The language of bare botany...

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THE LANGUAGE
OF
BOTANY.
THE LANGUAGE of BOTANY: BEING A DICTIONARY OF THE TERMS MADE USE OF IN THAT SCIENCE PRINCIPALLY BY LINNEUS: WITH FAMILIAR EXPLANATIONS, AND AN ATTEMPT TO ESTABLISH SIGNIFICANT ENGLISH TERMS. THE WHOLE INTERSPERSED WITH CRITICAL REMARKS.

THE THIRD EDITION, CORRECTED AND ENLARGED.

By THOMAS MARTYN, D.D. F.R.S. REGIUS PROFESSOR OF BOTANY IN THE UNIVERSITY OF CAMBRIDGE.

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1807
TO

JAMES EDWARD SMITH,

DOCTOR OF PHYSIC, FELLOW OF THE ROYAL SOCIETY,
PRESIDENT OF THE LINNEAN SOCIETY,
ETC. ETC.

DEAR SIR,

THE following GLOSSARY would probably never have appeared in print, had it not been for the favourable reception which an imperfect essay on the same subject met with from the Society over which you so ably preside; and the encouragement which I had to proceed from some conversations that have passed between us; wherein I found that you did me the honour to approve of my principles in general;
general; and that we differed as little in particulars as two men who think for themselves can well do on any subject, that branches out into such a variety as this.

To you, who know so well the difficulties that attend on accuracy and precision, there needs no apology for the errors and imperfections of the work that now presumes to claim your protection. The great and extensive task which I am now bringing to a period, has not left me leisure to use the file: and the subject will probably continue in its present rude state, till you, who have obliged the public with a handsome and correct edition of the most elegant among our great Master's works, shall find time to gratify them still farther, with an enlarged and corrected edition of his
Philosophia Botanica; which is certainly one of the most useful of them, and may be considered as the corner stone of all the rest.

You, Dear Sir, are happy in the praises and good wishes of every one who has occasion to consult any part of the Linnean Collections, which so fortunately for the public have fallen into your hands: and I may venture to say, that my brethren of the Linnean Society will heartily concur with me in my good wishes for your health and prosperity, as well as for your long continuance in a station which gives you the opportunity of rendering important services to Natural History.

I flatter myself that you will take in good part this public testimony which
which a veteran in our Science bears to your worth and abilities: and that you will permit me to subscribe myself,

Your very sincere Friend,

And

Obedient humble Servant,

THOMAS MARTYN.

Frith-Street,
February 8, 1796.
PREFACE.

My attention was first called to consider the Language of Botany, very soon after Linneus had published his Fundamental Treatise*. At that time I was a pupil in the school of our great countryman Ray. But the rich vein of knowledge, the profoundness and precision which I remarked everywhere in the Philosophia Botanica, withdrew me from my first master, and I became a decided convert to that system of Botany which has been since generally received.

Being then engaged in academical studies, and afterwards in those of the profession

* In the year 1751.
which I had determined to adopt, Botany was rather the amusement of leisure hours than the object of serious pursuit, till the institution of a Botanic Garden at Cambridge by Dr. Walker, and the desire which my father expressed to resign a chair which his age and infirmities rendered him unable to fill with satisfaction to himself, roused my attention a second time to a favourite pursuit.

Having been appointed by the unanimous voice of the University of Cambridge to the Professorship of Botany; and being soon after nominated by Dr. Walker, the founder of the new garden, his first Lecturer; I had the felicity of taking the lead in introducing the Linnean system and language to my countrymen, by a course of public lectures*. They were at that time entirely new to the University, and very little known or attended to in other parts of the kingdom, except at Edinburgh, by the laudable efforts of the late Dr. Hope.

* In the year 1762.
The institution of the Linnean Society; the avidity with which the study of Botany has been lately pursued by many in every rank and description of persons; the necessity I was under to find terms by which to express myself in my Letters on Botany, and especially in the great work which I am now finishing; have all conspired to excite my attention a third time to Botanical Language, and particularly to the mode which seems best for us to adopt when we write or speak of the science in our native tongue.

So long as Botany continued to be studied only among those who had received a learned education; the original terms of Linneus, derived from the Greek or Latin, served all the purposes of general intercourse. But when it became universally adopted, a Vernacular Language would of course be gradually formed; and if it were to be left to chance, or the choice of the ignorant, many absurdities and barbarisms would be introduced, debasing our sterling English. This it has been my wish to avoid; and I now
now renew the attempt which I made some time since * to fix our native Botanical Language on certain and reasonable principles, conformable to general analogy. Had not this been my particular view, and had I been satisfied with what has been already done by several learned and ingenious writers, I should certainly not have obtruded my ideas upon the public, after such a multitude of elementary books had been printed: and even now the errors, omissions, and defects of various kinds, which those who are skilful in Philological Botany will easily detect in this little volume, require an apology. I must request the public therefore to consider it as a mere attempt, that may hereafter be improved into something more worthy of their regard, if learned Botanists and Philologists will condescend to consider the subject more deeply.

I am aware that many will say, You give too much importance to these laborious

* Dissertation printed in vol. I. of the Transactions of the Linnean Society.
trifles. But if they be such, they lead not to any serious mischief; and so long as the weightier matters of science are not neglected, there can be no harm in working up and polishing the minuter parts, so that the ornaments may not disgrace the edifice.

The indolent I am sensible will shrink from this odious assemblage of terms: but the indolent must be contented to lie under the disgrace of ignorance, or at most to skim very lightly the surface of knowledge.

Many terms are indispensably necessary in the Science of Nature, where the objects that present themselves to our consideration are so numerous. The question therefore is not, whether we shall have terms or no, but in what manner they should be constructed so as to answer the great purpose of receiving and communicating knowledge most effectually? Now we have been long in possession of a precise and significant language invented by Linneus, generally adopted
adopted by the learned of every country in Europe, and received in great part into the vernacular tongues of several. Can we do better therefore than to keep as close as possible to this, and to adopt the Linnean terms themselves, so far as the nature and structure of the English language will permit, and whenever we can do it without violating the laws of grammar or common sense? We shall thus have all the advantage which is derived from speaking and writing one universal language: whereas if we set about finding equivalent terms in English, these will require as much explanation as the others, and will be equally difficult to the student, without having possession or prescription to plead. Thus shall we become unintelligible to every other nation, without being more intelligible among ourselves.

Laying it down therefore as a first principle, that we ought to adhere as closely as possible to the Linnean language, it will be found that the number of terms, purely English,
English, occurring in the Botanical Glossary, which is now offered to the public, is comparatively small. That this may be clearly seen, and that persons may judge for themselves how far they would choose to depart from the original terms, I have put together at the bottom of the page those which are translated or equivalent*. A perfect agree-

* Arched or Vaulted. For-nicatus.
Awn. Arista.
Banner or Standard. Vexillum.
Barb. Glochis.
Bark, outer. Cortex.
——, inner. Liber.
Barren. Sterilis.
Beaked. Rostratus.
Beard. Barba.
Bellying. Ventricosus.
Berry. Baccu.
Bough or Branch. Ramus.
Bowed. Arcuatus.
Bristle. Setau.
Bud. Gemma.
Cell. Loculamentum.

Chaff. Palea.
Chinked. Rimosus.
Clasper or Tendril. Cirrus.
Clasping or Stem-Clasping. Amplexicaulis.
Claw. Unguis.
Cleft. Fissus.
Club-shaped. Clavatus.
Clustered or Crowded. Conferus.
Cobwebbed. Arachnoideus.
Coiled. Tortuus, Tortus.
Columnar. Teres.
Condensed. Coarctatus.
Converging. Connivens.
Cotton, nap or flocks. To-mentum.
Creeping. Repens.
Crescent-shaped. Lunatus.

B 4
ment on this subject is not to be expected, nor is it of any great consequence; but I

Crofs-wise. Cruciatim.
Curled. Crispus.
Dotted. Punctatus.
Double. Geminus.
Doubled. Duplicatus.
Down. Pappus.
Drooping. Cermus.
Eared. Auritus.
Evergreen. Sempervirens.
Eye. Hilum.
Flat. Planus.
Flatted. Compressus.
Fleshy. Carnosus.
Floating. Natans.
Flower. Flos.
Fringed. Fimbriatus.
Funnel-shaped. Infundibuliformis.
Furrowed or Grooved. Sulcatus.
Gape. Riatus.
Gaping. Hians.
Gashed. Incisus.
Hair. Pilus.
Halved. Dimidiatius.
Hanging down. Dependens.
Head. Capitatum.
have subjoined a list of doubtful terms, many of which may perhaps be used indifferently at discretion*. The learned will of course

Pitcher-shaped. *Urceolata.*

Pitted. *Locunosus.*

Plaited. *Plicatus.*

Prickle. *Aculeus.*

Protruded. *Exsertus.*

Punched. *Perforatus.*

Rib. *Costa.*

Root. *Radix.*

Rough. *Asper.*

Runner. *Reptans flagellum.*

Salver-shaped. *Hypocrateriformis.*

Sap. *Succus, Alburnum.*

Scaly. *Squamofus.*

Scattered. *Sparfus.*

Scored. *Exaratus.*

Seed. *Semen.*

Sheath. *Vagina.*

Shrivelling. *Marcescens.*

Shrub. *Frutex.*

Sickle-shaped. *Falcatus.*

Silky. *Sericeus.*

Smooth. *Glaber.*

Spur. *Calcar.*

Stalk or Stem. *Caulis.*

Stiff. *Rigidus.*

Stings. *Stimuli.*


Sucker. *Stolo.*

Tail. *Cauda.*

Tapered. *Attenuatus.*

Toothed. *Dentatus.*

Tree. *Arbor.*

Twin. *Didymus.*

Twining. *Volubilis.*

Twisted, or Coiled. *Tortus, Tortilis, Tortuosus.*

Veil. *Calytra.*

Vessels. *Vasa.*

Undershrub. *Suffrutex.*

Wing. *Ala.*

Woody. *Lignosus.*

Wool. *Lana.*

Wrinkled. *Rugosus.*

Writhed. *Contortuplicatus.*

*Awl-shaped or Subulate.*

Bell-shaped or Campanulate.

Bitten or Præmorse.

Bladder
manifest a predilection for the Greek or Latin terms, and the English Botanist for the other. Some of our terms approach so near to their original, that they can scarcely be considered as English.

- Bladder or Vesicle. Kidney-shaped or Reniform.
- Blistered or Bullate. Kneed, Knee-jointed, or Geniculate.
- Blunt or Obtuse. Mule or Hybrid.
- Border, brim, or limb. Ragged or Square-se.
- Clammy or Viscid. Rugged or Scabrous.
- Climbing or Scandent. Sabre-shaped or Acinaciform.
- Coated or Tunicated. Shaggy or Hirsute.
- Coriaceous or Leathery. Sharp or Acute.
- Cottony, downy, nappy, or Tomentose. Thorn or Spine.
- Cowled or Cuculate. Tongue-shaped or Linguliform.
- Crenate or Notched. Top-shaped or Turbinate.
- Dagger-pointed, or Micronate. Trailing or Procumbent.
- Erect or Upright. Warted or Verrucose.
- Feathered or Plumose. Waved or Undulated.
- Gnawed or Erode. Wedge-shaped or Cuneiform.
- Heart-shaped or Cordate. Wheel-shaped or Rotate.
- Hoofed or Ungulate. Whorl or Verticil.

* Such as,

- Crested from Cristatus. Crown from Corona.
- Entire
That we must depart sometimes from the Linnean language I readily allow: but the cases are rare, and the instances under each case are not many.—Thus, when we have a significant English term, which has been in long and general use, it certainly ought to keep its place: but the original terms of the science in our language, which have received the sanction of the public, are very few.*—In the case also of very long words, giving too great an air of pedantry to the language, it may perhaps be better to substitute English compounds, which may be used with considerable success †.—When any Latin terms

Entire from Integer. Ray from Radius.
Fork from Furca. Round from Rotundus.
Fruit from Fructus. Unarmed from Inermis.
Nut from Nux.

* Seed. Leaf. Stalk. Flower. Fruit. Cell for Loculamentum. Partition for Diffepimentum. Seed-vessel for Pericarpium.—See the lists in the former notes. Grew's terms; as Empalement, Chive, Semet, Pointell, Ovary, Knob or Button, &c. have never met with a general reception.

† As Bell-shaped for Campaniformis. Funnel-shaped for
have already an appropriate sense in English, it avoids confusion to translate them, rather than to use the originals themselves*. So, likewise, when they do not assimilate kindly to our language, the same rule is to be observed†.

These exceptions being admitted, I hope to be excused for repeating my opinion—that the advantage of Botany will most effectually be consulted, by retaining the Linnean terms, whenever there is no cogent reason to the contrary. And I must add, that in order to avoid confusion, the greatest caution is necessary, when we would substitute equivalent terms for the originals‡.

Many particular observations, confirming the theory here laid down, will be found for infundibuliformis. Salver-shaped for Hypocrateriformis.

* As in Adversus, Exasperatus, Strictus.
† As in Teres, Amplicaulis, Hirtus.
‡ As in rendering Deciduus and Caducus by falling; Plumosus by feathery; and Pinnatus by feathered. Dichotomus by forked, &c.
scattered here and there in the Glossary. It remains therefore only to express my wish, that the structure and genius of our native language may be attended to, not only in the formation of the terms themselves, but in their terminations and plurals, their compounds and derivatives. Not to detain the reader however any longer, I beg leave to refer him, for this part of the subject, to my Essay in the Linnean Transactions, and to the method which I have pursued in the conduct of this work*.

* That my meaning however may be clearly understood, I here put down a few instances to illustrate it. With respect to Plurals, Nectarium should make Nectariums, not Nectaria. Nectar should make Nectaris. Pericarpium, Pericarpiums. Corolla, Corollas. Anthera, Antheras. Stamen, Stamens; not Stamina; which is sometimes taken for a singular, as Stipula is for a plural.—With respect to Derivatives and Compounds, they ought to follow the analogy of their Roots. Thus, if we adopt the English terms Prickle and Thorn, we must say Prickly and Thorny, not Aculeate and Spinose. If for Loculamentum we put Cell, we must use Two-celled, not bilocular. If for Bacca we put Berry, we must write Berry-bearing, not bacciferous. Two-leaved, Many-
The scientific mode of arrangement, which Linneus has adopted, and from him most of his followers, has the advantages of elegance and of presenting kindred terms to the Reader at one view. I have however preferred the alphabetical form for convenience, and because a word that is not understood is thus most readily detected,—A book of this sort, in order to be perfect, should contain a complete scientific arrangement, accompanied by a copious explanatory index or glossary; something in the manner of Mr. Lee's second and following editions of his Introduction. But the scientific arrangements are already numerous: the task of giving one more to the public would have interrupted too much the more important pursuits in which I am at present engaged; and my work would have risen into a bulk too great for the use to which I had destined it.

*Many-Leaved* will follow leaf. *Two-flowered, Many-flowered* will follow Flower. *Root* will have *Root leaf*, not radical leaf.
This Glossary, such as it is, will be found to contain the terms of Linneus's *Philosophia Botanica, Termina, Botanici, and Delineatio Plantae*; with the addition of some which are used in the *Species Plantarum* and *Systema Vegetabilium*, but are not explained or even registered in his fundamental or elementary treatises. They are always accompanied by an explanation in English, and frequently by one in Latin also; in order that the unlearned may understand, and the learned judge for themselves concerning their meaning, where there appears to be any shadow of a difficulty. The derivation of the term is commonly added, where it seems necessary, or could be given with any degree of satisfaction: sometimes a variety of derivations is set down, with a view of shewing the uncertainty that we find in this branch of our philological enquiries. Lastly, instances are subjoined, where they were at hand, of the most known plants, best adapted to illustrate the terms and their explanations. When the English word differs from the Latin in any thing more than
than the termination, both will be found in their proper places, mutually referring to each other; and each frequently accompanied with an explanation in its proper language. I have sometimes hazarded opinions and criticisms, not with any view of dogmatizing, but with the hope of being corrected, or better informed.

That the Reader may know where to apply for information, in case he should not be satisfied with what is here set before him, I shall conclude this Preface with a List of the principal fundamental Treatises on Botanical Language that have been hitherto published, and have been seen or consulted by me.

Linneus's celebrated elementary work, first published at Stockholm in 1751, is the foundation of all the rest. It is entitled, *Philosophia Botanica, in qua explicantur Fundamenta Botanica, cum definitionibus partium, exemplis terminorum, observationibus variorum, adjectis figuris æcis*. It contains the Institutes
tutes of the Science of Botany, and has eleven plates, ten of which are explanatory of leaves, stalks, fulcres, roots, fructification, &c. There are several editions of this valuable book. It was published in the same year at Amsterdam; at Vienna in 1755, 1763 and 1770; at Berlin in 1779, by Gleditsch; and at the same place in 1790, by Willdenow.*

A list of Botanical Terms without explanations, under the title of *Delineatio Planta*, was prefixed to the twelfth and thirteenth editions of *Systema Vegetabilium*, 1767 and 1774; and has been continued in the fourteenth edition of the same work by Murray, 1784; and in the thirteenth edition of *Systema Natu*ae, by Gmelin, in 1791.

This list is preceded by a general explanation of the principal parts of plants, and

* See Dr. Pulteney’s General View of the Writings of Linneus, p. 46—50.
some circumstances relative to their physiology, under the title of Regnum Vegetabile.

But the first appearance of a complete list of Botanical Terms, accompanied with explanations, and detached from other matter, was in the sixth volume of Amoenitates Academicae, printed in 1764. It is entitled Termini Botanici; and is a thesis read by J. Elmgren, in 1762.—This was reprinted here, with additions, in 1779, by Dr. Rotheram, under the title of Caroli a Linne Termini Botanici, definitionibus pluribus auèti; atque Systematis Sexualis Explicatio. Opere Joh. Rotheram, jun. M. D. Novicafri, 1779, 12mo.

Dr. Giseke also, of Hamburgh, has printed the same work, with the addition of other matters, under the title of Termini Botanici Clasium Methodi Sexualis Generumque Literarum Characteres Compendiosi. Redactus at interpretatione Germanica Magdeburg Horacei, curavit Paulus Dietericus, 1790, 8vo.
M. D. &c.—Editioni huic alteri accefferunt Fragmenta Ordinum Naturalium Linnaei, Nomina Germanica Planeri Generum, Gallica & Anglica Terminorum, & Indices. Hamburgi, 1787, 8vo.

This volume contains Linneus’s Preface to his Genera Plantarum—Clavis Systematis Sexualis both in Latin and German, with an explanation of the Classes—Regnum Vegetabile—Delineatio Plantae, with explanations from Termini Botanici, and additions. The whole of this is both in Latin and German. —An alphabetical Index of Terms in Latin, French, and English: the last very imperfect, and full of mistakes.—A German Index.—Part of the second contains compendious Characters of Linneus’s Genera, such as are placed at the head of each Class in Systema Vegetabilium, from Murray’s edition; with the German names, and a Latin and German Index.—And, Ordines Naturales, from the sixth edition of Linneus’s Genera Plantarum; with the new Genera added in their proper places.—I C 2 have
PREFACE.

have not seen the first edition of this work. —When I quote Delin. Pl. in the following Glossary, it is from this book of Giseke's.

Mr. Hudson has also prefixed Terminis Botanici to the second edition of his Flora Anglica, in 1778.—And the Lichfield Society have given it, together with the Regnum Vegetabile and Delineatio Plantae, in English, at the head of their translation of Linneus's Vegetable System, published in 1783; accompanied with many excellent general philological remarks in the Preface.

The Elements of Botany appeared first in an English dress in the introductions of the late celebrated Mr. Philip Miller, and of Mr. James Lee, nurseryman, at the Vineyard, Hammersmith, in the year 1760. The former annexed to the late editions of his Gardener's Kalendar, was short and imperfect. But the latter contains a full explanation of Linneus's terms. It is entitled
entitled—An Introduction to Botany. Containing an Explanation of the Theory of that Science; extracted from the Works of Dr. Linneus; with twelve copper-plates, two explanatory tables, &c. To the second edition of 1765 was added a Glossary. The fifth and last edition was published in 1794, 8vo.

This work however not being a translation of Linneus's fundamental treatise, Mr. Rose undertook this task, which had long been much desired by English Botanists unacquainted with the learned languages. He published it under the title of The Elements of Botany: containing the History of the Science, with accurate Definitions of all the Terms of Art, exemplified in eleven copper-plates; the Theory of Vegetables; the Scientific Arrangement of Plants, and Names used in Botany; Rules concerning the general History, Virtues and Uses of Plants. Being a translation of the Philosophia Botanica, and other treatises of the celebrated Linneus. To which is added, an Appendix, wherein are described some Plants lately found in Norfolk.
Norfolk and Suffolk, illustrated with three additional copper-plates, all taken from the life. By Hugh Rose, Apothecary, London, 1785, 8vo.

A few years after Mr. Lee's Introduction was published, Dr. Berkenhout gave the Linnean Terms, with an explanation, in the form of a Dictionary, entitled Clavis Anglica Linguae Botanicae: or a Botanical Lexicon; in which the Terms of Botany, particularly those occurring in the works of Linneus, and other modern writers, are applied, derived, explained, contrasted and exemplified. By John Berkenhout, M. D. Lond. 1764.

This work probably occasioned the addition of an alphabetical Glossary to Mr. Lee's Introduction, the year following. The public were so well satisfied with Dr. Berkenhout's performance, that a second edition of it was printed in 1789.

Dr. Colin Milne also is the Author of an elementary book in the same form, but on a plan
plan much more extensive, as may be seen from the Title, which runs as follows—

A Botanical Dictionary: or Elements of Systematic and Philosophical Botany. Containing Descriptions of the Parts of Plants—an Explanation of the Scientific Terms used by Morison, Ray, Tournefort, Linneus, and other eminent Botanists—A brief Analysis of the principal Systems in Botany—A critical Enquiry into the Merits and Defects of the Linnean Method of Arrangement, and Distribution of the Genera—Descriptions of the various Tribes, or natural Families of Plants, their Habit and Structure, Virtues, sensible Qualities, and economical Uses—An impartial Examination of the Doctrine of the Sex of Plants—with a Discussion of several curious Questions in the Vegetable Oeconomy, connected with Gardening. The whole forming a Complete System of Botanical Knowledge.

By Colin Milne, LL. D.—The first edition in 1770; the second in 1778; Lond. 8vo.

In the Universal Botanist, &c. published by Richard Weston, Esq. in 1770, there is C 4 a copious
a copious Botanical Glossary. As there is also in the second edition of Dr. Withering's *Botanical Arrangements*, printed in 1792. Mr. Stephen Robson has prefixed the *Principles of Botany* to his *British Flora*, York, 1777, 8vo.

Lastly, there is *A Short and Easy Introduction to Scientific and Philosophic Botany*, By Samuel Saunders, Lond. 1792, small octavo.—Neatly printed, in a little compass; well adapted to such as do not wish to enter into the depths of the Science.

It would carry me too far, were I to attempt enumerating the Elementary Books which have been published in Foreign Countries, and in various Languages. I shall content myself therefore with barely mentioning those which follow:

*Geo. Chr. Oeder Elementa Botanicae*—pars 1, 1764.—pars 2, 1766. *Hafn*. 8vo.

Joan,
PREFACE.

Joan. Antonii Scopoli Fundamenta Botanica, Viennae, 1786, 8vo.


There remains only to request the indulgence of the Public, for adding one more to the number of Elementary Books already before them.
ABBREVIATED perianth (*Abbreviátum perianthium*). Shorter than the tube of the corolla: as in *Pulmonaria maritima*.

ABORTIVE flower (*Abortiés flos*). Falling off without producing fruit. See Barren.

ABRUPT leaf. A term used only in pinnate leaves, which are said to be abruptly pinnate (*abrupté pinnata*), when they have neither leaflet (*foliolum*) nor tendril or clasper (*cirrus*) at the end.

ACAULIS. Stemless; without stem or stalk.

ACEROSE leaf (*Acerosum folium*). Linear and permanent; as in *Pine, Fir, Juniper,*
per, Yew. Lin. Philos. Bot. 42.—In form of a needle, usually inserted at the base into the branch by articulation, as in the cone-bearing trees, p. 219.

Acicular (Aciculāris). Shaped like a small needle. The trivial name of a small sharp-pointed Scirpus.

Acinaciform leaf (Folium acinaciforme). Fleshly, compressed; one edge convex and sharp, the other straighter and thicker; resembling a sabre, falchion or scymitar. As in Mesembryanthemum acinaciforme.

Acini. Granulations. With.—Linneus appropriates this term to the distinct component parts of the fruit in Mulberry, Blackberry and Raspberry. These fruits, with many others, are commonly called Berries; but, not answering to Linneus's definition, may have the name of Compound or Spurious Berries. See Berry.

Acinus is used by Columella in the same sense with Uva, for a single Grape. It was
was also applied to the single berry of Ivy and others which grow in clusters. *Bacca* is used for the Berry which grows singly, as Olea or Olive, &c. And *Uva* is of more extensive sense than *Acinus*; being put for a bunch of grapes, and even the vine itself.

**Acotyledonous plants** (*Plantae acotyledones*). Without cotyledons or lobes to the seed; and consequently not having any seminal leaves; as in the class *Cryptogamia*.

The distinction of Vegetables into *Acotyledones*, *Monocotyledones*, *Dicotyledones* and *Polycotyledones*; or into such as have no lobes, one lobe, two lobes, or several, in a seed, has been long made, and is the basis of Jussieu's Natural Arrangement.

**Aculeatus.** Prickly.

**Aculeus** (a Prickle). *Macro pungens, cortici tantum affixus.* Lin. See Prickle.

**Acuminate** or sharp-pointed (*Acuminātus*).
Ending in a subulate or awl-shaped point. Frequent in leaves: in the calyx, as in Itea, &c.


**Adnatus**. Adnate, Adjoined, Adhering, fastened, fixed or growing to. As the offsets, or small bulbs, produced from the main bulb, and closely adjoining to it; in Narcissus, &c.—The leaf, adhering to the stem or branch by the surface or disk itself.—The petiole.—The stipule, fixed to the petiole, and opposed to *solutus*, loose, detached; as in Rose, Bramble, Potentilla, &c.—The Anther.—The style, adhering to the corolla, as in Canna.

*Adpressus*. See Appressed.

*Adscendens*. See Ascending

*Adversum* folium (an Advers.). The upper side turned to the front.
Aequalis Polygamia (Equal Polygamy).
The name of the first order in the class Syngenesia of Linneus's system, containing those compound flowers, which have all the florets hermaphrodite and alike.

Aequinoctiales Vigillae. See Vigillae.

Æstivatio (Æstivation.) The disposition of the petals within the floral gem or bud. This is, 1. Convolute, when the petals are rolled up like a scroll of paper. 2. Imbricate when they lie over each other like tiles on a roof. 3. Conduplicate, when they are doubled together at the midrib. 4. Valvate or valved (valvata), when as they are about to expand they are placed like the glumes in grasses. 5. Unequally-valved, when they differ in size.

Aggregate flower (Aggregatus flos, from aggregare, to assemble or collect together). That which has some part of the fructification common to several florets. Or, when several florets are so combined by the intervention of some part of the fructification,
fructification, that taking away one of them destroys the uniformity of the whole. This common bond is either the Receptacle or the Calyx. The partial or component flower of the aggregate is called a flofcule or floret.

There are seven kinds of aggregate flowers. I. Umbellate or Umbelled. 2. Cymose or Cymed. 3. Compound. 4. Aggregate, properly so called, having a dilated receptacle, and the florets on peduncles: as Scabious, Knautia, Teasel, Cephalanthus, Globularia, Leucadendron, Protea, Staticæ, &c. 5. Amentaceous. 6. Glumose, as the grasses. 7. Spadiceous, as the Palms, also Calla, Dracontium, Pothos, Arum, Zoisera.

Hence Aggregateæ is the name of the forty-eighth order of plants, in Linneus's Fragments of a Natural Arrangement, in Philos. Bot. containing such vegetables as have their flowers properly aggregate. See Lin. Gen. ed. 6. at the end.
Ala. **Wing.** A membrane on the sides of a petiole or footstalk of a leaf; or attached to a seed or seed-vessel. **Alæ.** The two side petals of a papilionaceous flower. See **Wings.** The angle formed by a branch with the stem, or by a leaf with the branch, was formerly expressed by this term; but it is now called the **Axilla or Axil;** which see.

Alātus. See **Winged.**

Albumen. Used by Grew and Gärtner for the substance of the lobes of the seed; which corresponds with the white in an egg.

Alburnum. The soft white substance in trees, between the *liber* or inner bark and the wood, gradually acquiring solidity, and becoming genuine wood.—*Intermedia substantia libri & ligni.* Lin. Workmen call it the *Sap.*

Algæ (Flags). The second of the seven Families, and the eighth of the nine Tribes or Nations into which Linneus divides all vegetables.
vegetables. Comprehending such as have the root, leaves and stem all in one: as the *Lichens* or Liverworts, *Fucis* or Sea-weeds, &c. See *Families and Nations*, or *Gentes*.

In Linneus's Artificial System, the *Algae* occupy the third order of the class *Cryptogamia*. In his Fragments of a Natural Arrangement, at the end of *Genera Plantarum*, they make the fifty-seventh section, and in *Philosophia Botanica* the sixty-sixth.

**Alternate (Alternus)** branches, leaves, peduncles or flowers: coming out one after or above another, in a regular succession or gradation. Contrasted with *opposite*.

**Alternately-pinnate leaf.** When the leaflets or component leaves are arranged alternately on each side of the common petiole.

**Alyfolate (Alveolatum s. favosum)** receptacle. Divided into open cells, like an honey-comb, with a seed lodged in each: as in *Onopordum*.

**Ament (Amentum).** Called by others *Julus*. 
lus, Nucamentum, Catulus. In English, Catkin, from the French Chéton, on account of its resemblance to a cat’s tail.—Amentum; gemmaceum, imbricatum, commune*: f. Inflorescentia, ex receptaculo commune palcaleo gemmaceo†. A species of calyx, or rather of inflorescence, from a common, chaffy, gemmaceous receptacle; or, consisting of many chaffy scales, ranged along a stalk as slender as a thread, which is the common receptacle.—In the class Monoeia, the male flowers are frequently thus disposed; as in hazle, birch, oak, walnut, sedge, &c. also in willow, poplar, &c. in class Dioecia. The ament of the willow in vulgar language is called a Palm.

Amentaceae. The name of the sixteenth order in Linneus’s Fragments of a Natural Method, in Philosophia Botanica; and of the fiftieth at the end of Genera Plantarum: also, of a class in Tournefort’s, Boerhaave’s, and Royen’s systems.

Amentaceous flowers; one species of the Ag-

aggregate; borne or growing in an ament or catkin

**Amplexicaule folium**; a Stem-clasping leaf, embracing, clasping or surrounding the stem by its base. Some leaves go only half round; these are called **Semiamplexicaulii**.

**Anceps caulis** (an ancipital stem). **Angularis duobus oppositis acutiusculus**. Two-edged or double-edged. Flatted, and rather sharp with two opposite angles. This is the common form of the ancipital stem, but it may have more angles than two; for Linneus gives not only **digonus** (caulis) but **trigonus**, **tetragonus**, **pentagonus**, and **polygonus**, as species of the **anceps**.

There is also an ancipital leaf, having two prominent longitudinal angles, with a convex disk; as in **Sisyrinchium**.

**Androgynous plant** (*Planta androgyna*, from αὐστ and γυνή); bearing male and female flowers, on the same root, without any mixture of hermaphroditès. Such plants
plants are to be found chiefly in the class Monocotyledon.

Androgynous flowers, having stamens or pistils only.

Angiospernia. The name of the second order in the class Didynamia of the Linnean system. It is so called, because the seeds (σπερματα) are enclosed in a vessel (αγγος) or capsule: in opposition to the first order, Gymnospernia, which has naked seeds.

Angular stem (Angulatus caulis). Exca-vated or grooved longitudinally with more than two hollow angles. Called triangular, &c. (trigonus, &c.) according to the number of these angles:—obtuse-angled or acute-angled, from the measure of them.

Leaves also, and pericarps, running out into angles, are named triangular, &c. from the number of angles.

Annual plant or root; perishing within the compass of a year: opposed to biennial or perennial. The stem of herbaceous plants, although the root be permanent, is annual, and thus is distinguished from that of trees and shrubs.
ANOMALOUS, Irregular. Applied to plant, calyx, corolla, gem or bud, &c. In most of the old systems we find an anomalous or miscellaneous class.

