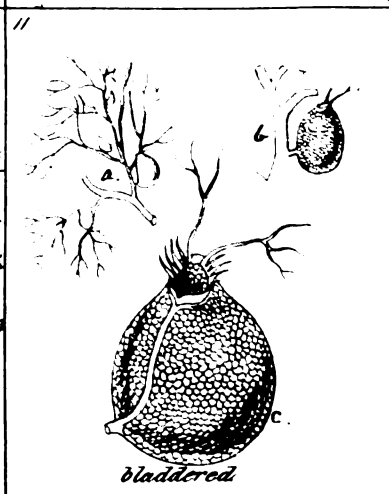
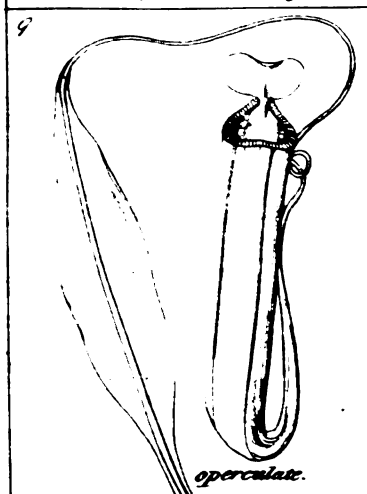
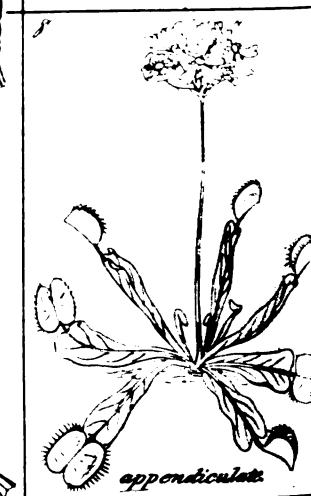
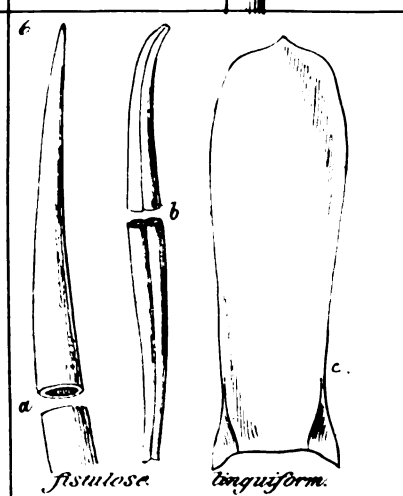
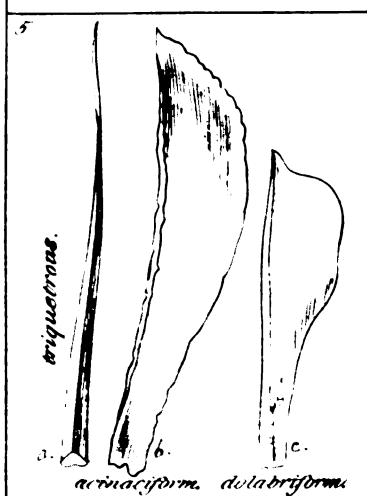
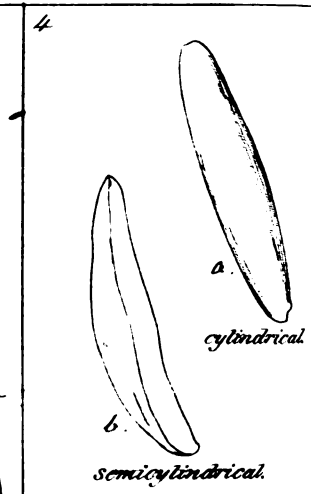
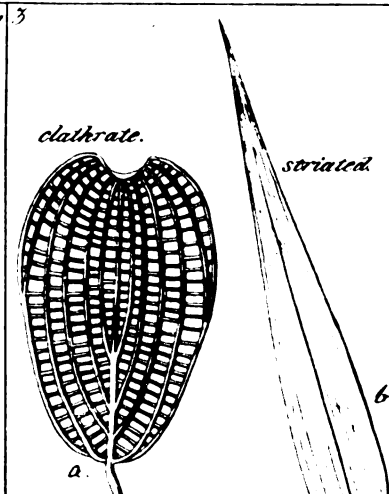
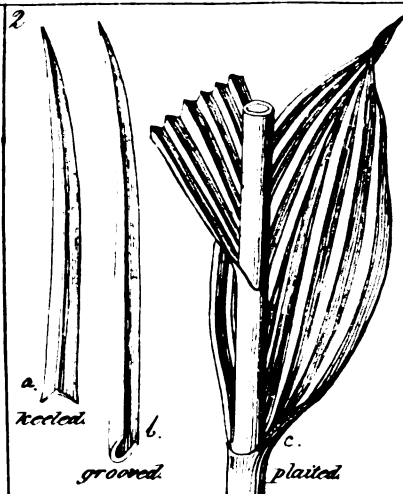
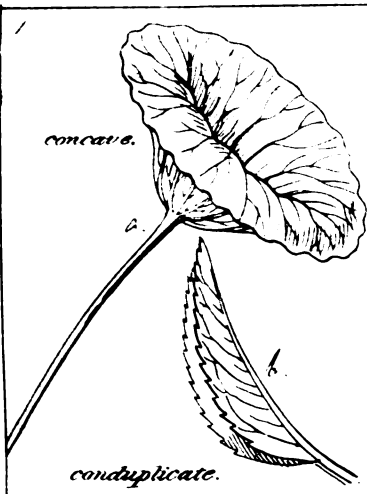


TABLE XI.—LEAVES, &c.

(1—11. Leaves, whose names are derived from circumstances connected with their surface, substance, texture, or appendages).

- 1.—*a.* Concave (Folium concavum). *Nelumbium speciosum*.—*b.* Conduplicate (Folium conduplicatum). *Young leaves of the Cherry*.
- 2.—*a.* Keeled (Folium carinatum). *Cyperus fuscus*.—*b.* Grooved or channelled (Folium canaliculatum). *Plantago maritima*.—*c.* Plaited (Folium plicatum). *White Hellebore, Veratrum album*.
- 3.—*a.* Clathrate (Folium clathratum). *Lattice-leaf, Hydrogetonfenestralis*.—*b.* Striated (Folium striatum). *Panicum Crus-galli*, and the leaves of other Grasses and Monocotyledonous Plants.
- 4.—*a.* Cylindrical (Folium cylindricum). *Sedum album*.—*b.* semicylindrical (Folium semicylindricum). *Chenopodium maritimum*.
- 5.—*a.* Triquetrous or trigonous (Folium triquetrum, seu trigonum). *Butomus umbellatus*.—*b.* acinaciform (Folium acinaciforme). *Mesembryanthemum acinaciforme*.—*c.* Dolabriform (Folium dolabriforme). *Mesembryanthemum dolabriforme*.
- 6.—*a.* Fistulose (Folium fistulosum). *Allium fistulosum*.—*b.* Bifistulose or bitubulose (Folium bifistulosum vel bitubulosum). *Lobelia Dortmanna*.—*c.* Linguiform (Folium linguiforme). *Mesembryanthemum linguiforme*.
7. Spinescent (Folium spinescens). *Holly*.
8. Appendiculate leaves (Folia appendiculata). *Venus' Fly-trap, Dionæa muscipula*.
9. Operculate (Folium operculatum). *Pitcherplant, Nepenthes distillatoria*.
10. Cucullate (Folia cucullata). *Red Side-saddle Flower, Sarracenia purpurea*.
11. Bladdered (Folium vesiculosum). *Utricularia vulgaris*.—*a.* natural size.—*b.* a portion, magnified.—*c.* vesicle, highly magnified.

(12—14. Petioles).

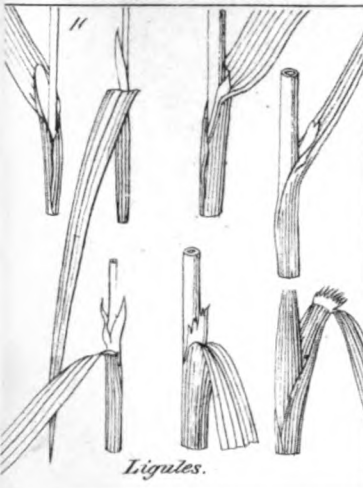
12. Cirrhose petiole (Petiolus cirrhosus). *Traveller's joy*.
13. Spinescent (Petiolus spinescens). *Gum-Tragacanth Plant, Astragalus verus*.
14. Leaf-like petiole (Petiolus foliiformis seu Phyllodium).—*a.* young leaf with its leaflets.—*b.* old Petiole, enlarged and destitute of leaflets. *Acacias of New Holland*.

(15, 16. Stipules).

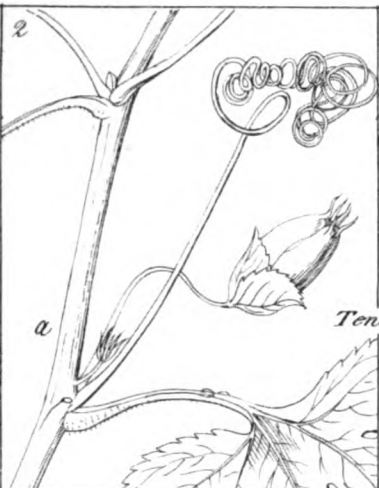
- 15.—*a.* Adnate Stipules (Stipulæ adnatæ). *Rose*.—*b.* Pinnatifid Stipules (Stipulæ pinnatifidæ). *Heart's-ease, Viola tricolor*.
- 16.—*a.* Opposite Stipules (Stipulæ oppositæ), as in the *Coffee* and various exotic *Rubiaceous plants*.—*b.* Sheathing (Stipula vaginans), as in *Polygonum* and other plants of the same Natural Order.

TABLE XII.

1. Ligules (Ligulæ), upon the leaves of various *Grasses*.
(2—4. Tendrils, Cirrhi).
2. Simple and axillary Tendril (Cirrhus simplex). *Passion-flower*.
3. Branched, and opposite to a leaf (Cirrhus ramosus, folio oppositus). *Vine*.
4. Spiral (Cirrhus spiralis). *Passiflora minima*.
(5, 6. Spines).
5. Simple Spines (Spinæ simplices). *Black-thorn*.
6. Branched Spines, (Spinæ ramosæ)—*a. Gleditschia ferox*.—*b. Poterium spinosum*.
7. Prickles (Aculei)—*a. and b, those of the Rose*.
(8—10. Hairs).
- 8.—*a. Articulated Hair (Pilus articulatus)*.—*b. falcate (Pilus falcatus)*.—*c. moniliform or beaded (Pilus moniliformis)*.—*d. reticulated (Pilus reticulatus)*.
- 9.—*a. Bipartite and divaricated (Pilus bipartito-divaricatus)*. *Malpighia*.—*b. Bi-trifurcate (Pilus bi-trifurcatus)*. *Arabis pendula*.—*c. fasciculate (Pili fasciculati)*. *Viburnum Tinus*.—*d. curved hair from the same leaf*.—*Glochidiate (Pilus glochidiatus)*; *e. of Echinosperrum Lappula*; *f. of Cynoglossum officinale*.
10. Stings. *Nettle, &c.*
11. Glands.—*a, b. Sessile*.—*c—h, stipitate and simple (Glandulæ stipitatæ simplices)*.
—*i, j. stipitate and branched (Glandulæ stipitatæ ramosæ)*. *Moss-rose*.
(12—14. Bracts).
12. Foliaceous (Bractea foliacea). *Lime*.
13. Imbricated (Bracteæ imbricatæ). *Pink*.
14. Bracts of the *Crested Cow-wheat, Melampyrum cristatum*.
(15, 16. Spathas.)
15. Spatha of the *Narcissus of the Poets*.
16. Spatha of a *Palm*.



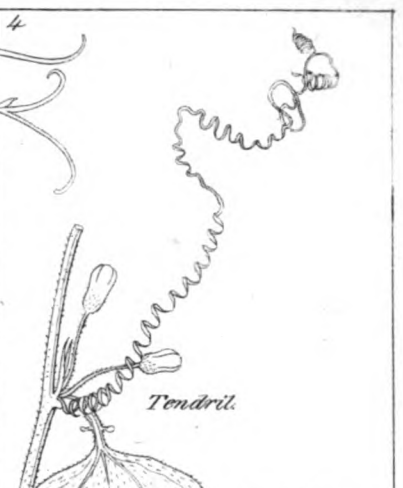
Ligules.



Tendrils



b



Tendril.



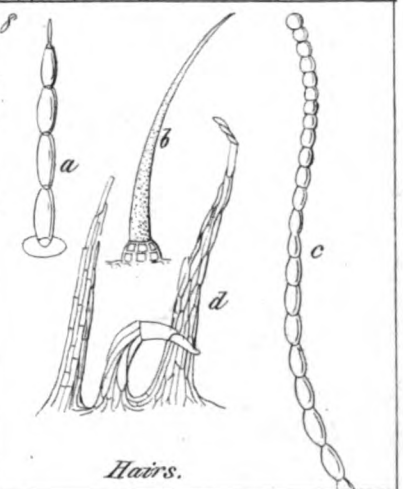
Spines.



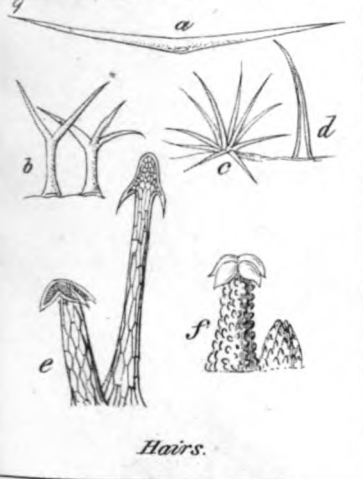
Spines.



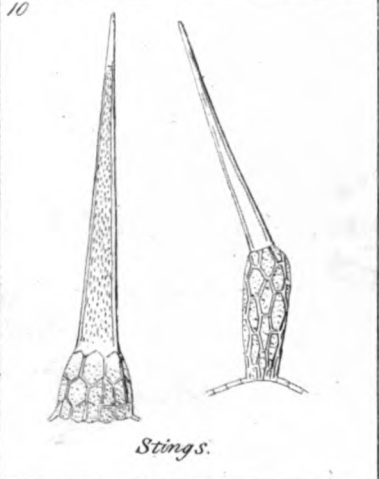
Prickles.



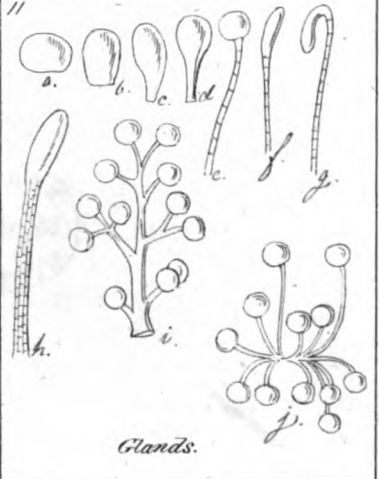
Hairs.



Hairs.



Stings.



Glands.



Bract.



Bracts.



Bracts.



Spatha.



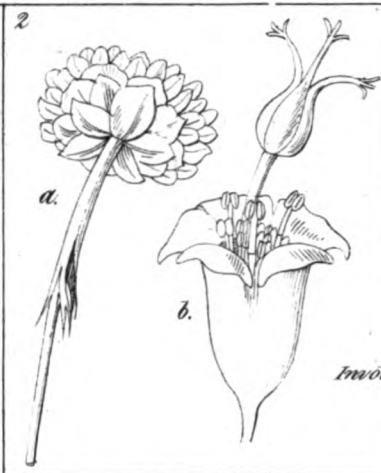
16



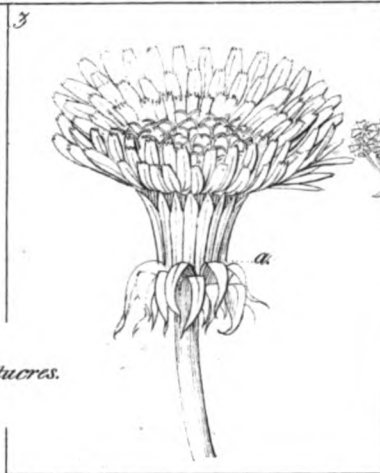




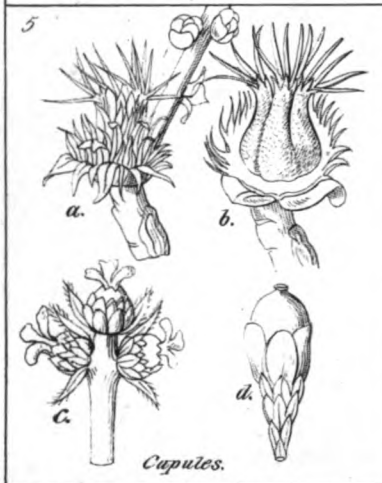
Involucre.