ANTHER (Ἀνθὴς, Ἀνθῆρα), Apex or Chive of Ray; Capsula stamina of Malpighi. Summit, Semet, Pendent, or Tip, of Grew and other English writers.—Pars floris gravida polline, quod matura dimittit: or fæta granulato polline, et hoc fovilla. A part of the flower, big with pollen or farina which it emits or explodes when ripe; or, big with granulated pollen, and that with fovilla. Or, it may be defined to be a vessel destined to produce and emit a substance for the impregnation of the germ. It forms a part of the stamen, and is placed on the top of the filament.

I prefer Anther to Anthera, in English, because we thus avoid any diffusion between the learned and unlearned respecting the pronunciation of the penultima, and the formation of the plural.

There is generally one anther to each filament:
A N

ment: in Cucurbita, however, there is one to three; and in the class Syngenesia, one to five filaments. In Mercurialis we find two, in Fumaria three, anthers to a filament; in Bryonia, five to three filaments; in Theobroma, five to each. In some flowers anthers are regularly wanting on one or more of the filaments; as in Chelone and Martynia, one—in Pinguicula and Verbena, two—in Gratiola, Bignonia, and some Geraniums, three—in Curcuma, four—in Pentapetes and other Geraniums, five. These are called barren filaments.

Anthers are connected

By the base, in most flowers.
By the top, in Colchicum.
By the side, in Canna, Amomum.
By the nectary, in Costus.

Their situation is

On the top of the filaments, in most flowers.
On the side, in Paris and Asarum.
On the pistil, in Aristolochia.
On the receptacle, in Arum, Annona.
They burst
On the side, in Leucoium, and most flowers.
At the top, in Galanthus and Kiggelaria.
From the base upwards, in Epimedium and Leontice.

They are

Distinct, separate, not cohering. Globularia.
Connate, coalescent, united. Solanum, Syngeneia.
Twin (didymae), swelling outwards with two knots. Boerhaavia, Salicornia, Blitum, Ammannia, Potamogeton.

Upright, pointing upwards. Salicornia, Ligustrum, Olea, Chionanthus, Verbas-cum, Tulipa.
Incumbent, horizontal, and then versatile, being fixed only in the middle so as to move freely. Gladiolus, Globularia, Dipiacus, Scabiosa, Passiflora.

Exsert, or standing out or beyond the corolla, in some species of Erica.
Included, or enclosed within it. Jasminum, Syringa, Primula.
Awned, ending in an awn, in some species of Erica.

Horned (bicorns), cloven at the tip, and the clefts spreading like horns, in some species of Erica, Andromeda, Pyrola.

Crested, terminating in a crest, in some species of Erica.

Their figure is

Oblong, in Lilium, Grasses.

Globular, in Mercurialis.

Sagittate, or shaped like the head of an arrow, in Crocus, Nolana, Soldanella, Dodecatheon, Nerium, Linum, Brömelia.

Angular, in Tulip.

Horned, in Hamamelis, Erica, Vaccinium, Pyrola.

Forked (bifurcate), in most Grasses.

Linear, in Heliocarpus, Stapelia, Canna, Protea, Coffea, Liriodendrum, Magnolia.

Subulate, or awl-shaped, in Roella, Cornus.

Lanceolate, or shaped like the head of a spear, in Banksia.

Haftate, or shaped like the head of a halberd, in Jacquinia.

Cordate, or heart-shaped, in Capraria, Tinus, Bucida, Malpighia, Thea.

Reniform,
Reniform, or kidney-shaped, in Ginora, Tradescantia, and the class Monadelphia.

Ovate, or egg-shaped, in Linum, Gladiolus, Commelina, Convulvulus.

Three-cornered (trigona), in Rosa.

Four-cornered (tetragona), in Cannabis, Populus, Dictamnus, Cetraria, Arum, Cannabis.

Lunular, or shaped like a crescent, in Fragaria, Comarum.

Spiral, or twisted like a screw. Chironia.

They have only 

One cell, in Mercurialis.

Two cells, in Epimedium, Asclepias, Daphne, Helleborus.

Three cells, in Orchis.

Four cells, in Fritillaria, Tropaeolum, Paeonia, Salix.

Apetalous flower (Apetalus flos): without any corolla. Called by other writers Stamens, Incomplete, Imperfect. Of such, a class is formed in several systems.

Apex; the tip summit or end. When applied to leaves, it is the upper extremity, farthest from the base or insertion.—Ray calls the Anther by this name.
A P

 Aphyllous (Aphylus); leafless, destitute of leaves: applied to the stem, and opposed to foliatus, leafy.

 Apophysis. A process or excrescence from the receptacle of mosses.

 Appendiculate, Appendicled, or Appendaged, (Appendiculatus). Ramenulis foliaceis ad basin. This term is applied to a petiole, when it has a small leaf or leaves at the base.

 Appressed (Appressus or Adpressus), pressed or squeezed close. Contiguous or laid to, With. Applied to a leaf, when the disk approaches so near to the stem, as to seem as if it had been pressed to it by violence: also to a calyx, when it is close to the peduncle—and to a peduncle, when it is close to the branch or stem.

 Approximating leaves. Growing very near each other. Opposed to remote. With reference to the stem, growing almost upright.

 Aquatic
Aquatic plants. Growing in or near water.

Arachnoideus, Cobwebbed. Covered with a thick interwoven pubescence, resembling a cobweb. Leaf, peduncle, calyx.

Arboreous (Arboreus) stem. Single, woody and permanent; as the trunk or bole of a tree. Opposed to shrubby, under-shrubby and herbaceous.

Arborescent (Arborescens) stem. From herbaceous becoming woody.

Arbustiva (from Arbustum, a shrub). The name of the thirty-ninth order, in Linneus's Fragments of a Natural Arrangement, in Philosophia Botanica. The same with Hesperideæ, in his Genera Plantarum n. 19:

Arched (Fornicatus). As the upper petal of the Aconite, and the upper lip of some ringent flowers. See Vaulted. It should seem that either term might be adopted indifferently.

Arcuatus,
AR

Arcuatus, Bowed. Bent like a bow. See Bowed.

Aril (Arillus). The outer coat of a seed falling off spontaneously: or, inclosing the seed partially (interdum includit partialiter semen. Reg. Veg.). As in Coffea, Jasminum, Cynoglossum, Cucumis, Dictamus, Diosma, Celastrus, Euonymus. Scopoli has distinguished such fruits by the name of Theca.

Arista and Ariflatus. See Awn and Awned.

Arms (Arma). Mucrones arcentes animalia, ne laedant plantam. Thorns, prickles, and stings, with which plants are furnished for their defence. Enumerated among the Fulcrum. See Fulcrum, Prickle, Stings, Thorn.

Arrow-shaped leaf, anther, stipule. See Sagittatum.

Articulatus, Jointed. Articulata radix, geniculis intercepta. Articulatus truncus, internodiis

Articulaté-pinnatum. See Pinnatum.


Artificial Clasf and System. See Clasfs.

Ascending (Ascendens v. Adscendens). From a horizontal direction gradually curved or bowed upwards. As the stems of many plants; the leaf; the peduncle; the banner of papilionaceous flowers; the filaments; and the style.

Asparagus. The first tender sprout, or young shoot of an herb from the ground, before any leaves unfold themselves. Ray.

Asper, Rough with hairs.

Said, in Philos. Bot. and Delin. Plantæ, to be the same with Scaber, rugged; but it seems to be a term of more extensive signification than that. See Scaber, and Rugged. Exasperatus, roughened.

Aspe-
Asperifoliiæ (Rough-leaved). The name of the 43d order in Linneus's Fragmenta, and of the 41st in his Ordines Naturales. Ray and others have the same natural order.

Assurgens petiolus. Assurgentia folia. 
Arcuatim erecta, primum declinata, dein apice erecta. Rising up in a curve, declining at the base, but upright at the tip. A rising petiole—rising leaves.

Attenuatus pedunculus, scapus. Attenuated, tapered or tapering. Becoming gradually smaller towards the flower. Opposed to incrassated or thickening. Attenuatum folium, a leaf tapering towards one or both extremities.

Auctus (increased) calyx. See Calyculate.

Avenium folium. A veinless leaf, without perceptible veins.

Auriculatus and Auritus. See Eared.

Awn (Arista). A slender sharp process issuing from the glume or chaff, in corn and grasses. It is commonly called in English the Beard, but this term is otherwise applied. See Beard.
The Awn is either
Terminating, fixed to the top of the glume; or
Dorsal, placed on the back or outside of it.
It is also
Straight.
Geniculate, or bent like the knee joint.
Recurved, or bowed back.
Twisted (tortilis), or coiled like a rope.
The Anther sometimes terminates in an awn.

Awned (Aristatus). Having an awn. As the glume and anther.

Awnless (Muticus). Having no awn; opposed to awned. As in the glume of Agrostis and Aira; the calyx of Serratula; the seeds of Adonis, &c. An awn, however, is said to be mutica when it is not sharp-pointed; acumine desituta.

Axe-form. See Dolabriform.
Axil or Axilla. The angle formed by a branch with the stem, or by a leaf with the branch. So named from its similarity to the armpit. Some old writers call it Ala, but this term is otherwise appropriated.

Axillary leaves. Growing at the angles formed by the branches with the stem; or, inserted at the base of the branch. Axillary peduncle, scape, cirrus or tendril, and thorn; proceeding from the axils, or from the bosom of the leaves or branches.

Bacca, a Berry: which see.

Bacciferous. Berry-bearing.

Bag. See Folliculus.

Banner or Standard (Vexillum). The upper petal of a papilionaceous corolla.

Barb (Glochis). A straight process,
cells, armed with several teeth pointing backwards, like the sting of a bee. This is one sort of pubescence in plants; and is distinguished from the hook (hamus) by the point not being bent.

Barba. See Beard.

Barbātus. See Bearded.

Bare. See Naked.

Bark. The skin or outer covering of a plant. This is threefold.—1. The cuticle, Epidermis. 2. The outer bark, Cortex. 3. The inner bark, Liber.

Barren (Sterilis) flower. Not capable of bearing seed, which the abortient flower might have done in favourable circumstances.

Bay colour, from the Greek βαύς, the spadix of the Palm; whence it is called Spadiceus in Latin.

Beaked (Rostrātus). Terminated by a process, shaped like the beak (rostrum) of
of a bird, applied to fruits. See Ros-tratus.

Beard (Barba). In pubescence, parallel hairs; or a tuft of stiff hairs terminating the leaves, as in Mesembryanthemum barbatum.—Rivinus and others give this name to the lower lip of a ringent corolla.—In common language the awn is called the beard.

Bearded (Barbatus). Having parallel hairs, or tufts of hairs. Applied to leaves—to the corolla, as in Dianthus barbatus, Gentiana campesiris—and to the nectary, as in Iris.

Beardless (Imberbis). Void of parallel hairs or tufts. As the corolla in some species of Iris, Gentiana filiformis, &c.

Bell-shaped, Bell-form, or Campanulate corolla (Campanulata). Swelling or bellying out, without any tube, as in Campanula, Convolvulus, Atropa, Gentiana, &c.—This term is applied properly
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perly to monopetalous corollas only, although it be sometimes extended to such as are polypetalous.—Calyxes, as in Chironia; and Neflariums, as in Narcissus, are also bell-shaped. Tournefort has a class of Campanulate or Bell-shaped flowers.

I cannot approve the use of the term bell’d.

Belllying or Bellied (Ventricosus). Swelling out in the middle. Applied to the spike—to the perianth, as in Æsculus—to the corolla, as in Digitalis. If any one should object to this term as vulgar, he may use the word Ventricose instead of it; but I do not see why Botanists may not speak of a belllying corolla, with as much delicacy as Poets of belllying fails.

Berry (Bacca). A succulent or pulpy pericarp or fruit, without valves, containing naked seeds. These are sometimes dispersed loose among the pulp (nipulantia), as in Nymphaea; but they are
are generally placed on receptacles, as in Currant, Gooseberry, &c.

Many fruits, having the appearance of Berries, but not corresponding with the definition, are improperly so called—as Xanthium, Capsicum, Rhus or Sumach, Cyclamen, Mespilus, Citrus or Orange and Lemon, Taxus or Yew, Bromelia or Pine-apple.

Such also as are formed by any part except the pericarp are improperly called Berries—as a large succulent calyx, in Mulberry, Rose, Blite, myrtle-leaved Sumach (Rhus Coriaria)—the receptacle, in Strawberry and Cashew-nut—the nectary, in Marvel of Peru—the tube of the corolla, in Poterium and Sanguisorba.

Such fruits as Mulberry, Raspberry and Blackberry, being usually regarded as berries, might very well be called Compound Berries, each of the component parts, which are called Acini, being a small berry, containing one seed immersed in the pulp. See Acinus.
Bicapsular (bicapsulare) pericarp. Having two capsules containing seeds, to each flower. As in Paonia.

Bicornes (two-horned). Plants with anthers having two horns. The name of the twenty-fourth order, in Linneus's Fragments of a Natural Arrangement.

Biennial (Biennis) root. Enduring two years, and then perishing. In biennial plants a root and leaves are formed during the first year, and in the second the fructification is completed.

Bifarious leaves (Bifaria folia). Pointing two ways; or, coming out only on opposite sides of a branch.

Bifariousely hairy, stem or branch. When the hairs between any two joints come out on the front and back; and in the two adjoining internodes, on the right and left sides.

Biferous plants. Bearing twice in a year. Common
Common in hot climates.—"Biferique rosaria Pæfli." Virg.

Bifid, two-cleft, or cloven. Leaf—Perianth, as in Utricularia—Stigma.

See Cleft.

Biflorous peduncle (pedunculus biflorus).
Two-flowered, or bearing two flowers.

Bigeminate leaf (folium bigeminum).
Twin-fork. With. A decompound leaf, having a dichotomous or forked petiole, with several folioles or leaflets at the end of each division. Bigemina folia, petiolo dichotomo apice annectent foliola plura.

Bijugous leaf (folium bijugum). A pinnate leaf having two pairs of leaflets.

Bilabiate or two-lipped corolla (bilabiàta corolla). As in Pinguicula, and the class Didynamia. See Labiate.

Bilamellate stigma (stigma bilamellatum). The form of a flatted sphere, E 4 lon-
longitudinally bifid. *Globus compressus* & longitudinaliter bifidus.

**Bilobate leaf** (*folium bilobum*). Divided into two lobes. See *Lobus* and *Lobatum*.

**Bilocular pericarp** (*biloculare pericarpium*); or more properly two-celled; divided into two cells internally; as in *Hyoscyamus, Sinapis, Nicotiana*, &c. Some seeds are also two-celled, as in *Cornus, Xanthium, Valeriana Locustia, Cordia*.

**Bina folia.** Two-fold leaves; or rather coming out two and two together, from the same place, or at the same joint of a branch.

**Binate leaf** (*binatum folium*); *digitatum foliolis duobus terminatum*. Having a simple petiole connecting two leaflets at the top of it: a species of digitate leaf, which see. *Binati pedunculi*, Peduncles growing in pairs; as in *Capraria, and Oldenlandia zeylanica*.
Bipartibile. Bipartile. Divisible into two: as the fruit of umbellate plants into two seeds.

Bipartite, leaf, perianth, corolla. Divided into two parts to the base. See Partitum.

Bipinnate, or doubly-winged, Leaf or Frond. When the common petiole has pinnate leaves on each side of it: as in Athamanta Libanotis, Anemone Pulsatilla, &c. and many of the Ferns.

Bipinnatifid, or doubly-pinnatifid, Leaf. When the common petiole has pinnatifid leaves on each side of it. See Pinnatifidum.

Biternate or doubly-ternate Leaf. When a petiole has three ternate leaflets. As in Epimedium.

Bitten root, leaf, corolla. See Præmorbus.

Bivalve, or two-valved, Pericarp. In which the covering, or seed-case, splits into two parts,
parts, as in *Chelidonium*, all the *Siliques* and *Legumes*.—The glume or chaff, which is the calyx and corolla of corn and grasses, is generally bivalve, or consisting of two pieces.

**Bladder** (*Vesicula*). A distended membranaceous pericarp; as in *Colutea*. See *Vesicularis*.

**Blistered.** See *Bullate*.

**Blossom**, in common language, is the corolla of fruit-trees. Dr. Withering makes it the English term for corolla.

**Blunt, or Obtuse, Leaf, Perianth, Capsule.** Ending in a segment less than that of a circle. Opposed to sharp or acute.

**Boat-shaped, Navicular or Cymbiform**; as the valve of some pericarps, and the carina of papilionaceous flowers. Hollowed and resembling a boat in shape. See *Navicularis*.

**Bole**, the naked trunk of a tree.
**Border or Brim** (*Limbus*). The upper spreading part of a monopetalous or one-petalled corolla. See *Limbus*.

**Botany** (from *Botanē*, an herb or plant). That branch of Natural History which treats of Vegetables.

"Botanicus est ille, qui Vegetabilia similis similibus, et distincta distinctis nominibus, eunicunque intelligibilibus, noscit nominare."

Lin.

**Bough**. A subdivision of the trunk, in a tree. See *Branch*, which is of a more extensive signification.


*Bowed in* (*incurvus*) is perhaps better expressed, *curved inwards*: and *inflexus*, *bent inwards*.

**Brachiate** (*Brachiatus caulis*), (from *Brachium*,
Brachium, the arm). Having branches (stretched out like arms) in pairs, decussated, all nearly horizontal, and each pair at right angles with the next. See Decussated.

Bractea, Bracte, or Floral leaf. "sequentis anni folia. Delin. Pl.—Bractea florum, ad florum pedunculorumve basin, foliacea." One of the seven fulcres or props of plants. A leaf different from the other leaves in shape and colour, generally situated on the peduncle, and often so near the corolla as easily to be mistaken for the calyx, as in Hellebore, Nigella, Passion-flower, Hepatica, Peganum. The calyx however withers when the fruit is ripe, if not before; whereas the bracte is generally more permanent.

Bractes are either green or coloured. Deciduous—Caducous—or Permanent.—One, two, or more.

Instances of remarkable Bractes may be observed in Lime-tree, Melampyrum, Monarda,
Monarda, Salvia, Lavandula, Bartisid Hebenstreitia, Mußenda, Fumaria. See Coma.

It seems better to preserve the term Bractea or Bracte, than to translate it: for Linneus frequently calls leaves which are near the flower, Floral leaves, when they differ from the other leaves, though they are not properly Bractes. Bractee is by no means an English plural.

Bracted (bracteätus). Furnished with bractes; as the Peduncle, and Verticil or whorl.

Branch (Ramus). A division of the main stem, supporting the leaves and fructification.

Branched or Branching (Ramöfus). Furnished with lateral divisions. Opposed to simple. Applied to the root, as in Urtica—to the stem; and to bristles.

When a plant is loaded with many branches, coming forth without order, it is said to be very branching (ramosissima). When
When it has only a few lateral divisions, it is said to be subramose.

**Branch-leaves (Ramea folia).** Leaves growing on the branches.

**Branchlet (Ramulus), dimin. of Branch.** A subdivision of a branch; a twig.

**Branch-peduncle (ramēus peduncūlus).** A peduncle springing from a branch.

**Bright (Lucidum) leaf.** See Lucidum.

**Bristle (Seta).** A species of pubescence, in form of a stiff roundish hair; on the stems, branches, leaves, flowers or fruits: sometimes covering almost the whole surface of plants.

Bristles are either simple or hooked. Branched, feathered (plumosae), and fstellate or rayed (stellatae).

**Bristle-shaped: of the thickness and length of a bristle; applied to the structure of a leaf (folium setaceum); shorter therefore than a capillary leaf.**
BRISTLY (fētōśum), set with bristles: as some receptacles, which have bristles interposed between the florets. In Cynara or Artichoke, Centaurea, Echinops.

BUD or Gem (Gemma). A hybernacle, or winter receptacle of leaves and flowers on the stem or branches; or, as Linneus expressions it, on the ascending caudex. It consists of stipules, or petioles, or the rudiments of future leaves, or cortical scales.—Hence Buds are called Stipular, Petiolar and Cortical.

Most plants in cold countries, but scarcely any in hot climates, have buds.

A Bud is

1. Leaf bearing (foliaris): as in Alder.

2. Leaf and flower-bearing distinct: as in Poplar, Willow, Ash.

3. Leaf and female-flower-bearing: as in Hazel and Hornbeam.

4. Leaf and male-flower-bearing: as in Pine and Fir.

5. Leaf
5. Leaf and hermaphrodite-flower-bearing (floralis): as in Daphne, Ulmus, Cornus, Amygdalus.

6. Leaf and flower-bearing together (communis): as in most trees.


Bulb (Bulbus). A hybernacle, or winter receptacle of a plant, composed of the bases of past leaves, and placed immediately upon the root. It is vulgarly considered as a root; and was called so by Botanists till Linneus corrected the error, and shewed that it was a single bud, enveloping the whole plant.

A Bulb is, 1. Scaly (squamatus), as in Lily. 2. Solid, as in Tulip. 3. Coated (tunicatus), as in Onion. 4. Jointed, as in Lathrea, Martynia, Adoxa.

Some flowers are succeeded by Bulbs instead of seeds: as in Allium. The term, in this case, is call Bulbiferous or Bulb-bearing.

Bulbous
BULBOUS plants (*Bulbosia*). Growing from bulbs. The title of a Class in Caesalpinus, Ray, and other systematic writers.

Roots that are solid and roundish, like true bulbs, are also called Bulbous; as in *Turnep*, *Ranunculus bulbosus*, &c.

**BULLATE** leaf (*folium bullatum*). When the substance rises high above the veins, so as to appear like blisters. It is only a greater degree of the wrinkled leaf (*fol. rugosum*).

**BUNCH.** See *Racemus*.

**BUNDLE or Fascicle** (*Fasciculus*). Several roots, leaves or flowers collected together, or proceeding from the same point.

A root in bundles (*radix fascicularis*) is a sort of tuberous root, with the tubers or knobs collected in bundles: as in *Paonia*.

Leaves are fasciculate (*folia fasciculata*),
or grow in bundles or bunches, in the Larch.

In the fructification, Linneus explains a bundle (*fasciculus*) to be a species of inflorescence, collecting upright, parallel, fastigiate-approximating flowers.

**Burr (Echinus).** A prickly pericarp.

**Butterfly-shaped Corolla.** See *Papilionaceae*.

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**C**

**Caducous (Caducus, from *cado*, to fall).** Falling off quickly. Applied to stipules and bractes; to leaves that fall before the end of the summer (*brevi decidentia, nec per integram aestatem permanentia. Delin. Pl.*)—to calyxes and petals falling before the corolla is well unfolded.—*Papaver* and *Epimedium* are instances of the caducous calyx: *Aconitrium* and *Thalictrum*, of caducous petals.—

This
This term is different from *deciduous*; which see.

**Calamariæ** (from *Calamus*, a reed). The thirteenth order in Linneus’s Fragments of a Natural Arrangement, in *Philosophia Botanica*; and the third of the Natural Orders, at the end of *Genera Plantarum*. It contains the Sedges, and other plants, allied to the Grasses.

**Calcar corollæ.** *Est ejusdem basis productio coniformis.* See *Spur*.

**Calcaratus calyx;** a Calcarate calyx, as in *Tropæolum*. Calcarata corolla: a calcarate corolla, as in *Larkspur*, &c. Furnished with a spur. Calcaratum nectarium; a calcarate or spur shaped nectary in shape resembling a cock’s spur, as in *Larkspur, Antirrhinum, Valerian, Pinguicula, Utricularia*. See *Spur*.

**Calycanthemi.** The fortieth order in Linneus’s Fragments of a Natural Arrangement.
Calycine. Of or on the calyx: as caly-cine scales—calycine thorns.

Calycine (Calyciulus). A row of small leaflets placed at the base of the calyx, on the outside.—Calycle of the seed is the outer proper covering or crown of the seed, adhering to it, in order to facilitate its dispersion. This word is evidently a diminutive of Calyx.

Calyculate or Calycled (Calyculatus f. Auctus). A calyx having a calycle or little cup at the base, on the outside: as in Dianthus, Coreopis, Bidens, Crepis, Chondrilla, Prenanthes, Hedypnois, Lap-fana.

Calyptra, Calyptre, or veil (from καλυπτειν, to cover). The calyx of mosses, covering the anther like a hood, according to Linneus: but not properly a calyx; and the part which he calls the anther, is in fact a capsule.—Old authors used this term for what Linneus calls the arillus; and in this sense Euonymus is said to be calyp-tred,
tred, calyptrate or veiled; having a loose covering over the pericarp.

**Calyx** (καλυξ from καλυπτω, not καλιξ a cup). The outer covering of the flower, or the first of the seven parts of fructification, formed, according to Linneus, of the *cortex* or outer bark. In another place he explains it to be, the *cortex* or outer bark present in the fructification.—*Tegmentum exterius floris e cortice*. Regn. Veget. *Cortex plantae in fructificatione præsens*. Delin. Pl. This term includes not only the *Perianth*, which is often exclusively called the *Calyx*; but also the *Involucrum, Ament, Spathe, Glume, Calyptre, and Volva*; and therefore is of a much more extensive signification than *Perianthium*. The Calyx is frequently called *Empalement* and *Flower-cup* by English writers. With respect to the latter of these names I have observed, that Calyx is not derived from καλιξ a cup; and, if it be admitted at all, should be confined to what we call the *Perianth*—which see.
C A

Campanacei (Campana, a bell.) The thirty-second order in the Fragments of a Natural Method, by Linneus: containing plants with bell-shaped flowers.

Campanulata corolla. From campanula (dimin. of campana) a little bell. See Bell-shaped.—Campanulatus calyx, a bell-shaped calyx—Campanulatum nectarium, a bell-shaped nectary.

Canaliculatum folium (dimin. from canalis a canal or channel). Supra fulco profundo longitudinaliter excavatum. See Channelled.

Cancellatus (Cancelli, trellis or lattice work). See Latticed.

Candelares (Candela, a candle). The sixty-second order in Linneus's Fragments of a Natural Method.

Capillares. The name for the class of Ferns, in the Systems of Morison, Ray, and Boerhaave. Capil-
Capillary (Capillacæs f. Capillāris, from Capillus, a hair.) Long and fine, like a hair.—Applied to leaves, that are longer than the fetaceous or bristle-shaped leaf; as in Ranunculus aquaticus, Artemisia capillaris.—To glands, resembling hairs; as in Ribes, Scrophularia, Cerasium, Silene.—To the filaments; as in Dipsacus, the Graffes, &c.—To the style—And to the pappus or down, affixed to some seeds; as in Sonchus, Lactuca, Chondrilla, Prenanthes, Leontodon, Hieracium, Crepis, Andryala, Carduus, Onopordum. This is by some called pilosus; and is opposed to plumosus or feathered. Ray calls the framents, capillamenta.

Capillus (a hair). Is sometimes put for a measure; the diameter of a hair, or the twelfth part of a line.

Capitatae (Caput, a head). The second division of the twenty-first order (Compositi Capitati) in Linneus’s Fragments of a Natural Method, in Philosophia Botanica; and the first division of the forty-ninth
ninth order in the *Ordines Naturales*, at the end of *Genera Plantarum* (*Compositae* *Capitatae*). Also the second division of the first order, in the class *Syngenesia*, in his Artificial System: and the ninth class in Ray's Method. It contains the thistles and other plants with compound flowers, growing in a head.

**Capitatus.** Capitate, growing in a head. See *Head.*—Applied to flower (*capitatus flos*) and stigma (*capitatum stigma*).

**Capitulum** (dimin from *caput*). *Consistat floribus plurimis in globum ferme congestis:* *Gomphrena.* See *Head.*

**Capreolus** (dimin. from *caprea*; or a capiendo). See *Cirrus* and *Tendril.*

**Capsule** (*Capsūla*, a little chest or casket). *Pericarpium cavum determinate debiscens.* Delin. Pl. & Philos. Bot.—*Membranacea, valvis debiscens varie in variis.* Regn. Veg.—A membranaceous hollow pericarp, opening in some determinate manner— or,
or, differently in different plants. The parts of which a capsule is composed, are—1. The Valves or outer covering (valvulae). 2. The Partitions (dissepimenta). 3. The Columella or central pillar. 4. The Cells (loculamenta). See all these terms explained in their proper places. Instances of capsules may be observed in Tulip, Crown Imperial, Iris, Poppy, &c. &c.

Capsules are distinguished from the number of their valves and cells. Thus we say, a five-valved capsule, or a capsule of five valves: a two-celled capsule, or a capsule of two cells. Bilocular, is not so proper, because we translate *loculamentum* by the term cell.

Some flowers are succeeded by more capsules than one: such fruits are called bicapsular, two-capsuled, or fruits of two capsules, &c. according to the number succeeding to each flower.

Capsules are *twin* or *double* (*didymae*)—*dicoecous*, or *two-grained*—*tricoecous*, or three-
three-grained. — *Jointed* (articulatae). — *Circaumfeisse*, opening in the middle transversely into two hemispheres. *Elastic*, or opening with a sudden spring. *Inflated*, or puffed up like a blown bladder.

**Carina.** The lower petal of a papilionaceous corolla. See *Keel*.

**Carinated.** *Calyx carinatus*, a keeled calyx. *Folium & nectarium carinatum*, a keeled leaf, and nectary. Having a longitudinal prominence upon the back, like the keel of a vessel.

**Carnosum folium.** A Fleasy leaf. See *Fleasy*.

**Cartilaginosus leaf (Cartilagineum folium).** Having the edge strengthened by a tough rim of a substance very different from the disk—*margin s ubosseo*.

**Caryophyllæus flos—caryophyllum corolla.** Resembling that of a single pink or carnation (*Caryophyllus*); having five regular petals, ending at bottom in a long, narrow
narrow claw. This is a term used by Tournefort: but hence Linneus has constituted an order of plants, called Caryophyllaceae, in his Fragments of a Natural Method, and his Natural Orders.

Castra f atamina s. filamenta. Without anthers: as in some species of Geranium.

Catkin and Catulus. See Ament.

Cauda. See Tail.

Caudeex (from caedo, to cut down). The stem or trunk of a tree. According to Linneus, when a seed germinates, the descending stem (caudex descendens) terminates in roots; the ascending stem (caudex ascendens), in branches and leaves.

Caulescent plant (planta caulescens). Having a stem different from that which produces the flower. Opposed to Acaulis or Stemless. Linneus applies this term to
the root also: as in cabbage, navew and turnep.

**Cauline leaf.** Growing immediately on the stem, without the intervention of branches. Applied also to the bulb, peduncle and scape. *Caulinus bulbus, pedunculus, scapus—caulinum folium.*

**Caulis (καυλός).** But the signification of the Greek word is more extensive than that of the Latin, for it comprehends the trunk of a tree, whereas the Latin term is confined to the stalk of herbs only. Our English Kale, and Cole (in Colewort and Coleseed), come from caulis, as well as Cauliflower vulgarly Collyflower: but immediately from the Low-Dutch Kool. See Stem.

**Cell (Loculamentum).** The hollow part of a pericarp, and particularly of a capsule in which the seeds are lodged.—According to the number of these, pericarps are called one-celled, two-celled, &c.
CERNUUS (q. qui terram cernat) flos f. pedunculus. Apice terram spectans.—Cum apice incurvatur, ut flos versus latus alterum vel terram nutet; nec poterit erectus attolli ob curvaturam strictam pedunculi.

It may be translated drooping, and must be distinguished from Nutans, nodding. See these words.

CESPITOSA planta (Cespis, turf). Cum multi caules ex eadem radice prodeunt.—A cespitose or turfy plant, has many stems from the same root, usually forming a close thick carpet, or matted together.

CHAFF (Pala). The dry calyx of corn and grasses, in common language; by Linneus called Gluma. See Gluma. Also,

A dry membranaceous body interposed between two florets, in some of the class Syngenesia.

CHAFFY receptacle; paleacēum receptaculum. In which the florets are divided by interposed chaffs or scales. As in Dip-sacas,
facus, Scabiosa, Hypochæris, Catananche, Arctium, Onopordum, Serratula, Bidens, Santolina, Athanasia, Xeranthemum, Zinnia, Anthemis, Achillea, Verbæsina, Sigebbeckia, Buphthalmum, Helianthus, Rudbeckia, Coreopsis, Silphium.

Channelled (canaliculatus). Hollowed above with a deep longitudinal groove; convex underneath. Applied to the stem, leaf, and petiole.

Character. The peculiar circumstance or circumstances that distinguish a vegetable, or a set of vegetables, from all others. Characters are Specifical, Generical, or Classical—Essential, Natural, or Artificial. See Class, Genus, Species: Essential, Factitious, Natural.

Chinked (Rimosus). Applied to the outer bark of trees, especially old ones.