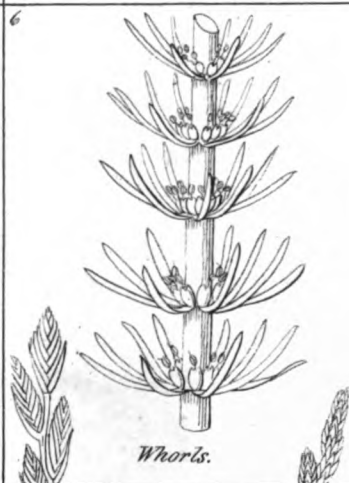
Involucres.



Involucres.



Capules.



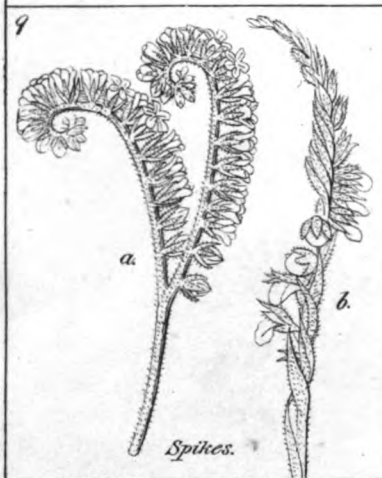
Whorls.



Whorls.



Spikes.



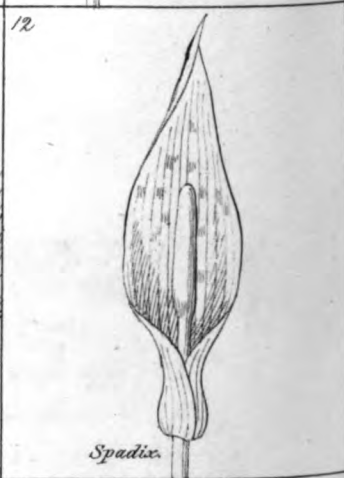
Spikes.



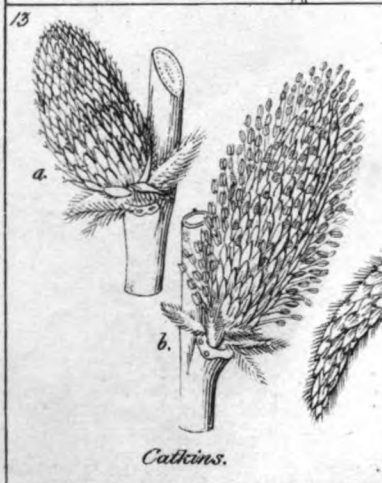
Compound Spikes.



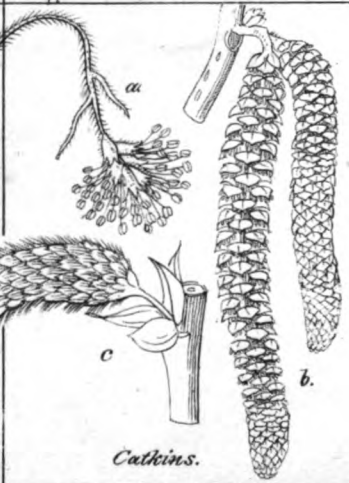
Spadix.



Spadix.



Catkins.



Catkins.



Catkins.



Catkins.

TABLE XIII.

(Involucre).

1. Involucre of *Anemone*.
- 2.—*a.* Involucre of the *Thrift*, *Statice* *Armeria*,—*b.* Involucre of *Spurge*, *Euphorbia*, including several sterile, and one fertile flower.
3. Involucre of *Dandelion*.
- 4.—*a.* Involucre (Involucrum);—*b.* partial involucre (Involucellum) of an *Umbelliferous Plant*.
5. Cupules.—*a.* Fertile flowers of the *Spanish Chestnut*, included in the cupules.—*b.* Section of a cupule, with the 3 included pistils.—*c.* Fertile flowers of the *Oak*, within their cupules.—*d.* Fertile flower, within the cupule, of the *Yew*.
- (6—16. Inflorescence).
6. Whorls (Verticilli). *Mare's-tail*. *Hippuris vulgaris*.
7. Whorls or pseudo-whorls (Verticilli seu pseudo-verticilli).—*a.* *Teucrium Chamædryas*.—*b.* *Lamium maculatum*.
8. Spikes (Spicæ).—*a.* Interrupted spike (Spica interrupta). *Lavandula Spica*.—*b.* Entire spike (Spica integra). *Lavandula Stæchas*.
9. Spikes.—*a.* Circinnate and secund (Spica circinnata secunda). *Heliotrope*.—*b.* Spiral (Spica spiralis). *Lady's Tresses*.
10. Compound spikes (Spicæ compositæ).—*a.* *Rye-grass*.—*b.* *Carex*.
11. Spadix. f. 1. that of *Calla palustris*, included in the spatha.—f. 2. *Sweet Sedge*, *Acorus Calamus*.
12. Spadix of *Wake Robin*, *Arum maculatum*, surrounded by the convolute spatha.
13. Catkins.—*a.* Fertile catkin of the *Willow*.—*b.* Sterile do.
14. Catkins of (*a.*) *Beech*,—*b.* *Nut*,—and *c.* *Poplar*.
- 15.—*a.* Sterile.—*b.* Fertile catkin of *Bread-fruit*.
16. Catkins, *a.* and *c.* of *Scotch Fir*.—*b.* and *d.* Catkins of the *Hop*.

TABLE XIV.—INFLORESCENCE.

1. Raceme, lateral (*Racemus lateralis*). *Bird-Cherry*.
2. Raceme, axillary (*Racemus axillaris*). *Germander Speedwell*.
3. Raceme, circinnate (*Racemus circinnatus*). *Forget-me-not*.
4. Raceme, compound (*Racemus compositus*). *Plane-tree*.
5. Corymb, (*Corymbus*). *Star of Bethlehem*.
6. Corymb, compound (*Corymbus compositus*). *Milfoil*.
7. Panicle, secund (*Panicula secunda*) *Bromus tectorum*.
8. Panicle, spreading (*Panicula patens*). *Saxifraga dentata*.
9. Thyrses (*Thyrusus*). *Lilac*.
10. Umbel, simple (*Umbella simplex*). *Allium ursinum*.
- 11.—*a.* Umbel, compound, many-rayed (*Umbella composita, multiradiata*). *Fennel*.
—*b.* Umbel, subsessile, subcompound (*Umbella subsessilis, subcomposita*).
Torilis nodosa.
- 12.—*a.* Umbel, compound, few-rayed (*Umbella composita, pauciradiata*). *Anthriscus Cerefolium*.—*b.* Umbel of two rays (*Umbella biradiata*). *Helosciadium inundatum*.
13. Umbel, compound, with the flowers radiant (*Umbella composita, radians*). *Platyspermum grandiflorum*.
14. Heads of flower (*Capitula*).—*a.* *Globularia vulgaris*.—*b.* *Scabiosa atropurpurea*.
15. Heads.—*a.* *Poterium Sanguisorba*.—*b.* *Lotus corniculatus*.
16. Heads.—*a.* *Trifolium spadiceum*.—*b.* *T. repens*.—*c.* *T. pratense*.



Raceme.



Raceme.



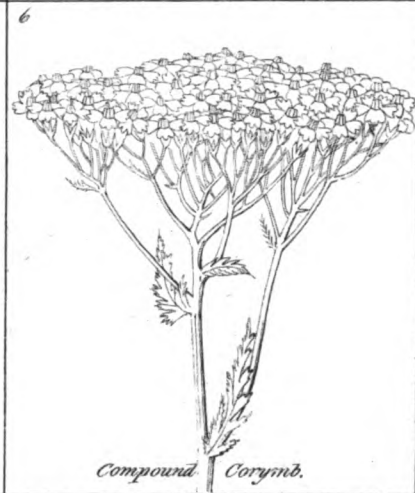
*Circinnate
Raceme.*



*Compound
Raceme.*



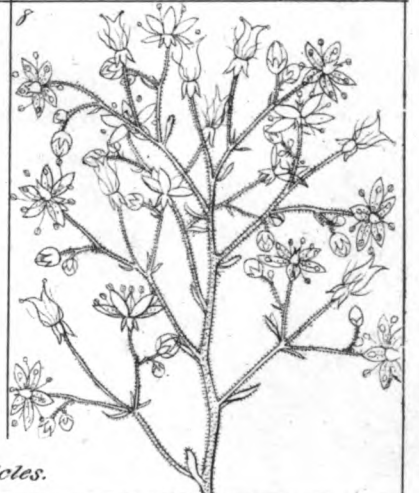
Corymb.



*Compound
Corymb.*



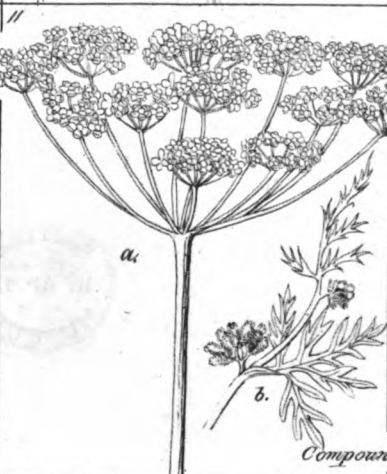
Panicles.



Thyrsus.



*Simple
Umbel.*



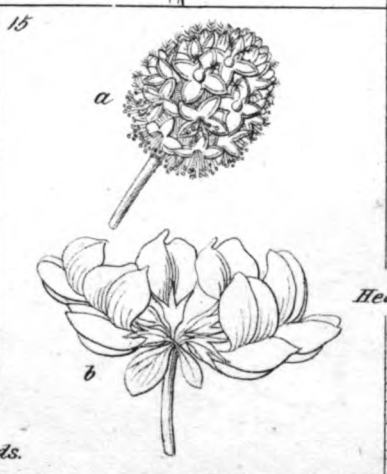
Compound Umbels.



Compound Umbel.



Heads.



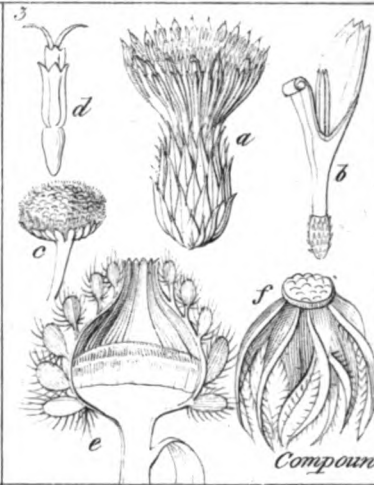
Heads.



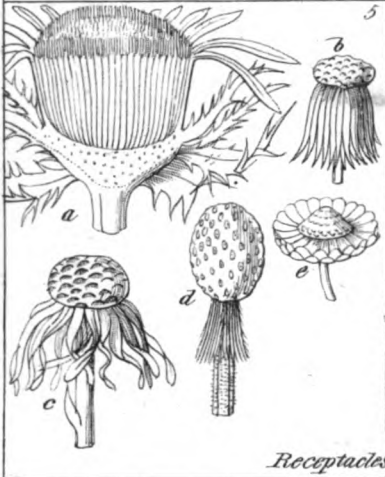




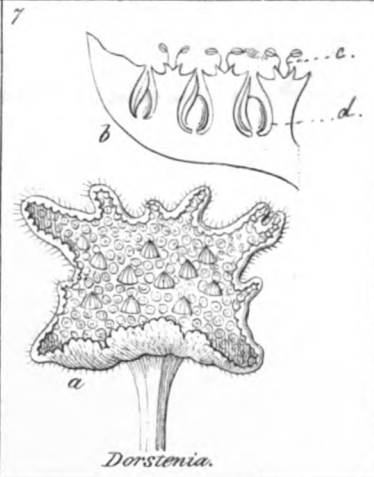
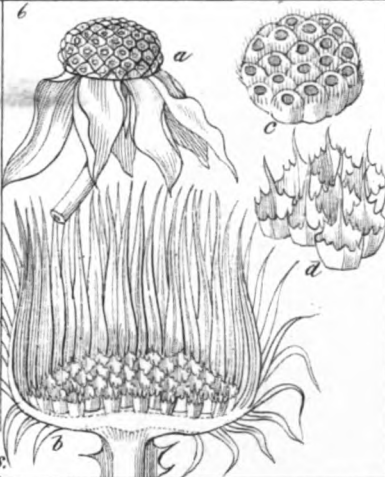
Compound flowers.



Compound flowers.



Receptacles.



Dorstenia.



Fig.

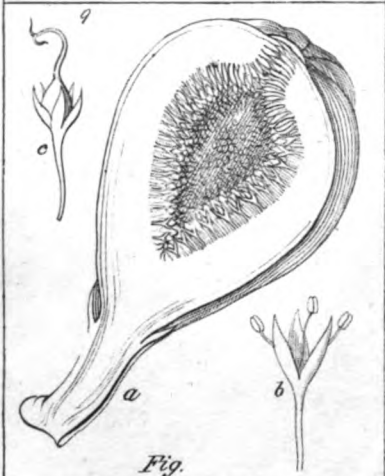


Fig.



Cyme.



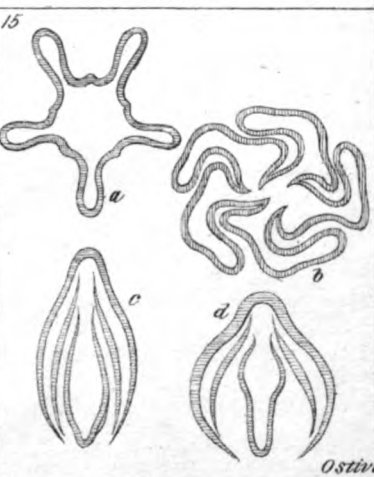
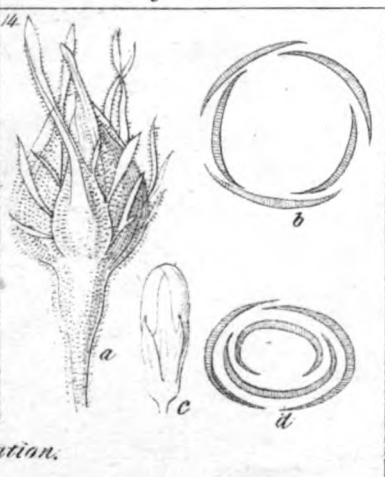
Fascicle.



Glomerules.



Estivation.