Chive. Put by some English writers for Stamen.
Cicatrisatus truncus f. caulis. A scarred stem. Marked with the remains of leaves that have fallen off.

Ciliatum folium. A ciliate leaf (from ciliae, the eye-lashes). The edge guarded by parallel bristles longitudinally: as in Drosera, Crassula coccinea & cymosa, Erica tetralix & ciliaris, &c.—It is applied also to the Stipule—the Spike—and the Corolla; as in Rue, Menyanthes, Tropaeolum.

This term is frequently but improperly translated Fringed, which answers to the Latin Fimbriatus. See these words.

Cinereous. The colour of wood ashes.

Circinalis vernatio. Quum folium in spiram transversalem coarctatum fit; ut apex centrum obtineat. Delin. Pl.—Circinalia folia, quum deorsum spiraliter involvuntur. Philos. Bot.—A term in foliation or leafing; importing that the leaves are rolled in spirally downwards, the tip occupying the centre. As in Ferns, and some
from *Palm*.—For this we have no equivalent English term, unless we may use the word *spiral*, which scarcely expresses the idea.

**CIRCULAR.** See *Orbiculatum*.

**CIRCUMSCISSA capsula.** *Quæ maturo fructu horizontaliter discedit. f. quæ media fere parte in hemisphaerio duo diffilit.*—Cut round. Opening, not longitudinally or vertically, as in most capsules, but transversely or horizontally, like a snuff-box; usually about the middle, so as to fall nearly in two equal hemispheres. Instances of this we have in *Anagallis*, *Hyoscyamus*.

**CIRRIFERUM folium:** A tendril-bearing leaf, as in *Fumaria capreolata & claviculata*. *Cirriferus pedunculus:* a tendril-bearing peduncle; as in *Cardiopermum* and *Vitis*.

**CIRRUSUM folium:** a cirrose leaf. Terminating in a cirrus or tendril: as in *Gloriosa, Flagellaria, Lathyrus, &c.*

**CIRRUS**
Cirrus (Cirri, capilli intorti, frizzled air). Some derive it from κέρως, a horn; others from κεραυν, to shiver; others from κερατος, a hard tumour; others again from circum, q. capilli circum torti: such is the uncertainty of derivation.—Linneus explains it to be—vinculum filiforme spirale, quo planta alio corpori alligatur.—He writes it with an h.—See Tendril.

Clammy. Viscidus.

Clasper. See Tendril.

Clasping, stem-clasping, embracing leaf (folium amplexicaule). Surrounding the stem at the base.

Class (Clavis). The primary division in a system or arrangement. Tournefort defines it to be—congeries generum, quibus nota quaedam communis adeo propria est, ut ab aliis omnibus generibus plantarum prorsus differat. An assemblage of genera, in which some common mark is so peculiar, that it differs entirely from all other
other genera of plants.—According to Linneus it is—*generum plurium convenientia in partibus fructificationis, secundum principia naturæ & artis*. The agreement of several genera in the parts of fructification according to the principles of nature and art.

Classes are either Natural or Artificial. Natural Classes are such as contain genera which are evidently related to each other: as *Umbellate, Verticillate, Siliquofose, Leguminose* plants, the *Compound* flowers, and *Grassès*.

Artificial Classes are merely succedaneums to natural ones, which we are obliged to adopt for want of a complete knowledge of the true characters of plants, and their relations to each other.

Natural Classes have been attempted by Royen, Haller, Linneus, and lately by Jussieu.

Linneus's artificial system or general arrangement of vegetables has twenty-four
four classes, besides the Palms, &c. in a twenty-fifth. These are founded principally on the number, situation, and proportion of the stamens; and several of them are natural.

Clavatus (clava, a club) club-shaped. Versus apicem incrassatus; growing gradually thicker toward the top. Applied to the leaf, as in Anabasis foliata—to the petiole and peduncle—t the calyx, as in Silene—to the style, as in Leucoium vernum—to the capsule, as in Papaver Argemone.

Clavicula. The same with Capreolus or Cirrus. See Tendril.

Claw (Unguis). The lower narrow part of the petal in a polypetalous corolla, by which it is fixed to the receptacle.

Cleft leaf (folium fissum). Divided by linear sinuses, with straight margins. According to the number of these divisions, such a leaf is called bifid, trifid, quadridbid.
drifid, quinquesid, multifid; or two-cleft, three-cleft, &c.—The term is also applied to the Perianth, and to Stipules, in the same manner.

**Climbing plant (Scandens).** Ascending by means of tendrils; or sometimes by the stem or branches; but without twining, which see.

**Cloven.** See Cleft.

**Club-shaped (Clavatus.)** Growing thicker toward the top. See Clavatus.

**Clustered or crowded (Confertus).** See Confertus.

**Coadunata folia (Coadunate leaves).** Several joined together, or united at the base. Coadunati lobi.

**Coadunatae,** the fifty-second of Linneus's Natural Orders.

**Coarctatus.** Squeezed or pressed together. Compact, With. Coarctati rami; versus
versus summitatem fere incumbentes: condensed branches. Opposed to divergentes.
—See Condensed. Coarctati pedunculi condensed peduncles; opposed to patuli. Coarctata panicula; a close or contracted panicle; opposed to diffusa.

Coated or tunicated (tunicatus). Composed of concentric layers; as the bulb of the Onion: or clothed with membranes; as some stems.

Coarctated (arachnoides). Covered with a thick interwoven pubescence. Applied to the leaf, peduncle, and calyx.

Coccum ( kokxov), a grain or feed. Linneus applies this term to some fruits of a particular structure, having several cells with a single seed in each. Thus Euphorbia and Thea have a tricoccous fruit; Geranium has a pentacoccous or five-grained fruit.

Cochleatum legumen. A screw-shaped, or snail-shaped legume or pod. Turned like

G 3
Coiled (tortilis). Bent or twisted like a rope. See Tortilis and Twisted.

Collum. The neck or upper part of the tube, in a monopetalous corolla.

Coloured leaf. Of any other colour than green. Calyx, as in Bartfia.


Columnar (Teres). Like the shaft of a column. See Teres. Withering explains Columnaris to be a square pillar.

Columniferae (plantae) or columniferae (florae). The name of the thirty-fourth order,
order, in the Fragments of a Natural Method, in Linneus's *Philosophia Botanica*: the thirty-seventh of his Natural Orders, at the end of *Genera Plantarum*; and the fourteenth order of Royen's System. It includes the Malvaceous, or Mallow-like plants; which are to be found in the class *Monadelphia* of Linneus's Artificial System.

**Coma** (*Koyn, a head of hair*). A species of bracte, terminating the stem in a tuft or bush. As in Crown Imperial; *Salvia Horminum, Sylvesteris, Sclarea, &c.*—A spike of flowers terminated by a coma is named *Comose*: and plants with such flowers are ranged in the thirty-sixth of the Natural Orders, in Linneus's *Philosophia Botanica*.

**Common bud** (**communis gemma**). Containing both leaves and flowers. Common peduncle (**communis pedunculus**). Bearing several flowers.—Common perianth; inclosing several distinct fructifications, as in the class *Syngenesis*. 

G 4 Common
Common receptacle; connecting several distinct fructifications; as in the same class.

Compact leaf. Having the pulp of a close firm texture.

Complete flower. Furnished both with calyx and corolla. Delin. Pl.—This is one of Vaillant's terms. It would with more propriety be termed complete, when it has all the parts of a flower. See Flower.

Complicate (complicatus). Folded together: as the valves of the glume or chaff in some grasses.

Compositae, or Compositi. The name of the twenty-first order in the Fragments of a Natural Method in Linneus's Philos. Botan.—the forty-ninth of the Natural Orders in his Gen. Pl.—in Royen's System, and others. Comprising the plants with compound flowers.

Compound (compositus). Stem: dividing into
into branches.—*Leaf*: connecting several leaflets on one petiole, which in this case is called a common petiole.—*Flower*: a species of aggregate flower, containing several florets, enclosed in a common perianth, and on a common receptacle; with the anthers connected in a cylinder; as in the class *Syngenesia.*—*Raceme*: composed of several racemules, or small racemes.—*Spike*: composed of several spicules or spikelets.—*Corymb*: formed of several small corymbs.—*Umbel*: having all the rays or peduncles bearing umbel-lules, or small umbels, at the top.—*Fruc-tification*: consisting of several confluent florets; opposed to simple.

**Compound terms.** Two terms forming one idea, much used by Linneus. It should be observed that these may be framed with propriety from figures, &c. of the same division only. Thus *lanceolate-ovate* and *ovate-lanceolate* are proper; but not *lanceolate-acute*, or *ovate-mucronate.*—Delin. Pl.
**Compressed or flatted (compressus).** Applied to a stem, which has the two opposite sides plane or flat—to a leaf, which is pulpy, with the sides more flatted than the disk. Opposed to *depressed* in Delin. Pl.—Applied to a siliqua, which has the opposite sides approaching to each other.

**Concave leaf.** When the edge stands above the disk: or, as Linneus expresses it, when the margin of the leaf being too tight to circumscribe the disk, the disk is depressed.—Applied also to the calyx and corolla; and to the valves of the glume in grasses.

**Conceptacle or Follicle (Conceptaculum, Folliculus).** A Pericarp of one valve, opening longitudinally on one side, and having the seeds loose in it. As in *Apocynum, Asclepias, Stapelia*.

**Condensed branches (coarētāti rami).** Pressed or squeezed together, so close, as almost
almost to be incumbent, or lie over each other, at their ends.

**Conduplicate**, doubled together. *Conduplicata vernatio* s. *foliatio*. A term in vernation or leafing; signifying, that in the bud, the two sides of the leaf are doubled over each other at the midrib. *Cum folii latera (intra gemmam) parallele fibi invicem approximantur.* As in Rose, Ash, Walnut, Almond, Cherry, Oak, Beech, &c.—It is used also in the sleep of plants (*conduplicans formus*) in the same sense: when the leaves, during the night, fold together, like the leaves of a book.

**Cone (Conus).** The fruit of several evergreen trees, as Fir, Pine, Cedar, Cypress. Linneus has discarded this term, and has adopted that of *Strobilus*, which however is of more extensive signification; comprehendling fruits, as of Magnolia, not called cones in common language. See *Strobilus*.

A *Cone* is broadest at the base, or next the
the point of union with the branch, and tapers more or less to the end. It is composed of woody scales, usually opening, and has a seed at the base of each scale. Though Linneus has discarded the term Cone, he has retained an order of coniferous plants. See Coniferae.

Confertus. Crowded or clustered. _Conferta folia_; leaves so copious, as to occupy the whole of the branches, scarcely leaving any space between; as in _Antirrhinum monspessulanum_ and _Linaria_. _Conferti rami_; branches so close, as scarcely to leave any space between them: opposed to _remoti_. _Confertus verticillus_, a close or crowded whorl, in which the peduncles, or flowers, are as it were squeezed together: opposed to _disflans_.

Confluent leaves (_folia Confluentia_), Thronging, Withering. _Ad basin inter _se_ cohaerentia_; united at the base: growing in tufts, so as to leave the intermediate parts of the stem bare. _Confluent lobes_; running
running one into another: in opposition to *disjunct*.

**Conforme** folium. A leaf in all parts the same. *Conformis torso*. Twisting (of a stem) always the same way.

**Congestus**, heaped together. *Congestia panicula*: a panicle which has a great abundance of flowers, but not so closely squeezed together as in the crowded or dense panicle.

**Conglomerate** (*con* and *glomus*, a clue of yarn or thread) flowers or peduncles. When a branching peduncle bears flowers on very short pedicles, closely heaped and compacted together, without order. As in *Dactylis glomerata*. Opposed to *diffusus*. See Glomerate.

**Conic** or **conical receptacle**. In shape of a cone, round and broad at the base, but drawing to a point at the top. As in *Bellis* (the common Daisy), *Anthemis*, &c.
Coniferæ. The fifteenth order in Linneus's Fragments of a Natural Method: and the fifty-first of the Natural Orders; at the end of Gen. Pl. Containing the cone-bearing trees. As Fir, Pine, Cypress, Thuja, &c.

Conjugate leaf (folium conjugatum). A pinnate leaf which has only one pair of leaflets. Conjugate raceme: having two racemes only, united by a common peduncle.

Connate leaf (folium connatum). When two opposite leaves are so united at their bases as to have the appearance of one leaf: as in the Garden Honeysuckle.—This term is applied also to filaments and anthers, united into one body; as in the classes Monadelphia and Syngenesia.

Connivens corolla. Cujus limbi lobi apicibus convergent. Connivens solum: quando duo folia opposita pagina superiore tam arête ad se mutuo applicantur, quasi unicum esset.

Contorta corolla. Cujus petalorum margo alter incumbens alteri obliquam directionem habet. A contorted corolla has the edge of one petal lying over the next, in an oblique direction. As in Vinca.—Contortum pericarpium. Cujus apex non in eadem cum basi linea est. A contorted pericarp is that, which has the apex in a different line from the base. This means no more than twisted.

Contortuplicatus. See Writbed.

Contracta panicula. A contracted panicule. Close and narrow, so as very much to resemble a spike. As in Festuca calycina.

Contra-
Contrarium disepimentum. See Partition.

Converging (connivens). Applied to the corolla, when the tips of the petals meet so as to close the flower; as in Trollius: to anthers, approaching or inclining towards each other; as in the class Didynamia: to the sleep of plants; when two opposite leaves are so closely applied to each other by their upper surfaces, as to seem one leaf.

Convex leaf (folium convexum). Quod in disco magis elevatum est. Philos. Bot.—Margine disco arctiore (depressiore) ut elevetur discus. Delin. Pl. Rising towards the centre; or, with the edge more contracted than the disk, so that the disk is raised.

This term in Philosophia Botanica is opposed to depressed, and has reference to the substance of a leaf; whereas in Delin. Pl. it refers to the mode of its expansion, and is opposed to concave. It is applied also to the Receptacle, which rises towards the
the middle: as in Tansy, Chrysanthemum, Matricaria, Buphthalmum.

**Convoluted (convolutus) leaf.** Foliorum lateribus cuculli in modum spiraliter contortis. Delin. Pl. A term in vernation or foliation, signifying that the sides of the nascent leaves are rolled together like a scroll: as in Arum, Piper, Solidago, Brassica, Prunus, Gramina or Grasses.—This is applied also, in the same sense, to the petals and stigmas, as in Crocus.—*Tendril (Cirrus).* In annulos contortus, twifted into rings or spirals.

**Corculum** (dimin. from Cor, the heart).
The corcle, heart, or essence of the seed.
The rudiment of the future plant. Attached to and involved in the cotyledons. Consisting of the plume, or scaly ascending part; and the rostel, or radicle, the simple descending part.—*Novae plantarum compendium, connectens Cotyledones; constans Rostello acuminato, deorsum germinante;*
CO

\nuante; Plumbula imbricata, fursfum excre-
\nsecente. Regn. Veg.

Cordate or heart-shaped leaf (folium cord-
datum). So called, from its resemblance
to a longitudinal section of the heart.—
Ovate or subovate, hollowed at the base,
without any angles there. Ovatum, basf
excavatum, defiitutum angulis posticis,

Cordate-oblong. A heart-shaped leaf
lengthened out.

Cordate-lanceolate, Cordate-fagittate, &c.
Partaking of the form of both leaves.

Coriaceous. Stiff like leather or parch-
ment. Applied to the leaf, calyx, and
capsule.

Cornered or angular stem: 3—6, cor-
nered (trigōnus, &c.) Having three, &c.
prominent longitudinal angles.

Cornu. A horn or spur at the back of
some flowers. See Horn.

Cor-
CORNUTUS. Horn-shaped.

CORolla (dimin. from corona, a crown).

Liber plantae in flore præsens. Philos. Bot. & Delin. Pl. Tegmentum interius floris e libro. Regn. Veg.—The second of the seven parts of fructification; or, the inner covering of the flower, formed, according to Linneus, of the liber or inner bark of the plant.

It may commonly be distinguished from the perianth, by the fineness of its texture and the gayness of its colours: whereas the perianth is usually rougher and thicker, and green. But there are many exceptions; the perianth in Bartafia is coloured—the corolla in Daphne Laureola is green.—Linneus makes the distinction between the corolla and perianth to consist, in the former having its segments or petals alternate with the stamens; whereas the latter has its parts or leaflets opposite to them. This appears from the inspection of the classes Tetrandria and Pentandria, in flowers which have both parts;
and of Chenopodium, Urtica, Parietaria, which have no corolla. See Philos. Bot. p. 57, § 90.

Adanson however observes, that in the Liliaceous plants, what is called a corolla is in reality a perianth, according to the principles of Linneus. That part which is named corolla of Rhamnus, in Lin. Gen. is called calyx in Syfl. Veget.—and on the contrary, the calyx or perianth of Polygonum in Lin. Gen. is the corolla in Syfl. Veg.

To get rid of the difficulty, which sometimes occurs in distinguishing the corolla from the calyx, De Necker has cut the knot, and called them by one name, Perigynanda; which signifies the envelope, cover or wrapper of the stamens and pistils; this he distinguishes into inner and outer, when there are two—then the first is the corolla, and the second the perianth.

I prefer corolla to corol, because it is a legitimate English word, as well as the other,
other, with a better found; but especially because it has generally obtained place among us. Some choose to translate corolla by *blossom*; but *blossom* has a more contracted signification in English, being usually applied to the flowers of fruit-trees. Beside this it is contrary to the principles that ought to regulate us in forming technical terms.

The Nectarium or Nectary is considered as a part of the corolla.

The corolla is frequently, but inaccurately, called the flower. See *Flower*.

The diminutive *Corollet* or *Corollule* (Corollula) is used in speaking of the florets in aggregate flowers.

**Corona:** See *Crown*.

**Coronariæ.** The ninth order in Linneus's Fragments of a Natural Method: and the tenth of his Natural Orders; containing part of the Liliaceous plants; such
such as for their beauty are adapted to the making of garlands (coronae).

**Coronula** (dimin. of *corona*) a *coronet* or little crown to the feed.

**Cortex** (from *corium* a hide, and *tego* to cover). The *outer bark* of a vegetable, or the second integument within the epi-dermis; plated, lax, dry, hard, often in chinks.—*Secundum integumentum plantæ, laminosum, laxum, fìccum, davior, sepe rimosum*.

**Cortical bud (Corticalis gemma).** Having its origin from the scales of the bark—*e corticis ramentis*.

**Corydales** (from *nopus*, *a helmet*). The twenty-eighth order in Linneus's Fragments of a Natural Method, and the twenty-fourth of his Natural Orders.

**Corymb** (*Corymbus*). Linneus's words are—*fit ex spica, dum singuli flores petiolis propriis instruentur, situ elevato proportionali*.
Corymbus.—It is made up of a spike, whilst each flower is furnished with its proper petiole [peduncle], in an elevated proportional situation.—I confess that I do not clearly understand this explanation of the term.—In Lee's Introduction it is thus expressed—"Corymbus is a kind of spike, the flowers of which have each its proper Pedicellus, or partial foot-stalk raised to a proportional height."—In Rose's Elements it stands thus—"The "Corymbus, where the lesser flower-stalks of unequal lengths are produced along the common peduncle on both sides, and rise to the same height, so as to form a flat or even surface at top."—Berkenhout says—"Linnaeus makes it a species of inflorescence, in which the flowers grow in clusters, each upon a separate pedunculus, as in the siliquose plants in general."—Rose's explanation is the most intelligible, but it is not Linneus's.—There is plainly a reference to the spike for the general similitude, with two distinctions.—1. That each flower is...
not sessile, but on its proper pedicel.

2. That instead of the flowers being ranged along a common simple peduncle alternately, as in the spike; each pedicel is of a length proportioned to its situation, so that all the flowers form nearly a flat surface at top. If this be not the sense intended by finu elevato proportionali, I am at a loss for a meaning.—After all, the meaning of the term will be best understood by attending to the manner of flowering in the plants referred to by Linneus. Spiræa opulifolia, Ledum, and those of the Siliquofæ or Tetrodynamia class. A corymb may be either simple or compound. Corymbus, in Pliny, signifies a cluster of ivy berries—"hederae race-mus in orbem circumactus." Columella puts it for the head of the artichoke.

"Hæc modo purpureo surgit glomerata
corymbo."

It is a Greek word (κόρυμφος), from κῶρος a helmet, and that from κατα the head.

This
This and two other kinds of Inflorescence, namely, the Cyme and Umbel, which bear some resemblance to each other, may be thus distinguished:

1. In the Corymb, the peduncles take their rise from different heights; but the lower ones being longer, they all form nearly an even surface at top.

2. In the Cyme, the peduncles take their rise from the same centre; but the subdivisions are irregular.

3. In the Umbel, the peduncles take their rise from the same centre, and the whole is disposed with a striking regularity.

Corymbiferae. The name of one of Ray's classes; and of the third subdivision in the order of compound flowers, in Linneus's Natural Arrangement.

Costatum folium. A ribbed leaf: as in Echites sphyilitica.

Cotty.
COTTONY. See Tomentosus.

COTYLEDON (κοτυλη, a cavity). The lobe, or placenta of the seed, destined to nourish the heart, and then to perish.—Corpus laterale feminis, bibulum, caducum. The lateral body of the seed, bibulous or imbibing moisture, and caducous or falling off quickly. Giseke defines it to be—folium primum germinantis feminis, but this is properly the feed-leaf.—In English we commonly call this part the Cotyledon or feed-lobe, when we speak of it as a portion of the feed, in a quiescent state—and the feed-leaf, when the feed is in a growing state.—The greater part of seeds have two lobes; some however have more—others only one, and others have none.—Hence a distinction of all plants into Acotyledones, Monocotyledones, Dicotyledones, Polycotyledones; which forms the basis of Jussieu’s Natural Arrangement.

COWLED or Cucullate leaf (folium cucullatum). Wide at top, drawn to a point below,
below, as in *Geranium cucullatum*: in shape of the paper rolled up conically by grocers for small parcels of spices, comfits, &c.

"Vel thuris piperifque fis cucullus."

Martial.

Hence, from a similitude in the form, this term was applied to the cowl, or large pendent cape of the upper garment, which turned up occasionally to cover the head.

"Pullo Mævius alget in cucullo."

Martial.

**Creeping root** (*radix repens*). Extending itself horizontally, and putting forth fibres; as in *Mint*.—**Creeping stem** (*caulis repens*). Running along the ground, or up trees and other bodies, putting forth roots; as in *Ivy, Bignonia*, &c.

**Crenate, scollopèd or notched leaf** (*folium crenatum, from crena a notch*). *Cujus margo angulis neutram extremitatem repicientibus fecatur*. Having the edge cut with
with angular or circular incisures, not inclining towards either extremity: as in Primula farinosa.—When the edge of a leaf is cut into segments of small circles, instead of angular teeth, it is said to be **obtusely crenate**; when the larger segments have smaller ones upon them, a leaf is then said to be **doubly crenate, duplicato-crenatum**.—Linneus’s definition in Philos. Bot. takes in only the **acutely crenate** leaf; and therefore **incisuris** is rightly substituted in Delin. Pl. for **angulis**.

The same term is applied to the co-rolla, in Linum, Dianthus chinensis, &c.—to the nectary, in Narcissus triandrus.

I think it, upon the whole, better to retain the Latin term; than to translate it by **notched**, which in our language does not take in the idea by which Linneus distinguishes **crenate** from **ferrate**; namely, the direction of the teeth or notches. See Serratus.

When the edge of a leaf is cut into very small notches, Linneus uses the diminutive
diminutive Crenulate (crenulatum). This term is also applied to the nectary in Narcissus poeticus.

Crescent-shaped (lunatus, from luna, the moon). Roundish, hollowed at the base, with posterior angles. Subrotundum basi excavatum, angulis posticis notatum — Applied to leaves and spikes: as in Acrostichum pectinatum. The diminutive lunulata is applied to the keel of the flower in Polygala myrtifolia. — Moon-shaped is absurd, and Mooned is abominable. If the terms lunate lunulate or crescent-shaped be objected to, we may use the periphrasis, shaped like a crescent, for any form of a leaf, &c. resembling the moon in any period of her first quarter; since this term does not occur very frequently.

Crested (cristratus). Having an appendage like a crest or tuft: as the flower of Polygala and some anthers.

Crinitus (crinis, hair). Crinete. Hairy, or
or having long hair, or beards resembling hair; as in *Phleum crinitum.*—Applied also to *Fronds.*


**Cristatus.** See Crested.

**Crosswise (cruciātim).** This term is applied to leaflets in a whorl, when there are four of them forming a cross—also to anthers; as in *Glecoma* and *Hippomane.*

**Cross-armed.** See Brachiate.

**Crowded.** See Confertus.

**Crown of the seed (corona feminis).** An appendage to the top of many seeds, enabling
enabling them to disperse. This is either the calyx, as in Scabiosa, Knautia, Ageratum, Arctotis—or a Down (Pappus), as in Hieracium, Sonchus, Crepis, Scorzonera, Tragopogon, &c.

**Cruciform** or *cros-shaped* corolla (*cruciformis* f. cruciata). Consisting of four equal petals, spreading out in form of a cross. *Petalis quatuor aequalibus patens*: in Delin. Pl. is added, *ungue quam lamina longiore*—the claw longer than the border. —These flowers constitute the fifth class in Tournefort's System; and are a principal character in the class *Tetradyntima* of Linneus. In the Natural Orders he has preferred the title of *Siliquofa*.

**Cryptogamia** (*κρυφτος* and *νυξ*, concealed nuptials). The name of the twenty-fourth class in the Linnean Artificial System, comprehending the vegetables whose fructification is concealed, or at least too minute to be observed by the naked eye.—It is divided into four orders.

1. *Filices*
CU

1. Filices or Ferns.  2. Musci or Mosses.  3. Algæ or Flags.  4. Fungi.

Cubit (cubitus, cubitālis mensura). A measure from the elbow to the extremity of the middle finger—seventeen Paris inches—a foot and a half English.

Cucullatum folium. Lateribus ad basis conniventibus, apice vero dilatatis: ut in Geranio cucullato. See Cowled.

Cucurbitaceæ (Cucurbita, a Gourd). The forty-fifth order in Linneus's Fragments of a Natural Method; and the thirty-fourth of his Natural Orders.

Culm (Culmus). The stalk or stem of Corn and Grasses; usually jointed and hollow; supporting both the leaves and fructification. Truncus graminibus proprius, elevat folia fructificationemque, plerumque geniculatus, articulis inanibus.—The word straw being commonly appropriated to the dry stalk of corn, I prefer using the Latin culm. The old term in English is blade.

CU-
CULMINÆ (Culmen, the top). The twenty-sixth order in Linneus’s Fragments of a Natural Method.

Cuneiforme folium. A cuneiform or wedge-shaped leaf. Cujus diameter longitudinalis superat transversalem, & sensim deorsum anguflatur. See Wedge-shaped.

Curled leaf (folium Crispum). When the periphery is larger than the disk admits, and so becomes waved—or, is so luxuriant, that the disk is longer than the rib of the leaf: as in Curled Parsley.—All curled leaves are monsters, or productions of art.

Curled nectary (nectarium crispum): as in Narcissus Pseudonarcissus and minor—which have their cups waved or curled about the edge.

Curved, bowed, or bent inwards (incurvus). Applied to Legumes and Prickles.—Caulis incurvatus, introrsum nutans. A stem curved or nodding inwards.

I Curved,
Curved, or bowed outwards, backwards or downwards (recurvus, recurvatus). Applied to Leaves and Prickles.

Cuspidatum folium (cuspis, the point of a sword or spear). A cuspidate leaf. Having the end sharp, like the point of a spear—or, terminating in a bristly point Terminatum apice setaceo rigidiusculo.

Cyathiformis (cyathus, a drinking-cup or glass). Cum ex cylindro superne parum dilatatus est. Cyathiform, Glass-shaped or Cup-shaped. Cylindric, only widening a little at the top.—Applied to the calyx in Mauritia—to the corolla—and to Peziza Acetabulum and cyathoides.

Cylindrical. Applied to stems, and some leaves, which are round (teretes), that is without angles; but many times longer than they are thick. This is more properly expressed by columnar, because they are not of the same diameter from top to bottom.
bottom. The same term is applied to the calyx; as in Euphrasia, Dianthus chinensis, &c.—to the style—and to the spike.

**Cymbiformis.** See Boat-shaped.

**Cyme or Cyma (κυμα, flectus).** It signifies properly a sprout or tender shoot, particularly of the cabbage.—Dr. Withering calls it a tuft.—Linnaeus explains it to be an aggregate flower composed of several florets fitting on a receptacle, producing all the primary peduncles from the same point, but having the partial peduncles scattered or irregular; all fastigiate, or forming a flat surface at top. As in Opulus, Cornus sanguinea, Ophiorhiza.—Flos aggregatus ex flosculis pluribus insidentibus receptaculo, in pedunculos fastigiatos, primores ex eodem puncto productos, posteriores autem sparsos. Philos. Bot. p. 78.—Receptaculum ex centro eodem universalibus, partialibus vero vagis, elongatum in pedunculos fastigiatos, p. 55. Umbella composita ramulis alternis. Regn. I 2 Veg.
The Cyme is either *naked*, or with *bractes*. See *Corymb*.

Flowers disposed in a Cyme are called *Cymose* flowers.—Hence

*Cymose*. The sixty-third of Linneus's Natural Orders in *Philosophia Botanica*.

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**D**

*Daedaleum* folium. A *Dædal* leaf.—*Unda flexuofum lacerumque.*—At the same time *flexuose* and *lacerated*; or *winding and torn*.

**Dagger-pointed**, *Daggered* or *Mucronate*; ending in a point like that of a dagger.—Applied to the leaf of *Bromelia Ananas*: and to the calyx.

**Decagynia** (Δεκα *ten*, and γυνή *a woman* or *wife*). Ten-styled. The name of one
of the orders in Linneus's Artificial System; comprehending those flowers which have ten styles. This occurs only in the class Decandria.

Decandria (\textit{dēcā ten}, and \textit{āvō a man or husband}). Ten stamened. The name of the tenth class in Linneus's Artificial System; comprehending all hermaphrodite flowers with ten stamens.—It is also the name of an order in the classes Monadelphia, Diadelphia, Gynandria, and Dioecia.

Decaphyllus calyx. A decaphyllous or ten-leaved calyx; as in Hibiscus.


Decemloculare pericarpium. A ten-celled pericarp or seed-vessel: as in Linnimum.

Deciduous (\textit{Decidūus}) Leaf: falling off in the autumn. \textit{Deciduum folium: per-}
acta unica æflate casurum.—Calyx or perianth: falling after the corolla opens. Deciduum perianthium: post floris explanationem cadens. As in Berberis, and the class Tetradyamia.—Corolla or petals: falling off with the rest of the flower. Decidua corolla: cum floris cafu.—Applied also to stipules; as in Padus, Cerasus, Populus, Tilia, Ulmus, Quercus, and many othertrees—Bractes— and Legumes. See Cadusious.


Decompound leaf. Folium decompositum. When the primary petiole is so divided that each part forms a compound leaf.—The different kinds of the decompound leaf
leaf are—Bigeminate, Biternate, and Bipinnate: which see in their proper places.
—Applied sometimes to an umbel (umbella decomposita), which is otherwise called Proliferous.—Flower (decompositus flos): compounded of compound flowers, or containing within a common calyx smaller calyces, common to several flowers; as in Sphæranthus, &c. contained in the order Segregata of the class Syngenesia.

Decumbent flower. Decumbens flos. Having the stamens and pistils declined or bending down to the lower side of it: as in Caffia—Stem: caulis decumbens, lying on the ground with the base higher than the other parts.

Decurrent leaf. Folium decurrens. A sessile leaf having its base extending downwards along the stem. As in Symphytum, Verbesina, Carduus, Sphæranthus.
—Applied also to the petiole, and the stipule.
DE

Decursively-pinnate leaf. Folium decussate pinnatum. Having the leaflets decurrent, or running along the petiole.

Decussated leaves and branches. Decussata folia. Decussati rami. Growing in pairs, which alternately cross each other at right angles; so that if the stem be viewed vertically, or the eye be directed right down it, the leaves or branches will appear to be in fours.


Defloratus. Having discharged the Farina or Pollen.

Defoliatio. Defoliation, or shedding the leaves.—Tempus autumnale, quo arbores folia dejiciunt, eoque indicant progressum autumni & inssequentis hyemis.—Here Linneus puts it, not for the action of unleafing, or shedding leaves; but for the season
fason in which this action is performed.
—So

Dehiscentia, the gaping or opening of capsules, is also put for the season in which this usually happens.