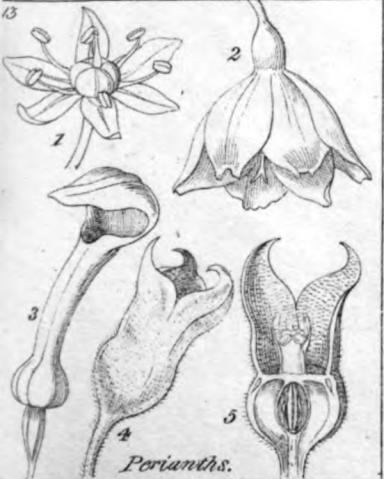
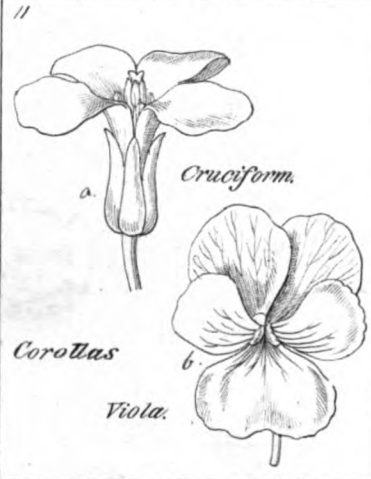
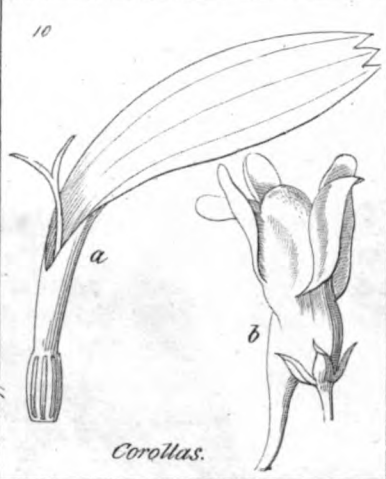
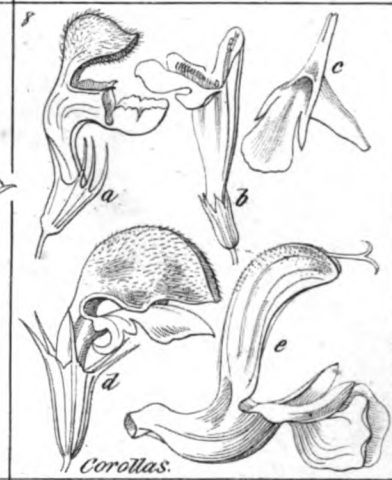
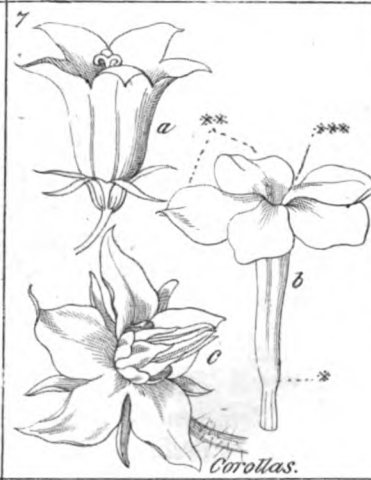
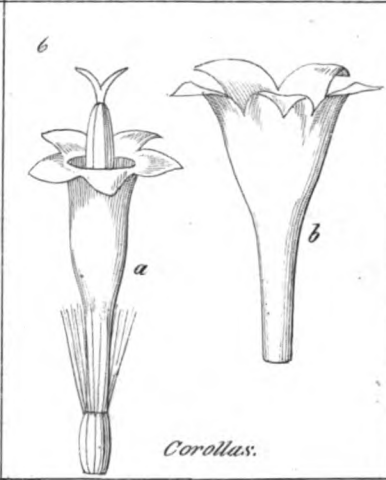
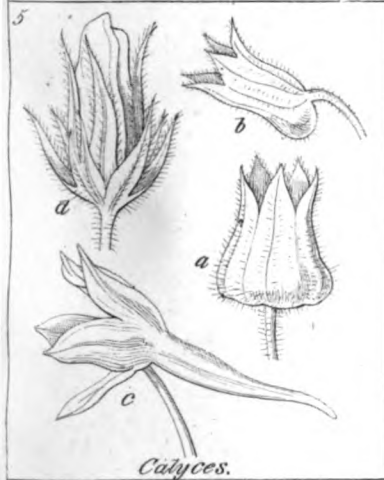
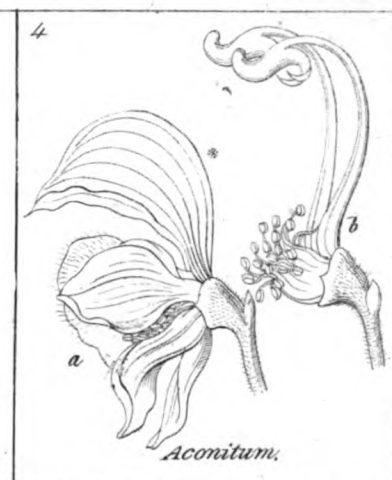
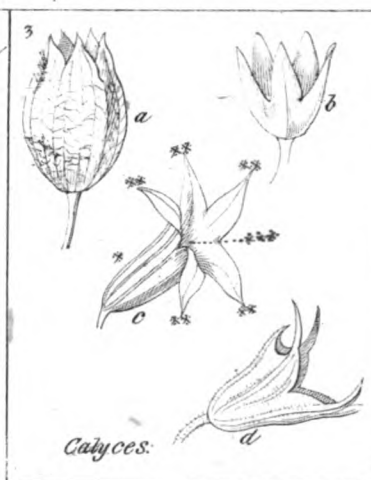
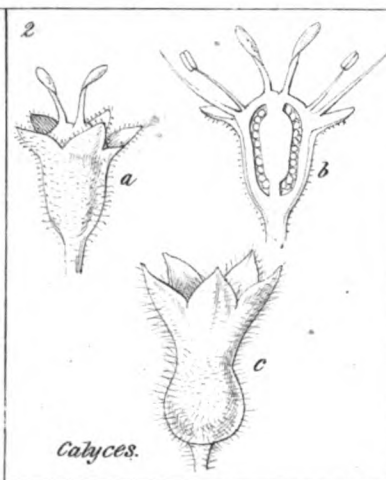
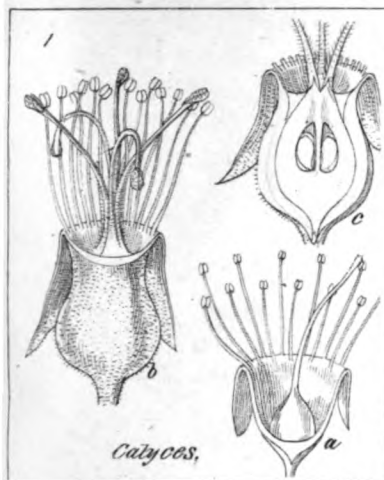
Ostivation.

TABLE XV.—INFLORESCENCE.

- (1—4. Compound flowers).
1. Semiflosculose (Flos semiflosculosus). *Scorzonera Hispanica*.
 2. Radiate (Flos radiatus);—*a.* *Senecio erucæfolius*.—*b.* *Chamomile*;—*c.* Floret of the ray; and *d.* Floret of the disk of do.—*e.* *Milfoil*;—*f.* Floret of the disk; and *g.* Floret of the ray of do.
 3. Discoid (Flos discoideus);—*a.* *Cnicus palustris*;—*b.* Labiate floret of a compound flower;—*c.* *Tansy*; floret of do.—*e.* Receptacle of *Centaurea nigra*;—*f.* Receptacle of *Helminthium echioides*.
 4. Tubular and radiate flower (Flos tubulosus, radiatus).—*a.* *Blue-bottle*, *Centaurea Cyanus*;—*b.* Floret of the ray; and *c.* Floret of the disk of do.
 5. Receptacles (Receptacula).—*a.* *Carlina vulgaris*;—*b.* *Erigeron acre*;—*c.* *Colt's foot*;—*d.* *Echinops sphærocephala*;—*e.* *Tansy*.
 6. Receptacles.—*a.* *Scorzonera Hispanica*;—*b.* *Onopordon Acanthium*;—*c.* *Crepis biennis*;—*d.* Portion of the receptacle of *b.*
 - 7.—*a.* Aggregate flowers of *Dorstenia Contrayerva*;—*b.* Portion of the receptacle with (*c.*) the sterile flowers, and (*d.*) the fertile flowers.
 8. Fig.—*Ficus Carica*.
 9. Fig.—*a.* Receptacle of the Fig. cut through vertically;—*b.* Sterile flower; and *c.* Fertile flower, removed from the receptacle.
 10. Cyme (Cyma). *Mealy Guelder-rose*.
 11. Fascicle (Fasciculus). *Dianthus carthusianorum*.
 12. Glomerules (Glomeruli).—*a.* *Parietaria erecta*;—*b.* *Blitum capitatum*.

TABLE XVI.—CALYX, COROLLA, &c.

- (1—5. Calyces).
- 1.—*a.* Calyx inferior or free; not united to the germen (Calyx inferus seu liber). *Cherry*.—*b.* Calyx superior, or with the tube incorporated with the germen (Calyx superus seu ovario adhærens). *Apple*.—*c.* The same cut through vertically to show that the tube of the calyx is so united with the germen.
 - 2.—*a.* Superior calyx of *Saxifraga decipiens*;—*b.* The same cut through vertically;—*c.* Urceolate calyx (Calyx urceolatus). *Henbane*.
 - 3.—*a.* Inflated, 5-toothed calyx (Calyx inflatus 5-dentatus). *Bladder Campion*.—*b.* Regular, 5-fid calyx (Calyx regularis 5-fidus).—*c.* subregular, 5-fid, oblique (Calyx subregularis, 5-fidus, obliquus). * The tube. ** The limb. *** The mouth or faux.—*c.* Two-lipped (calyx bilabiatus). *Sage*.
 - 4.—*a.* Flower of the *Aconite*,* the upper helmet-shaped leaf or sepal of the calyx. (*b.* represents 2 of the inner petals or nectaries).
 - 5.—*a.* Calyx truncated at the base (Calyx basi truncatus). *Chinese Primrose*.—*b.* Gibbous at the base (Calyx basi gibbosus).—*c.* Spurred at the base (Calyx basi calcaratus). *Tropæolum*.—*d.* Double or involucreted calyx (Calyx duplex seu involucreatus). *Althæa*.
- (6—12. Corollas.—6, 7. Monopetalous and regular.—8—10. Monopetalous and irregular.—11, 12. Polypetalous).
- 6.—*a.* Tubular corolla (Corolla tubulosa). Floret from the disk of the *Leopard's Bane*.—*b.* Infundibuliform (Corolla infundibuliformis). *Pulmonaria*, &c.
 - 7.—*a.* Bell-shaped (Corolla campanulata). *Bell-flower*.—*b.* Salver-shaped (Corolla hypocrateriformis). *Primrose*.—* The tube. ** The limb. *** The mouth or faux.—*c.* Rotate (Corolla rotata). *Borage*.
 8. Lipped Corollas (Corollæ labiatæ).—*a.* *White Dead-Nettle*.—*b.* *Ground Ivy*.—*c.* *Horehound*.—*d.* *Phlomis Herba Venti*.—*e.* *Meadow Sage*.
 9. Lipped Corollas.—*a.* *Marsh Woundwort*.—*b.* *Prunella grandiflora*.—*c.* *Galeopsis*.—*d.* *Bugle*.—*e.* *Hebenstreitia tenuifolia*. (unilabiate).—*f.* *Plectranthus* (resupinate).
 - 10.—*a.* Ligulate (Corolla ligulata). Floret of the ray of the *Leopard's Bane*. *b.* Personate (Corolla personata). *Snapdragon*.
 - 11.—*a.* Polypetalous, regular, cruciform (Corolla polypetala, regularis, cruciformis.) *Wall-flower*.—*b.* Polypetalous, irregularis (Corolla polypetala, irregularis.) *Pansy*.
 12. Polypetalous, irregular, papilionaceous (Corolla papilionacea).—*a.* *Colutea arborescens*.—*b.* The standard (Vexillum).—*c.* *c.* Wings (alæ).—*d.* Keel (Carina).
- (13—16. Single Perianths).
13. f. 1. *Onion*. f. 2. *Snowflake*. f. 3. *Aristolochia*. f. 4. *Asarabacca*. f. 5. The same laid open.
 14. Orchidæ.—*a.* *Ophrys arachnites*.—*b.* *Listera ovata*.—*c.* *Habenaria viridis*.—*d.* *Orchis mascula* (* refers to the labellum or lip; ** to the spur).
 15. Orchidæ.—*a.* *Habenaria bifolia*.—*b.* lip of *Orchis militaris*.—*c.* *O. hircina*.—*d.* *Neottia spiralis*.—(* The lip.—** The spur).
 - 16.—*a.* *Bletia verecunda*.—*b.* Its lip.—*c.* Lip of *Epipactis palustris*.—*d.* Side, and *e.* Inner view of the lip of *Bletia verecunda*.







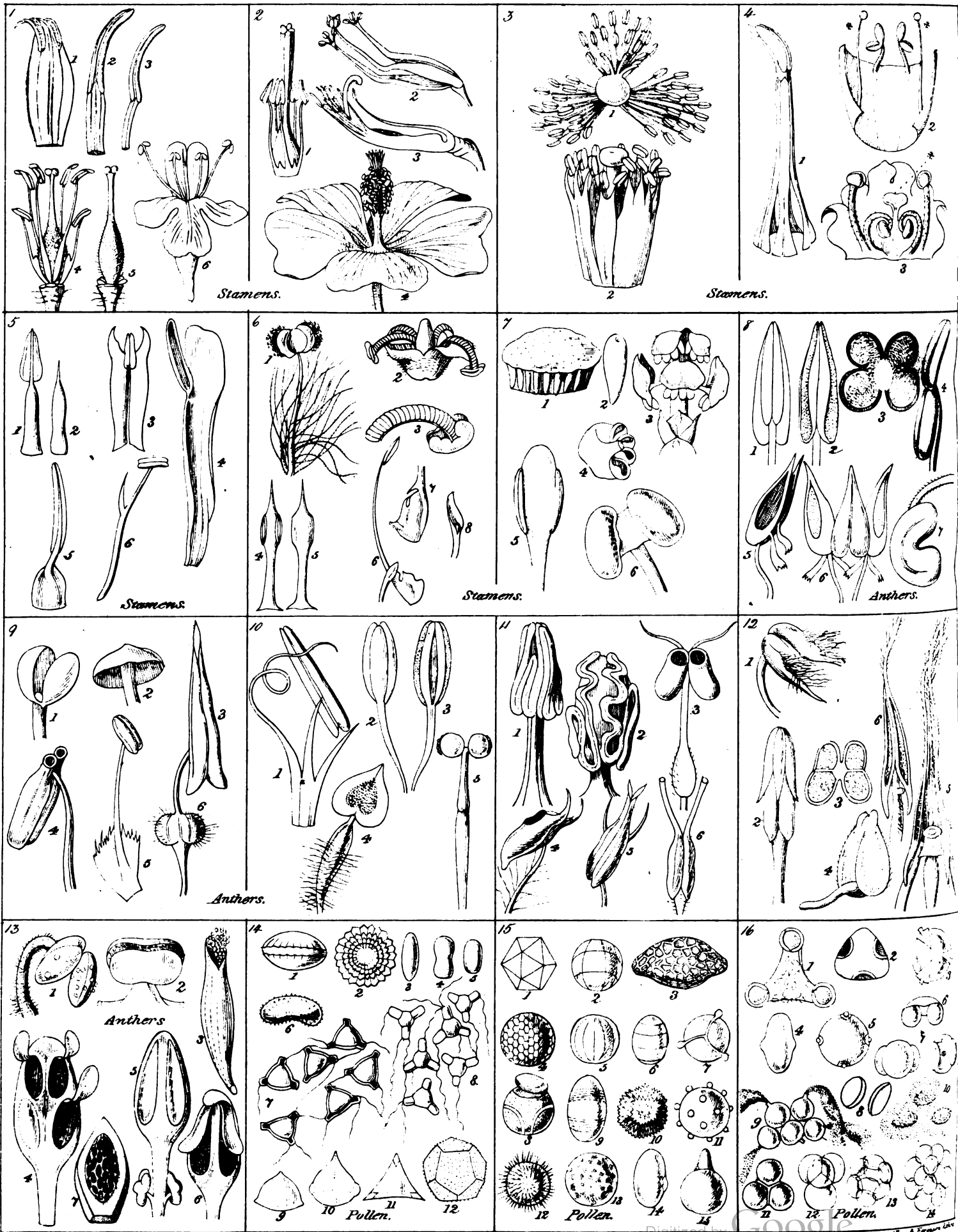


TABLE XVII.

(1—13, Stamens).

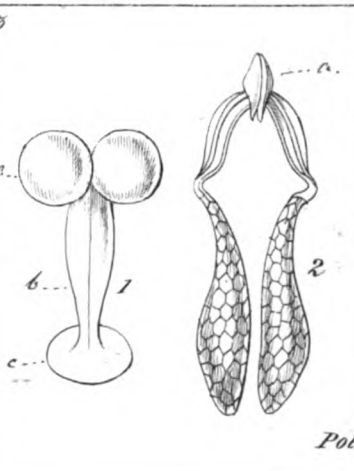
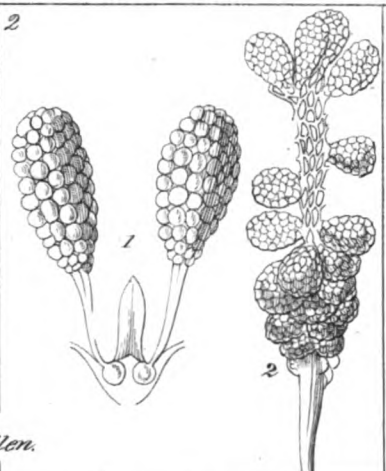
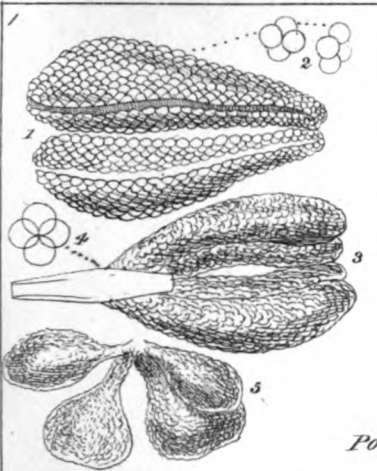
1. (1, 2, 3) *White Water Lily*; f. 4, *Berteroa incana*; f. 5, Pistil of do.; f. 6, *Origanum vulgare*.
2. f. 1. *Flax*; f. 2, *Corydalis*; f. 3, *Bladder Senna*; f. 4, *Mallow*.
3. f. 1. *St. John's Wort*; f. 2. *Orange*.
4. f. 1. *Lobelia*; f. 2, *Hedgehyssop*, *Gratiola*; *. *. two of the stamens abortive; f. 3, *Scrophularia*; *. scale or abortive fifth stamen.
5. f. 1, 2, *Tulip*; f. 3, *Ornithogalum nutans*; f. 4, *Canna Indica*; f. 5, *Nettle Bell-flower*; f. 6, *Sea-Kale*.
6. f. 1. *Virginian Spiderwort*; f. 2, 3, *Pellitory of the wall*; f. 4, 5, *Asarabacca*; f. 6, *Meadow-Sage*; f. 7, the perfect, and f. 8, sterile cell of the Anther of the same.
7. f. 1, *Caladium bicolorum*, and f. 2, Anther-cell of the same; f. 3, *Thuja occidentalis*, and f. 4, inner view of a scale, with the anther-cells; f. 5, *Begonia*; f. 6, *Melissa grandiflora*.
8. f. 1, 2, *Crown Imperial*, and f. 3, Transverse section of the same; f. 4, *Monarda fistulosa*; f. 5, 6, *Common Heath* or *Ling*, *Calluna vulgaris*; f. 7, *Ajuga pyramidalis*.
9. f. 1, 2, *Moschatel*; f. 3, *Mahernia*, of which f. 6, points out the singular enlargement of filament in the genus; f. 4, *Round-leaved Wintergreen*; f. 5, *Zygodphyllum fetidum*.
10. f. 1. *Garlic*, *Allium sativum*; f. 2, 3, *Creeping Crowfoot*; f. 4, *Boronia ledifolia*; f. 5, *Euphorbia*.
11. f. 1. *Gourd*; f. 2, *Bottle-Gourd*; f. 3, *Bear-berry*; f. 4, *Arbutus Unedo*; f. 5, *Whortle-berry*, *Vaccinium Myrtilus*; f. 6, *Red Whortle-berry*, *Vaccinium Vitis-idaeu*.
12. f. 1. *Eye-bright*; f. 2, 3, *Casuarina 4-valvis*; f. 4, *Pansy*; f. 5, 6, *Oleander*.
13. f. 1. *Stachys Germanica*; f. 2, *Euonymus latifolius*; f. 3, *Caulinia fragilis*; f. 4, *Laurus Cinnamomum*; f. 5, 6, *L. nobilis*; f. 7, *Misseltoe*.

(14—16, Pollen).

14. f. 1, 2, *Polygala Chamæbuxus*; f. 3, *Acanthus mollis*; f. 4, *Heracleum Sibiricum*; f. 5, *Vicia oroboides*; f. 6, *Commelina cælestis*; f. 7, *Oenothera biennis*; f. 8, *Epilobium augustifolium*; f. 9, *Dictamnus albus*; f. 10, *Trapa natans*; f. 11, *Tropæolum majus*; f. 12, *Gerophogon glaber*.
15. f. 1. *Picris hieracioides*; f. 2, *Thunbergia alata*; f. 3, *Pancreatium declinatum*; f. 4, *Ruellia formosa*; f. 5, *Saxifraga aquatica*; f. 6, *Valantia Chersonensis*; f. 7, *Pelargonium inquinans*; f. 8, *Passiflora cærulea*; f. 9, *Salvia interrupta*; f. 10, *Leontodon Taraxacum*; f. 11, *Silene inflata*; f. 12, *Althæa rosea*; f. 13, *Mirabilis Jalapa*; f. 14, *Cornus mascula*; f. 15, *Scirpus Romanus*.
16. f. 1. *Stachytarpheta mutabilis*; f. 2. *Tilia parvifolia*; f. 3. *Plumbago rosea*; f. 4. *Astragalus Onobrychis*; f. 5. *Nerium Oleander*; f. 6, 7, *Pinus Strobis*; f. 8. *Linaria purpurea*; f. 9. *Cistus albidus*; f. 10. *Lilium bulbiferum*; f. 11. *Epacris pulchella*; f. 12. *Erica urceolaris*; f. 13. *Acacia undulata*; f. 14, *A. lophantha*.

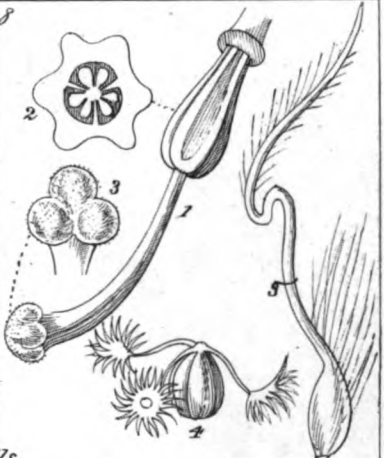
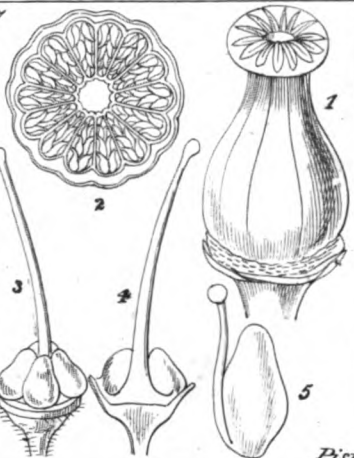
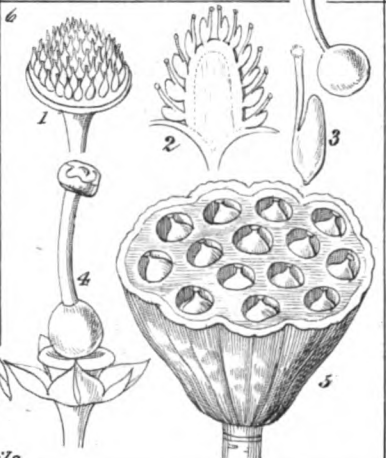
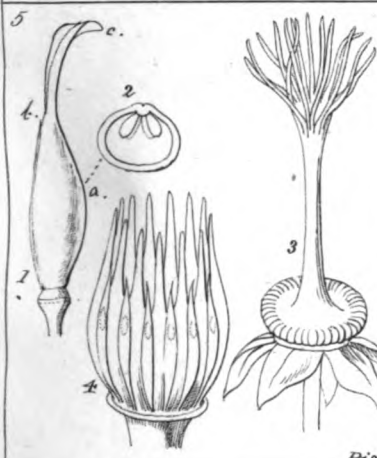
TABLE XVIII.

- (1—4 Pollen).
1. Orchideæ.—f. 1, 2. Granulated Pollen-masses (*Massæ granulatae*). *Listera ovata*;—f. 3, 4. *Neottia*;—f. 5, Solid masses (*Massæ solidæ*) *Bletia*.
 2. f. 1, 2. Lobulated Masses or granules elastically cohering (*Massæ lobulatæ*, seu *granulæ elasticæ cohærentes*). *Orchis*.
 3. f. 1. *Saccolobium*.—*a.* Pollen-masses, waxy (*Massæ pollinæ cereaceæ*). *b.* the caudicula;—*c.* the gland;—f. 2, Pollen-masses of *Asclepias*—*a.* the gland or retinaculum.
 4. f. 1. Grain of Pollen of *Amygdalus nana*, f. 2, Fovilla or aura seminalis of the same.
- (5—16. Pistils, Styles or Stigmas).
5. f. 1. Pistil of *Larkspur*.—*a.* Germen (f. 2, the same cut through transversely). *b.* the style.—*c.* the stigma. f. 3. Pistil of Mallow. f. 4. Pistils of *Houseleek*.
 6. f. 1. Pistils of *Fragaria*. f. 2. The receptacle of the same cut through vertically. f. 3. Single Pistil, with its lateral style. f. 4. Pistil of the *Orange* on its disc or torus. f. 5. The remarkable torus or gynophore (*Torus seu gynophorum*) of *Nelumbium speciosum*, which is alveolated and bears the pistils within the cavities.
 7. f. 1. Pistil of *Nymphæa alba*. f. 2. transverse section of the many-celled germen; f. 3. *Symphytum*; its germen deeply 4-lobed, as in *Boragineæ* and *Labiatae*; f. 4. Section of the same showing the origin of the style;—f. 5. Pistil, with the style from the base (*stylus basilaris*). *Alchemilla*.
 8. f. 1. Pistil;—f. 2. transverse section of the germen, and f. 3, stigma of *Martagon Lily*;—f. 4. Pistil, with reflexed style and fimbriated stigmas, of *Rumex*;—f. 5. Pistil of *Geum*, with the persistent geniculated awn.
 9. f. 1. *Viola tricolor*;—f. 2. *Iris*, with the petaloid stigmas;—f. 3. *Tulip*, with sessile 3-lobed stigma.
 10. f. 1. Pistil and f. 2. Stigma of *Aristolochia*.—f. 3. *Bletia verecunda*.—f. 4. *Listera ovata*.—f. 5. front view of the same (*a.* germen.—*b.* column.—*c.* stigma.—*d.* pollen-masses, fallen out from the the anther-case (*e.*) on the back of the stigma.—*f.* crest of the column.—f. 6. Young anther and stigma of the same.
 11. f. 1. *Orchis mascula*. stigma and anther.—f. 2, 3. *Neottia spiralis*.—f. 4. *Ophrys arachnites*.—f. 5. *Habenaria viridis*.
 12. f. 1, 2. Column, with anthers and stigma of *Cypripedium Calceolus*.—f. 3. back view of the column of *Orchis mascula*. (*a. a.* lateral abortive anthers.—*b.* central fertile one).—f. 4. Pistil of *Papaver Argemone*.—f. 5. *Papaver orientale*.—f. 6. *Platanus occidentalis*.
 13. Stigmas.—f. 1. *Epilobium grandiflorum*.—f. 2. *Sandbox*, *Hura crepitans*.—f. 3. *Yucca aloifolia*.—f. 4. *Asarum Europæum*.—f. 5. *Acalypha Virginica*. f. 6. *Gratiola officinalis*.—f. 7. *Sideritis hyssopifolia*.—f. 8. *Crocus vernus*. f. 9. Segment of the same.
 14. Stigmas.—f. 1. *Drosera rotundifolia*.—f. 2. *Corydalis tuberosa*.—f. 3. *C. lutea*.—f. 4. *Fumaria officinalis*.—f. 5. *Cynanchum Vincetoxicum*.—f. 6. *Oleander*.—f. 7. *Vinca minor*.—f. 8. *Artemisia vulgaris*.—f. 9. *A. campestris*.—f. 10. *Caladium Seguinum*.
 15. Stigmas;—f. 1. *Andropogon hirtus*.—f. 2. *Hierochloe australis*.—f. 3. *Parietaria*.—f. 4. *Lobelia Cardinalis*.—f. 5, 6. *Goodenia grandiflora*.—Sections of Germens. f. 7. *Campanula hybrida*.—f. 8. *Yucca aloifolia*.—f. 9. *Wall-flower*.—f. 10. *Melilot*.—f. 11. *Anagallis arvensis*.—f. 12. *Papaver orientale*.
 16. Ovules.—f. 1. infant state of the ovules in *Cucumis Anguria*.—f. 2. an ovule of the same after fertilization;—*a.* the Foramen.—f. 3. an oblique vertical section of the fertilised ovule of the Garden *Tulip*;—*a.* foramen of the primina;—*b.* foramen of the secundina;—*c.* primina;—*d.* secundina;—*e.* nucleus, its apex concealed within that of the secundina;—*f.* vessels of the raphe;—*g.* place of the chalaza.



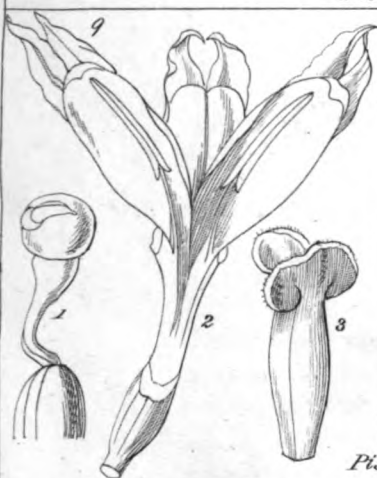
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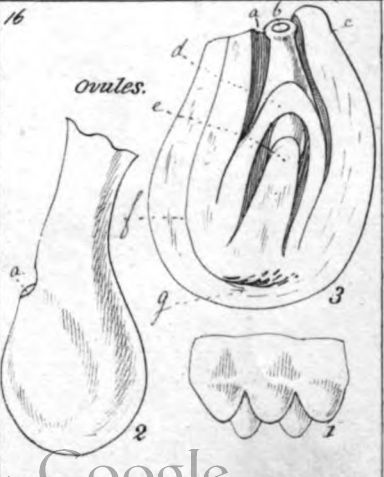
Pistils.

Pistils.



Pistils.

Pistils.



Stigmas.

Stigmas &c.

Ovules.





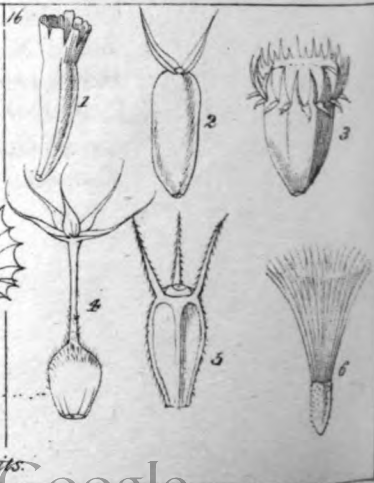
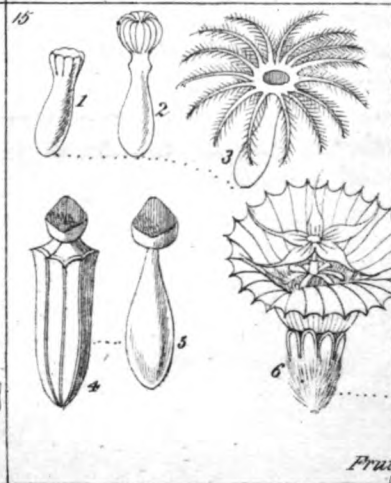
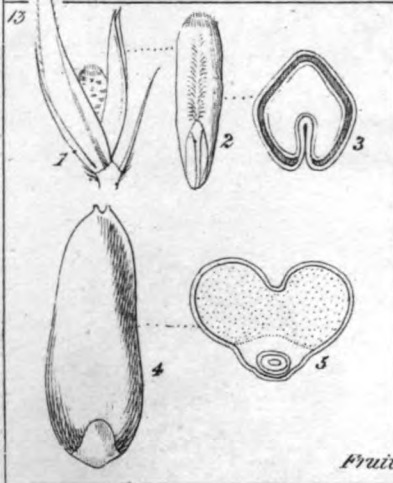
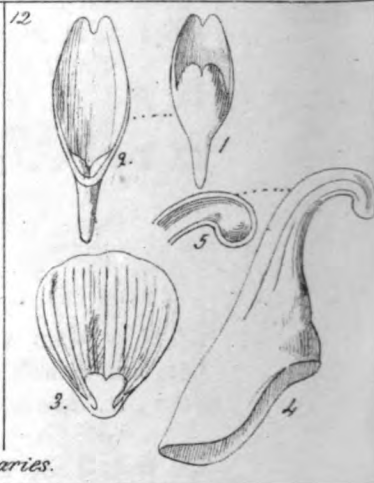
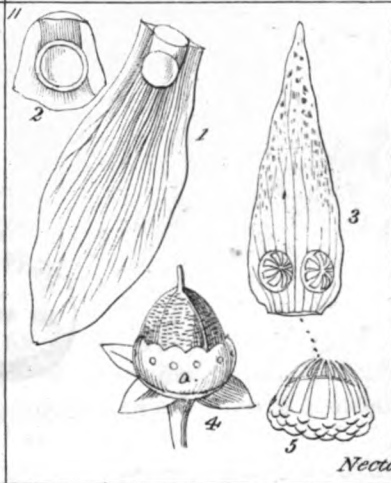
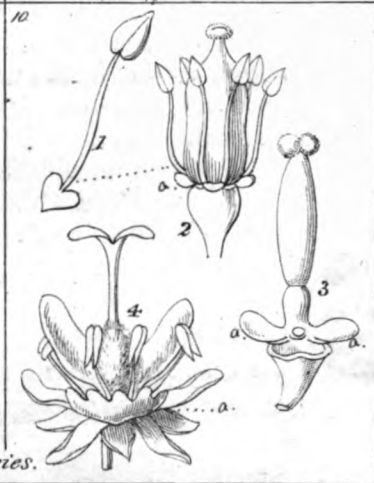
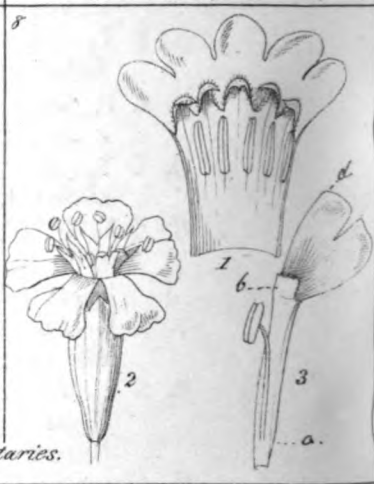
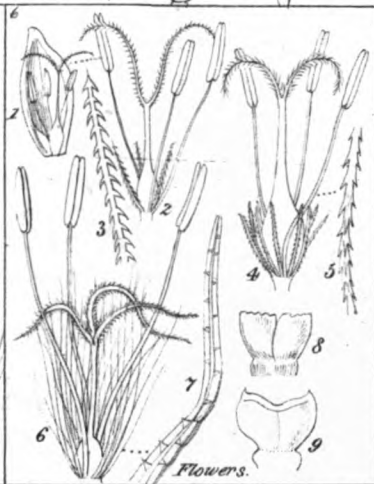
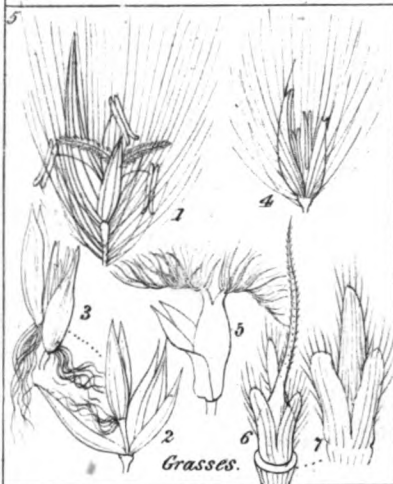
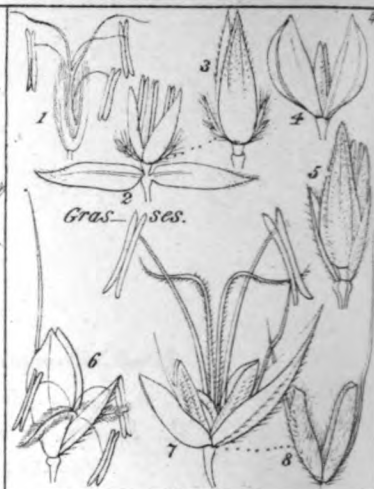
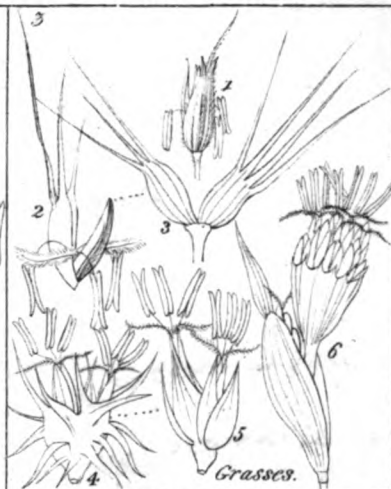
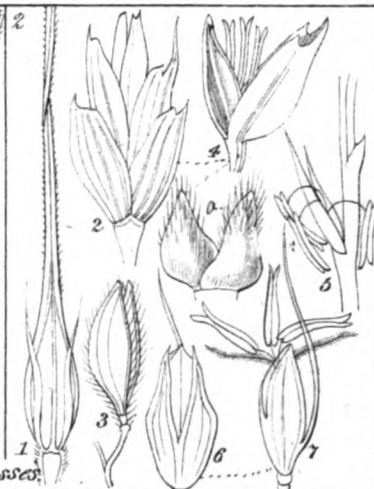
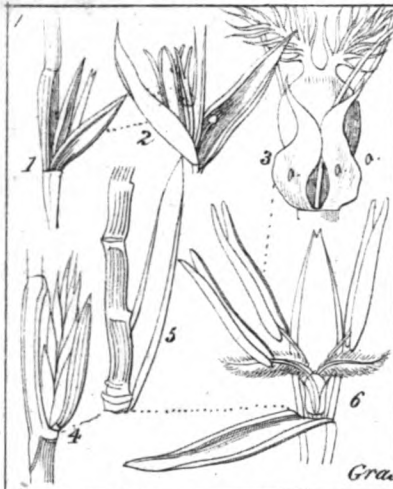