Deltoid leaf. Folium deltoïdes, or deltoïdeum.—Rhombeum ex quatuor angulis, e quibus laterales minus a basi distant quam reliqui.—Shaped like a rhomb, having four angles, of which the lateral ones are less distant from the base than the others.

I must confess that I do not understand this description; for of the two remaining angles, (reliqui) one is at the base of the leaf; and the lateral angles cannot be at a less distance from the base than the base itself is. Nor will the figure of a deltoid leaf given at n. 58. in Philosopha Botanica at all assist us; for that is by no means a plane leaf, but one of the succulent kind, such as we find in the genus Aloe, Mesembryanthemum, &c. and yet
yet it has no resemblance to those of *M. deltoides*.

I either mistake Linneus's meaning, or we must admit of some alteration in the terms of his description. If instead of *reliqui* we read *reliquus*; then the sense of the words will be—that *the lateral angles are nearer to the base, than the apex is to the same base*. This is true, but not sufficiently descriptive of a deltoid leaf.—If for *reliqui* we read *a reliquo*; then the meaning will be—that *the lateral angles are at a less distance from the base than they are from the apex*; and therefore the lower sides of the rhomb, connecting the lateral angles with the base or point of insertion of the petiole, must be shorter than the upper sides, connecting the same lateral angles with the apex of the leaf, or angle opposite to the petiole. This sense agrees sufficiently with the form of those leaves which are given as instances of the deltoid leaf.—But I own it would give me more satisfaction if we might be permitted for *basi* to substitute *se invicem*. Then
Then the full meaning of the definition would be this—a Deltoid leaf has the general appearance of a delta or triangle, but in reality it approaches in figure to a rhomb, and like that has four angles, of which the two side ones are always nearer to each other than the two others at the base and apex; so that the length of the leaf is somewhat greater than the breadth.

—All this will be best understood by examining a leaf of the common Black Poplar, which is given as one instance of a deltoid leaf in Linneus's Specific Characters. Other instances are, several species of Chenopodium and Atriplex: Cochlearia danica: Alyssum finuatum and deltoideum.

—if it should be objected, that a leaf cannot have the form both of a delta and a rhomb; I reply that Linneus affirms no more than that this leaf has the appearance of a delta, with a resemblance to a rhomb; and that it would be absurd to expect mathematical exactness in substances so various in their forms as leaves.

Dr. Withering translates deltoideus triangularly
angularly spear-shaped; and says, that leaves in this form are broad at the base and nearly triangular, but spear-shaped at the point; as in the Black Poplar.

With respect to *Mesembrianthemum deltoides*, there is no doubt but that it was so named, because each side of its succulent leaves is in form of a triangle, and therefore corresponds with the figure of the Greek letter *delta*.

*Demersum* folium. A *demersum* leaf. Growing below the surface of the water. Frequent in aquatic plants. The same with *Submersum*.


Denta-
Dentatum folium. A toothed leaf. Quod acumina horizontalia, folii consisitentia, spatio remota habet. Having horizontal points, of the same consistence with the leaf, with a space between each.—Dr. Berkenhout observes, that if, instead of horizontal, Linneus had written, in the plane of the disk, it would have been more intelligible.—In Delin. Pl. it is—margine acuminibus patentibus remotis, having spreading points [or teeth], remote from each other, about the edge.—Exemplified in Leoutodon hastile, autumnale, alpinum, hispidum, hirtum. Primula veris & minima. Epilobium montanum.

Dentato-finuatum. Toothed, and at the same time with sinuscs, bays or large hollows about the edge. Tooth-finuate.

This term is applied also to the stipule—Stipula dentata.

Denticulatus (denticulis, dimin. from dens). Toothletted, having small teeth or notches. Applied to the leaf; as in Hesperis
Hesperis matronalis, Leontodon Taraxacum, Epilobium tetragonum.—To the calyx—and to the feed; as in Bidens.

Denudatae (denudor, to be stripped naked). The seventh of the Natural Orders, in Linneus's Philos. Bot. comprehending a few genera which have flowers that appear at a different time from the leaves, and therefore have a naked appearance; as Colchicum.

Dependens folium. A leaf hanging down; or, pointing directly to the ground. Quod recta terram spectat.—Applied also to the sleep of plants (dependens somnus); when the leaves, which are erect in the day, hang down at night.

Depressum folium. A depressed leaf.—Quod in disco magis deprimitur quam ad latera. Hollow in the middle; or, having the disk more depressed than the sides. This term has reference to succulent leaves only; and is opposed to Convex,

Applied also to seeds; as in Cynoglossum.

Dextra torsio, and Dextrorsum volubilis. See Torfio and Twining.

Diadelphia (from δις twice, and αδελφος a brother). Two brotherhoods. The name of the seventeenth class, in Linneus's Artificial System; comprehending those plants which bear hermaphrodite flowers, with two sets of united stamens.—This is a natural class, with papilionaceous or pea flowers, and leguminous fruits. It is nearly the same with the Papilionacei of Tournefort; the Irregulares Tetrapeetalæ of Rivinus, and the Leguminosæ of Ray. The orders are founded on the number of the stamens; and ten being the predominating number in this class, the order Decandria is much the largest. The regular disposition of the stamens in this
this order is, nine united in one brotherhood, the lower broad part of the filament sheathing the germ; and the tenth single; but in almost twenty genera the ten stamens are connected into one body at bottom.

**Diadelphous stamens.** *Stamina diadelpha.* stamens forming two brotherhoods. The filaments united in each of the two sets at bottom, but separate at top.

**Diagnosis plantæ consistit in affinitate generis & in discrimine speciei.**—The diagnosis of a plant consists in the affinity of the genus, and the difference or distinction of the species. The specific characters in the *Species Plantarum, Systema Vegetabilium*, and other works of Linneus, are true diagnoses.

**Diandria (δίς, and ἀνὴρ a husband).** The second class of Linneus's Artificial System, comprehending all hermaphrodite flowers, which have two stamens.—Also the name of
of an order, in classes Gynandria, Monoezia, Diwcia.

Haller calls such plants Diftemones.

**Dichotomous stem.** *Caulis dichotomus* (διχα and τεμνων, to divide by pairs). Continually and regularly dividing by pairs from top to bottom. As in *Viscum* or *Misselto, Valeriana Locusta*. I prefer anglicising the Latin term, to translating it by *forked*; because this gives the idea of a single division only, and is expressed by another Latin word, *furcatus*.

When applied to a peduncle, as in *Melissa Calamintha*, this term may with more propriety be rendered by *forked*; because it seldom proceeds to a second subdivision.

**Dichotomous-corymbed.** Composed of corymbos, in which the pedicles divide and subdivide in pairs. As in *Achyranthes corymbosa*, which is distinguished by having—*panicula dichotomo-corymbosa*. 
Dicoccos or two-grained capsule (capsula dicocca). Consisting of two cohering grains or cells, with one seed in each.

Dicotyledones. Those plants which have seeds that split into two lobes in germinating.

Didyma (δίδυμος, twin) anthera, capsula, bacca.—Duobus nodis extus protuberantes. —Didyma capsula, bacca, eadem ac dicocca esse videtur. See Twin.

Didynamia (δις twice, and δύναμις power). The name of the fourteenth class in Linneus's Artificial System, comprehending those plants which have hermaphrodite flowers, with four stamens in two pairs of different lengths; the outer pair longer, the middle pair shorter and converging. These flowers have one pistil; and the corolla is irregular—either ringent or personate.

It is a natural class, containing the Labiati and Personati of Tournefort, and the Monopetalii irregulares of Rivinus.

Linneus
Linneus has divided it into two orders:
1. Gymnospermia, or such as have naked seeds. 2. Angiospermia; such as have the seeds enclosed in a vessel.

**Difformis flos** of Jungius and Knaut—*Anomalus* of Tournefort—*Irregularis* of Rivinus.—Linneus adopts the latter term. A difform, anomalous, or irregular flower, or corolla.—*Partibus nec magnitudine nec proportione partium sibi respondentibus.* The parts of which do not correspond either in size or proportion.

**Difformis torso.** The twisting of a stem one way and then another. See *Twining*.

**Difformia folia.** Difform leaves. *Diversae figure in eadem planta.* Of different shapes on the same plant. As in *Ranunculus aquatilis, Rudbeckia triloba, Euphorbia heterophylla, Lepidium persiifolium, Hibiscus virginicus, pentacarpos, Sabdariffa.*

It is observable, that Aquatic plants sometimes have the leaves under water finely
finely cut, whilst those above water are not so. On the contrary, in mountain plants, the upper leaves are usually most cut.

**Diffused stem.** *Caulis diffusus.* Having spreading branches—*ramis patentibus*; as *Teucrium Scordium.*—Panicle. *Diffusa panicula,* hanging loose: opposed to *coarctata* close or compact. *Cum laxe divaricantur pedicelli, angulis rectis five obtusis.* When the pedicels are spread about loosely, at right or obtuse angles with the main peduncle.

**Digitate leaf.** *Folium digitatum.* (Fingered leaf. *Lichf. Soc.*) When a simple or undivided petiole connects several distinct leaflets at the end of it. *Cum petiolus simplex apice adnexit foliola plura.* This is a sort of Compound leaf; whereas the *Palmate,* which in some measure resembles it, is a simple leaf. The Digitate leaf, to correspond with the name, should have five leaflets spreading out like the open fingers: but Linneus makes *binate,* *ter-nate*
nate and quinate leaves to be species of the digitate; and the leaves of Horse-chesnut, though they have more leaflets than five, are nevertheless called digitate.

**Digynia** (δίς and γυνή). The name of an order in Linneus's Artificial System, comprehending those plants which have two pistils to a flower. This order is the second in the first thirteen classes, except the ninth.

**Dimidiatus.** See *Halved.*—Dimidiata Spatha, latere tantum interiore fructificationem obvestiens.—Dimidiatum Capitulum, ab altero latere rotundum, ab altero planum.—Dimidiatum involucrum, f. involucellum, extrorsum situm, etque patens vel dependens: ut in Æthusa.

**Dioica** (δίς, and οἱος a house) planta. A dioecous plant. Having male and female flowers on distinct individuals. Hence

**Dioecia.** The name of the twenty-second class in Linneus's Artificial System, comprehending
prehending those plants which have no hermaphrodite flowers; but male and female flowers on distinct individuals.—
Mares & fæminae habitant in diversis thalaminis & domiciliis.

Dipetalous (dipetula) corolla, or two-petalled; having two petals only: as Circae, Commelina.

Diphyllous (δίς, and φύλλον a leaf) or two-leaved calyx: as in Papaver and Fumaria.—Applied also to the cirrus or tendril, as in Lathyris—and to the peduncle, as in Gomphrena.

Disk of a leaf. The whole surface—sipinus, the upper—pronus, the under surface.—Disk of a flower, is the central part in radiate compound flowers, consisting generally of regular corollules or florets: it is applied to other aggregate flowers, when the florets towards the middle differ from those in the circumference; as in umbels.
Dispermus fructus, qui duo tantum semina continet. A dispermus or two-seeded fruit; containing two seeds only; as in umbellate and stellate plants.

Dissectum folium. A gashed leaf (dissected is not proper).—In Philos. Bot. p. 219. Linneus gives incisum f. disjectum as a superseded term, and refers to Laciniatum, which he thus explains, in p. 43, —varie sectum in partes, partibus itidem indeterminate subdivisis. See Gashed and Laciniatus.

In Delin. Pl. the Gashed leaf is distinguished from the Laciniate, by the sections being determinate in the first, and indeterminate in the second.—Dissecta f. incisa [folia] sectiones continentia plerumque numero determinatas.

Dissepimentum. Paries quo fructus interne distinguuitur in concamerationes plures. See Partition.

Dissilienispericarpium. A dissilient, bursting or elastic pericarp or fruit. Bursting open

K 4
open with a spring; as in Hura, Dentaria, Cardamine, Momordica Elaterium.

Distans f. remotus verticillus, pedunculis remotis. A distant whorl; when the flowers which compose it, being few in number, are remote from each other.

Applied also to stamens (flamina distantia), as in Mint.

Distichus (δίς, and ὀψ row or rank). Two-ranked.—Distichus caulis: ramos situ horizontali, nec decussatim sitos exserens.—A distich or two-ranked stem or stalk: putting forth branches, not decussated, but in a horizontal position.—Disticha folia: duo latera rami tantum respicientia, licet undique inserta.—Respecting two sides of the branch only, though inserted on all parts of it: as in Fir and Diervilla. Or, pointing two ways only, though not in the same plane.

This term is applied in the same sense to a spike (spica disticha); floribus ad utrumque latus spectantibus: all the flowers pointing
pointing two ways. Opposed to Secunda.
—Spica tetraflicha, a four-ranked spike—
hexaflicha, a six-ranked spike.

Distinct leaves. Folia distincta. Quite separate from each other. Contrasted with connate: as in several of the Mefembryanthema.—Foliola distincta. Distinct leaflets, as in Jasminum officinale; contrasted with confluent, as in J. grandiflorum.—Antherae distinctae. Distinct or separate anthers, as in most flowers; contrasted with connate.

—Applied in the same sense to peduncles and petioles.

Diverging branches. Divergentes rami. Making
Making a right angle with the stem.  
*A trunco ad angulum rectum discendentem.*  
—Applied also to the sleep of plants.  
*Divergens somnus:* when the leaflets, in their state of repose, approach each other at the base, but spread out at the tips.

**Dodecandria** (δώδεκα twelve, and αἷμα a husband). Twelve-stamened. The name of the eleventh class in Linneus’s Artificial System; comprehending all those plants which have hermaphrodite flowers with from twelve to nineteen stamens inclusive.

**Dodrans** f. *dodrantalis mensura.* The space between the end of the thumb and of the little finger, both extended. About nine Paris inches. This measure may be called in English the long span, and *spithama* the short span. See Measures.

**Dolabriforme** folium (Dolabra, an axe, a dolando). A *dolabriform, axe or hatchet-shaped leaf.* Battledore-shaped. With.—Compressum,
Compressum, subrotundum, obtusum, extrorsum gibbum acie acuta, inferne teretiusculum. Compressed, roundish, obtuse, gibbous on the outside with a sharp edge, roundish below. As in Mesembryanthemum dolabriforme.

Dorsal awn. Dorsalis aristla. Fixed to the back or outer side of the glume, not springing from the end: as in Bromus and Avena.—Lateri exteriori glumae imposita.

Dotted leaf. Folium punctatum. Be sprinkled or pounced with hollow dots or points. Quod punctis excavatis adspersum est. As in Anthemis maritima. Applied also to the receptacle; as in Leontodon, Cacalia, Ethulia, Xeranthemum, Chrysanthemum, Othonna.

Double. Geminus.—Double leaves. Two connected by one petiole.—Double flippules. Two and two by pairs.—Double peduncle. Two from the same point.

Different
DO

Different from Two-flowered, and Twin, which see.

Doubled together. See Conduplicate.

Doubly-compound. See Decomound.

Doubly-crenate leaf. Duplicato-crenatum folium.—Having small notches on the larger.

Doubly-pinnate. See Bipinnate.


Doubly-ternate. See Biternate.

Down is properly the English term for some sorts of pubescence; but it is used also for the Pappus or little crown, fixed on the top of some seeds, by which they fly: as Dandelion, Thistle, &c. This is, 1. feathered or plumose—or else, 2. capillary, hairy or simple. Corona pennacea, pilosae velitans. Some of these crowns are stiped, other seffile.—Down ought not
not to be used in both senses. Pappus cannot well make an English word. Feather is not proper, for we cannot say—a feathered feather, and a hairy feather. Seed-Down will distinguish it from Pubescence. See Pappus.

Downy leaf. See Tomentosus.

Drooping (cernuus). The top or end pointing to the ground. Applied to the peduncle or flower; as in Bidens cernua.—Different from nodding, nutans; which see.

Drupa. Pericarpium farctum evakve, nuceu contineus. A Drupe is a pulpy pericarp or fruit without valves, containing a nut or stone with a kernel. As Plum, Apricot, Peach, Almond, Olive, &c. Some call this sort of fruit Prunus or Plum. It is usually a moist succulent fruit; but sometimes dry, as the Almond.

Drupaceæ. The thirty-eighth order in Linneus's Fragments of a Natural Method:
thod: containing those trees which bear a drupe or plum.


**Duplicato-crenatum.** Doubly-crenate.

**Duplicato-pinnatum.** Doubly-pinnate or Bipinnate.

**Duplicato-serratum.** Doubly-serrate.

**Duplicato-ternatum.** Doubly-ternate, or Biternate.

**Duration** of plants. The continuance of their life or existence.—As Caducous or quickly perishing. *Ephemeral*, creatures of a day. Annual, Biennial, Perennial.
EARED. *Auritus, Auriculatus* (auris, an ear). Having an appendage like a little ear. Exemplified in the leaf—leaflet—and frond.—*Aurita folia: cordata ceterum, sed anguis prominentibus rotundatis*. Eared, or more properly Ear-shaped leaves are cordate or heart-shaped, but have the corners prominent and rounded. *Delin. Pl.*—*Auriculata folia; lobo laterali minore prope basin aucta*. *Jungermannia, Leers Nomencl.*—with the addition of a smaller lateral lobe near the base. This is the proper sense of *auritus* or *auriculatus*.—*Auriculatum foliolum: twisted into the form of a little ear, as in Jungermannia ciliaris*. *Berkenb.*—We have instances of Eared Fronds in *Acrostichum punctatum*. *Polypodium Pica, marginale*.

The diminutives *Earlet* and *Earletted* seem scarcely necessary.

EBRACTEATUS *racemus, pedunculus*. A raceme
raceme or peduncle, without any bracte or floral leaf; as in Ciflus guttatus.

Ecalcarata corolla. A corolla without any spur, or spur-shaped nectary. As in Wolfenia.

Echinatum pericarpium. An echinated or burry pericarp. Beset with prickles like a hedge-hog (εχινος). As in Datura Stramonium.—Prickly is the proper translation of aculeatus.

Echinus. A Burr, or prickly pericarp.

Efflorescentia. Flowering season.—The time of the month in which different sorts of plants first shew their flowers.

Egg-shaped (Ovatus). See Ovatum.—I cannot approve of Egged.

E glandulosus petiolus. A petiole without glands.

Egret. From Aigrette, the French term for the Pappus, Down, or feathery Crown of some seeds. See Pappus.
Eight-petalled corolla; or consisting of eight distinct petals. Octopetala corolla: as in Mimusops.—When it is only deeply divided into eight parts, it is said to be eight-cleft or octofida; (corolla octofida) as in Fuchsia and Chlora.—We have an example of an eight-cleft calyx (calyx octofidus) in Tormentilla.

Elastic pericarp. Throwing open, or casting off its valves with a spring, as in Dictamnus albus. Not different from Diffiliens; which see.

Elliptic leaf. Folium ellipticum. Lanceolate, but with the breadth of an ovate leaf. Lanceolatum latitudine ovati folii. Delin. Pl.—In Philos. Bot. it is made synonymous with ovale.—Both the elliptic and oval leaf are in the form of an ellipse; and it appears to me that the former differs from the latter only in being more oblong; and yet broader than the lanceolate leaf.
Emarginate. Emarginatūm. Notched at the end. End nicked, Lichf. Soc. Applied to the leaf—to the corolla, as in Agrostemma coronaria, &c.—and to the stigma: as in the class Didynamia.—Quod terminatur crena.

Embracing or stem-clasping leaf. Folium amplexicaule.

Empalement. See Calyx.

End-Bitten. Præmorsus.

End-nicked. See Emarginate.

Enervium s. enerve folium. A nerveless leaf. Having no apparent nerves. Opposed to nervosum.

Enneandria (εννεα nine, and ἀνὴρ a husband). Nine-stamened. The name of the ninth class in the Artificial System of Linneus; comprehending such plants as bear hermaphrodite flowers with nine stamens.—Also of an order in the classes Monadelphia and Diacia.
EN

Ennea Petala corolla: A nine-petalled corolla: or, a flower of nine petals: as in Thea viridis, Magnolia, and Liriodendron.

Enodis. Knotless. Without knots or joints. In opposition to nodofus knotted. —Enodis culmus: qui continuus est, nec articulis interceptus.—As in Schoenus, Cyperus, Scirpus.—Nodum in Scirpo quærere, is proverbial.

Ensatæ (ensis, a sword). The fifth order in Linneus's Fragments, and the sixth in the Natural Orders at the end of Gen. Pl. Containing some of the Liliaceous plants, which have sword-shaped leaves.

Ensiform leaf (folium ensiforme). Sword-shaped, or sword-form.—Ancipital or two-edged, tapering from the base towards the point. As in some species of Ixia, Gladiolus, Iris, &c.—Anceps, a basi versus apicem adtenuatum.

Entire. Integer.—Stem: quite single with L 2 scarce
fscarce any branches. Simplicissimus, ramis vix ullah. Philof. Bot.—In Delin. Pl. it is explained to be, Simplicissimus, ramis angustatis; and simplicissimus is ramis vix ullah; whereas simplex is defined to be, continua serie virfus apicem extensus: that is, the simple stem has no branches, and the most simple stem has few—which seems strange.

An entire leaf. Integrum folium.—Undivided, without any finus or opening in the edge. Indivifum, finu omni deflitutum.

An entire perianth. Integrum perianthum. Opposed to fissum, cloven. As in Genipa.

Sometimes the superlative degree is used, and must be rendered—quite, very or absolutely entire.—Integerrimum folium: ipso margine linear, nec minimum secto. With a linear edge, not in the leaf cut or divided. As in Rhamnus, Frangula, Trientalis europae. —It is applied also to the Stipula. 

Epidermis.
EPIDERMI S. The outer dry and very thin coat or covering of a plant; corresponding with the scarf skin.—Tunica exterior plantæ sicca tenuissima.

EQUAL. A calyx or corolla is said to be equal (æqualis), when the parts are of the same size and figure. In Utricularia, the calyx is equal; in Primula, Limosella, &c. the corolla is equal. Regular expresses the idea better.

Equal Polygamy. See Æqualis.

Equinoctial flowers. Opening at a regular stated hour. See Vigiliae.

EQUITANTIA folia. Equitant leaves; riding as it were over each other. Quum folii latera parallele coNNivent, ut interiOra ab exterioribus includantur; quod non in conduplicatis obtinet. Philos. Bot.—When the sides of a leaf converge in parallel lines, so that the inner leaves are inclosed by the outer ones: which is not the case in conduplicate leaves.—It is a term used in
in foliation or leafing. In Delin. Pl. it is called equitans vernatio, and is thus explained—marginibus conniventia folia sita opposito, ut alterum includat alterum. When two opposite leaves converge so to each other with their edges, as that one incloses the other.—As in Iris, Hemerocallis, Acorus, Carex, Gramina.

Erect or Upright. Erectus.—When applied to a stem or branch, it is not taken strictly, but is so called, when it approaches to a perpendicular with the ground—fere ad perpendiculum se attollens. When a stem or branch is entirely perpendicular without any bending, the word strictus is used.—In Philos. Botan. Erectus is opposed to volubilis; and must therefore be understood to mean a stem standing of itself without support, in opposition to twining.

A leaf is said to be erect, when it makes so very acute an angle with the stem as to be close to it—quod ad angulum acutissimum cauli adsidet.—When it makes
ER

makes an acute angle with the stem, it is said to be *patens*, spreading.

An *erect* flower has its aperture directed upwards: as in *Trillium sessile*. Opposed to *nutans*, nodding.

An *erect* anther, fixed by one end to the top of the filament; contrasted with *versatilis* and *incumbens*, which are fixed by the side.

This term is applied also to the *petiole*, *peduncle*, and *stipule*.

The dimin. *erectinscula* is sometimes used for *somewhat* or *nearly upright*; and is applied to the capsule of *Hellebore*. The distinction seems hardly necessary, since the term *erect* or *upright* is taken so loosely.

**Erosum folium.** An Erose or gnawed leaf. When a sinuate leaf has other very small obtuse sinuses on its edge.—*Cum folium sinuatum margine sinus alios minimos obtusos acquirit.*—It has the appearance of being gnawed or eaten by insects.

L. 4
Essential Character of Vegetables. Character Essentialis. A single or peculiar natural mark, distinguishing one genus from all others in the same natural order. Innumerable instances of such occur in Linneus's Systema Vegetabilium.

Even. See Lævis.

Evergreen. Sempervirens. Flourishing through all seasons of the year.

Exaratus. Scored.

Exasperatus. Roughened.

Expansus. Expanded, spread out: as the calyx in Helianthus.—Patens, and the dimin. Patulus, are better expressed by Spreading—which see.

Explanatus. Unfolded, or spread out flat: as the lip of the corolla in Antirrhinum canadense.

Exserta (from exséro, to put forth) flamina; exsertae antheræ. Protruded stamina
mens or anthers. Standing out of the corolla, or appearing above it; as in some species of Erica. Opposed to inclusa, shut in, or inclosed within the corolla.

Exstipulatus. Without stipules. As in many sorts of Cistus, Cardamine parbi-flora, &c.

Exsuccus. Juiceless, without juice; opposed to succulent. It respects the substance of leaves.

Extrafoliaceæ stipule. Extrafoliaceous stipules. Growing on the outside of the leaves, or below them.—Infra folium collocateæ. As in Betula, Tilia, and the class Diadelphæ. Opposed to intra-foliaceæ.—It is applied also to peduncles, and prickles.

Eye of a seed. Hilum—which see.
FACTITIOUS or Artificial Character.—
Character factitius. A mark or marks distinguishing one genus from another in an artificial arrangement: which is done by Ray and others in synoptical tables.

Families of Vegetables. Linneus (Philof. Bot.) divides the vegetable world into seven families. 1. Fungi. 2. Algæ. 3. Musci, or Mosses. 4. Filices, or Ferns. 5. Gramina, or Grasses. 6. Palmæ, or Palms. 7. Plantæ, or plants; including all that are not in the foregoing families. See Gentes.

M. Adanson published a system, under the title of Familles des Plantes. And the Lichfield Society have given their translation of Linneus’s Genera Plantarum the same title, in English.
Farctus (farctio, to stuff or cram). Stuffed, crammed, or full; without any vacuities. —Farctium folium; a stuffed leaf, full of pith or pulp; in opposition to tubulosum and fistulosum, tubular or hollow like a pipe.—It is applied also to the stem and pericarp.

Farina. See Pollen.

Fascicle (fasciculus, dimin. from fasces), a bundle. A species of inflorescence, or manner of flowering, in which several upright, parallel, fastigiate, approximating flowers are collected together: as in Dianthus barbatus.—Colligit flores erectos, parallelos, fastigiatos, approximatos. Hence

Fascicularis radix: a fascicular or fascicled root. A species of the tuberous, with the knobs collected in bundles, as in Paeonia.

Fasciculata folia: fascicled leaves. Growing in bundles or bunches from the same point, as in Larix.
**Fastigiatus** (*faṣligium*, the pointed top, or roof of a building).—Caulis: *ramis aequalis altitudinis*. A faſtigiate stem, having branches of an equal height.—Fastigiati pedunculi: *cum ita attollunt fructificationes in fasciculum, ut superne aequales altitudines evadant, ac si horizont-aliter detonfse essent*. Peduncles are faſtigiate, when they elevate the fructifications in a bunch, so that they are all of an equal height, as if they had been thorn off horizontally—or, when they are so proportioned as to form an even surface at top, like a flat roof: as in *Dianthus* and *Silene*.—Umbella faſtigiata: *gradatim assumgens*. Delin. Pl. A faſtigiate umbel, rising gradually. This is a different idea from the former: and in *Philos. Botan.* the umbellate flower is thus described—*est aggregatus ex flosculis pluribus insidentibus receptaculo in pedunculos faſtigiatos, omnes ex eodem puncto productos*.—Here we are probably to understand faſtigiatos in the former sense of *level-topped* : but I am at a loss to conceive how Linneus came
came to annex this idea to *faßigium* and its derivatives; since roofs are not flat in northern countries; and although they be so in the east, and in some parts of Italy, yet *faßigiatus* seems applied to lofty and pointed buildings. Thus Solinus says of the pyramids——*turres sunt in Ägypto faßigiae, ultra celstitudinem omnem, que fieri manu posset.*

**Favosum receptaculum.** A honey-combed receptacle. See *Alveolate.*

**Faux.** The jaws, chaps, throat, or opening of the tube of the corolla—or, between the segments of the corolla, where the tube ends.—As in the class *Didynamia* and the *Asperifoliae* in class *Pentandria.*——*Hiatus inter lacinias corollae ubi tubus terminatur.*—The whole upper part of the tube is called the neck, *collum*: and the opening is sometimes termed the mouth, *os.*

**Feather.** See *Pappus.*

**Feathered.**
Feathered. *Plumosus.* See *Down* and *Plumosus.*

Some put feathered for pinnate, but improperly.

**Female** plant. *Femina planta.* Which has female flowers only. *Quae floribus tantum femineis.* Female flower. *Femineus flos.* Which has pistils or stigmas, without stamens, or at least anthers.

Fence, put by Dr. Withering for the Involucre.

**Ferns.** See *Filices.*

**Ferruginous** colour. *Color ferrugineus.* The colour of rusty iron.

**Fertile** flowers, producing seed.

**Fibre.** *Fibra*—of a root. A thread or longitudinal canal, imbibing moisture from the earth. *Canalis longitudinalis humidum terrae fugens.*—These fibres properly constitute the roots of vegetables; the
the main body, whence they usually pro-
ceed, is the descending trunk; and will,
in many plants become a trunk, if the
plant be turned upside down.

A branch or subdivision of a fibre is
called a fibril. *Fibrilla.*

A root consisting wholly of fibres, as
in many Grasses, is termed a fibrous root.
*Radix fibrosa.*

Fiddle-shaped. See *Panduræformis.*

**Filament.** *Filamentum* (*Filum,* a thread).
The thread-like part of the stamen, sup-
porting the anther, and connecting it with
the flower. *Pars elevans adnecärensque an-
theram.*

Filaments, in the same flower, are—
1. Equal, or all of the same length.
2. Unequal, or of different lengths.
3. Connate, or united. 4. Alternate.
Most filaments are simple; some few are
bifid; and others Tricuspidate, or broad
and trifid at the end.

**Filices.**
**FILICES. Ferns.** The fourth family; and the sixth great tribe or nation, in Linneus's General Distribution of Vegetables. The first order of the class Cryptogamia in his Artificial System. The sixty-fourth order in his Fragments of a Natural Method: and the fifty-fifth of his Natural Orders, at the end of *Gen. Pl.*

**FILIFORM (filiformis).** Thread-shaped. Of equal thickness from top to bottom, like a thread. Applied to peduncle, filament, style, and receptacle.—It seems to me more elegant to use filament and filiform, than to translate them by thread, and thread-shaped.

**FIMBRIATUS. Fringed.** *Fere idem ac decurrans in caule, & ciliatus in flore.* Gi-fèke.—Almost the same with decurrent in the stem, and ciliate in the flower.—It appears to me, that it has no relation to the first, and that it is sufficiently distinct from the second.—I do not find this term either in *Philosophia Botanica* or *Delineatio Plantae.* See Fringed.
Fingered leaf. See Digitate.

Fissum folium. Divisum sinubus linearibus, marginibusque rectis.—Hinc bifidum, trifidum, quadrifidum, quinquesidum, &c. multifidum, a numero finuum.—Indiviso opponitur. See Cleft.

Fistulosus (fistula, a pipe) caulis. A fistulous stem. Hollow like a pipe or reed. Opposed to farctus, stuffed or full.—Fistulosum folium, a fistulous leaf; as in Oenanthe fistulosa.—Fistulosum nectarium, a fistulous nectar; as in Aconitum.

Five-cleft. Quinquesidus. See Cleft.

Five-fold leaves. Quina folia. In fives; growing by fives; or five and five together.

Five-lobed leaf. Quinquelobatum folium. See Lobatum.


Five-valved Quinquevalvis. Applied to the capsule. See Valva.

Flaccidus caulis, pedunculus. A flaccid stem or peduncle. So feeble as not to support its own weight. Linneus uses it in the same sense with laxus, and in opposition to strictus.—The flaccid stem is exemplified in Galium Mollugo.

Flagellum. A Runner. Caulis longiores decumbentes, internodiis tantum remotis aut apice gemmantes. Giseke. See Runner. Hence a sort of Cactus has the name of flagelliformis, because it resembles the lash of a whip (flagellum).

Flat leaf. Folium planum. Having an even surface; in opposition to channelled, grooved, &c.—When applied to succulent leaves, it has both surfaces parallel, neither
neither convex nor concave, in opposition to gibbous.