TABLE XIX.

(1—5. Flowers of Grasses, illustrative of some of the generic characters).

1. f. 1, 2, *Monerma subulata*. f. 3—6, *Lolium arvense*. 3, *a.* the nectary.
2. *Hordeum distichon*; f. 2, *Triticum Spelta*; f. 4, flower from the same; *a.* the nectary; f. 3, *Leersia oryzoides*; f. 5, *Nardus stricta*; f. 6, 7, *Alopecurus utriculatus*.
3. f. 1, *Andropogon distachyus*; f. 2, 3, *Ægilops ovata*; f. 4, 5, *Cenchrus tribuloides*; f. 6, *Cornucopiæ cucullatum*.
4. f. 1, *Knappia agrostidea*; f. 2, 3, *Phalaris arundinacea*; f. 4, 5, *P. Canariensis*; f. 6, *Bromus racemosus*; f. 7, 8, *Anthoxanthum odoratum*.
5. f. 1, *Arundo Phragmites*; f. 2, 3, *Poa trivialis*; f. 4, *Calamagrostis lanceolata*; f. 5, *Stipa Calamagrostis*; f. 6, 7, *Bambusa arundinacea*.
6. f. 1—7, *Cyperaceæ*. f. 1, 2, 3, *Scirpus palustris*; f. 4, 5, *Rhynchospora alba*; f. 6, 7, *Eriophorum gracile*; f. 8, Nectary or hypogynous scale of *Glyceria spectabilis*; and f. 9, do. of *Glyceria fluitans*.
7. f. 1—12, Nectaries; 7. *Narcissus*; *a.* the Nectary; *b.* the Spatha; *c.* the inferior Germen; *d.* Perianth.
8. f. 1, *Anchusa*, with the 5 scales or nectaries at the mouth, (*faux coronata*); f. 2, *Lychnis*, with a scale or nectary on each petal; f. 3, petal of the same; *a.* claw (*unguis*); *b.* nectary; *d.* the cleft border (*lamina fissa*).
9. *Grass of Parnassus*. f. 1, flower, with its 5 nectaries; f. 2, single Nectary.
10. f. 1, 2, *Nasturtium*. *a.* the 4 hypogynous glands or nectaries; f. 3, *Crambe*. *a.* the 2 hypogynous glands; f. 4, *Plane*. *a.* hypogynous disc or nectary.
11. f. 1, 2, Nectary of *Fritillaria*. f. 3, 5, do. of *Swertia perennis*. f. 4, *Rue*. *a.* hypogynous disc or nectary in the *Rue* which bears the stamens.
12. f. 1, Petal (Nectary, L.) of *Eranthis hyemalis*; f. 2, the same with the lower lip cut away; f. 3, Petal and nectary of *Ranunculus*; f. 4, Petal (Nectary, L. of the *Columbine*); and f. 5, section of the horn-shaped extremity filled with sweet fluid.

(13—16. Fruits, dry and indehiscent).

13. Caryopsis of *Rye*; f. 2, do. of *Wheat*.
14. Compound fruit of *Ranunculus*; f. 2, Carpel (Achenium) from the same; and f. 3, cut open to shew the seed and embryo; f. 4, 5, Caryopsis of *Clematis*; f. 6, *Achenium*. *Mallow*; f. 7, 8, Carpels (achenia) of the same.
15. f. 1, 2, 3, Achenium of *Valerian*, crowned by its singular pappus-like calyx; f. 4, do. of *Dipsacus laciniatus*; f. 5, the same, its outer coat or calyx removed; f. 6, do. of *Scabiosa stellata*, and f. 4 of the next division (16) the same with the calyx removed.
16. f. 1, Achenium of *Pyrethrum corymbosum*; f. 2, do. of *Helianthus annuus*; f. 3, do. of *Cichorium Intybus*; f. 5, do. of *Bidens tripartita*; f. 6, do. of *Chrysocoma Linosyris* (all *Compositæ*).

TABLE XX.—FRUITS.

(1—9, Dry and indehiscent).

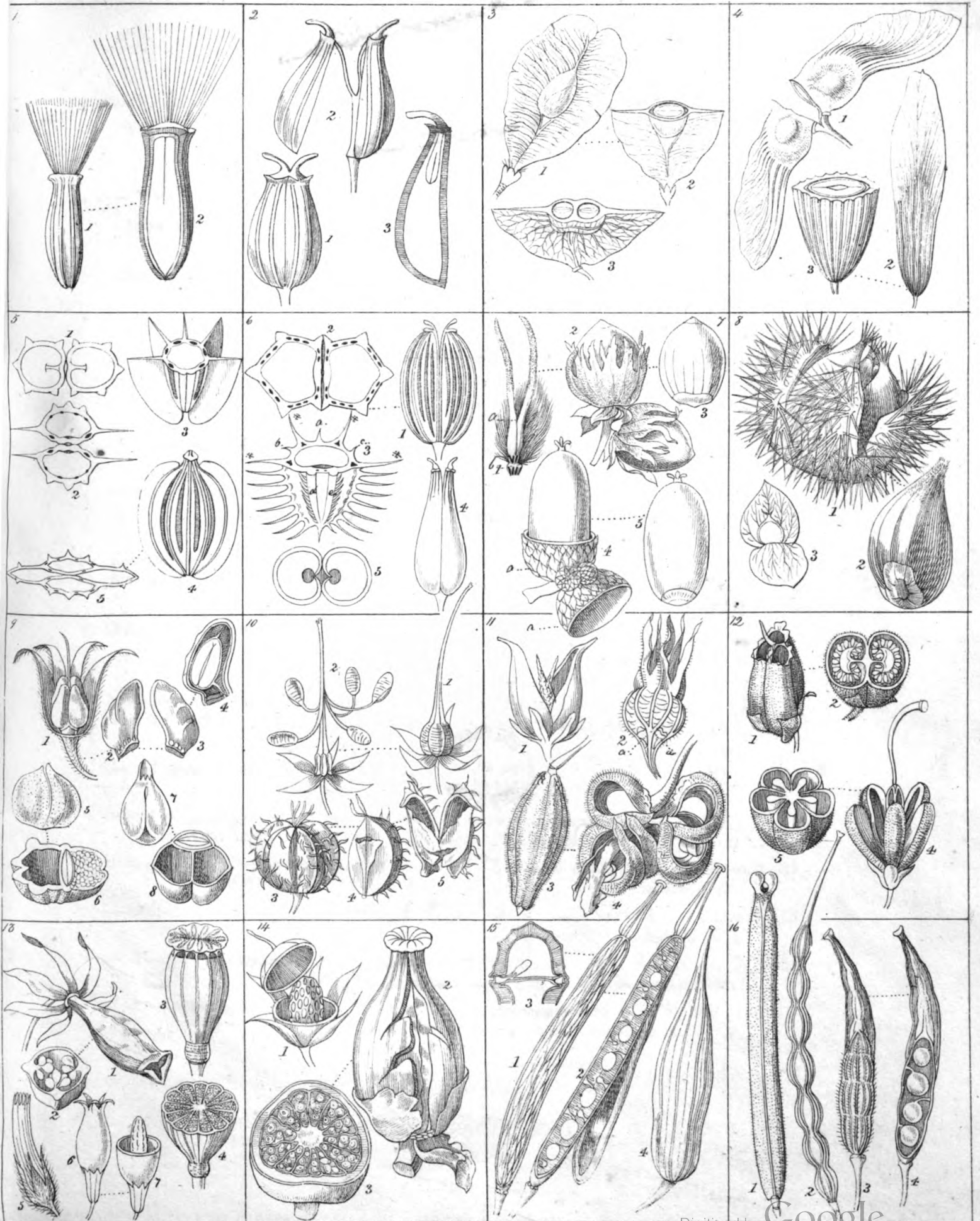
central.

1. f. 1, Achenium of a ~~vertical~~ floret of the *Leopard's bane*;—f. 2. Section of the same, showing the erect seed and the embryo.
2. f. 1. Fruit of an *Umbelliferous Plant*;—f. 2, the same, with the carpels (achenia) separating;—f. 3, Section of a carpel, with the pendent seed.
3. f. 1, 2, Samara of the *Elm*;—f. 3, do. of *Ptelea trifoliata*.
4. f. 1, Samara of the *Maple*;—f. 2, 3, do. of the *Ash*.
5. Fruit of *Umbelliferae*.—f. 1, *Hemlock*;—f. 2, *Angelica sylvestris* (with vittæ);—f. 3, *Selinum caruifolium* (with vittæ);—f. 4, 5, *Parsnep* (with vittæ).
6. Fruit of *Umbelliferae*;—f. 1, 2, *Bupleurum falcatum*;—f. 3, *Carrot* (with vittæ); *a, b, c, d, e*, the 5 primary ridges, *.*.*. the 4 secondary ones;—f. 4, 5, *Anthriscus sylvestris*.
7. f. 1, Fertile flower of the *Hasel*, *a*, the scale of the catkin, *b*, the little involucre which persists and enlarges with the fruit;—f. 2, 3, Nuts of the same. f. 4, 5, Acorns (glans) of the *Oak*. *a, a*, Cups (*Cupulæ*).
8. f. 1, Fruit of the *Spanish Chestnut*, invested by the enlarged persistent involucre or cup;—f. 2, a single fruit;—f. 3, Fruit of *Atriplex hortensis*, with its persistent 2-leaved perianth.
9. f. 1—4, achenia of *Symphytum officinale*.—f. 5, 6, Capsule of *Corn-salad*, *Fedia olitoria*.—f. 7, 8, do. of *F. Auricula*.

Pericarp.

10—16. (Dry and dehiscent or capsular fruits).

10. f. 1, Five-celled and five-valved fruit of the *Geranium*. f. 2, the same with the valves separating, each containing 1 seed.—f. 3, 4, 5, Capsule of the *Castor-oil plant*.
11. f. 1, Two-valved capsule of *Digitalis*.—f. 2, capsule of *Campanula* opening (*a. a.*) by pores at the base;—f. 3, 4, Capsule of *Noli me tangere*.
12. f. 1, Capsule of *Antirrhinum*, opening by pores at the extremity, f. 2, Section of the same.—f. 4, 5, Five-valved and five-celled capsule of *Rhododendron*.
13. Capsules.—f. 1, 2, *Reseda*.—f. 3, *Poppy*.—f. 5, *Cerastium*;—f. 6, 7, *Lychnis Chalcedonica*.
14. Capsules.—f. 1, *Poor man's weatherglass*, a Pyxidium or Capsula circumscissa.—f. 2, 3, *Yellow Water-Lily*.
15. f. 1, 2, Beaked Pod (Siliqua) of the *Cabbage*; f. 3, transverse section.—f. 4, valveless pod of *Radish*, *Raphanus sativus*.
16. f. 1, Pod of *Cheiranthus annuus*.—f. 2, do. of *Raphanus Raphanistrum*;—f. 3, 4, *White Mustard*, *Sinapis alba*.







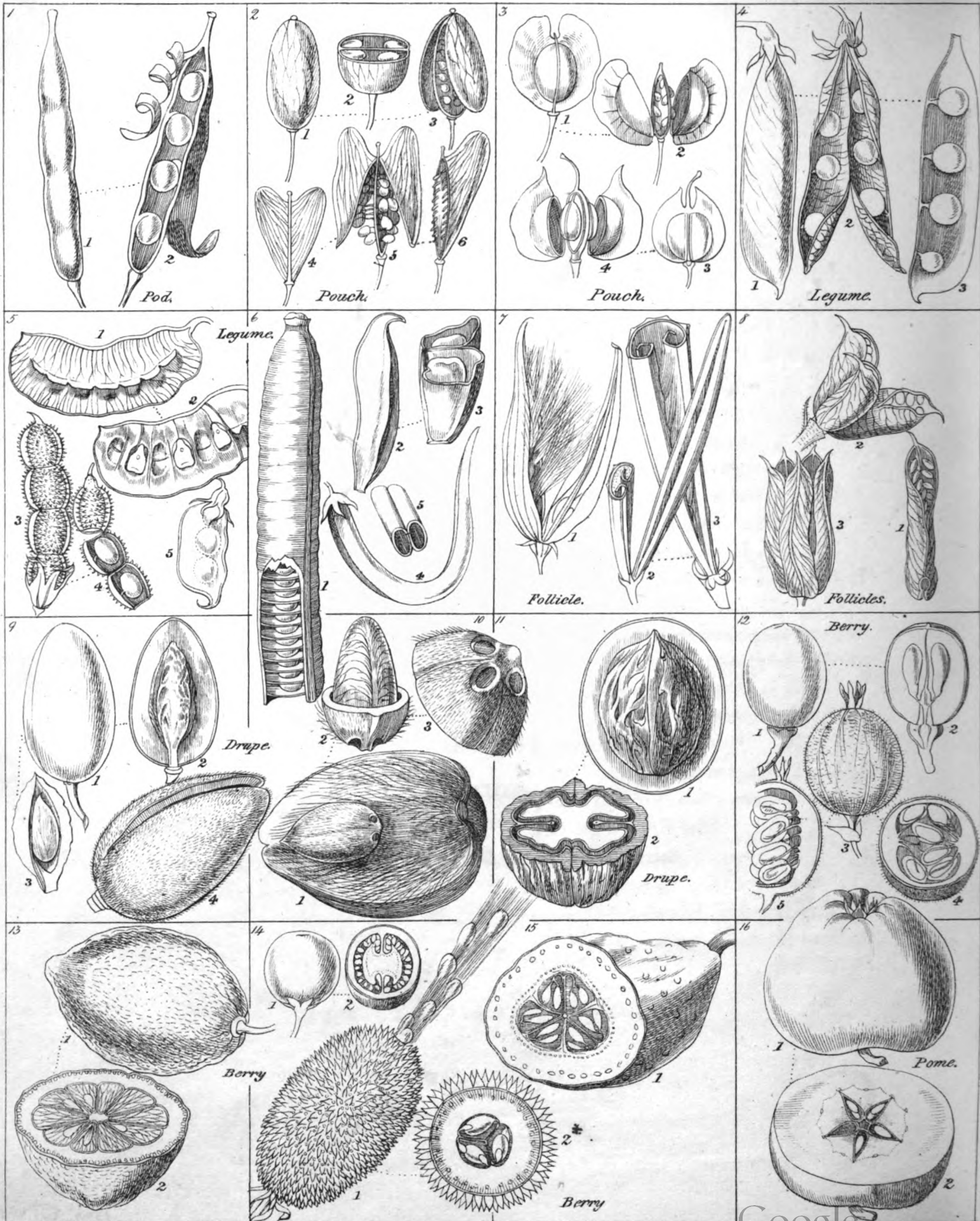


TABLE XXI.—FRUITS.

(1—8, Dry and dehiscent, or capsular fruit).

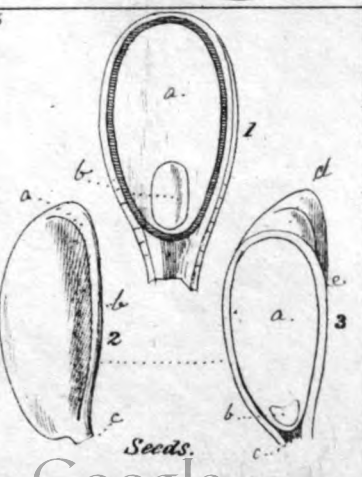
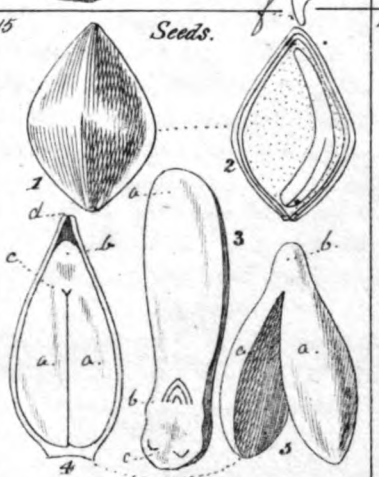
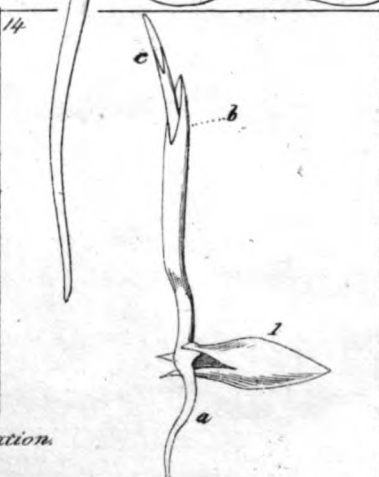
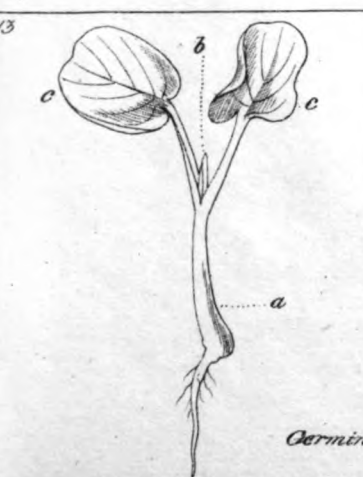
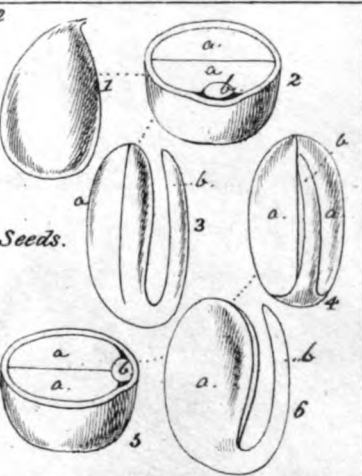
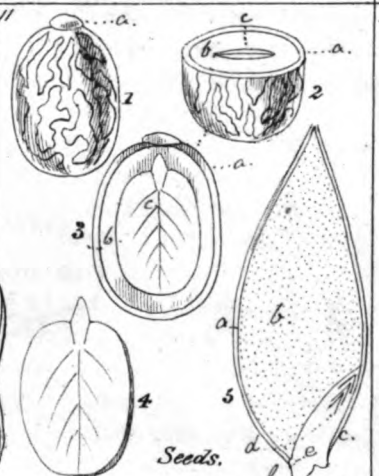
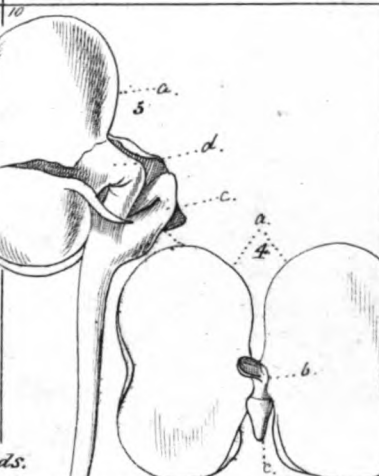
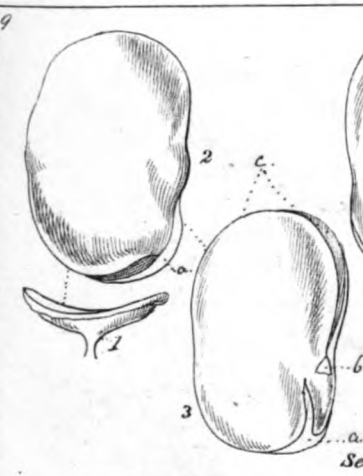
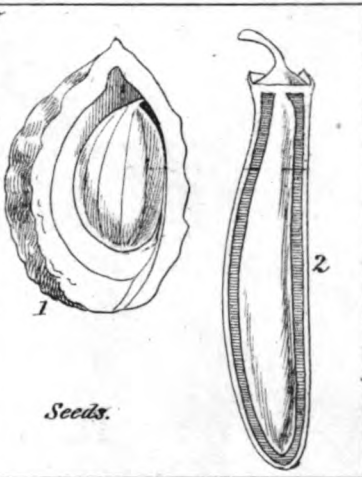
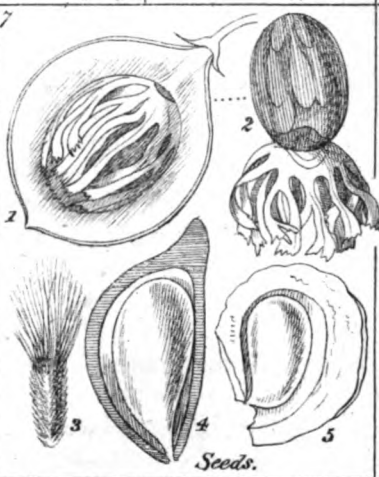
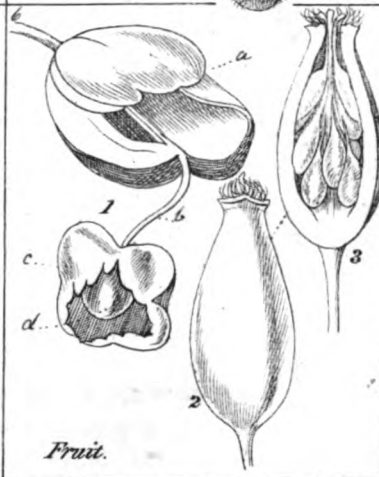
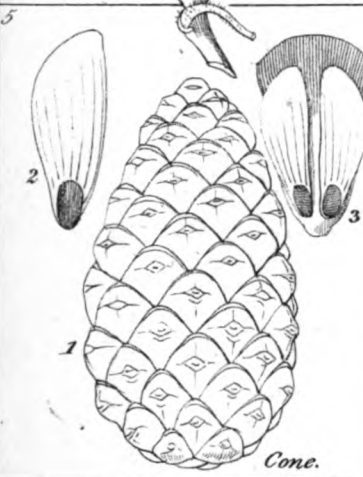
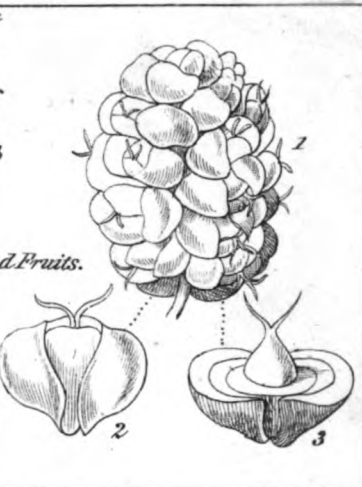
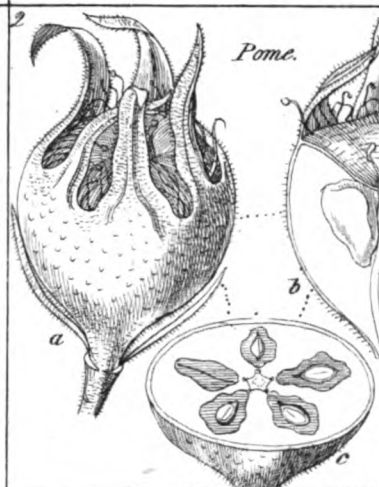
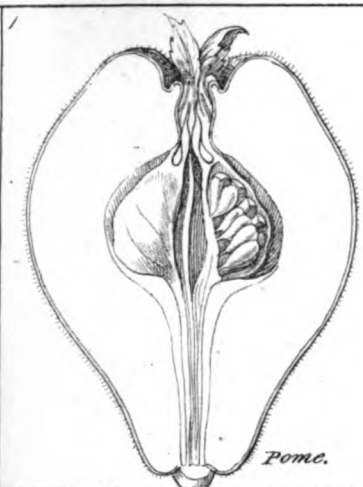
1. f. 1, 2, Pod of *Cardamine*.
2. f. 1, 2, 3, Pouch (Silicula) of *Draba verna*; f. 4, 5, 6, do. of *Shepherd's-purse*.
3. f. 1, 2, Pouch of *Thlaspi arvense*; f. 3, 4, *Iberis amara*.
4. f. 1—3, Legume (Legumen) of the *Pea*.
5. f. 1, 2, Legume of *Senna. Cassia obovata*; f. 3, 4, Lomentaceous Legume (Lomentum) of *Hedysarum*. f. 5, Legume of *Ervum Lens*.
6. f. 1, Legume of *Cassia Fistula*, divided into chambers or cells by transverse septa (Legumen septatum); f. 2, 3, Two-celled Legume of *Astragalus Bæticus*; f. 4, 5, do. of *Astragalus hamosus*.
7. f. 1, Follicle of *Cynanchum Vincetoxicum*; f. 2, 3, do. of the *Oleander*.
8. f. 1, Follicle of *Delphinium Ajacis*; f. 2, do. of *Aconitum Napellus*; f. 3, of *Aquilegia vulgaris*.

(9—16. Fleshy Fruits).

9. f. 1, 2, 3, Drupe or Stone fruit (Drupa) of a Plum, *Prunus domestica*; f. 4, do. of the *Almond*.
10. f. 1, 2, 3, Dry drupe (Drupa sicca) of the *Cocoa-nut*.
11. f. 1, 2, Drupe of the *Wallnut*.
12. f. 1, 2, Berry (Bacca) of the *Grape*; f. 3, 4, 5, of the *Gooseberry*.
13. f. 1, 2, Many-celled Berry of the *Lemon*.
14. f. 1, 2, Two-celled Berry of *Solanum*; f. 1*, 2*, Berry (Pepo, of many authors) of the *Squirting Cucumber*.
15. Berry (Pepo) of the *common Cucumber*.
16. Pome (Pomum) *Apple*.

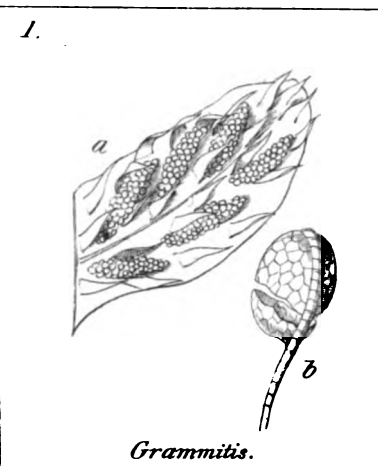
TABLE XXII. 1—7. FRUITS.

- (1, 2. Fleshy Fruits).
1. Pome (Pomum) of the *Quince*.
 2. *a, b, c*. Pome of the *Medlar*.
- (3, 4. Compound Fruits).
3. *a, b, c, d*. *Raspberry*.—*e, f*. *Strawberry*.
 4. *f 1, 2, 3*, *Mulberry*.
5. Aggregated Fruit.—*f 1*, Cone of the *Scotch Fir*, *Pinus sylvestris*.—*f 2*, winged seed.—*f 3*, Scale of the cone with its 2 seeds.
 6. *f 1*, Capsule of *Spindle-wood*, *Fuonymus Europæus*.—*a*. Pericarp.—*b*. the seed-stalk (podospermum).—*c*. the arillus.—*d*. the seed.—*f 2*, Fruit of the *Rose*. *f 3*. section of the same, showing the achenia lining the inside of the fleshy calyx.
- (7—16. Seeds and Embryos).
7. *f 1*, Drupe of the *Nutmeg*, cut through to show the Nutmeg or seed, invested by the arillus (or Mace).—*f 2*, the arillus forced back to show the Nutmeg.—*f 3*. Comate Seed (semen comatum).—*f 4*, Erect seed (Semen erectum) as in *Ranunculus*; *f 5*, ascending seed (Semen adscendens) *Medlar*.
 8. *f 1*, Suspended Seed (Semen suspensum) *Nectarine*.—*f 2*, Pendent or inverted seed (Semen inversum) *Umbelliferæ*.
 9. *f 1*, Seed-stalk (podospermum) of the *Garden Bean*.—*f 2*, Seed of do.—*a*. the scar (hilum).—*f 3*, Embryo, from which the integument has been removed.—*a*. the radicle (radicula) *b*. the plumule (plumula) *c*. the seed-lobes or cotyledons (cotyledones).
 10. *f 5*, Seed of the *Garden Bean* in a state of germination.—*a*. the integument bursting.—*b*. the radicle.—*c*. the plumule.—*d*. the cotyledons.—*f 4*, the Embryo laid open.—*a, a*. the two cotyledons.—*b*. the plumule.—*c*. the scar (hilum).
 11. *f 1*, Seed of the *Castor-oil Plant*.—*f 2*, Transverse section of do.—*a*. the integument.—*b*. the albumen.—*c*. the embryo.—*f 3*, vertical section of the same.—*a*. the integument.—*b*. the albumen.—*c*. the embryo.—*f 5*, Grain of *Barley*.—*a*. the integument (which in this case is incorporated, not only with the pericarp, as in a caryopsis, but with the floral covering also).—*b*. the farinaceous albumen.—*c*. the embryo, of which *d*. is the single cotyledon, including the embryo (*e*).—*f*. the radicle, a little developed.
 12. *Cruciferæ*.—*f 1*, Seed of *Sisymbrium*, the embryo having incumbent cotyledons; *f 2*, transverse section of the same.—*f 3*, entire embryo;—*a*. the cotyledons; *b*, the radicle, curved upwards and directed to the back of one the cotyledons.—*f 5*, transverse section of a seed of *Cardamine*, the embryo having accumbent cotyledons, and *f 4, 6*, entire embryos of the same.—*a*. the cotyledons; *b*. the radicle curved upwards and directed to the edges of the cotyledons.
 13. Embryo of a *Dicotyledonous* plant (*Lupine*) in a state of germination.—*a*. the radicle, now the young root; *b*. the plumule, about to become the stem; *c, c*. the cotyledons, now the seminal leaves (folia seminalia).
 14. Seed of a *Monocotyledonous* plant (*Tradescantia*) in a state of germination.—*1*, the husk of the grain from which the embryo has burst.—*a*. the radicle; *b*. the single cotyledon from whence issues (*c*.) the plumule.
 15. *f 1*, Seed of *Buck-wheat*.—*f 2*, the same, cut through vertically, showing the dicotyledonous embryo on one side of a farinaceous albumen.—*f 3*, Vertical section of an embryo of a *Monocotyledonous* plant (*Canna*) before germination.—*a*. the single cotyledon; *b*. the included plumule; *c*. the included radicle.—*f 4*. Vertical section of the seed of *Myrica cerifera*.—*a, a*. cotyledons; *b*. the radicle; *c*. the plumule; *d*. remains of the foramen.—*f 5*, embryo of the same; *a, a*. the cotyledons, within which at their base the embryo is lodged; *b*. the radicle (*f 3—5* from Lindley).
 16. Vertical section of the seed of *Luzula campestris*.—*a*. the Albumen; *b*. Monocotyledonous Embryo.—*f 2, 3*, Seeds of the *Red Currant*.—*a*. Chalaza; *b*. raphe; *c*. hilum;—*f 3*, *a*. albumen; *b*. Embryo with its 2 spreading cotyledons; *c*. hilum; *d*. chalaza; *e*. raphe, cut through, (from Lindley).