**Flattened. Compressus.** Better expressed by Compressed—which see.

**Fleshy leaf. Folium carnosum.** Full of pulp within: as in Sedum and other succulent plants. The substance more stiff than in the pulpy leaf: folium pulposum.—Applied to the capsule in Mesembryanthemum—and to the root, in Valerian, &c.

**Flexible. Flexilis.** Easily bent. Applied to the stem and raceme.

**Flexuose (Zigzag, With.) Flexuosus.** Changing its direction in a curve—from joint to joint or from bud to bud in the stem, as in Ptelea, Smilax, Solidago flexicaulis—from flower to flower in the peduncle, as in Aira flexuosa and some other Grasses. Secundum articulos, vel a gemma ad gemmam, f. a flore ad florem horfum vorfum flexus.
Floating leaf. *Folium natans*. Lying flat on the surface of the water.

Floral bud. *Gemma florālis*. Containing the flowers. In opposition to *foliaris*, containing the leaves. See *Bud*.—Floral leaf. *Folium florale*. Immediately attending the flower, but different from the Bracte, which see.

Floræscentia. Floræscence, or the flowering season. The time when vegetables usually expand their flowers.

Floret. *Floscūlus*. The partial or separate little flower of an aggregate flower: chiefly in the class *Syngenesia*, or compound flowers properly so called; but applied also to the umbel, cyme, &c.—I prefer *floret* to *floscule*, because it is a regular diminutive of flower.

Flos. See *Flower*.

Floşculosus flos. A floscular flower. A term of Tournefort's, for which Linneus substitutes
substitutes *tubulosus*. It is opposed to *semi-flosculosus—ligulatus* of Linneus. See *Tubulosus*.

**Flosculus**, *est flos partialis floris aggregati, compositi, umbellati, cymosi*. See *Floret*.

**Flower.** The organs of generation in vegetables, with their coverings.—*A flower, when complete, consists of a calyx, corolla, stamen, and pistil; but the essential parts are the anther and stigma, which are sufficient to constitute a flower, either together in hermaphrodite flowers, or separate in male and female flowers.*

**Flower-stalk.** See *Pedunculus*.

**Foliacea spica.** A leafy spike. Having leaves intermixed with the flowers.—*Glandulæ foliaceæ*. Leafy glands, or glands situated on the leaves. See *Gland*.

**Foliaris cirrus.** A tendril placed on the leaf.—*Foliaris gemma*. A leaf bud. Containing leaves, not flowers.
Foliatio f. Vernatio. Foliation, vernation or leafing. The disposition of the nascent leaves within the bud.—The different modes of foliation are by—1. Involution. 2. Revolution. 3. Obvolution. 4. Convolution. 5 Imbrication. 6. Equitation. 7. Conduplication. 8. Plaiting. 9. Reclination. 10. A Circinal or spiral direction. See these terms explained in their proper places.

Foliatus caulis. A leafy stalk. In opposition to Aphyllus, leafless.

Foliolum (dimin. of folium). Partiale est folii compositi. See Leaflet.

Foliosum capitulum. A leafy head. Having leaves intermixed with the flowers.

Folium (from φυλλον). Organum motus plantæ. Delin. Pl.—Folia transpirant & adtrahunt (uti Pulmones in Animalibus), umbramque præbunt—in se tamen re ipsa musculi analoga sunt, licet non uti in animalibus caudā affixa, cum motus voluntarius in
in his dari nequeat. Philos. Botan.—Foli-
lium expandens par æra superficiem, vola-

Folliculus (dimin. from follis, a bag) a
follicle. A univalvular pericarp, opening
on one side longitudinally, and having
the seeds loose in it. Pericarpium uni-
valve latero altero longitudinaliter dehis-
cens, nec futurœ femina affigens. Exem-
plified in Asclepias, Apocynum, Stapelia.
See Conceptacle.

In Philos. Botan. Follicles (folliculi)
are vessels distended with air: (air bags,
With,) as at the root in Utricularia, and
on the leaves in Aldrovanda.

Foot. Pes. A measure from the bend of
the elbow to the base of the thumb.

Footstalk, has been put by English writers
both for the peduncle and petiole. See
Pedunculus and Petiolus.

Fork. Furca. A divided prickle. Aculeus

M 4
in plures divisus. Called bifid or trisid from the number of divisions. Exemplified in Berberis, Ribes, Gleditsia, &c.

Forked, furcatus: branched or sub-divided, usually into two.—Applied to anthers—to bristles; as in Leontodon hispidum, Arabis thaliana—to fronds, as in Jungermannia furcata—and to stems; but dichotomous is more proper, at least when they divide more than once.

Fornicatus (fornix, an arch or vault). Arched or vaulted: which see.

Fovilla. A fine substance, imperceptible to the naked eye, exploded by the pollen in the anthers of flowers.

Four-cleft leaf. Folium quadrifidum.—See Cleft.

Four-cornered stem or peduncle. Tetragonus caulis—pedunculus. As in Vetricillate plants.—Siliqua tetragona, a four-cornered siliqua, as in Sinapis nigra.

Four-
Four-fold leaves. *Folia quaterna.* Four together, or by fours, at each joint or whorl; as in Sherardia fruticosa, Asperula taurina, cynanchica, &c. several of the Galiums, Erica herbacea, &c.

Four-leaved tendril. *Cirrus tetraphyllus.* Four leaves to each tendril; as in Lathyrus sativus.

Four-lobed leaf. *Folium quadrilobatum,* See Lobatum.

Four-parted leaf. *Folium quadripartitum.* See Parted.

Fringed corolla.—*Fimbriata.* The edge surrounded by hairs or bristles not parallel or so regularly disposed as in the ciliate corolla. Exemplified in Menyanthes trifoliata.

Frond. *Frond*: anciently written fruns (from Bruns pullulo, to germinate or bud); and signifying a twig of a tree with its leaves. Linneus applies this term to the peculiar leafing of Palms and Ferns. He defines
defines it to be a kind of trunk or stem, which has the branch united with the leaf, and frequently with the fructification.—Frons, folium e stipite factum.—Stipes, truncus a folio non distinctus. Regn. Veg.

Frondescentia. Leafing season. Tempus aestatis, quo species singulae plantarum prima folia explicant. The time of the year when plants first unfold their leaves.

Frondosus caudex. A frondose stem; applied to Palms.—Frondosus prolifer flos; a leasy proliferous flower. It sometimes happens in the Rose, Anemone, &c.

Fructescentia comprehendit tempus, quo femina matura dispersunt Plantae. Fructescence, or the fruiting season, is the time when vegetables scatter their ripe feeds.

Fructificatio: vegetabilium pars temporaria, generationi dicit, antiquum terminans, novum incipiens. Fructification, or fruiting.
fruiting, is a temporary part of vegetables, appropriated to generation, terminating the old and beginning the new vegetable. — The essence of it consists in the flower and fruit; and there is no fructification without anther, stigma, and seed. — When perfect it consists of seven parts——
1. Calyx. 2. Corolla. 3. Stamen. 4. Pistil. 5. Pericarp. 6. Seed, 7. Receptacle.—Of these the four first belong to the flower; the two next to the fruit; and the last is common to both.

**Fructus.** Semen cum pericarpio.

**Fruit:** fructus. The seed with its pericarp. It is a fruit, however, whether there be a pericarp or not.

**Fruit-stalk.** See Pedunculus.

**Frustranea** (frustra, in vain) polygamia. The name of the third order in the class Syngenesia of Linnaeus's Artificial System; comprehending such of the Compound flowers as have perfect florets in the disk, producing
producing seed; but imperfect florets in the ray, which for want of a stigma are barren.—Cum flores disci hermafroditae stigmatce insituentes & semina profertur; flosculi vero radium constituentes, quum stigmatce careant, semina proferre nequeunt.

**Frutescens caulis.** A frutescent stem. From herbaceous becoming shrubby. As in *Chironia baccifera* and *frutescens*.

**Frutex.** A shrub. Caulis ascendentia supra terram absque gemmis—sed intra Fruticem & Arborem nulos limites posuit natura, sed opinio vulgi. See *Shrub*.

**Fruticosus caulis.** A shrubby stem. Perennis cum caudicibus pluribus. See *Shrubby*.

**Fugax.** Fugacious, fleeting, of short continuance, soon falling off: as the corolla of some flowers.

**Fulcrum** (from *fultum*, which is from *fulcio*), Fulcrum, prop, or support. A help to
to vegetables for their commodious sustentation.—*Fulcrea adneminicula plantar sint, pro commodiore sustentatione.*


*Fulcratus caulis—ramus.* A stem or branch fulcrated, or furnished with fulcras.

Botanists frequently use the Latin word, with the Latin plural—*fulcr*—in English, which I cannot approve.

*Full flower. Flos plenus.* When the corolla
rolla is so multiplied as to exclude all the stamens. Polypetalous flowers are generally the object of plenitude. See Luxurians.

Fungi, Funguscs or Mushrooms. The first of the great Families; and the ninth of the Nations, Tribes, or Casts, into which Linneus has distributed the whole Vegetable world. Also the sixty-seventh order in his Fragments of a Natural Method; the fifty-eighth of his Natural Orders; and the fourth order of the class Cryptogamia, in his Artificial System.

Funnel-shaped corolla. Infundibuliformis corolla. Monopetalous and conical, with a tubular basis: as in Lithospermum, Cynoglossum, Pulmonaria.

Furca. See Fork.

Furrowed, fluted, or grooved Stem. Caulis fulcatus. Marked with deep broad channels longitudinally.—Applied sometimes to the leaf.
Fusiformis (fusus, a spindle) radix. Fusiform or Spindle-shaped root. Simple or generally so, tapering downwards to a point; as in Radish, Carrot, Parsnip. Applied also to the leaf, as in Crassula rubens.

G

Galea (an helmet). The upper lip of a ringent corolla. Linneus uses the words labium superius or upper lip.

Gape. Rictus. The opening between the two lips, in an irregular corolla.


Gashed leaf. Folium incisum f. dissectum. Having the sections or divisions usually determinate in their number; or at least more so than in the Laciniate leaf.—
The Gajhed differs from the Cleft leaf (fissum,) in having the sections extending but little beyond the edge (though deeper than in the crenate leaf); whereas in the cleft leaf they reach almost to the middle. See Distinctum and Laciniatus.

Hence Linneus has formed several compound terms, which see under Licifum.

**Gemina** folia. Eodem petiolo duo folia annectente.—Geminar stipulae. Duo & due per paria.—Geminarus pedunculus. Ex eodem puncto bini. See Double.

**Gemma.** A Gem or Bud. Hybernaculum plantae e rudimentis foliorum prateritorum. See Bud.

**Gemmatio.** Gemmation or Budding. Gemmar constructio—ex foliis, stipulis, petiolis aut squamis.—The construction of the Bud; of leaves, stipules, petioles or scales.

**Gemmiparus.** Gemmiparous. Producing gems or buds.

**GENERAL**
**General Fence.** The same with Universal Involucre. See *Involucrum*.

**Genetic Character.** The definition of the Genus. This is factitious; essential or natural. See *Genus* and *Character*.

**Generic Name.** *Cognomen gentilitium*. The family surname, as it were, of vegetables.

**Geniculatus.** Kneed. (Knee-jointed.) Applied to a stem, peduncle or awn, forming a very obtuse angle at the joints, as when the knee is a little bent. As in *Alopecurus geniculatus*.—In *Delin. Pl.* it is explained to be—*internodiiis interceptus*, which is the same with *nodofus*. In my opinion this is the difference—that *nodofus* means knotty, or merely having knots; whereas *geniculatus* implies, that the stem is bent in an angle at the joint. *Flexuosus* is totally different from this, for it implies deviation in a curve, not at an angle. See *Knotted*.

**Geniculum** (dimin. from *Genu*). Knee, knot,
knot, or joint. Properly a joint, where there is a bending like that at the knee; but frequently put for a joint in general; and then synonymous with nodus. See Knot and Knotted.

Gentes. Nations, great Tribes, or rather Casts of Vegetables. Linneus makes nine of them—1. Palmae. 2. Gramina or Grasses. 3. Lilia. 4. Herbae. 5. Arborae, Trees. 6. Filices, Ferns. 7. Musci, Mosses. 8. Algae. 9. Fungi.—The only difference between this arrangement and that of Families is, that the third, fourth, and fifth divisions of this are included in the seventh of that.

Genus. The third subdivision in a systematical arrangement of vegetables; containing plants of the same class and order, which agree in their parts of fructification.—Genera tot dicimus, quot similes constructae fructificationes proferunt diversae species naturales. Philof. Bot.—Genera tot sunt, quot attributa communia proxima distinctarum species, secundum quae in primordio creata fuere. Gen. Pl. in Praef.

Genuses
Genus is making an awkward plural, and genera not being English; I have often wished that we might be allowed to substitute kind for genus, and sort for species.

Germen. Germ, Ovary or Seed-bud. Rudimentum fructus immaturi in flore. The rudiment of the fruit yet in embryo. —Analogous to the Ovarium, since it contains the rudiments of the seeds.—It is the lower part or base of the pistil, which see. Germ, differing little from the Latin term, and being sufficiently established as an English word, may be used in preference to Germen: such, however, as adopt the latter, will, I hope, when they write in English, use Germens in the plural, and not Germina.

A Germ, when it is included within the corolla, is said to be Superior; but when placed below the corolla, Inferior. —On the contrary, when a corolla is placed above the germ, it is called Superior (corolla supera, flos superus); and when it incloses the germ, so as to have
its base below it, then it is called *Inferior* (corolla infera, flos inferus).—When a germ is elevated on a fulcre, beside the peduncle, it is said to be *Pedicelled*, pedicellatum.

**Germinatio est tempus, quo semina terræ mandata eadem excludunt in cotyledonum proventum.** The time in which seeds vegetate.

**Gibbousleaf.** *Folium gibbum.* (Dr. Withering uses *hunched*). Having both surfaces convex, by means of a very abundant pulp. — Quod utramque superficiem facit convexam, mediante copiosiore pulpæ. See Convex.—This term, when applied to a perianth, means only swelling out at bottom. Instances of this we have in the classes *Diadelpbia* and *Tetradyamia*.

**Gills.** See Lamella.

**Glaber caulis.** *Glabrum folium.* A smooth stem or leaf. *Superficie lævi, absque omni inæqualitate.* Philos. Botan. where it is opposed to *tomentosum.* In Delin. Pl. it is explained
explained to be— superficie lubrica. See Smooth.

**GLADIATA filiqua. Gladiatum legumen.**
A gladiate or sword-shaped siliqua or legume. As in Cleome arabica, Dolichos ensiformis.

**Glandula. A Gland or Glandule.** Papi
pilla humorem excernens. Or, as it is explained in Regn. Veg.— fulcrum sect
nens liquorem. An excretory or secretory duct or vessel. Exemplified in Urena,
Ricinus, Iatropha, Passiflora, Caffia, Opul
lus, Turnera, Salix tetrandra, Heliocarpus,
Bryonia zeylanica, Acacia corrigera, Bau
hinia aculeata, Prunus armeniaca, Amyg
dalus, Morifona.

Glands are usually found on the leaves—the petioles—the peduncles—or the stipules.

**Glandulatio. Vafa secretoria offert.** The situation and structure of glands.

**Glandulosum folium.** Quod glandulas ins
fidentes gerit, vel in dorfo, vel in serra
N 3 turis.
G L

G L

turis. A glandular leaf is that which has glands either on the surface or on the ferratures.

Glaʃ-sʃaped. See Cyathiformis.

Globoʃus. Globoʃe, Globular, Spherical—radix: subrotunda radiculis lateralibus, root—roundish, with lateral fibres; as in Bunium, Ranunculus.—Globosum capitulum: undique rotundum. A globular head of flowers, round on all sides.—Globosa corolla; a corolla or flower round like a ball; as in Trollius.—Applied also to the Receptacle—to the Germ—and to Seeds.

Globoʃo-depreʃfium pericarpium. A flatted-globular, or more properly an oblate spheroidal pericarp or fruit.

Glochiʃs (γλωξίς, cuspis, a point). Glochiʃes: mucrones apice retrorsum multidentati, nec curvati.—In Philos. Botan. we have hami triglochiʃes, as in Lappula; but the hamus or hook has a curved point—the glochiʃ a straight one. See Barb.

Glo-
Glomerata (glomero, from glomus a clue of yarn or thread) spica—panicula. A glomerate spike—*spiculis varie conglobatis*; having the spikelets or component spikes variously heaped together: as in *Panicum italicum*.—The glomerate panicle is exemplified in *Poa ciliaris*, and *Dactylis glomerata*.—The flowers grow pretty close together, in a globular or sub-globular form.—Scaliger derives *Glomus* from *Globus*; but others on the contrary derive *Globus* from *Glomus*.

Glomerulus (dimin. from *Glomus*). A Glomerule, or small glome.

Glomus, a Glome, or roundish head of flowers.

Gluma. Glume (from glubo, denudo, corticem detraho, to bark, or take the bark from a tree; from the Greek γλυφω, to scrape or carve). Calyx *graminis, valvis amplexantibus*. The calyx or corolla of corn and grasses, formed of valves embracing the seed.—It is thus explained by Varro (de R. R. 1. c. 48): "Spica—
in ordeo & tritico tria habet continentia, "granum, glumam, arisam."—Gluma eft "folliculus ejus.—Arista & granum om-
"nibus fere notum: gluma paucis.—
"Videtur vocabulum etymon habere a "glubendo, quod eo folliculo deglubitur "granum." In common language it is called the husk or chaff.

Uniflora, bi- & multiflora. Having one, two or many flowers. Univalvis bi- & multivalvis. Having one, two or many valves. Colorata, coloured; of any colour but green, the usual one. Glabra, smooth. Hispida. Hispid, shaggy, or rough with hairs.

Glumosus flos; habet receptaculum fili-
forme, cujus basis inftruitur gluma com-
muni.—A glumose flower is a kind of aggregate flower, having a filiform re-
ceptacle, with a common glume at the base. As in corn and grasses, Scirpus, Cyperus, Carex.

Glutinositas (gluten, glue). Glutinosity or
or gluciness. *Qualitas humoris lubrici.*
The quality of slippery moisture.

**Glutinosum folium.** A glutinous leaf.
*Humor lubrico illitum.* Besmeared with slippery moisture.

Gnawed. See *Erosum.*

**Gramina.** Grasses. The fifth family, and the second nation, tribe or cast in Linneus's General Division of the Vegetable Kingdom. The fourteenth order in the Fragments of a Natural Method in Philos. Botan.—and the fourth of the Natural Orders at the end of Gen. Pl.—In the Artificial System, most of the grasses are contained in the second order of the fifth class.

**Granulata radix.** A granulate root.
(Beaded, *With.*) *Particulis carnosis adspersa.* Consisting of several little tubers or fleshy knobs, resembling grains of corn: as in *Saxifraga granulata.*

Grooved. See *Furrowed.*
GYMNOSSPERMA planta (γυνός naked, and σπέρμα seed). A plant bearing naked seeds; in opposition to that which has the seeds inclosed in a capsule or other vessel.

GYMNOSSPERMIA. The name of the first order in the class Didynamia, in Linneus's Artificial Arrangement; comprehending those plants which have four stamens, of which the two middle ones are shorter than the two outer ones, within a ringent flower, succeeded by four naked seeds.—These are the same with the Labiati of Tournefort; and the Verticillatae of Ray, and Linneus in his Natural Orders.—See Didynamia and Angiospermia.

GYNANDRIA (γυν a woman, and ἀνὴρ a man). The name of the twentieth class in the Linnean Artificial System, containing all plants with hermaphrodite flowers, which have the stamens growing upon the style; or else having an elongate receptacle bearing both stamens and styles. This class has been considerably reduced by some modern reformers, and the plants referred
referred to other classes. Others have entirely dismissed it from the sexual system. The reduction appears reasonable; but the singularity of the order *Diandria* surely may demand a separate class for itself.

**H**

**Habitatio plantarum.** *Locus ubi sponte prognascuntur.* The native place of growth of plants. Called by some, barbarously and vulgarly, their *habitat*.

**Habitus plantarum.** Commonly called the *habit* of plants; but more properly their air, port, or general external appearance. Linneus defines it to be, a certain conformity which kindred or congenerous vegetables have in their placentation, rooting, branching, intortion, budding, leafing, stipulation, pubescence, glandulation, lactescence, florescence, &c.

Hence-
Hence such characters are called *Characeres habituales*. And these, though not sufficient of themselves to distinguish vegetables, yet frequently make them known at first sight. Many of the natural classes are directly apparent from this general similitude—as the *Caryophyllea*, *Verticillatae*, *Asperifolae*, *Umbellae*, *Leguminosae*, *Siliquosae*, *Columniferae*, *Filices*. In forming the characters of the genus, these have been neglected, since the fructification has been thought amply sufficient for the purpose.

**Hair. Pilus.** A species of pubescence, or excretory ducts on the surface of plants; long, straight and distinct.

**Hair-like Filament.** *Capillare*.

**Hairy leaf.** *Folium Pilosum*. Covered with hairs—applied also to the style, and to seeds. **Hairy receptacle.** Having hairs between the florets.

**Halbert-shaped.** See *Halate*.

**Halved head.** *Dimidiatum capitulum*. Hemispherical,
mispherical, or resembling half a head: round on one side and flat on the other. —A halved spathe. *Dimidiata spatha.* Inverting the fructification on one side only. —A halved involucre. *Dimidiatum involucrum.* Placed wholly on one side: as in *Æthusa.*


**Hamosus.** Hooked. *Hamosa feta.* A bristle curved at the end.

**Hand.** A measure taken from the breadth of the hand: or three inches. See Measures.

**Handed or hand-shaped root—leaf.** See Palmata.

**Hanging leaf.** *Folium dependens.* Pointing directly to the ground.

**Hastate leaf.** *Folium hastatum.* Re-sembling the head of a halbert. Triangular, hollowed at the base, and on the sides, with the angles spreading. —*Triangulare,*
angularis, basi lateribusque excavatis, angulis patulis. Philof. Bot.—In Delin. Pl. it is thus explained. Sagittatum, angulis posticis finu divisiis ad latera prominentibus. —Exemplified in Rumex and Scutellaria hastifolia.

Hatchet-form. See Dolabriforme.

Head. Capitulum. A species of inflorescence, or a manner of flowering, in which several flowers form a kind of ball. As in Gomphrena. This is globular—roundish—or halved. Leafy—or naked.

Flowers in this case are said to grow in a head. Capitati flores.—A stigma round like a ball, is called Capitatum stigma; headed or head-shaped.

Heaped panicle. Congesta panicula. Abundant in flowers, but not so close as in densa panicula.

Heart of a seed. Corculum. The rudiment of the future plant. It consists of the Plume (Plumula) and Rostel (Rostellum.) See Corculum.

Heart-
Heart-shaped Leaf. *Folium cordatum*. Somewhat ovate, hollowed at the base, without posterior angles.—It may be called either cordate or heart-shaped; but I dislike hearted.

Heart-tongued Frond. *Cordato-lingulatus frons*. Tongue-shaped, and hollowed at the base. As in *Asplenium Scolopendrium*.

Hedge-hogged Pericarp. *Echinatum pericarpium*. Beset with prickles. A round prickly set of flowers, like a hedge-hog, is called *Echinus*; a Burr.

Hedge-hog-hooked. *Echinato-uncinata spica*. A spike beset with prickles which are hooked at the end.


Helmet-tubed Petal. *Galeato-tubulatum petalum*. Having the tube shaped like a helmet.

Hemispherical Calyx or Nectary. In form
form of half a sphere. The first exemplified in *Tanacetum*: the second in *Narcissus Jonquilla*.

**Heptandria** (ἐπτάς *seven*, and ἄντρο *a husband*). The seventh class in the system of Linneus, comprehending those plants which have seven stamens to the flowers.

**Herb. Herba.** In common language an *Herb* is used in opposition to a *Tree*. By Linneus the herb is put for that part of a vegetable, which arises from the root, is terminated by the fructification, and comprehends the stem, leaves, fulcres, and hybernacle.—*Vegetabilis pars, orta a radice, terminata fructificatione, comprehenditque truncum, folia, fulcra, hybernaculum*. Philos. Bot.—*Herba adscendens, aëria spirans, movens*. Regn. Veg.

*Herbaceous* plants, are such as perish annually down to the root.

*Herbaceous* stem, perishing annually, soft not woody.

*Herbs* constitute the fourth nation, great tribe
tribe or cast, into which Linneus divides all vegetables. See Gentes.

Hermaphrodite flower. *Hermaphroditus flos*. Having both anther and stigma. An *Hermaphrodite plant* is that which has only hermaphrodite flowers.

Hesperideae. The name of the forty first order in Linneus's Fragments of a Natural Method; containing only three genera—Citrus, Styrax, Garcinia.

Hexagonus caulis. A hexagonal stem. Having six angles.

Hexagynia (*σέξ* six, and γυνη a woman). One of the orders in the ninth and thirteenth classes of the Linnean system; containing those plants which have six styles in the flowers.

Hexandria (*σέξ* and ἀνήρ a man or husband). The name of the sixth class in Linneus's system; comprehending those plants which have hermaphrodite flowers with six equal stamens.—This is a natural class, nearly the same with the *Lilia*...
or *Liliaceous plants* of other writers; and contains a great part of the sixth, ninth, tenth, and eleventh orders, in Linneus's Natural Arrangement, with the admixture of some others.

**Hexapetala corolla.** A corolla consisting of six distinct petals.

**Hexapetaloides corolla.** Divided so near to the base as to have the appearance of a six-petalled corolla, but in reality one-petalled, as in *Agapanthus*.

**Hexaphyllus calyx.** A calyx of six leaves or leaflets.

**Hilum.** The Eye—commonly so called in the bean. The external mark or scar of the umbilical chord on some seeds, where they adhere to the pericarp.—*Cicatrix umbilicalis*. Regn. Veg.—*Cicatrix externa feminis ab ejusdem affixione in fructu*. Philof. Bot.—As in *Cardiospermum, Staphylea, Dolichos, &c.*

**Hirsutus.** Hirsute, rough with hair, shaggy.—Nearly the same with *hispid*, but
but having more hairs or bristles, and less stiff. Applied to the stem—frond—calyx, as in *Serratula alpini*—and legume, as in *Lathyrus odoratus*.

**Hirtus.** Rough-haired. Nearly the same with *hirsutus*. The hairs stiffer than in *pilosus*.

**Hispidus.** Hispid. *Hispidus caulis*, a hispid stem. Beset with stiff bristles, as in *Brassica Erucastrum*—*Hispidum folium*, a hispid leaf. Having brittle stiilfish bristles scattered over the disk, as in *Turritis hirsuta*.

Since we cannot easily find significant English terms for all the numerous varieties of pubescence, it is perhaps best to use the Latin terms where we can. Thus here, *hirsute* and *hispid* are preferable to *shaggy* and *bristly*: but *hirtus* not being convertible to an English word, we must substitute *rough-haired*, or *rough with hairs*.

**Hoary leaf.** *Folium incanum*. Covered with
with a white pubescence: as in Draba incana, Cistus incanus.

Holeraceae, Holoraceae, commonly written Oleraceae (from Olus, anciently Holus, a pot-herb). The name of the twelfth order in Linneus's Natural Orders; and the fifty-third in his Fragments of a Natural Method; containing Spinach, Beet, &c. &c.

Hollow stem. Cavus truncus, f. culmus. As in corn, reeds, &c.

Hollow-tubular. Tubulato-cavus.

Honey-cup.—Nectarium. Honey-cup is improper, because few Nectaries are in form of a cup; not more so indeed than glass ink-horn, silver terrene, Dresden China, and many other barbarisms. But why multiply these unnecessarily? See Nectarium.

Hooded. See Cowled.

Hoofed or Hoof-shaped. Ungulatus. Exemplified in the silicle of the Rose of Jericho.

Hooked. *Hamofus*—A hooked bristle. *Hamofa feta*. A sort of pubescence, in which the end of the bristle is curved. See *Uncinatus*.

**Horizontal leaf.** *Horizontale folium.* Making a right angle with the stem—having the upper surface turned towards the sky.—*Quod ad angulum rectum a caule discedit.* Philof. Bot. *Paginam superiorum caelo obvertens.* Delin. Pl. See *Adversum*.

—*Horizontalis flos*: a horizontal flower. Parallel with the surface. *Æquori parallelus*—*Radix horizontalis*; a horizontal root. Running immediately under the surface, and parallel to it.

**Horn or Spur.** *Cornu f. Calcar.* The hinder hollow part of the nectary in some flowers, extended in a conical form: as in *Orchis, Larkspur, &c.*—*Conica productio basios.* See *Spur*.

Horn-shaped. *Cornutus*.

Husk. See *Gluma*.

**Hyaline.** *Hyalinus*. (*ταλός*, from *υπο pluo*, the...
the colour of rain water.) The colour of glass, with its transparency.

**Hybernaculum.** The Hybernacle.—Herbæ compendium super radicem antequam excrescit. Philos. Bot.—Compendium herbæ totius, squamosum. Regn. Veg.—A compendium of the whole herb, before it grows up. Or, in which the embryo of the future plant is inclosed by a scaly covering, and secured from external injuries during the winter.—It is either—a bulb (*bulbus*), formed from the remains of past leaves—or a bud (*gemma*), from the rudiments of future leaves.

**Hybrida planta.** A hybrid or hybridous plant, or mule. A monstrous vegetable produced from the mixture of two different species.

**Hypocrateriformis corolla.** A salver-shaped corolla. Monopetalous, with the border spreading out horizontally or flat from the tube, like an old fashioned salver. As in some of the *Asperifoliæ*—*Heliotropium, Myosotis*;—in *Diapensia, Aretia, Androsace, Hottonia, Phlox, Samolus.*

J A G.
JAG. *Lacinia.* A division or cleft in a leaf, calyx or corolla. This term relates chiefly to monophyllous calyxes and monopetalous corollas. These are named bifid, trifid, &c. according to the number of jags.

JAGGED. *Laciniatus.* Cleft or divided. A jagged leaf. *Folium laciniatum.* Divided irregularly, and the parts subdivided indeterminately.

JAWS. See *Faux.*

ICOSANDRIA (*εἴκοσι* twenty, and *ἀνὴρ* a husband). The name of the twelfth class in the Linnean system; comprehending those plants which have hermaphrodite flowers with twenty or more stamens, growing on the inside of the calyx, not on the receptacle.—The situation, and not the number of the stamens is here to be attended to.—The calyx also is monophyllous and concave in this class; and
the claws of the petals are fixed into the inside of the calyx. To confound this class with Polyandria is abominable.

**Imberbis corolla.** A beardless corolla. Applied to some sorts of Iris, in opposition to other sorts, which have a bearded corolla (*barbata*). This beard is the nectary.

**Imbricate.** *Imbricatus.* Lying over each other, like tiles on a roof. Applied to leaves and their serratures, in the bud; or, a term in foliation—to the stem, when covered with scales: *tefitus, ut nudus non appareat*—to the calyx, as in *Hieracium, Sonchus,* and other *Sylgene*—to the spike, having flowers so close as to press over each other. Some use tiled; a term that can hardly pass.

**Immersed leaf.** *Submersum folium.* Growing under water. See *Demersum.*

**Impari-pinnatum folium.** An unequally-pinnate leaf; terminated by an odd or single leaflet.
IMPERFECT flower. Imperfectus flos. De-
stitute either of the anther or stigma—
In Rivinus and some other authors it is
fynonymous with apetalus of Tournefort,
stamineus of Ray, and incompletus of
Vaillant.

INÆQUALIS corolla. An unequal corolla.
Having the parts corresponding, not in
size, but proportion. As in Butomus.

INANIS truncus. A pithy stem. Interne
medulla spongiosus. Having a pith or
spongy substance within. When quite
empty, it is called fistylosus.

INCANUS. Hoary; which see.—Linneus
makes it fynonymous with tomentosus.—
Folia (incana) quæ colorem glaucum ha-
bent & fere argenteum, quod ex superficie

INCISUM f. dissec tum folium. (Snipt, With.)
or Gashed; which see.

Inciso-crenatum. Gash-crenate, or deeply
cut; as in Geranium Reichardi.—Inciso-
denticulatum. Gash-toothletted.—Inciso-
multisidum.
multifidum. Gash-multifid.—Inciso-serratum.—Gash-serrate. These compound words found well in Latin. Persons who think them harsh in English, must use the periphrases.

Includens calyx. An including or inclosing calyx. Shutting up and concealing the corolla. As in Phalaris.—Includens fomentus. When alternate leaves approximate to the stalk during the night, so that the flower or tender twig is protected between them.

Inclusa anthera. Inclosed within the corolla: as in some sorts of Erica. Opposed to exserta.

Incompleteus flos. Qui caret perianthi aut corolla.—An incomplete flower is destitute either of the perianth or corolla. —In Delin. Pl. it is made synonymous with apetalous, as it is also by Vaillant. See Imperfect. Every apetalous flower is incomplete; but every incomplete flower is not apetalous. An imperfect flower wants one or both the essential parts; an incomplete
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incomplete flower wants one or both the covers.

**Incrassatus pedunculul.** A peduncle incrassated, thickening or becoming thicker towards the flower. As in *Cotula, Tragopogon*, and most cernuous flowers. Opposed to *attenuatus*. It is applied also to the scape.

**Incumbent. Incumbens.** Leaning upon, or resting against. Applied to the stamens in the class *Diadelphia*—to anthers, which rest upon the filament: opposed to upright, *cresta*—to the divisions of leaves which lie one over another.

**Incurvatus caulis.** An incurved stem.

**Introrsum nutans.** Delin. Pl. bowed or curved inwards—*incurvum folium; dum sursum arcuaturn versus caulem*; bowed or curved upwards towards the stem. Made to be synonymous with *inflexum* in Philof. Bot.—*aculeus incurvus; introrsum flexus*; a prickle, bowed or bent inwards. The terms for angular and curvi-linear bendings ought to be distinct; I usually apply bent
bent to the first, and bowed or curved to the second.

Indivisum folium. An undivided leaf; in opposition to fissum, cloven. See Integer.


Inferum perianthium. An inferior perianth. Inclosing the germ; or, having the germ above the receptacle: opposed to superum.—Inferum germen. An inferior germ. Placed below the perianth. —An inferior perianth implies a superior germ; and a superior perianth implies an inferior germ.—This happy distinction was originally Tournefort's: but his expression of calyx abit in fructum, and pistillum abit in fructum, was by no means so clear as Linneus's germen superum and inferum. To understand the difference, we must observe the situation of the perianth or germ with respect to the receptacle.—

This
This distinction might be exemplified in innumerable instances: the inferior flower or perianth, and the superior fruit or germ, are in no plants more evident than in Cucumber, Melon, Gourd, Bryony and others of the class Monaxia, and the order Syngenesia.

**Inflatus.** Inflated. Hollow and puffed or blown up like a bladder. Applied to the perianth, as in Phyalis—to the corolla, as in Calceolaria—to the nectary, as in Cypripedium—to the pericarp, as in Fumaria cirrhosa, and Colutea.

**Inflexus.** Inflex or inflected. Bent upwards, at the end, towards the stem. Applied to the leaf; and also to the calyx, when it means only bent inwards. See Incurvatus.

**Inflorescentia.** Inflorescence, or manner of flowering. *Modus quo flores pedunculo plantae annectuntur.* The various modes in which flowers are fastened to the plant by means of the peduncle. These are—1. Spadix. 2. Cyme. 3. Umbel.
IN

bel. 4. Spike. 5. Ament. 6. Strobile.

**InfraGus caulis f. culmus.**

Bent in at angle, so as to appear as if it were broken: as in *Alopecurus genicularatus*.

**Infundibuliformis corolla.** A funnel-shaped corolla. *Monopetala, conica, tubo imposita.* Monopetalous; Having a conical border, rising from a tube. As in *Lithospermum, Anchusa, Cynoglossum, Pulmonaria, Asperugo, Lycopod, Tournefortia.*

**Integer calyx.** An entire calyx. Opposed to fissus—Exemplified in *Genipa.*—**Integer caulis.** *Simplicissimus, ramis vix ullis.* Philos. Bot.—**Simplicissimus, ramis angustatitis.**—Delin. Pl. where *Simplicissimus* is explained by *ramis vix ullis.*—In Philos. Bot. *Integer* is a species of the *Simplex,* which means, that the stem is continued
continued in one unbroken series from top to bottom—that is, has no branches. How then comes Integer, Entire, to have scarcely any branches? Should one not suppose that an Entire stalk was unbroken, as well as a Simple stalk? I confess my ignorance, in hopes of being better informed.—Integrum folium. An entire leaf. Indivisum, sinu omni desitutum. Undivided, having no sinus.

Integerrimum folium. A leaf quite or absolutely entire. Cujus margo extimus integer absque omni crena est. Philos. Bot.—Ipso margine linearis, nec minimum seeto. Delin. Pl. Having the margin or edge entire, without any notches—or, without being in the leaf cut. Integrum therefore refers only to such situations as extend far into the disk of the leaf; and a leaf may be integrum, entire, although the edge is indented.

Interfoliacei flores s. pedunculi. Interfoliaceous flowers or peduncles.—Inter folia opposita, sed alternatim collocati. Between opposite leaves, but placed alternately
nately with them: as in Asclepias. Contrasted with oppositifolii.

**Internodium.** The internode, or space between knot and knot, or joint and joint. In English we have no term appropriate to this idea, for which reason it seems best to anglicize the Latin term. The joint is properly the articulation itself, from juncta; although in common language we use it also for the space between two joints.

**Interrupta spica.** An interrupted or broken spike. Divided by intervals of smaller flowers. As in Mentha spicata.

**Interrupte pinnatum folium.** An interruptedly pinnate leaf. Foliolis alternis minoribus. Having smaller leaflets between each pair of larger ones.

**Intorsio.** Flexio partium versus alterum latus. Philos. Bot.—In Delin. Pl. it is called Torso, and is thus explained. DirecEio plantæ in unam alteramve plagam a verticali diversam.—The writhing, bending,
ing, turning, twining or twitting of any part in a vegetable towards one side or other—or, in any direction from the vertical. Thus the stem in some plants twines from right to left; as in Tamus, Dioscorea, Rajania, Menispermum, Cissampelos, Hippocrates, Lonicera, Humulus, Helxine.—In others from left to right; as in Phaseolus, Dolichos, Clitoria, Glycine, Securidaca, Convolvulus, Ipomaea, Cynanchae, Periploca, Ceropogia, Euphorbia, Tragia, Basella, Eupatorium, Tournefortia. It is also applied to the Clasper or Tendril; as in Leguminous plants, Vine, Bryony. In this last it is observed by Grew, that the tendril having made two or three turns one way, is then directed the contrary way, in order to be more sure of its hold. To the corolla, which, twists to the left in Asclepias, Nerium, Vinca, Rauwolfia, Periploca, Stapelia—to the right in Pedicularis, Tricntalis, Gentiana.—It is applied also to the Piffil and Germ—to the Spike—to the Awn, as in the Wild Oat—to the beak of the Seed, as in Geranium—to the peduncle, as
as in *Muium hygrometricum*.—When we speak of right and left, we suppose the spectator to have his face turned towards the south. See *Twining*.

**INTORTUS stylos.** A style twisted inwards.

**INTRAFOLIACEÆ stipulae.** Intrasoliaceous stipules. Growing above or within the leaves.

*Inversely heart-shaped.* See *Oncordatum*.

**INVERTENS somnus.** When during the night the more tender surface of the leaves is protected, by being inverted.

**INUNDATÆ.** The name of the forty-fifth order in Linneus's *Fragments of a Natural Method*; and the fifteenth of the Natural Orders in *Gen. Pl.*—Containing such plants as grow naturally in the water.

**INVOLUCRUM.** An involucre (from *involvo*, to wrap up). *Calyx* (*umbellæ*) *a flore remotus*. A calyx remote from the
the flower; particularly in the umbel, but
applied also to the whorl and other kinds
of inflorescence.

*Involucrum universale.* A universal or rather
general involucre; placed at the origin of the
universal or general umbel.—*Partiale.* A
partial involucre; at the origin of the
partial umbel.—*Proprium,* a proper invo-
lucre; placed beneath a single flower.

Involucres are *one-leaved,* &c. or *many-
leaved,* according to the number of leaves
of which they are composed. *Involucrum*
*monophyllum,* &c. *polyphyllum.*

*Involucrum dimidiatum.* A dimidiate
or halved involucre. *Ab altero lateri
deficiens;* deficient on one side.

*Involucratus.* Involucred. Having an in-
volucre. As umbels, whorls, &c.

*Involucellum.* An Involucret. A little or
partial involucre. (Partial Fence, *Wither-
ing.*) As in Umbellate plants and *Eu-
phorbia.*

*Involvens fomnus.* When the leaflets of

P₂ compound
compound leaves, during the night, approach by their tips only, making an arch or hollow underneath.

Involuta foliatio s. vernatio. Involuted foliation or vernation. Quum margines laterales (foliorum in gemma) utrinque introrsum spiraliter involvuntur. Philos. Bot. Foliorum lateribus utrinque spiraliter contortis versus superiorem paginam. Delin. Pl. When leaves within the bud have their edges rolled spirally inwards on both sides towards the upper surface. As in Lonicera, Euonymus, Pyrus, Populus, Viola, &c.

Joint. Articulus. According to Linneus, that part of a culm which lies between two knots. See Internodium.

Jointed. Articulatus. Applied to the root, in Lathræa, Oxalis, Martynia, Dentaria—to the stem or culm, in corn and grasses—to the leaves, when one leaflet grows from the top of another—to the spike, peduncle, petiole, capsule, silique and legume.

Irregu-
Irregularis corolla. An irregular corolla. 

Quae limbi partibus, figura, magnitudine, aut proportione diversa est. Philof. Bot. In Delin. Pl. we read et proportione. Different in the figure, size, or proportion of the parts of the border. I prefer the disjunctive, because a diversity in any of the above-recited circumstances is sufficient to produce an irregularity.—The term is originally Rivinus’s, whose arrangement is founded on the regularity or irregularity of the corolla. Jungius expressed the idea by the term difformis—Ray, Tournefort and others by Anomalus (flos).—Dr. Berkenhout’s explanation gives Jungius’s idea.—An irregular flower is that whose parts want uniformity.

Jugum. A yoke, couple, or pair of leaflets. —Hence folium conjugatum, a leaf paired or having one pair of leaflets, of which there are many instances in the class Diadelphia.

Julus. A Catkin or Ament. For this term of Tournefort’s and others, Linneus sub-

stituted
stituted Amentum. Hence Herman and others had a class of trees entitled Juliferace.

**K**

**KEEL. Carina.** The lower petal of a papilionaceous corolla, inclosing the stamens and pistil: usually shaped like a boat.

**Kneed. Carinatus.** Having a longitudinal prominency upon the back. Applied to the leaf, calyx and nectary.

**Kidney-shaped leaf. Folium reniforme.** Roundish, and hollowed at the base without angles. Applied also to the anther and seed, which being solid bodies, have really the form of a kidney; whereas a leaf, being a plane surface, resembles the section of a kidney. This distinction is to be observed in several other cases.

**Kneed or Knee-jointed.** See Geniculatus. **KNOT.**
Knot. Nodus. A protuberant joint in the stem of some plants, particularly in corn and grasses. An admirable provision to strengthen their otherwise weak hollow culms.

Knotted or Knotty. Nodosus. Having knots or swelling joints.—The terms Articulatus, Geniculatus, and Nodosus, do not seem to be well distinguished by Linneus. The first appears to me to mean jointed in general; the last—jointed with a swelling or protuberance. The difference between this and the second has been already explained under Geniculatus.

Knotless. Enodis. Without knots. Continuous absque articulis. Applied to a stem: In this explanation there is a confusion between nodus and articulus, and the latter is put for the knot itself; whereas in another place Linneus puts it for the space between the knots. See Joint.
LABIATUS flos. A Labiate or lipped flower. This is a term of Tournefort’s. Linneus uses the term Ringens, including under it both Labiate and Personate flowers. In Delin. Pl. Ringens (corolla) is made synonymous with Labiate. This term is applied likewise to the calyx. See Ringens and Personata.

The confusion would be cleared up, if we might be allowed to put Labiate, for an irregular monopetalous corolla, with two lips; and to appropriate the term Ringent, to such as have the lips gaping or open—Personate, to such as have them closed.

Labium, the lip, is usually applied by Linneus to both lips of a labiate corolla, with the distinction of superior and inferior. But it is sometimes used for the lower lip in opposition to the upper lip, which is then called Galea, the helmet.

LACERA
**Lacera corolla.** A lacerated corolla. (Ragged, Withering.) *Cujus limbus tenuissime disjectus est.* Having the border very finely cut.

*Lacerum folium.* A lacerated leaf. *Quod margine varie sectum est segmentis difformibus.* Having the edge variously cut into irregular segments—as if it were rent or torn.

**Lacinia corolla.** *Quaevis pars in quam limbus corollae monopetalae disjectus est.*—Any part into which the border of a monopetalous corolla is cut. It is applied also to monophyllous calyxes: and a calyx which has two *laciniae* is said to be *bifidus*, &c. Philof, Bot. p. 63.

**Laciniatus.** Jagged. *Folium laciniatum,* *Varie sectum in partes, partibus idem indeterminate subdivis.* This implies an irregularity in the division and subdivision, whereas *lacinia* is the same with a part, segment or cleft; as Linneus has explained it.

*Laciniatus flos,* is a term of Tournecfort's, for
for which Linneus puts *multifida corolla*.

*Lacinüila.* Dimin. from *Lacinia.* A little jag, or subdivision of the larger one.

*Lactescentia.* Lactescence or Milkiness.

Copia liquoris, qui effluat lēsa plantā. The liquor which flows abundantly from a plant, upon its being wounded. It has the name from the juice being commonly white, like milk: as in *Euphorbia, Papaver, Asclepias, &c. Campanula, &c.* and many of the plants in the first division of the class *Syngenesia.*—It is however yellow in *Chelidonium, Bocconia, Sanguinaria, Cambogia:* and red in *Rumex sanguineus.*

*Lacunosum folium.* A lacunose or pitted leaf. *Disco depresso inter venas interfectas.* When the disk is depressed between the veins. Contrary to *rugosum,* wrinkled, in which it rises.

*Lævis.* Even, level, very smooth, polished. This term does not occur in *Philosophia Botanica.* In *Delin. Pl.* it is applied to the
the stem, and is explained to be *superficies æquali.* Having an even surface. Opposed to *striatus* and *fulcatus,* streaked and furrowed or grooved. Whereas glaber, smooth, is opposed to *asper,* *scaber,* &c. rough and rugged.—The *Even* stem is exemplified in *Chelidonium hybridum.*

In leaves it is commonly used in opposition to *rugosum,* &c. and therefore means an even level surface: as in *Statice Limonium.* And yet in *Crotalaria incanescens,* Lin. Suppl. 323. *levis* is opposed to *albo-tomentosus.* In *Ethulia divaricata,* it is opposed to *pubescens.* And in Philos. Bot. *Glaber* is interpreted to be, *superficies levii.* The French translate it *lisse.* There is classical authority for *levis* being not only *planus,* *politus,* *taetum* non *asperus,* as *levi clypeum;* but also *glaber,* *depilatus.* Perf. Sat. 1. & Virg. Ecl. 6, &c.

**Lamella.** A thin plate. Applied to the plates of which the under part in some Funguses is composed: hence these are called *lamellated* or *lamellous* Funguses.
Gills is the common English name for lamellae.

**Lamina.** The border. *Corollae polypetale pars superior patula.* The upper, broad or spreading part of the petal, in a polypetalous corolla. Called *limbus,* in a monopetalous corolla.


**Lanatus.** Woolly. Applied to the stem; as in *Stachys germanica,* &c.—*Lanatum folium.* A woolly leaf. *Quasi tela araneæ indutum*—to which is added in Delin. Pl. —*pilis sponte curvatis.* With a covering resembling a spider's web, composed of hairs curling spontaneously: as in *Salvia* and *Sideritis.*

*Sublanatus.*
Sublanatus. Somewhat woolly.

Lanceolatum folium. A lanceolate leaf. Oblongum utrinque sensim versus extremitatem attenuatum. Oblong, and gradually tapering towards each extremity: like the head of a lance.—Exemplified in Plantago lanceolata.—Some call it spear-shaped, others lance-shaped or lanced; but Lanceolate appears to me in all respects preferable.—It is applied also to the Stipule, Bract, and Perianth.

Lanceolato-ovatum folium. A lanceolate-ovate leaf; partaking of both forms, or between both; but inclining more to the latter. An Ovate-lanceolate leaf, on the contrary, would incline more to the lanceolate. This is a general rule with respect to these compound words.


Laterifolius flos f. pedunculus. Ad latus baseos folii. By the side of the base of the leaf.
Leaf. As in *Claytonia*, *Solanum*, *Asperifolia*.

Latticed. *Cancellatus*. Applied to the involucre in *Atrachlylis cancellata*. And to the capsule of Lily.

Laxus, in Philos. Bot. synonymous with *flaccidus*, and opposed to *strictus*.—Libere in *arcum flexibilis*. Delin. Pl.—A lax, loose, flaccid, or flexible stem. Easily bent, in opposition to *stiff*.—It is applied also to the glume.

Leaf. *Folium*. The organ of motion in a vegetable. Transpiring and attracting air and moisture, as the lungs do in animals; and affording shade to the vegetable. In reality, however, leaves are rather analogous to the muscles, although they be not as in them fixed by a tail, because in vegetables there is no voluntary motion. Leaves are either, 1. *Simple*, having one leaf only on a petiole, or proceeding from the same point—or, 2. *Compound*, having several leaves to one petiole: the component leaves are called *Leaflets*.
LE

Leaflets. Foliola. Others call them Leafits. But I follow the analogy of the language in forming diminutives. For the same reason, if we use leaf, we must not use foliole.


Leaf-stalk. See Petiolus.

Leafy. Foliatus. Furnished with leaves: in opposition to leafless.—Or abounding in leaves, contrasted with such terms as have few.—It is applied not only to the stem, but to the head, spike, raceme and peduncle.

Leathery or leather-like. See Coriaceous.

Legumen. A Legume. (Alegendo, Pulse being commonly gathered by hand.) Pericarpium bivalve, affigens semina secundum futuram alteram tantum.—A pericarp of two valves, in which the seeds are fixed along one future only. It is usually of a membranaceous texture, and commonly one-celled. Some legumes however are two-celled—others jointed—others again divided
divided transversely into several cells (fibris intercepta), by contracting between the seeds.—The old English word was Cod: and the Legume of a Pea is still called a Peas-cod.—Pod is used both for the legume and silique indifferently: but they are so distinct that they ought not to have the same appellation. It seems better, therefore, to anglicize the Latin terms: and with respect to this, it is become sufficiently familiar to the English ear. Dr. Withering calls it the shell.

Leguminosæ. Leguminous plants. Such as have a legume for the pericarp. The same with the Papilionacei of Tournefort. It is one of Ray’s classes. The order Decandria of the class Diadelphia in Linneus’s system, contains these plants.

Lenticularis scabrities (from Lens, a lentil). A sort of small glandular roughness, resembling small lentils, on the surface of some plants. See Scabrities. Applied also to the capsule, in Allamanda, and then alluding merely to the shape.
Level-topped. See Fastigiatus.

Liber. (According to Scaliger, quasi luber, quia de arbores reluatur, f. resolvatur, or to use Cato's word glubatur. As from cresco comes creber; from facio, faber; from suo, suber; so from luo comes luber, and thence liber.—But a more probable derivation is from the Æolic λεπος for λεπος, which by changing π into ε became λεης.)—Tegmentum tertium membranaceum succidum flexile. The inner bark of a vegetable; or the third integument, membranaceous, juicy and flexible. The wood is gradually formed from this; and according to Linneus, the corolla is a continuation of it. See Substantia.

Lignosus caulis. A woody stem. Opposed to herbaceous.

Lignum. The wood, or woody part of the trunk.—Liber præcedentis anni, nunc ex-suuccus, induratus, agglutinatus. The liber, or inner bark of the preceding year, deprived of its juice, hardened, and glued fast together.
Ligulatus (from ligula, a strap; which some derive from ligo, to bind; others from lingula dimin. of lingua, a tongue; the first from its office, the second from its shape) flos. Ligulata corolla. A ligulate or strap-shaped flower. A species of Compound flower, in which the florets have their corollets flat, spreading out towards the end, with the base only tubular. Cum corollulæ flosculorum omnes planæ, versus exterius latus expansæ sunt. These are the Semi-flosculosi or Semi-floecular flowers of Tournefort; and are comprised in the first division of the first order of Linneus's nineteenth class, Syngenesia Polygamia Aequalis.

Lilia. The name of the third nation, tribe, or cast of vegetables, in Linneus's Regnum Vegetabile, containing the Patri- cian rank, eminent for their splendid flowers.

Liliacea corolla. A liliaceous corolla: having six regular petals.

Liliaceæ. Liliaceous or Lily-like plants. The
The name of one of Tournefort's classes. Also of the tenth order in Linneus's Fragments of a Natural Method. They are divided among several (9—11) orders, in the Ordines Naturales, at the end of Linneus's Genera Plantarum.—This fine natural class is to be found in the class Hexandria of Linneus's Artificial System.

LIMBUS. The border or upper dilated part of a monopetalous corolla. Since we have only the word border in English, to express the upper spreading part, both in this and the polypetalous corolla, it would perhaps be better to preserve the Latin terms limbus for the first, and lamina for the second. For limb applied to border we have the authority of the astronomers.

LINEA or line. The twelfth part of a Paris inch. The breadth of the crescent at the root of the finger nail. See Measures.

LINEARE folium. A linear leaf. Æquali ubique latitudine, interdum utraque extre-
mitate tantum angustatur. Of the same breadth throughout, except sometimes at one or both ends. As in Grasses, Rosemary, &c.—Applied also to the petiole, involucre, perianth, petals, spike, &c.

Lineari-cuneiforme. Linear-wedged-shaped. Between both, but inclining more to the latter.

Lineari-lanceolatum. Linear-lanceolate.

Lineari-subulatum. Linear-subulate.

Lineatum folium. A lineate leaf. Nervis depressis. The surface slightly marked longitudinally with depressed parallel lines. Lined is improper, as being used in a different sense.—This term has been sometimes confounded with linear, which respects the form of the leaf. The terms being so alike, and this occurring seldom, it may perhaps be better to write—a leaf marked with lines.

Linguiforme, f. lingulatum folium. A tongue-shaped leaf. Linear and fleshy, blunt at the end, convex underneath, and...
having usually a cartilaginous border, as in *Mesembryanthemum, Aloe, Haemanthus coccineus*.

**Lingulatus flos.** A term of Pontedera's. The same with *ligulatus*; which see.

**Lip.** See *Labium*.

**Lobus.** A lobe. The part into which some simple leaves are divided.—Also the *placenta*, or main body of the seed destined to nourish the heart, splitting usually in two; these parts are called the lobes. See *Cotyledon*.

**Lobatum folium.** A lobate or lobed leaf. *Divisum ad medium in partes distantae, marginibus convexis*. Divided to the middle into parts distant from each other, with convex margins.—The latter clause is omitted in *Delin. Pl.* and yet it seems necessary to distinguish this from *foliosum fissum*, the cleft or cloven leaf.—These leaves take the names of *bilobate, trilobate*, &c. or *two-lobed, three-lobed*, &c. from the number of lobes into which they are divided.
Loculamentum pericarpii. The cell of a pericarp or fruit. *Concameratio vacua pro feminum loco.*—Pericarpium uniloculare, bilocular, &c. A unilocular or one-celled; a bilocular or two-celled pericarp. If any one should dislike these compound words, he may write—a pericarp of one cell—of two cells, &c. And this may serve as a general rule in the like cases.

Loculus. The little cell of an anther containing the pollen. Loculi—divisiones laterales, tunicis fætæ.

Lomentumaceæ. (*Lomentum,* a sort of colour in Pliny, a *lotus,* being made by washing. But it also signifies *farina friëta,* parched meal, or, according to others, *farina fabacea,* bean meal.) The name of the fifty-sixth order in Linneus's Fragments; and of the thirty-third in his *Ordines Naturales.*


Lucidum folium. *Quasi illuminatum.* Delin. Pl.—Bright, shining, as it were illuminated.
minated. See Nitidum.—Dr. Berkenhout understands it to mean clear, transparent: and Dr. Withering uses the word transparent for it.

Lunulatum folium. Subrotundum, basi excavatum, angulis posticis notatum. Philos. Bot.—In Delin. Pl. it is called Lunatum, and the explanation is somewhat differently worded—subrotundum, basi finu divisum, angulis posticis acutis.—It is singular that Dr. Berkenhout, who seldom gives any equivalent English terms, should translate lunatum, moon-shaped; and lunula, a half-moon; though he explains it, rightly enough—shaped like a small crescent. In which sense only it is used in botany; though among the ancients lunatus is put for the shape of the moon, both when full and in a crescent.

Lunulata is applied to the keel of the flower in Polygala myrtifolia. Also to the stipule and spike.—See Crescent-shaped.

Luridae. (Luridus, a dusky or livid colour. Linneus makes it synonymous with fuscus.)
fusæus.) The name of the thirty-third order in Linneus's Fragments, and of the twenty-eighth in his Ordines Naturales.

Luxurians flos. A luxuriant flower. Tegmenta fructificationis ita multiplicat, ut essentiales eusdem partes defruantur. Multiplies the covers of the fructification so as to destroy the essential parts.—Luxuriancy is either Multiplicate, Full or Proliferous. All Luxuriant flowers are Monsters; but full flowers only (Pleni) are absolutely barren.

Lyratum folium. A Lyrate or Lyre-shaped leaf. Transversim divisum in lacinias, quarum inferiores minores remotiores.—Divided transversely into several jags, the lower ones smaller and more remote from each other than the upper ones. As in Geum urbanum.—This is one of the Compound leaves, and yet the figure (n. 76.) to which Linneus refers, is a simple leaf, not at all like that of Geum urbanum.
MALE flower. *Masculus fls.* Bearing stamens only, without pistils; or at least wanting the stigma.

Male plant. *Planta Mas.* Producing only male flowers. Otherwise called barren, or abortive.

Many-cleft or Multifid leaf. See *Cleft* and *Fissum.*—It is applied also to the Corolla.


Many-fold corolla. See *Multiplex* and *Multiplicatus.*

Many-leaved calyx or tendril. *Polyphyl/us.*

Many-parted leaf. *Folium multipartitum.* See *Partitum, Parted.*
Many-petalled corolla. *Polypetala*. Opposed by Linneus to a monopetalous or one-petalled corolla. Other writers have commonly given separate names to the corolla, according to the number of petals, as far as six; calling the rest polypetalous. Linneus also makes the distinction of *dipetalous, tripetalous*, &c. but calls them all polypetalous.

Many-valved glume. *Multivalvis*. Consisting of more than two valves, which is the common number.


*Marrow*. *Medulla*. The pith of a vegetable. The inner vesicular substance, or that which clothes the inner surface of a hollow trunk.

*Masculus flos*. A male or barren flower. **Masked**
Masked corolla. See *Personata*.

Measures. Linneus seldom makes use of any other measure besides the proportion between the parts. Since plants vary exceedingly in the size both of the whole and all the parts, he has discarded geometrical measures, and has adopted others taken principally from the human hand and arm.

1. *Capillus*. A Hair. The diameter of a hair. *One-twelfth of a line*.


6. *Spithama*. A short Span. The space between the end of the thumb and
of the fore-finger extended.—*Seven Inches.*


8. *Pes.* A Foot. From the bend of the elbow to the base of the thumb.—*Twelve Inches.*

9. *Cubitus.* A Cubit. From the bend of the elbow to the end of the middle finger.—*Seventeen (Paris) Inches: or something more than eighteen inches English.*

10. *Brachium.* An Arm. From the arm-pit to the end of the middle finger.—*Twenty-four Inches.*

11. *Orgya.* A Fathom. The height of a man, or the space between the ends of the fingers when the arms are extended.

Observe that the above geometrical measures follow the French standard; and that the English foot is eleven
eleven inches and a quarter French, nearly. Our hand is the breadth of the palm, or about four inches. And the Roman palm is 8. 78 for architecture, and 9. 79 in buying goods; English measure.

Mediocris. Of a middling length. Applied to a petiole, that is of the same length with the leaf. When it is shorter than the leaf, it is said to be brevis, short; when it surpasses the length of the leaf, it is called longus, long.


calyx—petiolus, complanatus more folii; flattened like the leaf itself.—Membranaceum folium; a membranaceous leaf. Quod inter utramque superficiem nulla evidenti pulpa scatet. Having no distinguishable pulp between the two surfaces.

Membranatus caulis. A membraned stem. Complanatus more folii. Flattened like a leaf.

Mensura. See Measures.

Meteoricæ vigilie. When flowers open and shut according to the temperature of the air. See Vigilie.

Mid-rib. The main nerve or middle rib of the leaf, running from the base or petiole to the apex, and from which the veins of the leaf usually arise and spread. See Rachis, and Rib.

Monadelphia. (Μονός and αἴδαφος one brotherhood.) The name of the sixteenth class in the Linnean System. Comprehending those plants which have hermaphrodite flowers, with one set of united stamens.
flaments. They form a natural class, entitled Columnifera.

**Monandria.** The name of the first class in the Linnean System, comprehending those plants which have only one stamen in a hermaphrodite flower.

**Monocotyledones plantae.** Plants which have only one cotyledon or lobe in the seed; as Grasses, Palms, and Liliaceous plants. Linneus remarks that these are more properly Acotyledonous, since the cotyledon continues within the seed.

**Monœcia.** (*Movoς, and ὡς a house.*) The name of the twenty-first class in the Linnean System; comprehending the androgynous plants, or such as produce male and female flowers, on the same individual, without any mixture of hermaphrodites.

**Monogynia.** The name of the first order, in each of the thirteen first classes of the Linnean System. Comprehending such plants as have one pistil, or stigma only, in a flower.
Monopetala corolla. A monopetalous or one-petalled corolla. The whole in one petal. It may be cut deeply, but is not separated at the base. Exemplified in Convolvulus, Primula, &c.

The most remarkable forms of the monopetalous corolla are the Bell-shaped, Funnel-shaped, Salver-shaped, Wheel-shaped, and Labiate.

Monophyllum (μονος, and φυλλον a leaf) perianthium. A monophyllous or one-leafed perianth. All in one; if cut, not separated to the base. As in Datura, Primula. Applied also to the Involucre.

Monosperma planta. A plant that has one seed to each flower. As in Polygonum, and Collinsonia. A monospermous or one-seeded plant.—Monosperma bacca. A one-seeded berry; called monopyrena by the older botanical writers.

Monostachyos (μονος, and σταχυς a spike) caulis. A stem bearing a single spike.
Moon-shaped. See Lunulatum and Crescent-shaped.

Mosses. See Musci.

Mouth. Os. The opening of the tube in the corolla.

Mucro. (From μακρός, long, according to some; from μικρός, small, according to others.) A dagger-point. Hence

Mucronatum folium. A dagger-pointed leaf. Terminating in a sharp point like a dagger; as in Bromelia Ananas. Applied also to the calyx.—The diminutive mucronulatum is sometimes used.

Mule plant. See Hybrida.


Multicapsulare Pericarpium. A multicapsular pericarp; or, a fruit of many capsules. Having several pericarps succeeding to a flower. As in Caltha, Trollius, Helleborus.
Multidentata corolla. A many-toothed corolla. Cujus limbus aut petala margine diffusa sunt. Having the border (in a monopetalous corolla) or the petals (if it be polypetalous) cut about the edge.

Multifidum folium. A multifid or many-cleft leaf. Divided into several parts by linear sinuses and straight margins. See Fissum and Cleft.

Multifidus cirrus. A many-cleft tendril. Multoties divisus. Divided and subdivided several times.


Multiflorus. Many-flowered. Common to several flowers.—Caulis. A many-flowered stem; as in several species of Iris, &c.—Scapus. A many-flowered scape; as in Primula officinalis, Auricula, Polyanthus, &c.—Calyx; as in Scabiosa, and the class Syngenesia; when the component
ponent flowers are called florets or flo-
cules.—Pedunculus. A many-flowered peduncle; as in Browallia elata.

Multiloculare pericarpium. A many-
celled pericarp. Divided internally into several cells; as in Nymphaea.

Multipartita corolla. A many-parted corolla. Multipartitum folium. A many-
parted leaf. Divided into several parts almost to the bottom.

Multiplex Corolla, radius. Many-fold, or having petals lying over each other in two or more folds or rows.

Multiplicatus flos. A multiplied flower. A sort of Luxuriant flower, having the corolla multiplied so far as to exclude only some of the stamens.—The perianth and involucre seldom, the stamens scarcely ever, constitute a Multiplicate flower. It is called a Double, Triple, or Quadruple flower, according to the number of rows in the multiplied corolla: and a double flower is the lowest degree of it, or the first
first essay towards fulness.—In common language we improperly call all these variations Double flowers.

Polypetalous flowers are not unfrequently multiplied; as in *Ranunculus* and *Anemone*. Monopetalous flowers are very subject to this variety; but very seldom become full, or lose all their stamens.