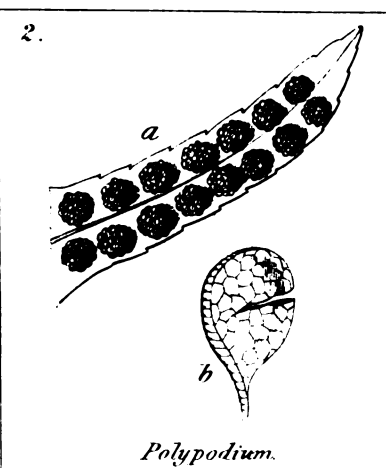




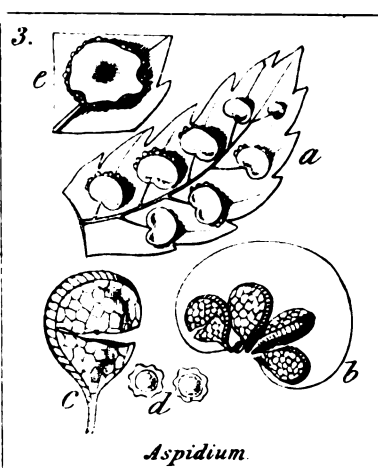




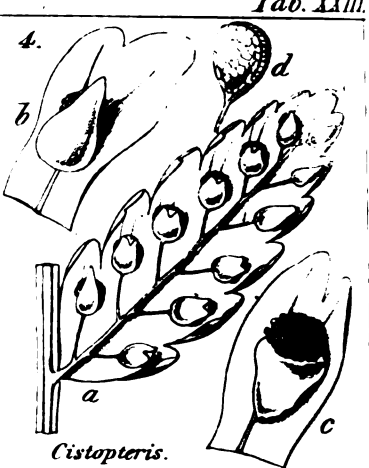
Grammitis.



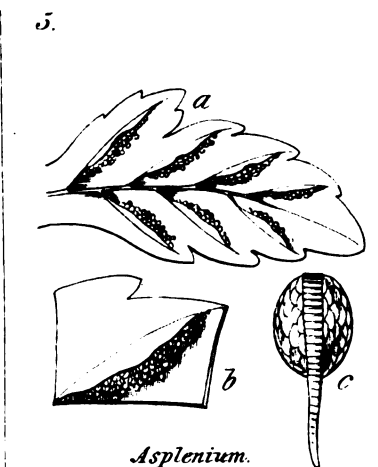
Polypodium.



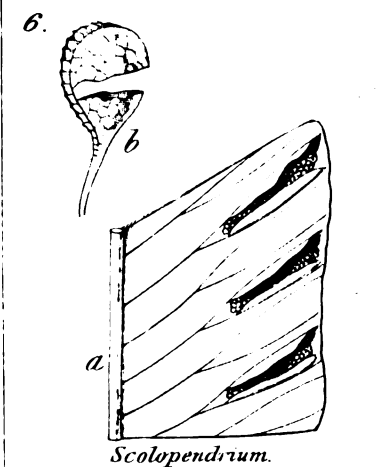
Aspidium.



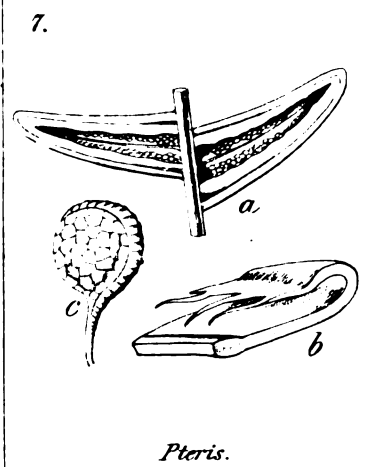
Cistopteris.



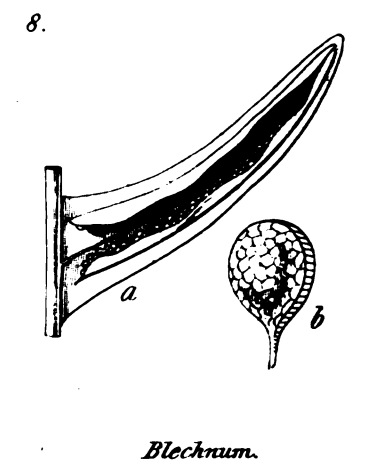
Asplenium.



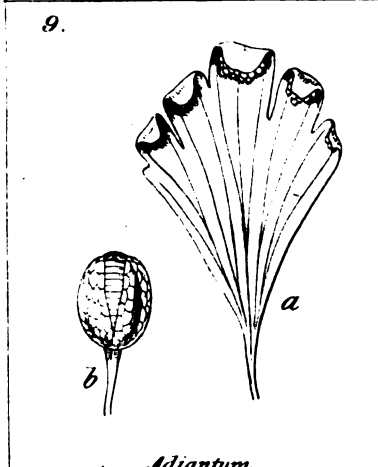
Scolopendrium.



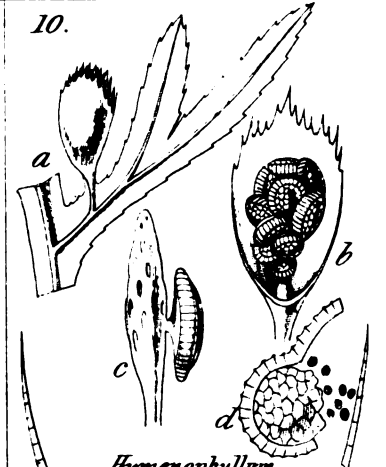
Pteris.



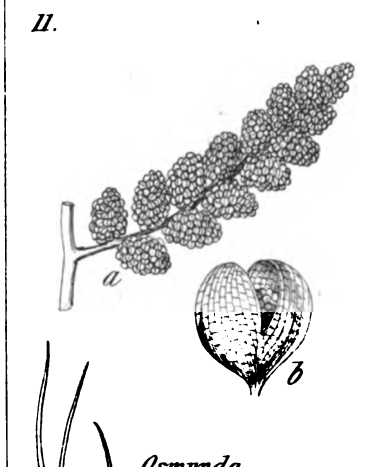
Blechnum.



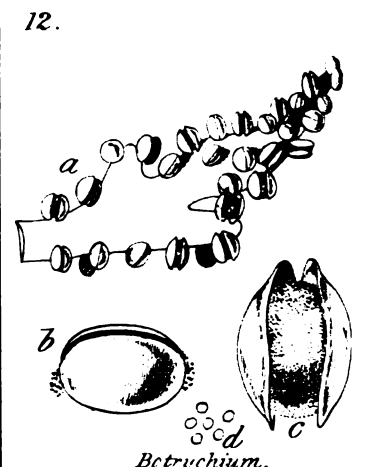
Adiantum.



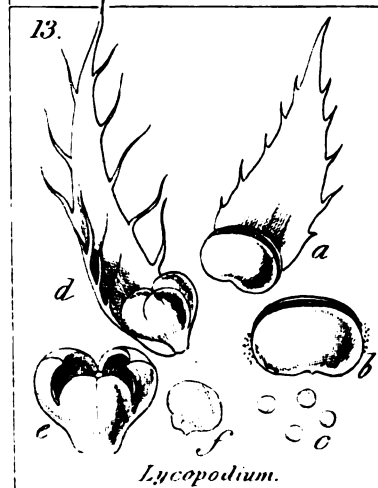
Hymenophyllum.



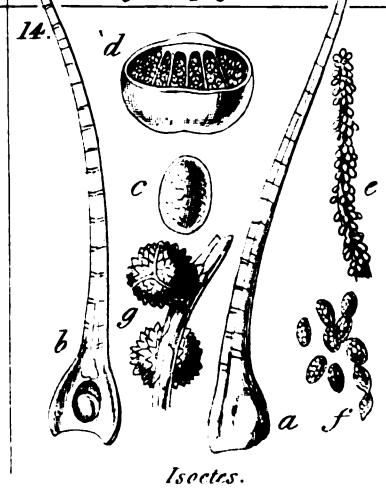
Osmunda.



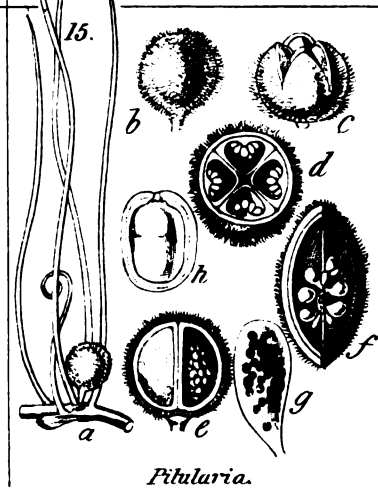
Botrychium.



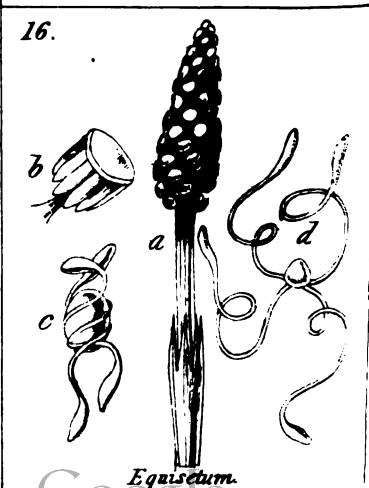
Lycopodium.



Isoetes.



Filularia.



Equisetum.

TABLE XXIII.

(1—12. Ferns).

1. *Grammitis*. *a.* oblong Sori or clusters of capsules; *b.* Capsule.
2. *Polypodium*. *a.* rounded Sori; *b.* Capsule.
3. *Aspidium*. *a.* rounded Sori, covered by kidney-shaped Involucres; *b.* inner view of a similar involucre with 4 capsules; *c.* Capsule; *d.* Seeds; *e.* Sorus, orbicular, fixed by the centre.
4. *Cistopteris*. *a.* Sori covered by the acuminate involucres; *b.* single Sorus; *c.* Sorus with the involucre bent back; *d.* Capsule.
5. *Asplenium*. *a.* Sori with the involucres opening towards the midrib; *b.* Single Sorus; *c.* Capsule.
6. *Scolopendrium*. *a.* Sori; *b.* Capsule.
7. *Pteris*. *a.* marginal continuous Involucres; *b.* Involucre from which the capsules are removed; *c.* Capsule.
8. *Blechnum*. *a.* Sori, one on each side the midrib; *b.* Capsule.
9. *Adiantum*. *a.* Pinna, with marginal interrupted Sori; *b.* Capsule.
10. *Hymenophyllum*. *a.* marginal Sorus, within the 2-valved Involucre; *b.* Involucre, cut through to show the capsules on the receptacle; *c.* receptacle from which all the capsules, but one, are removed; *d.* Capsule, bursting, and seeds.
11. *Osmunda*. *a.* Capsules racemed; *b.* Single capsule.
12. *Lunaria*. *a.* Capsules spiked; *b. c.* Capsules bursting open; *d.* Seeds.
13. (*Lycopodiaceæ*.) *Lycopodium*. *a.* bractea with a 2-valved Involucre; *b.* Involucre from the same; *c.* its small granular seeds; *d.* bractea, with a 3-valved Involucre; *e.* Involucre from the same; *f.* one of its large seeds.
14. (*Marsileaceæ*.) *Isoetes*. *a.* the back, and *b.* the front view of a leaf enclosing the fructification at the base; *c.* Capsule; *d.* the same cut through transversely; *e.* a transverse fibre with Sporules; *f.* Sporules; *g.* Sporules in a dry state; *much magnified*.
15. (*Marsileaceæ*.) *Pilularia*; *a.* plant; *b.* receptacle of fructification; *c.* the same, opening in 4 valves; *d.* transverse section; *e.* vertical do.; *f.* portion of do. with fructification; *g.* anther? *h.* capsule?
16. (*Equisetaceæ*.) *Equisetum*; *a.* Spike; *b.* peltate Scale with its involucres; *c.* capsule with its accompanying 4 filaments, clavate at the apex; *d.* the same, with the filaments unrolled.

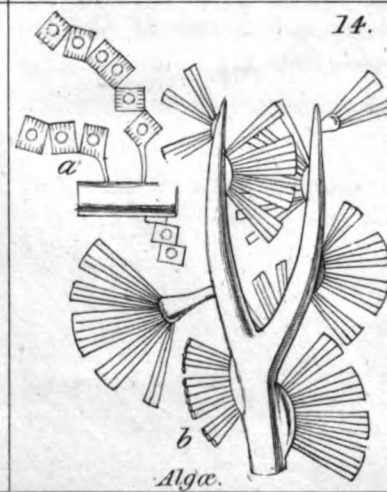
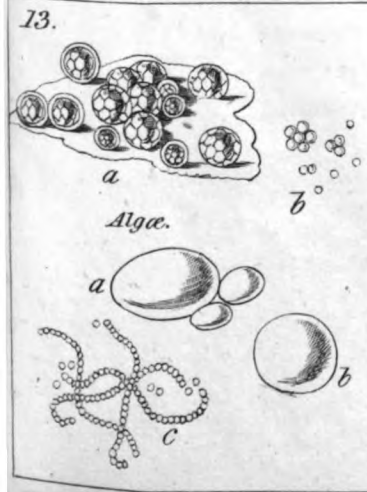
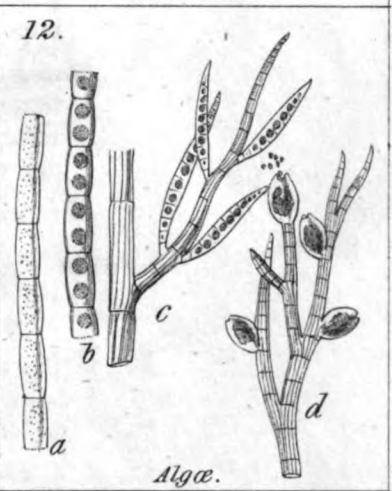
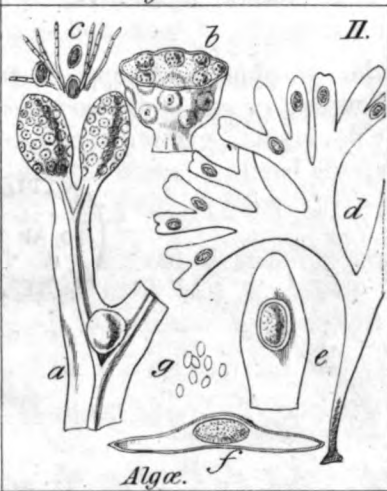
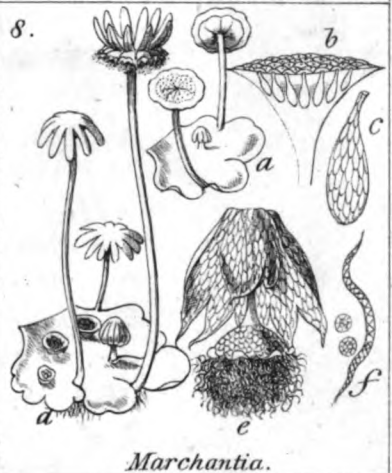
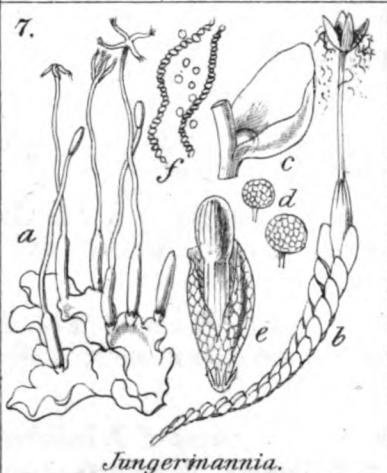
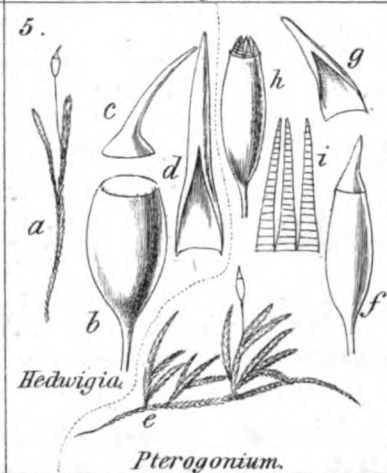
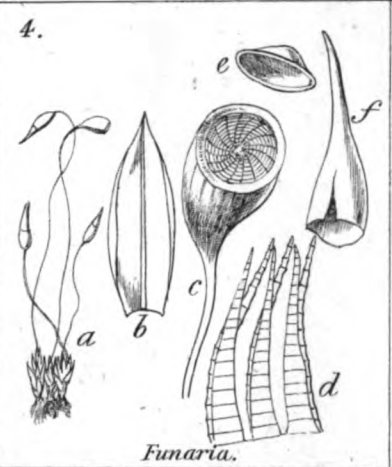
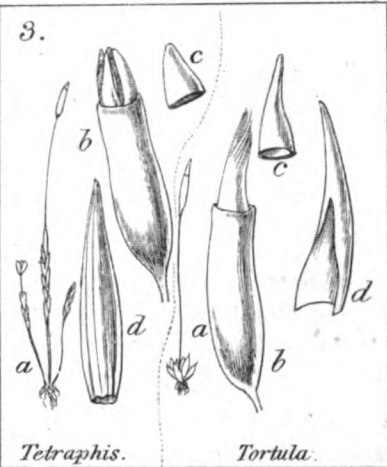
TABLE XXIV. (CRYPTOGAMIA.)