**Multisiliquæ.** The name of the twenty-third order in the Fragments of a Natural Method, in *Philos. Bot.*; and of the twenty-sixth in the *Ordines Naturales*, at the end of Linneus's *Genera Plantarum*. Comprehending those plants which have several siliques or pods succeeding to each flower. As *Columbine, Hellebore*, &c.

**Multivalvis gluma.** A multivalve or many-valved glume. Having more than two valves.

**Munien's fomnus.** When the upper leaves of a plant, which during the day had spread out horizontally on long petioles, drop them at night, and hang down so
as to form an arch all round about the ftcm.

Muricatus. Muricated. *Punčis subulatis adspersus*. Having fubulate points scattered over it; or armed with sharp prickles, like the *Murex* shell-fish.—Applied to the ftcm—to the calyx, as in *Crepis biennis*—to the pod, as in *Bunias*—to the seeds, as in *Caucalis, Ammi*.

Hence we have

**Muricatæ** for the name of the eleventh order in Linneus's Fragments of a Natural Method.

Musci. Mosses: The third of the Families, and the seventh of the Nations or Cafts, into which Linneus has distributed all Vegetables.—The sixty-fifth order in his Fragments; and the fifty-sixth of his *Ordines Naturales*.—They form the second order of the class Cryptogamia, in his Artificial System.

Hedwig has made considerable discoveries with respect to the fructification of Mosses.

R 3 Muticus.
Muticus.—Awnless.—Opposed to aristatus, awned, in Philos. Botan.—Mutica gluma; acumine defluita. Without any point at the end. Delin. Pl.—In this sense we have Aristan mutica: which can mean only blunt, or having no acumen or sharp point. This term is applied to the calyx in Serratula; and to the anthers in Erica herbacea.

Mutilatus s. Mutilus flus. A mutilated flower. Not producing a corolla, when it ought regularly to do it. This defect is commonly owing to a want of sufficient heat, either from climate or situation: sometimes it is the effect of culture.

N

Naked. Nudos. When applied to the Stem or Trunk of a vegetable, it signifies, that it is without leaves, fulcres or arms. Qui foliis, fulcis & armis caret. Delin. Pl.

—In
In Philof. Botan. it is said only to be destitute of leaves, but that is expressed by the term aphyllus, leafless. — When applied to the Leaf, it signifies, that it is destitute of all pubescence. *Setis ac pilis deflittutum* : Delin. Pl. and is opposed to tectum, covered, in Philof. Bot. p. 233. — When applied to the Flower, it implies, that the calyx is wanting; but it would be more properly called a naked flower, if the corolla were wanting as well as the calyx; however, it rarely happens that a flower is destitute of both. *Philof. Bot.* p. 76. — When applied to the Receptacle, it means, that it is without hairs, bristles or chaffs. — When applied to a Head of flowers (*Capitulum*), it is opposed to foliosum, and implies that it has no leaves on it. — When applied to a Whorl (*Verticillus*), the meaning is, that there is no involucre or leaves. In the same sense it is applied to the Raceme, Petiole, Peduncle, &c.

**NAP. Tomentum.** Soft interwoven hairs scarcely discernible.
NAPPY or Tomentose. Tomentosus. Covered with a whitish down, or with hairs interwoven and scarcely distinguishable. As the leaves of Ceraslium tomentosum, &c.

Natans folium. A floating leaf. Placed on the surface of the water, in many aquatic plants; as Nymphæa, Potamogentos.

Nations. See Gentes.—The sense in which the word Cast is used in the east Indies, best expresses the idea which Linneus seems to have affixed to this word.

Natural Character of Vegetables, is that which delivers all possible certain characteristic marks of the fructification: and may therefore be used under any system or arrangement.—Such characters are given by Linneus in his Genera Plantarum; from the number, figure, situation and proportion of the parts; rejecting taste, smell, colour and size.

Natural Class. An assemblage of several genera of plants, agreeing in their parts
parts of fructification, general appearance and qualities. We have instances of such in the Umbellatae, Verticillatae, Siliquoseae, Leguminosae, Compositae, Gramina, &c.


Necessary Polygamy. Polygumia Necesfaria. The name of the fourth order in the class Syngenesia; wherein the hermaphrodite florets of the disk, for want of a stigma, are barren; but the female florets of the ray, being impregnated by the pollen from the others, bear perfect seed.

Neck. Collum. The upper part of the tube in a corolla of one petal.

Nectarium. The Nectary, or melliferous part of a vegetable, peculiar to the flower. It commonly makes a part of the corolla, but is sometimes entirely distinct from it, and is then called a Proper Nectary. It is frequently in form of a horn or spur; sometimes
sometimes it takes the shape of a cup, whence this part is named in English by some the *Honey cup.*—Those who prefer the Latin termination use *Nectaria* in the plural, which is not English. Why do they not use *filamenta, stigma, &c.*?

*Nervosum folium.* A Nerved leaf. *Quum vasa simplicissima absque ramulis extenduntur a basi versus apicem.* Having vessels perfectly simple and unbranched, extending from the base towards the tip. As in *Plantago lanceolata.*—It is applied also to the stipule. Nervous has other appropriate senses, and therefore to be avoided.

*Nestling.* *Nidilans.* Applied to seeds which lie loose in pulp or cotton, within a berry or other pericarp.

*Nitidum folium.* Glittering, glossy. *Quod glabritie lucidum est f. glabritie lucente.* So smooth as to shine. Opposed to *Opaque.* Exemplified in *Ferula* and *Angelica canadensis.*—*Nitidum germen,* a glossy germ, as in *sweet-brier.*

*Nodding.*
NODDING. *Nutans.* When applied to a stem it is explained to mean, bent down outwards from the top:—when applied to a flower it signifies that the peduncle is considerably curved, but not so much as in the *flos cernuus*; which, as the term implies, points directly to the ground.

**Nodus.** See *Knot.*—*Nodofus caulis: geniculis craffioribus interceptus.* See *Knotted.*

**Notched leaf.** *Folium crenatum.* See *Crenate,* which is a better term.

**Nucamentum;** the same with *Amentum.* Hence *Nucamentaceae,* the name of the seventeenth order in Linneus's Fragments of a Natural Method.

**Nucleus.** A Kernel. The seed of a nut and of some fruits, contained within a shell—*Putamen.*

**Nudus.** See *Naked.*

**Nudiusculus.** Almost, or rather naked.

**Nut.** *Nux.* A seed covered with a shell. Extending
Extending not only to Nuts, commonly so called, but to the Acorn, and all Stone-fruits.

**NUTANS.** See Nodding.—*Nuto* properly signifies to nod with the head, or to nod assent. Cicero uses it for nodding to its fall, or being ruinous; also for hesitating or doubting in an opinion.

**Nux.** See Nut.—*Semen teclum epidermide effoo.* Delin. Pl.

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**OB** in composition is put for obverse: as

**Obconicum Nectarium.** An inversely conical Nectary, such as we find in *Narcissus minor.*

**Obcordatum petalum.** An Obcordate or inversely heart-shaped petal: having the apex downwards. As in the clafs *Monadelphia.*—*Obcordatum legumen;* an inversely
versely heart-shaped legume: as in Poly-gala.—Obcordata filicula; an inversely heart-shaped silicle: as in Thlaspi Burfa Pastoris, or Shepherd's Purse.

Obliquum folium. An oblique leaf. Basæ caelum, apice horizontem spectans. Having the base directed towards the sky, and the apex or point towards the horizon. This sense of the word oblique respects the position of a leaf; and is exemplified in Protea and Fritillaria. But it is also used in another sense, which respects the shape of a leaf, when the surface is placed obliquely to the petiole, as in Begonia.

Obliquus caulis. An Oblique stem. A perpendiculari horizontalis linea discedens. Neither perpendicular nor horizontal. Respecting the general position of the stem with regard to the earth; or having a lateral direction without being bent.

Oblongum folium. An Oblong leaf.—Cujus diameter longitudinalis aliquoties superat transversalem, & utraque extremitas segmenta
segmento circuli angustior.—Having its longitudinal diameter several times exceeding the transverse one; rounded at both ends, but the curvature of each less than the segment of a circle.—Applied also to the spike and capsule.

Oblongiusculus. Rather or somewhat oblong.

Oblongo-ovatum folium. An Oblong-ovate leaf. Between both, but inclining most to the latter.

Obovatum folium. An Obovate or inversely ovate leaf. Having the narrow end downwards; or next the petiole, branch or stem.

Obsoletus. Worn out, scarcely distinguishable, very obscure. Obsolete lobatum, serratum, &c. Si non exacte lobatum, serratum, &c. est. Obsoletely lobed or serrate: applied to leaves which are not quite regularly so: or in which the lobes or serratures are not very distinguishable: or seem as if almost gone or worn out.

Obtusum
Obtusum folium. An obtuse or blunt leaf. Ending bluntly, but within the segment of a circle.—Applied to the perianth, in Convolvulus and Melia:—to the capsule, in Rhinanthus.

Obtusiusculus. Rather or somewhat obtuse or blunt—bluntish.

Obversum folium, f. verticale. An obverse or vertical leaf. Cujus basis angustior, ita ut basis concepiatur ubi nunc apex. Philos. Bot. p. 220.—Having the base narrower than the top, so that they seem to have changed places. See Obcordatum and Obovatum.

Obvoluta foliatio, f. vernatio. Obvoluta folia. Obvolute foliation, vernation, or leaves. Quum margines alterni comprehendunt oppositi folii marginem rectum.—When (as the leaves lie in the bud) the margins alternately embrace the straight margin of the opposite leaf.

Octandria (οκτώ and ἀνάπε, eight husbands). The name of the eighth class in
in the Linnean system; comprehending those plants which have hermaphrodite flowers with eight stamens.

**Octofidus calyx.** An eight-cleft calyx, as in *Tormentilla*. See *Cleft*.

**Oleraceae.** See *Holeraeae*.

**One-celled Capsule.** *Capsula unilocularis*. As in *Primula, Trientalis, &c.*

**One-flowered Glume.** *Gluma uniflora*. Including one flower only.—A one-flowered peduncle. *Pedunculus uniflorus*; sustaining one flower.

**One-leafed Calyx.** *Monophyllus*. All of one piece.

**One-petalled Corolla.** *Monopetala*. All of one piece.

One-ranked. See *Secundus*.

**One-seeded Berry.** *Bacca monosperma f. monopyrena*.

**One-sided.** *Unilateralis*. Applied to a raceme.
raceme which has all the flowers inserted on one side.

One-valved. *Univalvis*. Applied to the Glume in some Grasses—to a Spathe opening on one side—to a Pericarp which has the outer shell undivided.

Opacum folium. An opaque leaf. Dark-coloured; not reflecting light: in opposition to Nitidum, or Lucidum.

Operculum (*operio*, to cover). A lid or cover to a capsule: as in some Mosses, and Hyoscyamus.—Hence such a capsule is said to be Operculata, Operculate, Opercled, or covered with a lid.—Some use Lidded, which I cannot approve.

Opposita folia. Opposite leaves. Growing in pairs, each pair decussated, or crossing that above and below it.—*Oppositi rami, pedunculi*. Opposite branches and peduncles.—Contrasted with Alternate.

Oppositifolius pedunculus. A peduncle placed opposite to the leaf. This term is applied also to Stipules.
Opposite-pinnatum: Oppositely-pinnate. See Pinnatum.

Orbiculatum folium. An orbicular, or circular leaf.—Cujus diameter longitudinalis & transversalis æquales, peripheria circinata. Having the periphery of a circle, or the longitudinal and transverse diameters equal.—Applied to a seed which is flat, with a round margin; as in Lens—also to a globular spike.

Orchideæ. The name of the fourth order in Linneus's Fragments; and of the seventh in his Ordines Naturales; containing Orchis and other genera allied to it.

Ordo, an Order. A subdivision of a Class; or the second branch in a System. This subdivision is usually arbitrary; and is adopted principally, that too many genera may not occur at once to be distinguished. —In Linneus's system, the Orders of the first thirteen Classes are taken from the number of pistils in the flower. In the fourteenth and fifteenth, from the pericarp.
O R  O V
carp. In the sixteenth, seventeenth, eighteenth, twentieth, twenty-first, and twenty-second, from the number, &c. of stamens. In the nineteenth, from the disposition and character of the florets.

Orgy a. A Fathom. See Measures.

Os. See Mouth.

Ovale folium. An Oval leaf. *Cu jus diameter longitudinalis superat transversalem, superiore & inferiore extremitate angufliore.* Philos. Bot.—*Ex orbiculato oblongum, utraque extremitate rotundata aequali.* Delin. Pl.—Having the longitudinal diameter longer than the transverse one, and the curvature the same at both ends. In Philos. Botan. the Elliptic leaf is made synonymous with this; but in Delin. Pl. they are distinguished.—In truth, an Oval leaf has nearly the same proportion with the section of a hen's egg; although it has not the difference of curvature at the two extremities which that and the Ovate leaf have. Whereas an Elliptic leaf, as Botanists understand it, is much longer in
in proportion to its breadth, or more eccentric than the Oval.

Ovarium (from Ovum, an Egg). The Ovary or germ; the embryo or rudiment of the fruit. See Germen.

Ovatum folium. An Ovate or Egg-shaped leaf.—Cujus diameter longitudinalis superat transversalem, basi segmento circuli circumscripta, apice vero eodem angustiore. The longitudinal diameter exceeding the transverse one; the base a segment of a circle; but narrower (or having a greater degree of curvature) at top.—The shape of this leaf is that of the longitudinal section of an egg. Egged sounds unpleasant to my ears.—It is frequently confounded, by careless writers, with the Oval leaf: which see.

Ovato-lanceolatum folium. An ovate-lanceolate leaf. Between these two forms, but inclining to the latter.

Ovato-oblongum folium—femen. An ovate-oblong leaf, or seed. Ovate lengthened out.
Ovato-subulata capsula. An ovate-subulate capsule. Between ovate and awl-shaped, but most tending to the latter. As in Aconitum.

Pagina superior—inferior folii. The upper and lower surface of a leaf. Otherwise called supinus and pronus discus.

Pair. Jugum. Applied to the leaflets in pinnate leaves; which are said to be bi-juga, tri-juga, &c. from having two, three, &c. pairs of leaflets.—Two-paired, three-paired, &c.

Palatum. The Palate. Gibbositas prominens in fauce corollæ. Philof. Bot.—Processus labii inferioris superiora versus quo rectus occluditur. Delin. Pl.—A prominence in the throat of a corolla, in Labiate flowers—or, a process of the lower lip, extending towards the upper part, by which the gape or opening is closed.

Palea.
PA

PALEA. A Chaff. Lamella receptaculo innata, flosculos distinguens. A thin membrane, springing from the receptacle, and separating the florets, in some aggregate flowers. Hence such a receptacle is called

Paleaceum. Paleaceous or Chaffy. As in Dipsacus, Scabiosa, &c. See Chaffy.

Paleaceus Pappus. A Chaffy crown or down to some seeds; as in Bidens, Silphium, Tagetes, Coreopsis, &c.

Palmæ. The sixth family; and the first of the nine great tribes, nations, or casts, into which Linneus has divided all vegetables. They are placed in the Appendix to the Artificial System, and take the lead in the Natural Orders, though Linneus had placed them only in the second place, in his Fragments of a Natural Method.

Palmaris mensura. The measure of a palm or hand. See Measures.

Palmata radix. A Palmate root. Consisting of several oblong tubers or knobs, spreading
spreading out like the fingers. As in some sorts of Orchis.

_Palmatum folium._ A Palmate or hand-shaped leaf.—*Longitudinaliter in partes plures subaequales divisum versus basin, quae tamen cohaerent in unum.* Philos. Bot.—_Divisum ultra dimidium in lobos subaequales._ Delin. Pl.—Divided beyond the middle into several lobes that are nearly equal: as in _Passiflora caerulea._ It resembles the hand with the fingers spread; and is one of the simple leaves: whereas the _Digitate_ leaf resembles the fingers spread, without the hand; and, having all the leaflets separate, is one of the compound leaves.

_Panduræforme_ (Paudura, a musical instrument of the guitar kind, in Merfennus) _folium._ A guitar-shaped leaf. (Viol-shaped, _Ray hist._ 174.) The French call it _en forme de violon._—_Oblongum, inferne latius, lateribus, coarctatum._ Philos. Bot. _Oblongum, broader below, contracted on the sides._ In _Delin. Pl._ the explanation is differently worded.—_Oblongum, lateribus_
inferne coar&litatum. Oblong, contracted below at the sides. The former appears to me to be right.—It is exemplified in Rumex pulcher, and Convolvulus panduratus.

Panicula (Dimin. from panica, πανικα comă; or rather from panus, the woof about the quill in the shuttle). Panicle.—Fructificatio sparfa in pedunculis diverse subdivisis. A fructification, or species of inflorescence, in which the flowers or fruits are scattered on peduncles variously subdivided. As in Oats and some of the Grasses.


Panicula densa. A dense or close panicle. A higher degree of the preceding. Or rather, having the flowers close as well as abundant.

Panicula spicata. Approaching in form to a spike: as in several of the Grasses, which are commonly called Spiked Grasses.
Panicula contracta. A greater degree of the foregoing.

Panicula coarctata. A squeezed panicle. Having the pedicels extremely near to each other.

Panicula patens. A spreading panicle. Having the pedicels spreading out so as to form an acute angle with the stalk.

Panicula diffusa. A diffused panicle. Having the pedicels spreading out more and irregularly.

Panicula divaricata. A divaricating panicle. —Spreading out still more, at an obtuse angle with the stalk.

Paniculatus Caulis. A Panicled stem. Having branches variously subdivided.

Paniculata Gramina. Panicled Grasses. Having their fructifications in a panicle.

Papilionacea (Papilio, a Butterfly). A Papilionaceous or Butterfly-shaped corolla.—Irregular, and (usually) four-petalled.
talled. The lower petal is shaped like a boat, and is called *carina* or the keel: the upper petal which spreads and rises upwards, is called *vexillum*, standard or banner: the two side ones stand singly, being separated by the keel, and are called *ala*, the wings.—The keel is sometimes split, and then this corolla is properly five-petalled. These flowers form a natural class, called *Papilionaceae*; and are to be found in the fifty-fifth order of Linneus's Fragments, and in the thirty-second of his Natural Orders. They are chiefly comprehended within the order *Decandria* of the class *Diadelphia*, in the Artificial System.—This is one of Tournefort's classes; and is the same with the *Leguminosae* of Ray and other authors.—The Pea being the most obvious of these, some call them *Pea-blossomed flowers*.

**Papillosum** (Papilla, *a nipple*) *folium*. 
*Quod tegitur punctis vesicularibus*. Philos. Bot. This explanation is, in *Delin. Pl.* more properly referred to *papulosum*; and there the *Papillose leaf* is defined—*tectum punctis*.
punctis carnosis; having the surface covered with fleshly dots or points; and is made synonymous with verrucosum, warted. If so, the term might be spared.

Pappus. (Anciently put for senex, an old man, whence it was applied to the down on the seed of thistles, &c. being like the gray hairs of old age.) Commonly translated Down: but hence arises a confusion between this and the lanugo or tomentum on the surface of leaves, &c. which we usually call down. Pliny however will justify us in some degree: for speaking of the Cactus (l. 21, c. 16) he says—Semen ei lanuginis, quam pappum vocant. Some endeavour to get rid of this difficulty by translating Pappus, the Feather, but I think not successfully; for we cannot say a hairy feather and a feathered feather.—The French name is Aigrette. The Ladies have adopted that term: why may not we? Or if we call it Seed-down, all confusion will be avoided.

Linneus explains it to be—Corona (feminis) pennacea pilosae volitans, A feathery
feathery or hairy flying crown to the feed.—The first he calls *Pappus plumosus*; and indeed it resembles a feather in its structure:—the second, *Capillaris pilosus* or *simplex*; having the hairs undivided. See *Capillary*.—This crown is either placed immediately on the feed, and is then said to be *seffilis* or *seffile*; or else there is a thread interposed between it and the feed, which Linneus calls *Stipes*, and then it is said to be *stipitatus*, stipitate or stiped.—This *Down* or *Egret* is one of Nature's most obvious means of dispersing seeds to a considerable distance.

**Papulorum* folium. (Papula, a pimple.)
A pimply, bladdery or blistered leaf.—*Textum punctis vesicularibus*. Covered with little blisters.

**Parabolicum* folium. A Parabolic leaf. 
*Cujus diameter longitudinalis superat transversalem, & a basil sursum angustatur in semiouvatum*. Philos. Bot. Having the longitudinal diameter exceeding the transverse one, and narrowing from the base upwards
upwards into a half ovate.—In Delin. Pl. it is not so fully expressed—versus apicem sensim angustius rotundatum. Rounded gradually towards the top into a narrower form.

**Parasiticus caulis.** *Parasitica planta.*
A parasitical stem or plant. *Alteri planta* nec terræ innatus. Growing on some other plant, not on the ground.—As *Epidendrum, Tillandsia.*

**Partes primariae.** The primary parts of a Vegetable are—1. The *Root,* descending, imbibing fluid, nourishing. 2. The *Herb,* ascending, breathing air, moving. 3. The *Fructification,* expanding, inhaling ether, generating.

**Partialis umbella.** A partial Umbel: otherwise called *Umbellula.* A smaller umbel, proceeding from the general or universal umbel.—*Umbellula quæ prodiiit ex universali.*—The involucre at the foot of this is called the Partial involucre. *Involucrum partiale.*—*Pedunculus partialis,* a Partial peduncle, is a subdivision of a common
a common peduncle. See Umbella and Pedunculus.

**Partition.** Diffepimentum. A wall separating a pericarp internally into cells. —This is either Parallel: that is, approaching in breadth and its transverse diameter to the valves: as in Lunaria and Draba. Or, Contrary; that is, narrower than the valves; or, as it is expressed more fully in Detin. Pl.—narrower, when the valves by being squeezed or contracted become concave. Augustinus ubi valvulae coarctatae evadunt concave.—This is exemplified in Biscutella and Thlaspi.—Linneus borrowed these terms from Tournefort; and says that they are to be understood cum grano falis.—I should have conceived a parallel partition in a siliqua or pod to have been in the direction of the valves—a contrary or transverse one, at right angles with the valves.

**Partitum folium.** A Parted leaf. Simple, but divided almost down to the base.—According to the number of divisions it is called—Bipartitum, Tripartitum, &c. Bia-
partite or two-parted; Tripartite or three-parted, &c.—It is applied in the same sense to the Perianth and Corolla.

**Patens folium.** A Spreading leaf. *Quod ad angulum acutum cauli insidet.* Forming an acute angle with the stem or branch on which it is placed; between erect and horizontal. Applied also to the Stipule and the Petiole.

**Patentes Rami.** Spreading branches. Making an acute angle with the stem.

**Patentissima folia f. petala.** Leaves or petals spreading very much: making almost a right angle with the stem or peduncle.

**Patulus (dimin. of Patens) calyx;** as in Sinapis, and Ranunculus acris and repens. *Pedunculus;* bearing the flowers loose or dispersed; opposed to coarctatus, squeezed or contracted.—I do not know that there is any difference in sense between Patens and Patulus.

**Pectinatum folium.** A Pectinate leaf.

A fort
A sort of pinnate leaf, in which the leaflets are toothed like a comb: as in *Artemisia pedatifida*.

**Pedatum folium** (Pes, a foot,). A Pedate leaf. *Cum petiolus bifidus latere tantum interiore adnecit foliola plura*. When a bifid petiole connects several leaflets on the inside only. This is a species of Compound leaf, and bears some resemblance to a bird’s foot. It is exemplified in *Passiflora, Arum* and *Helleborus foetidus*. It is applied also to the Raceme.

**Pedatifidum folium.** A pedatifid leaf. This is to pedate, what pinnatifid is to pinnate; the parts of the leaf not being separate; but connected, as in the feet of water fowl. Exemplified in *Arum musceivorum*.

**Pedicellus.** A Pedicel or Pedicle.—In *Philos. Botan.* it is interpreted—*pedunculus partialis*, a partial peduncle. But in *Delin. Pl.* a Partial peduncle is a sub-division of a Common peduncle, supporting a few flowers.—The genuine notion of.
of a Pedicel is, that it supports one flower only where there are several on a peduncle; or, it is the ultimate subdivision of a common peduncle, immediately connected with the flower itself.

Pedunculus (dimin. from Pedo, pedare, the same with fulcire, or prop or support. I am at a loss to conceive how Dr. Berkenthout came to derive it from the noun Pedo, splay-footed). A Peduncle. By older writers called the Foot-stalk; by several moderns the Fruit-stalk. To the first of these I object, because we have then the same term for the support of the fructification and of the leaf: to the second, because, the peduncle being the support of the flowers as well as the fruit, we are reduced to the absurdity of saying a many-flowered Fruit-stalk. To both I object, because Peduncle is generally received, and is intelligible in every nation where Botany is studied.

The peduncle is the fulcre of the fructification, or a partial stem supporting that only. The explanation in Philos. Bot. is thus
thus expressed—*truncus partialis elevans fructificationem, nec folia.*—In Delin. Pl. thus—*fulcrum sustinens fructificationem.*—In Regn. Veget. it is said to be *ramus caulis floriferus*; a flower-bearing branch from the stem. The last is the least accurate of the three; and wants the exclusion of the leaves, as in the first.

Ray and other old writers use the classical term *Pediculus* for the foot-stalk of a leaf, flower, or fruit. Linneus probably changed it for *Pediculculus*, because the former signified a sort of insect, as well as the little stalk that supports a fruit.

With respect to its Place, a peduncle may be

1. *Radicalis.* Radical, or proceeding immediately from the root: as in the Primrose.

2. *Caulinus.* Cauline, or proceeding from the stem.

3. *Rameus.* Rameous, or proceeding from a branch. These may be called in English
English—*a root-peduncle—a stem-peduncle—a branch-peduncle.*

4. *Petiolaris.* Petiolary, or proceeding from the petiole.

5. *Cirrhiferus.* Cirrhiferous, or tendril-bearing.

6. *Terminalis.* Terminating or proceeding from the top of the stem.

7. *Axillaris.* Axillary, or proceeding from the angle made by the leaf and stem, or the branch and stem.

8. *Oppositifolius.* Opposite to a leaf.

9. *Lateriflorus.* Having the flower on the side of it.

10. *Interfoliaceus.* Among the leaves—I rather think that this is a mistake for *Intrafoliaceus,* within the leaf.

11. *Extrasoliaceus.* Without or on the outside of the leaf.

12. *Suprasoliaceus.* Inserted into the stem higher than the leaf or its petiole.
With respect to their *Situation*, peduncles may be

1. *Opposite* to each other; or, 2. *Alternate*.

3. *Sparsi*, scattered; without any regular order.


With respect to their *Number*, they may be

1. *Solitarii*. Solitary or single.

2. *Geminati*. Double; two together, or in pairs.

In an Umbellule there are several equal peduncles diverging from the same point or centre.

According to the number of flowers which a peduncle bears it is called *uniflorus*, *biflorus*, *triflorus*, &c. and *multiflorus*.—One, two, three-flowered, and many-flowered.
With respect to its Direction, a peduncle may be,

1. Appressus. Pressed close to the stem.
2. Erectus. Upright.
5. Resupinatus. Upside down.
7. Nutans. Nodding. Curved downwards more than in n. 6. but less than in n. 4.
8. Ascendens. Rising gradually.
9. Flaccidus. Weak, so as to bend with the weight of the flower.
10. Pendulus. Loose, so as to tend downwards with the leaf.
11. Strictus. Stiff and straight.
12. Flexuosus. Bending this way and that.
With respect to its Measure, a peduncle is,

1. *Brevis*—*brevissimus*. Short, very short.

With respect to its Structure, a peduncle is,

4. *Filiformis*. Like a thread. Of the same thickness in all its parts.
5. *Attenuatus*. Tapering gradually towards the top.
6. *Incrassatus*. Growing gradually thicker towards the top.
10. *Foliatus*. 


Peduncularis. Growing from a peduncle: as some tendrils do.

Pedunculatus flos—verticillus. A peduncled flower or whorl: in opposition to one that is close to the stem—sessilis.

Peltata. A flat fructification on some Lichens, resembling a round shield; whence its name.

Peltatum folium. A Peltate or Target-shaped leaf. Having the petiole inserted into the disk of the leaf, instead of the edge or base, as is most usual. As in Nymphaea, Hernandia, Colocasia, Hydrocotyle, Tropæolum, Geranium peltatum.—Applied also to a stigma, when it is round and flat, like a pelta.

Penicilliformis appendix. An appendix
to the keel of the corolla in some sorts of *Polygala*; in shape of a Painter's pencil.

*Penicilliforme stigma.* A pencil-shaped stigma: as in *Milium*.

*Pennatum folium.* Bay. A feathered leaf. The same with *Pinnatum*, which see.

*Pentacocca capsula.* A pentacoccos or five-grained capsule. Swelling out in five protuberances; or having five united cells, with one seed in each.

*Pentagonus caulis.* A pentagonal or five-cornered stem. It is a species of Linneus's Ancipital stem, and he seems to distinguish it from *Quinquangularis.*—He describes the capsule of *Euonymus* as being *Pentagona, quinquangularis*.

*Pentagynia.* The name of one of the Orders in the fifth, tenth, eleventh, twelfth, and thirteenth classes in the Linnean System; containing those plants which have five pistils in a hermaphrodite flower.

*Pentandria.* The name of the fifth class in Linneus's system; comprehending those plants
plants which have hermaphrodite flowers with five stamens.

**Pentapetala Corolla.** A pentapetalous or five-petalled corolla; or a corolla of five petals: as in the *Umbellatae*, &c.

**Pentaphyllus Calyx.** A pentaphyllous or five-leaved calyx, or rather perianth: as in *Cistus, Adonis, Cerbera*.

**Perennis Radix—Caulis.**—A perennial root or stem. Continuing more than two years.

**Perfectus flos.** A perfect flower. Having both stamen and pistil; or at least anther and stigma: the same therefore with *Hermaphrodite*. Delin Pl.—In Philos. Botan. it is synonymous with *Petalodes* of Tournefort.—But the having a corolla only is by no means sufficient to constitute perfection in a flower, according to Linneus's idea: neither does the want of it argue imperfection.

**Perfoliatum folium.** A Perfoliate or perforated leaf. *Si basis folii undique cingat transversim caulem*. Philos. Bot.—*Basi
transversum cingente (nec antice debifeente) caulem. Having the base of the leaf entirely surrounding the stem transversely (without any opening in front).—The latter clause of this explanation added in Delin. Pl. is not absolutely necessary to discriminate this from the stem-clasping leaf (Amplexicaule); if the terms of the two explanations in Philos. Bot. be carefully attended to. The base of that is said to surround the sides of the stem; whereas in this, the base encircles it quite round; so that it seems as if the stem had been driven through the middle of the leaf. The Perfoliate leaf is well exemplified in Bupleurum rotundifolium.

After all, Folium perfoliatum appears to me to be an improper term. I should rather have said Caulis perfoliatus; a perfoliate stem.

Perforatae. The name of the sixtieth order in Linneus's Fragments of a Natural Method. So called because the plants contained in it have the leaves perforated with small holes.
**Perforatum folium.** A Perforated leaf. Full of small holes, very apparent when held up to the light. As in Hypericum.

If there be any difference of meaning in the three terms *Perforatum, Pertusum, Punctatum*; the first may be rendered *Perforated*; the second *Punched*; and the third *Dotted*. In Delin. Pl. they are set down as synonymous, and are explained to be—*adspersa punctis excavatis*: that is, having hollow dots scattered over the surface. In Philos Bot. we find only the term *Punctatum*, explained in the same manner. There also (p. 211) mention is made of leaves that are dotted underneath; as in Anagallis and Plantago maritima.

The term *Perforatum* is applied also to a Stigma, having a hole bored through it.

**Perianthium** (*περι about, and αὐτὸς a flower*). The Perianth, or calyx of a flower when contiguous to the other parts of fructification. *Calyx fructificationi contiguus.*—In Regn. Veget. it is—*corolae approximatum*: but it frequently happens that
that a flower has a perianth with any corolla.—The Perianth is often, but improperly, called the calyx exclusively; for this latter term has a more extensive signification. See Calyx.

Perianth of the fructification, includes the stamens and germ.

Perianth of the flower, contains the stamens without the germ.

Perianth of the fruit, contains the germ without the stamens.

For the difference between Perianth and Bracte, see Bractea.

1. Perianthium Caducum. A caducous perianth. Falling before the flower opens.—Deciduum, deciduous. Falling after the flower opens.—Persistens, permanent. Continuing after the flower is withered.