(1—6. Mosses).

1. *Moss*; *a.* supposed male flower, consisting of stamens (?) with jointed filaments; *b.* supposed female flower, consisting of pistils, with jointed filaments;—one is represented as fertilized; *c.* fertile Pistil, more advanced; the calyptra, having separated, rising up with the fruit stalk; *d.* Moss, with capsule fully formed, still retaining its lid (operculum); the calyptra, *e.* having been removed.
2. *a.* *Phascum*; *b.* the capsule and calyptra; *c.* capsule of *Sphagnum*, with the base of the calyptra and abortive pistils; *d.* calyptra; *e.* operculum; *f.* seeds.
3. *Tetraphis*; *a.* plant; *b.* capsule; *c.* operculum; *d.* calyptra.—*Tortula*; *a.* plant; *b.* capsule; *c.* operculum; *d.* calyptra.
4. *Funaria*; *a.* plant; *b.* leaf; *c.* capsule; *d.* portion of the double peristome; *e.* operculum; *f.* calyptra.
5. *Hedwigia æstiva*; *a.* plant; *b.* capsule; *c.* operculum; *d.* calyptra.—*Pterogonium gracile*; *e.* plant; *f.* capsule with operculum; *g.* calyptra; *h.* capsule with peristome; *i.* peristome.
6. *Hypnum*; *a.* plant; *b.* capsule with operculum; *c.* calyptra; *d.* double peristome; *e.* portion of outer peristomes; *f.* ♂, portion of inner peristomes.

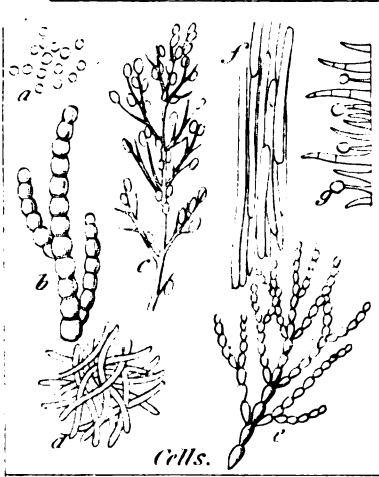
(7, 8. Algæ).

7. *Jungermannia*; *a.* plant of *J. epiphylla*; *b.* do. of *J. minuta*; *c.* leaf with the supposed male flowers; *d.* anthers, so called; *e.* calyptra and the young capsules bursting through; *f.* seeds and spiral filaments.
 8. *Marchantia*; *a.* plant with supposed male flowers; *b.* section of the receptacle of male flowers; *c.* one of the so called male flowers; *d.* frond, with the so called female flowers and gemmiferous receptacles; *e.* involucre laid open with calyptra and capsule burst; *f.* spiral filament and seeds from the capsule.
 9. (*Lichens*).—*a.* *Variolaria*; *b.* *Lecidea*; *c.* *Parmelia*; *d.* and *e.* *Scyphophorus*.
 10. (*Characeæ*) *Chara*; *a.* branch with the two kinds of fructification; *b.* supposed female flower; *c.* seed from *b.*; *d.* globular fructification; *e.* the portions of the outer covering; *f.* contents of the globular fructifications.—(from Bischoff).
 11. *a.* *Fucus*; *b.* transverse section of the receptacle; *c.* sporules and seeds from the same; *d.* *Chondrus crispus*; *e.* portion with a capsule; *f.* section of the same; *g.* sporules of the same.
 12. *a, b.* *Confervæ*; *c, d.* *Polysiphoniæ*.
 13. *a.* *Red Snow*; *b.* contents of the globules; *a, b.* plants of *Nostoc cæruleum*; *c.* contents of the same, beaded filaments.—(from Greville).
 14. *a.* *Achnanthes unipunctata*; *b.* *Exilaria fulgens*.—(from Greville).
- (15, 16. Fungi).
15. *Agaricus*; *a.* *Agaricus campestris*; *b.* younger plant of the same; *c.* one of the lamellæ or gills with the external sporules.—(from Greville).
 16. *Geastrum stellatum*; *a.* plant, natural size; *b.* vertical section of the head; *c.* sporule and filaments; *d.* sporules, more highly magnified.

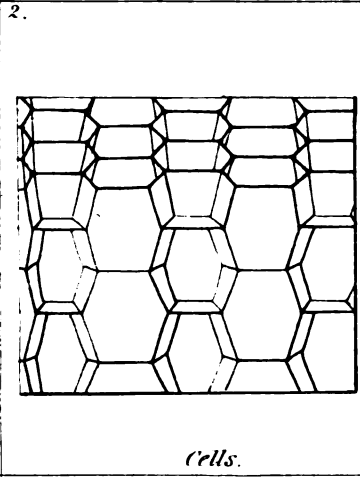




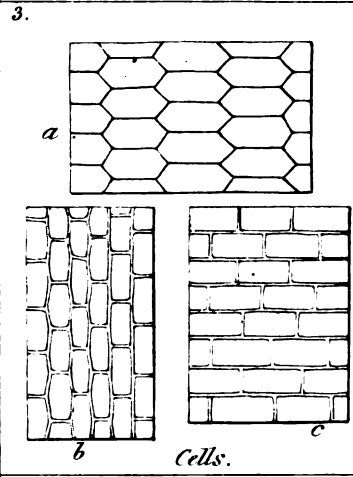




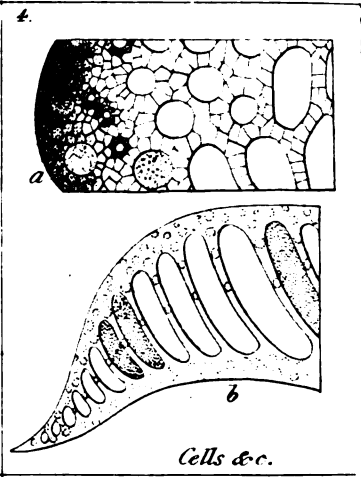
Cells.



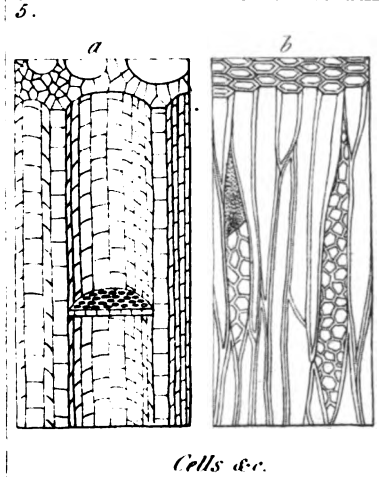
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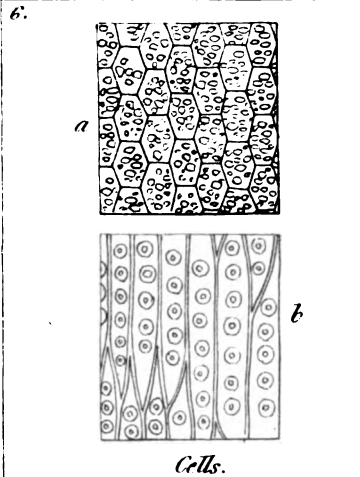
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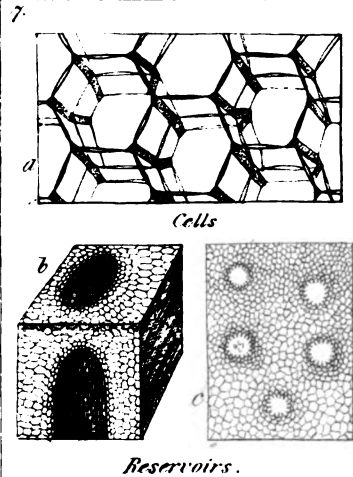
Cells &c.



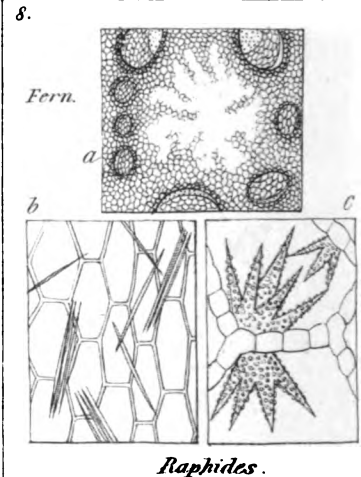
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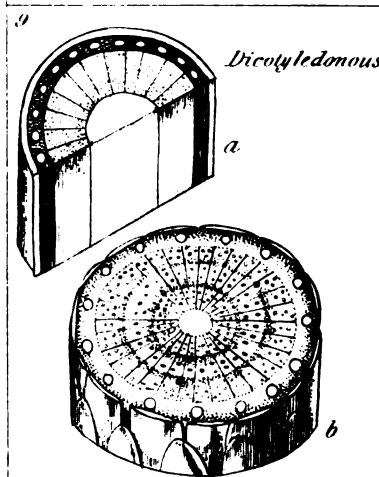
Cells.



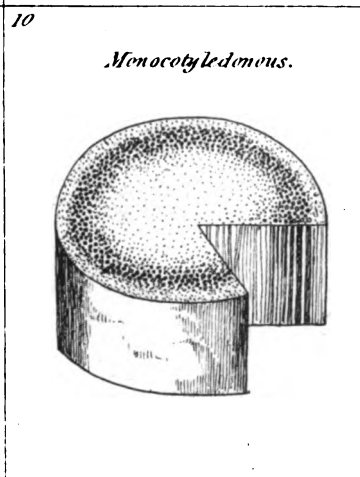
Reservoirs.



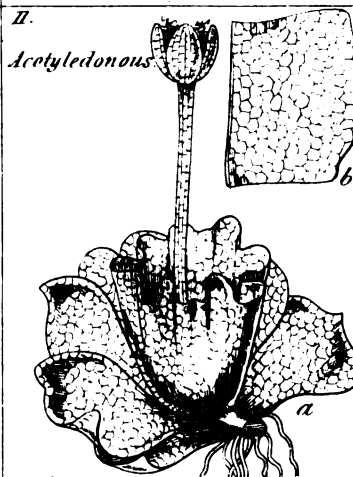
Raphides.



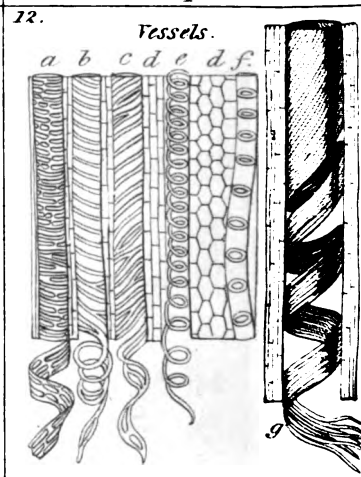
Dicotyledonous.



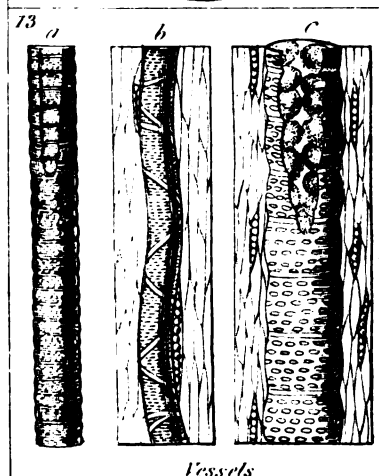
Monocotyledonous.



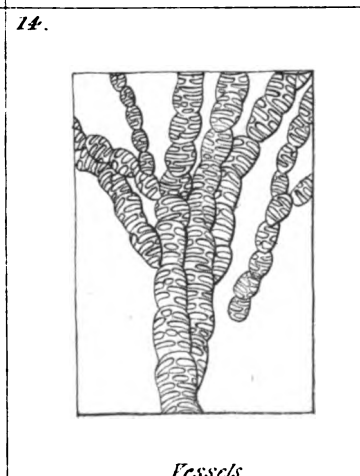
Acotyledonous.



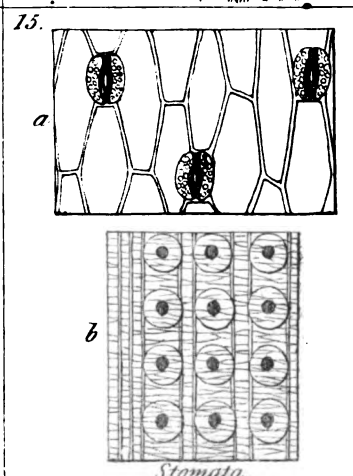
Vessels.



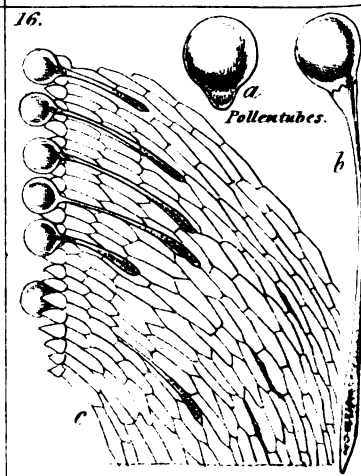
Vessels.



Vessels.



Stomata.



Pollentubes.

TABLE XXV.

- Fig. 1. Cells; *a.* constituting the entire plant in *Ustilago Segetum*; *b.* do. in a *Conferva*; *c.* do. in *Botrytis agaricina*; *d.* do. much elongated in the pileus of *Agaricus muscarius*; *e.* do. elliptical in *Batrachospermum moniliforme*; *f.* do. elongated, from the stipes of *Agaricus*; *g.* do. in the hairs of the *Gourd*.
2. Cells of common Cellular Tissue.
 3. Cells, *a.* and *b.* of the Pith; *c.* muriform cells of the medullary rays.
 4. *a.* Air-cells and proper vessels in *Calla Ethiopica*; *b.* Air-cells in *Musa paradisiaca*.
 5. Cells, &c.—*a.* vertical section of the air-cells in *Calla Ethiopica*; *b.* Woody cells and proper vessels in *Laurus Sassafras*.
 6. Cells.—*a.* dotted cells of *Cycas revoluta*; *b.* Woody cells in *Pinus Abies*.
 7. *a.* Cellular tissue of the *Gourd* with intercellular canals; *b.* proper vessels in the *Pinus Abies*; *c.* do. in the rind of the Orange.
 8. *a.* Section of the stem of a *Fern*; *b.*, *c.* Raphides.
 9. Sections of a dicotyledonous stem; *a.* Section of *Asclepias*, with the proper vessels in the bark; *b.* do of the *Scotch Fir*, with the proper vessels in the bark.
 10. Transverse and longitudinal section of a *Monocotyledonous* or *Endogenous plant*.
 11. *a.* *Acotyledonous* or cellular plant; *b.* portion of the leaf, more highly magnified, showing its truly cellular structure.
 12. *Impatiens balsamina*.—*a.* reticulated vessel; *b.*, *c.*, *e.* spiral vessels; *f.* annular vessel; *d.*, *d.* cellular tissue; *g.* spiral vessel of many fibres from *Musa Paradisiaca*.
 13. *a.* Dotted vessel from the stem of the *Gourd*; *b.* dotted vessel from *Laurus Sassafras*, with a spiral band; *c.* dotted vessel from the *Oak*, containing globules of air and surrounded by the woody body, through which medullary rays pass.
 14. Beaded vessels of *Impatiens Balsamina*.
 15. Stomata.—*a.* in the cuticle of *Amaryllis formosissima*; *b.* in the cuticle of *Pinus Abies*.
 16. *a.* Grain of *Pollen*, beginning to send forth its tube; *b.* grain of pollen more advanced; *c.* section of the stigma, showing how the tubes of the pollen-grains are supposed to enter, and separating from the grain, penetrate the tissue of the style, in order to reach the ovule.

TABLE XXVI.—PANSY. (VIOLA TRICOLOR.)

- A. Plant :—*a.* the Root.
b. the Stem.
c, c, c. Leaves.
d, d, d. Stipules.
e. Petiole, or leaf-stalk.
f, f. Peduncle.
g, g, g. Bracteas.
h. Calyx.
i, i, i. Corolla of 5 irregular petals, in the centre of which are the stamens and pistil.
j. Capsule, burst open, still containing the seeds.
- f. 1, Larger Petal with its spur or nectary (*a.*)
2. *a.* Anthers; *b.* the filaments; *c.* spurs or nectaries proceeding from 2 of the anthers; *d.* stigma of the pistil.
3. Pistil; *a.* germen or ovary; *b.* style; *c.* stigma.
4. Section of the germen, shewing 3 receptacles, from which the seeds arise.
5. Capsule (with the persistent calyx), burst open into 3 valves and exhibiting the seeds.
6. Seed.
7. Seed, cut through vertically, showing the integument, albumen, and dicotyledonous embryo.