2. Proprium, Proper. Belonging to one flower.—Commune, Common. Belonging to several.

3. Mono-


5. Tubulofum.—Patens.—Reflexum.—Inflatum.—Tubular. Spreading. Reflex. Inflated, hollow, or puffed up like a bladder.

6. Abbreviatum.—Longum.—Mediocre.—Abbreviated; or shorter than the tube of the corolla.—Long; that is, longer than the tube. Middling; or about the same length.


9.Æquale. Equal. Having all the parts corresponding in size and proportion.—Inequate, Unequal.

10. Labiatum, Labiate, or lip-shaped.


12. Imbri-
12. *Imbricatum, Imbricate.*—*Squarrosum.* Squarrose, or having a ragged appearance, from the irregular disposition of the scales.—*Calyculatum.* Calyced. Having a smaller calyx or perianth at the base of the larger. *Scariosum* Scariose. Tough, thin, and semi-transparent.—*Turbinatum.* Turbinate, top-shaped: inversely conical: shaped like a boy's top or a pear.

**Pericarpium** (περικάρπιον, and καρπός fruit or seed). A Pericarp, Seed-vessel or Seed-case. *Viscus gravidum feminibus, quae matura dimittit.*—*Vasculum féminal producens dimittensque.*—*Ovarium fecundatum.* Philos. Bot. 52, 56, 92.—*Germin desfloratum feminiferum.* Regn. Veg.—A viscus big with seeds, or a vessel producing seeds, which it lets drop when they are ripe.—Or it may be considered as the ovary or germ fecundated, or arrived to a state of maturity, after the flower is past; containing ripe seeds analogous to fruitful eggs.

The most remarkable pericarps are the *Capsule*

Pericarpium (περί, and χαίτ juba). Involucrum setosum, quod inter foliola busin cingit.—A bristly involucrum, surrounding the base, among the leaflets: in Mosses.

Permanent. Persissens.—Applied to leaves that remain on the plant till the fruit is ripe or after the summer is over—To stipules continuing after the leaves drop off; as in the class Diadelphia, and the order Polygynia of class Icosandria.—To calyces, abiding after the corolla is withered; as in the class Didynamia.

Personata (Persōna a mask) corolla. A personate or masked corolla. Ringens, sed inter labia palato clausa. Ringent, but closed between the lips by the palate. —But surely ringent or gaping with the lips closed, is a contradiction in terms. It would better to define it, a species of labiate corolla which has the lips closed. See Labiatus.

Tournefort,
Tournefort, from whom Linneus adopted these terms, is clear and precise in his distinction. A *Labiate* flower, according to him, is drawn out at bottom into a tube, and is widened out at top either into one or two lips. The pistil becomes a fruit of four seeds ripening in the calyx as in a capsule: as in *Salvia; Horminum, Marrubium, Chamaedrys*.—A *Perfonate* flower differs from this in having the pistil becoming a capsule entirely distinct from the calyx. It has something of the same appearance as the labiate flower; but does not ill represent a mask, or the snout of some animals. This he exemplifies in *Linaria, Antirrhinum, Pedicularis, Melampyrum*.—There are some irregular monopetalous flowers which Linneus includes under his *Rin- gentes*, that are neither *Labiatî* nor *Perfonati* of Tournefort: as *Digitalis* and *Scrophularia*.

**Pertusum.** Punched. Applied to a leaf which has hollow dots all over the surface. See Perforatum.
P E

Pes and Pedalis mensura: The measure of a foot. See Measures.

Petalum (πεταλον, from πεταλος, to expand). A Petal. The Greek word signifies a leaf; but it has been appropriated by Columna, and from him by other modern authors, the flower-leaf.—Tegmen floris corollaceum, Philos. Bot.—The corolla-ceous integument of the flower.—In flowers of one petal, the corolla and petal are the same. In flowers of several petals, the corolla is the whole, and the petals are the parts. Or, to speak more accurately—in a monopetalous flower, the petal is the corolla, exclusive of the nectary: in a polypetalous flower, it is one of the leaves of which the whole corolla is composed.

In the former, it consists of the tube and limb. In the latter, of the claw and lamina.

Petaliforme stigma. A petal-shaped stigma: as in Iris.

Petalinum nectarium. A petaline nectary.
Petalodes flos. A petalled flower; or, a flower having petals; in opposition to {\em Apetalous}, destitute of petals, or having no corolla.

Petiolus. A Petiole, Leaf-stalk or Foot-stalk. {\em Trunci species, adnecfens folium, nec fructificationem}. Philof. Bot. {\em Fulcrum sustinens folium}. Delin. Pl. {\em Ramus folii-ferus, folio proprius}. Regn. Veg.—A partial stem, supporting the leaf, or connecting it with the stem or branch.—It sometimes happens, but very rarely, that the same foot-stalk supports both leaf and fructification, as in Turnera and Hibiscus.

Petiolulus. A Partial Petiole. Connecting a leaflet with the main petiole, in compound leaves.

as in Ricinus, Iatropha, Passiflora, Cassia, Mimosa, &c.

Petiolatum folium. A Petiolate or Petioled leaf. Growing on a petiole or footstalk, inserted into it usually at the base. Opposed to sessile.

Pileus. The cap of a Fungus, expanding horizontally, and covering the fructifications.


Pilus. A hair. Duclus excretorius plantae setaceus. An excretory duct of a plant, in shape of a bristle.—This appears to be an improper explanation of hair by bristle, inasmuch as a bristle is only a stiff hair.—It is a sort of Pubescence.
PIMPLED or pimply leaf. See Papulosum.

PINNA. The large feather of a bird’s wing; or a fin in fish. Applied in Botany to the leaflet of some compound leaves.

A subdivision of the pinna is called Pinnula.

Pinnatifidum folium. A Pinnatifid leaf. By the Lichfield Society called Feather-cleft.—Transversim divisum lacinios horizontalibus oblongis.—A species of simple leaf, divided transversely by oblong horizontal segments or jags—not extending to the midrib.

Pinnatum folium. A Pinnate leaf. Cum petiolus simplex lateribus adnexit foliola plura.—A species of compound leaf, wherein a simple petiole has several leaflets fastened to each side of it.

Conjugatum. Conjugate. Having only one pair of leaflets.

Bijugum. Having two—trijugum, having three—quadrijugum, having four pairs of leaflets.
Pinnatum cum impari. Unequally pinnate. Terminated by a single or odd leaflet.

Pinnatum abrupte. Abruptly pinnate. Not terminated either by a leaflet or tendril.


Pinnatum oppositè. Oppositely pinnate. Having the leaflets placed over against each other in pairs.

Pinnatum alternatim. Alternately pinnate. Having the leaflets alternate along the common petiole.

Pinnatum interrupè. Interruptedly pinnate. Having smaller leaflets interposed between the principal ones.

Pinnatum articulatè. Jointedly pinnate. When the common petiole is jointed.

Pinnatum decursivè. Decursively pinnate. When the leaflets run into one another along the common petiole.

U 3 Pinnulatum
Pinnulatum folium, f. pinnulata pinna. When each pinna is subdivided.

Piperitae (Piper, Pepper). The name of the first order in Linneus's Fragments; and of the second, in his Natural Orders.

Pistillum. Pistil or Pointal.—Viscus fructui adherens, pro pollinis receptione. Philos. Bot.—Viscus interius e medulla: Organum genitale femineum. Regn. Veg. —A viscus or organ adhering to the fruit, for the reception of the pollen.—It is the fourth part of the fructification; and is supposed by Linneus to be a continuation of the medulla or pith.—Its appearance is that of a column or set of columns in the centre of the flower: and, when perfect, it consists of three parts—1. Germen; the Germ or Ovary. 2. Stylus; the Style. 3. Stigma.


Pitcher-shaped. Urceolatus. Swelling or bellying
bellying out like a pitcher. Applied to the calyx, corolla and nectary.

Pith. See Marrow and Medulla.

Pitted leaf. See Lacunosum.

Placenta. See Receptaculum.

Placentatio. Placentation. Est cotyledonum disposito sub ipsa feminis germinatione. The disposition of the cotyledons or lobes in the vegetation or germinating of the seed.—Hence vegetables are distributed into—1. Acotyledones. 2. Monocotyledones. 3. Dicotyledones. 4. Polycotyledones.

Plaited. Plicatus. Folded like a fan. Distinguished from waved by the folds being angular. Applied to the leaf; as in Alchemilla:—to the corolla; as in Convulvulus:—to the nectary; as in Narcissus Tazetta. It is also a term in Foliation and Placentation.

Planta. A Plant. In common language synonymous with Vegetable: but frequently
chiefly used in a more restricted sense. Plants are placed Linneus in the last of the seven Families into which he has distributed the whole Vegetable kingdom. Comprehending all that are not Funguses; Algas, Mosses, Ferns, Grasses or Palms. They are, 1. Herbaceous. 2. Shrubs. 3. Trees. Philos. Bot. p. 37.—In Regn. Veg. he has funk the word Plantæ; and has divided them into Lilia, Herbae, Arbores.

**Planum folium.** A Plane or flat leaf.—Quod utramque superficiem ubique parallellam gerit. Having the two surfaces parallel.—In Delin. Pl. it is—superficie æquali. Having an even surface: but this explanation is defective.

**Plano-convexum Stigma.** A plano-convex stigma. Flat on one side, and rising on the other.

**Plenus.** See Full.

**Plicatus.** Plaited. — Plicatum folium. Quum discus folii versus marginem ad angulos ascendent & descendit.—Plicata foliatio:
Plafted.

**Plumosa or Plumata Seta.** A plumose or feathered bristle. *Villofa, composita.* Having hairs growing on the sides of the main bristle. Resembling a feather.

**Plumosus Pappus.** Plumose, feathered or compound Down. *Pilis pennatis constans—f. villofus compositus.* A flying crown to some seeds, composed of compound or feathery hairs: as in *Crepis, Scorzonera, Tragopogon.* Opposed to Capillary. See *Pappus.*

**Plumula.** The Plume, or ascending scaly part of the Corculum or Heart of the seed.

**Pod.** See *Silica.*

**Pintal.** See *Pillium.*

**Pollen.** Farina, or prolific powder, like fine meal or flower, contained in the anther of flowers; and which, according to Linneus, being moistened with a liquor peculiar
peculiar to it, and lodged upon the stigma burfts like a bladder, and explodes elastically a substance imperceptible to the naked eye; which he calls *Fovilla.*—


Pollen, when exposed to the microscope, is found to put on a great variety of forms in the flowers of different plants. Thus in *Helianthus* it is a prickly ball, like a burr. In *Geranium* it is perforated. In *Symphytum* it is twin or double. In *Malva* it is a toothed wheel. In *Viola* it is angular. In *Narcissus* it is kidney-shaped. In *Borago* it is like a roll of parchment.

**Pollex** I. *pollicaris mensura.* See Measures.

**Polyadelphia** (*poly* many, and *alpha* a brother; several brotherhoods.) The name
name of the eighteenth class in the Linnean system; comprehending those plants which bear hermaphrodite flowers, with three or more sets of united stamens.

Polyandria (τολυς, and ανθρο a husband). The name of the thirteenth class in the Linnean system comprehending those plants which bear hermaphrodite flowers with many stamens (from twenty to a thousand) growing single on the receptacle. The number of the stamens distinguishes this from the first eleven classes; their situation (on the receptacle) separates it from the twelfth class, Icosandria: and their simplicity avoids all confusion with the sixteenth and eighteenth classes—Monadelphia and Polyadelphia.

Polycotyledones Plantæ. Plants which have more than two cotyledons or lobes to the seed; as Pinus, Cupressus, Linum.

Polygama (πολυς and γαμος, several marriages) Planta. A Polygamous plant is that which has hermaphrodite, and either male or female flowers, or both.
**Polygamia.** The name of the twenty-third class in the Linnean system; comprehending those plants which bear hermaphrodite flowers, accompanied with male or female flowers, or both; not enclosed within the same common calyx, but scattered either on the same plant, or on two, or on three distinct individuals. Whence the three Orders of this class—

Some modern reformers have entirely discarded this Class, and thus have simplified the Linnean arrangement, and rendered it more easy to beginners; but they have at the same time wholly mutilated it, considered as a sexual system. We may go on reforming till we reduce it to the simplicity of Rivinus's system; when it will acquire great facility, and at the same time become good for nothing.

This term *Polygamina* or Polygamy, as applied to a compound flower, in the orders of the class *Syngenesia,* signifies that several distinct flowers (called *Florets*) are included
included in one common calyx. These may be all hermaphrodite, as in the first order; or hermaphrodites with female flowers as in the second, third, and fourth.

**Polygonus caulis.** A many-angled stem. Having several (more than six) prominent longitudinal angles. *Delin. Pl.*—But in *Philos. Bot.* it is a species of *Anceps.* *Multangularis* is explained in *Delin. Pl.* to be—excavated longitudinally by several hollow angles. According to this explanation, therefore, the former term refers to the angles in cameo, the second to those in intaglio.—But in *Philos. Bot.* the *Multangular* stem is said to have several prominent angles.

**Polygynia** (*πολύς, and γυνή a wife*). The name of one of the orders, in the fifth, sixth, twelfth and thirteenth classes of the Linnean system; comprehending those plants which have flowers with many pistils.

**Polypetala corolla.** A Polypetalous corolla—or, a corolla of many petals.—*Linneus*
Linneus uses this term in opposition to a monopetalous corolla; that is, consisting of one petal only. By former writers it was commonly put for a flower of more than six petals; and Linneus uses the terms monopetala, dipetala, &c.

**Polyphyllus.** Many-leaved. Applied to the calyx, perianth, involucre, and cirrus or tendril; in opposition to monophyllus, one-leaved.—Here also Linneus uses diphyllus, triphyllus, &c.

**Polysperma capsula—bacca.** A many-seeded capsule or berry: containing several seeds.

**Polystachyus culmus.** A culm bearing several spikes. As in Scirpus lacustris, holoschoenus, and fetaceus.

**Pomaceæ.** The name of the thirty-seventh order in Linneus's Fragments; and of the thirty-sixth in his Natural Orders. Comprehending such plants as bear a Pome, or fruit resembling the apple.

**Pomum.**
Pomum. A Pome. *Pericarpium farctum evolue, capsulam continens.* A pulpy pericarp without valves, containing a capsule. —It includes all the moist fruits which have the seeds lodged in a core; as Apple, Pear, Quince, &c.

Pouch. See Silicula.

Præmorsus. Bitten off. *Præmorsa radix;* not tapering, but ending blunt, and thus appearing as if it were bitten off short at the end, as in *Scabiosa, Plantago, Valeriana.* *Præmorsum folium;* ending very obtusely, with unequal notches.—*Præmorsa corolla:* as in *Althæa.*

Preclæ. Early ripe. The name of an early sort of Grape in Virgil. The fifty-first order in Linneus's Fragments; and the twenty-first in his Natural Orders: comprehending such plants as flower early in the spring.

Prickle. *Aculeus.* A sharp process from a plant, fixed into the bark only: as in Rose, Bramble, Gooseberry, and Barberry. This
This and the Thorn are called Arma by Linneus, and are enumerated among the Fulcres.

Prickles are straight—bent in, incurvi; or bent back, recurvi—When divided, they take the name of Furca, forks or forked prickles; and are called bifid, trifiid, &c. from the number of divisions.


Prismaticus calyx. Prismaticum stigma—pericarpium. A prismatic or prisma-shaped calyx or perianth—stigma—pericarp. Cum lineare polyedrum fit, lateribus planis. Linear, or of the same thickness from top to bottom with several flat sides.

trailing, or prostrate stem, as it is sometimes called, is exemplified in *Convulvulus Soldanella*.

**Prolifer caulis.** A proliferous stem. *Ex-apicis centro tantum emittens ramos.* Putting forth branches only from the centre of the top: as in *Pinus.*—Prolifer flos. A proliferous flower.—*E-centro floris alium protrudens.*—*Cum intra florem (sexpius plenum) alii flores enascuntur.* Having smaller flowers growing out of the principal one: as in *Childing Daisy.*—Prolifer umbella. A proliferous umbel. *Plusquam decomposita.* Every compound umbel is twice divided. In a proliferous umbel, the umbellule is subdivided.

**Prominens dissepimentum.** A prominent partition, in a filicula. Standing out beyond the valves.—*Prominens faux.* A prominent throat or opening in the tube of a corolla: as in *Cyclamen.***

*Prominulum dissepimentum.* A partition somewhat or but a little prominent.
Pronus discus s. inferior pagina folii. The lower side, or surface, or back of a leaf.

Prop. See Fulcrum.

Propago. Semen Musci decorticatum, detegitum 1750. A peculiar name given by Linneus to what he took for the seeds of Mosses; because he supposed them to differ from other seeds in having a naked circle or heart, without cotyledons; a discovery which he made in 1750. But they are now known to be the dust of the capsule, which Linneus mistook for the Anther.

Proprium receptaculum. A Proper or peculiar receptacle. Quod partes unius tantum fructificationis respicit. That which respects the parts of a single fructification: in opposition to a Common receptacle, connecting several florets, as in the Aggregate flowers.—Proprium Perianthium—Involucrum. A Proper perianth, or involucre: respecting one flower only. As in simple flowers. Aggregate flowers have usually both a calyx common to the whole, and a perianth proper to each floret.—Proprius flos—Propria corolla.

A Proper
A Proper flower or corolla. One of the single florets or corollets in aggregate flowers: in opposition to the common or compound flower, consisting of the aggregate of florets, making one whole. —Proprium Nectarium. A proper, peculiar or distinct nectary. Separate from the petals and other parts of the flower.

Prostratus. See Procumbens.

Protruded. See Exsertus.

Pubes. Pubescence. Hiristies omnis in planta. Delin. Pl.—vestiens villostate. All hairiness, or shagginess in a plant; or whatever clothes it with any hairy or villous substance. Linneus's original word was Pubescentia, and he explained it to mean the armour of a plant, by which it is defended from external injuries: thus comprehending Thorns and Prickles under the idea of Pubescence. These however he afterwards separated, and called them with more propriety Arma.—The following are the different forms of Pubescence.

X 2

1. Pili.

2. *Lana*. Wool: or close curled hairs.


9. *Glandulae*. Glands. Small *papillæ* or teats, or excretory ducts in that form.

Glands seem to be improperly enumerated as a species of pubescence.

**Pubescens.** Pubescent. Covered with one of the foregoing sorts of pubescence. Applied to the stem, leaf, corolla, and style.

**Pulposum folium.** A pulpy leaf, filled with a tenacious substance between the two
two surfaces.—Linneus did not originally distinguish this from *Carnosum*, which has a firmer pulp.

**Punched leaf.** See *Perforatum* and *Per-\textit{tusum}*. 

**Punctatum.** Dotted leaf. See *Perforatum*. 

**Pungens.** Pungent, sharp or prickly. 

**Putamen.** The shell of a nut and other fruits allied to it.—Hence 

**Putamineæ.** The name of the thirty-first Order in Linneus’s Fragments, and of the twenty-fifth in his Natural Orders.

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**QUADRANGULARIS caulis.** *Quadran-\textit{gulare folium}*. A Quadrangular stem or leaf. Having four prominent angles.

**X 3** **QUADRI-**
Quadricapsulare pericarpium. A Quadricapsular pericarp. Having four capsules to a flower: as in Rhodiola.

Quadridentatus pappus. A four-toothed Seed-Down. Having four teeth on the edge. As in Rudbeckia.

Quadrididus calyx. A four-cleft perianth: as in Rhinanthis.—Quadrididum folium. A four-cleft leaf. Cut into four segments with linear sinuses, and straight margins.

Quadrijugum folium. A quadrijugous leaf. Pinnate, with four pairs of leaflets.

Quadrilobum folium. A four-lobed leaf. Divided to the middle into four distant parts, with convex margins.

Quadrioculare pericarpium. A four-celled pericarp: as in Euonymus.

Quadripartitum folium. A four-parted leaf. Divided into four parts almost to the base.
Quadrivalve pericarpium. A four-valved pericarp: as in Ludwigia, Oenothera, &c.

Quaterna folia. Four-fold leaves. Growing by fours; or, coming out four together: as in the Stellatae.

Quina folia. Five-fold leaves. Five together in a whorl. As in some of the Stellatae.

Quinatum folium. A sort of Digitate leaf, which has five leaflets on a petiole.

Quinquangularis folium. A five-corned leaf. Having five prominent angles about the disk.—Quinquangularis caulis. A five-corned stem.

Quinquecapsulare pericarpium. Having five capsules to a flower: as in Aquilegia.

Quinquefidum folium. A quinquefid or five cleft leaf. Cut into five segments, with linear sinus, and straight margins. Applied to the corolla—and to the perianth, in Nicotiana.

X 4

Quin-
QUINQUEJUGUM folium. A pinnate leaf, with five pairs of leaflets.

QUINQUELOBUM folium. A five-lobed leaf. Divided to the middle into five distant parts, with convex margins.

QUINQUELOCULARE pericarpium. A five-celled pericarp: as in Pyrola.

QUINQUEPARTITUM folium. A five-parted leaf. Divided into five parts almost to the base.—Applied to the perianth, in Lithospermum.

QUINQUEVALVE pericarpium. A pericarp of five valves: as in Hottonia.

RACEMUS (from φακ, φαγος, acinus racemci). A Raceme.—Anciently signifying a bunch of grapes, or other berries; in the Linnean language it is a species of inflorescence, consisting of a peduncle with short
short lateral branches. *Pedunculo ramis lateralibus instructo.* As in *Vitis* or *Vine*, *Ribes* or *Currant*, &c.

A Raceme may be—

1. Simple, or Compound.

2. One-sided. *Unilateralis.* Having all the flowers growing on one side of the common peduncle.—*Secundus.* All bent or directed the same way.—Pedate—Conjugate.


4. Naked, or leafy.

**Rachis** (*Paxis, the back-bone*) *spicae.* The Spine. *Receptaculum filiforme flosculos longitudinaliter annellens in spicam Delin.* Pl.—*Receptaculum spicae graminis cui flores insculpti.* Regn. Veg.—A filiform receptacle connecting florets longitudinally into a spike: as in *Panicum Crus corvi* and *Crus galli, Lolium,* and many other Grasses.—It has the name from some resemblance which it bears to the spine, when
when it is naked or deprived of the florets. Dr. Withering calls it the Spikestalk.

This term is also sometimes used for the principal rib of a leaf.

Radiata (Radius, a ray) corolla. Radiatus flos. A Radiate or Rayed corolla or flower.—A kind of compound flower, (in the class Syngenesia) consisting of a disk, in which the corollets or florets are tubular and regular; and of a ray, in which the florets are irregular. These are most commonly ligulate; as in Sunflower, Daisy, &c.—Sometimes however they also are tubular, but irregular; as in Centaurea. And sometimes they are naked, or nearly so: as in Artemisia, Gnaphalium.

Radiato-Patens. Radiate expanding: or, spreading out like rays. Applied to the stigma.

Radicalis pedunculus. A root-peduncle; scarcely different from scape, but sustaining only one flower. See Scapus. Radi-


Radicatum folium. A rooted leaf. Radiculas demittens e substantia ipsius folii.—Radicatus scapus; a rooted scape, as in Drosera.

Radicula (dimin. from Radix, a root), a Radicle or Fibre. The fibrose part of the root, by which the stock or main body of it is terminated; imbibing nourishment for the support of the vegetable.


Radix (from Radius, according to some; from rado, as others will have it; but more probably from the Greek ἡρδίς, which however signifies a branch). Alimentum hauriens, herbamque cum fructificatione producens. Philos. Bot.—Organon nutritens

Ragged. See Squarrosus.

Ramentum (a radendo, q. rasura). A small particle of any thing; as gold-dust, saw-dust, or little chips, &c. Applied by Linneus to the small loose scales that are frequently found on the stems of vegetables.

Rameum folium. Rameus pedunculus. A branch-leaf. A branch-peduncle. Growing on, or proceeding from a branch. In opposition to such as proceed from the root, or axils, or grow on the stem itself.


Ramus.
Ramulus. A branchlet, little branch, or twig. A subdivision of the branch.

Ray. Radius. The outer part or circumference of a compound radiate flower; or radiated discous flower, as it is called by others.

Rayed. See Radiata.

Receptaculum (Recipio, to receive). A Receptacle.—Basis qua partes fructificationis connectuntur. The base by which the other parts of the fructification are connected.—By Boerhaave named Placenta; and by Vaillant Thalamus.

1. Proprium. A proper or peculiar receptacle: appertaining to one fructification only. Commune. A Common receptacle: connecting several florets or distinct fructifications, so that if any one of them be removed an irregularity is occasioned.—There are instances of this in the Umbel, Cyme, Spadix and Rachis, as well as in the Compound flowers.

2. Recept. Fructificationis. The Receptacle of
of the Fructification. Common both to flower and fruit; or embracing the corolla and germ.

**Floris.** Receptacle of the flower. The base to which the parts of the flower, exclusive of the germ, are fixed.

**Fructus.** Receptacle of the fruit. The base of the fruit only, remote from the receptacle of the flower.

**Seminnum.** Receptacle of the seeds. The base to which the seeds are fixed: as in *Adonis*.

3. The Receptacle may be, *Nudum.* Naked. Without chaffs, hairs or bristles. *Punctatum.* Dotted.—*Pilosum.* Hairy.—*Setosum.* Bristly.—*Paleaceum.* Chaffy.—*Alveolatum s. favosum.* Honey-combed; divided into open cells, within each of which a single seed is lodged.

Reclinatum folium. A reclined leaf.
Quod deorsum curvatur, ut apex sit base inferior; quibusdam etiam Reflexum dicitur. Philof. Bot.—Deorsum flexum, ut arcus sit base inferior, apice ascendente. Delin. Pl. Bent downwards, so that the point of the leaf is lower than the base. The latter explanation seems very different; if I understand it rightly, as meaning that the bow is lowest at the base, and rises at the point. In Foliation, this term implies, that the leaves are bent downwards towards the petiole: as in Podophyllum, Aconitum, Anemone, Adoxa.

Reclinatus caulis. A reclined stem. Bowed towards the earth: as in Ficus.

Rectus caulis. A straight stem. See Straight.

Recurvatum folium. A recurved leaf.
Deorsum flexum, ut arcus superiora spectet. Delin. Pl.—Bent, or rather bowed or curved downwards, so that the bow or convexity is upwards. This term does not occur in Philos. Bot.—Berkenhout explains
explains it, but I know not on what authority—"bent downward in a greater degree than reclinatum, but not so much as revolutum."

When applied to a Prickle, it is said only to be bent outwards; in opposition to incurvus, bent in.—In the same sense it is applied to the Awn, Petiole, Calyx, and Corolla.


**Refractus.** Refracted. As it were broken.—Refracata corolla. Recurvata angulo acuto. Delin. Pl. Bent back at an acute angle. See Retrofractus.
**Regularis corolla.** A regular corolla. —
Æqualis figura, magnitudine & proportione partium. Equal in the figure, size and proportion of the parts: as in *Privet*, *Lilac*, *Jasmin*, &c.

**Remotus.** Remote. Distant.—Remota folia: opposed to approximata.—Remoti pedunculi opposed to confertii. —Remoti verticilli opposed to contigui, as in *Galeopsis Ladanum*.

**Reniforme folium.** A Reniform or Kidney-shaped leaf. —Subrotundum, basi excavatum, angulis deslitutum. Philof. Bot.—Subrotundum, basi exsulptum absque angulis posticis. Delin. Pl.—Roundish, hollowed out at the base, without angles: as in *Convolvulus Soldanella*, the lower leaves of *Campanula rotundifolia*, *Saxifraga granulata*, *Glecoma hederacea*. —This term is applied also to the anther and Seed.

**Repandum folium.** A Repand leaf.—Cujus margo angulis, eisque interjectis sinusbus, circuli segmento inscriptis terminatur. The rim of which is terminated by angles, having
having sinuses between them inscribed in the segment of a circle.—In Delin. Pl. it is differently described *margine flexuoso*, *tamen plano* : with a flexuose or waving rim, but flat. Properly speaking, says Dr. Berkenhout, having a serpentine margin, without any angles at all. But this by no means agrees with the first explanation from Linneus's *Philosophia Botanica*.—It is clearly distinct from the Undulating or waving leaf; for the curvature in that respects the disk; but in this, the edge only.

**Repens radix.** A creeping root.—*Longe excurrens bine inde germinans, f. radiculas demittens.*—Repens caulis: *radiculas bine inde exsere exserens procumbendo; ut in Hedera, Bignonia.*

**Reptans flagellum.** A runner. As in Strawberry. See Creeping and Runner.

**Resupinata corolla.** Cum *labium superius terram, inferior caelum spectat.* When the upper lip faces the ground, and the lower lip the sky. Or, when that which is
is usually the upper lip (in a labiate corolla) becomes the lower; and the contrary: so that the flower is, as it were, turned upside down; or, in vulgar language, topsy-turvy. This is exemplified in Scrophularia, Ocymum, Ajuga orientalis, the European Violets, and some species of Satyrium.

Resupinatum folium. Pagina superiore inferiore, & contra inferiore superiorefacta. A leaf is said to be Resupinate or turned upside down, when that which is commonly the upper surface becomes the lower; and the contrary.

Reticulata (dimin. from rete, a net) corolla, petala. A netted corolla. Netted petals. Having distinct veins crossing like net-work.—Beautifully exemplified in Geranium fritiatum.

Retroflexus. Retroflex.—Rami retroflexi: horsum vorsium divaricati. Bending this way and that, in different directions, usually in a distorted manner. Thus it seems to differ from Reflex, which is only Y2 simply
simply bent back at an angle. Dr. Berkenhout explains it to be three times bent, or bent in three different directions. But for this I know not that he has any warrant, either from the sense of the term, or the explanation. It does not occur in *Philosophia Botanica*.

**Retrofractus.** Retrofracted. Applied to the Peduncle.—*Vi quasi ad dependentiam redactus*. Delin. Pl.—Reduced to hang down as it were by force. So that it appears as if it had been broken.—I do not discover any reason why this and the foregoing term should have a different signification from *Reflexus* and *Refractus*.

**Retusum folium.** A Retuse leaf. *Quod terminatur finu obtuso*. Ending in a blunt sinus: as in *Frankenia pulverulenta*, *Cro-talaria retusa*.—Applied also to the seed in *Lycopus*.

**Revolutus.** Rolled back or downwards.

—*Revoluta vernatio s. foliatio*. Revolute foliation or leafing. *Quorum margines laterales*
laterales utrinque retroflexum, f. versus paginam inferiorem spiraliter convolvuntur. When the sides of the leaves (in the bud) are rolled spirally back, or towards the lower surface.—Revolutum folium. A revolute leaf. Quod dorsum revolvitur.—Having the edges rolled back or towards the lower surface: as in Rosemary, Teucrium fruticans.—Revolutus cirrus. A revolute tendril. Spira dimidio itinere reverta. When a spire of the screw, having made half a revolution, turns back in a contrary direction.—Revoluta corolla. A revolute corolla: having the petals rolled back, as in Asparagus, Medeola, Lilium chalcedonicum.—Revoluta valvula. A revolute valve. Turned back after it opens: as in the folia of Cardamine.—This term is opposed to Involute or rolled inwards.

Rhoeades f. Rhoeadeæ (from Rhæas, Corn Poppy). The name of the thirtieth order in Linnaeus's Fragments, and of the twenty-seventh in his Natural Orders; containing vegetables allied to the Poppy.

Y 3 Rhom-
Rhombeum folium. A Rhombed or rhomb- shaped leaf. Having four equal sides, but the angles not right angles: as in Poplar. —Linneus has not this term in his Philo- sophia Botanica; but his Deltoid leaf seems scarcely to differ from it.

Rhomboideum folium. A Rhomboid leaf. Having the opposite sides equal, and the angles not right ones: as in Chenopodium viride. This also seems included in the Deltoid leaf of Philo. Botan.

Rib. Costa. The continuation of the petiole along the middle of a leaf, and from which the veins take their rise.

Ribbed. Costatum: which see.

Rictus. The Gape. Hiatus inter utrumque labium. The opening between the two lips in a labiate flower.

Rigidus. Rigid, stiff, inflexible, impatient of bending: opposed to laxus. Applied to the stem, leaves and bristles.—The stem is called Rigofus in Glinus dictam- noides. Has this term the same meaning with
with the other? But *rigosus* should be derived from *Rigo*, not from *Rigeo*.

**Rimosus.** Rimose or Chinked. Abounding in cracks, clefts, or chinks; as the outer bark of some trees.

**Ringens** (from *γνος, nares*, the nostrils, whence *riçlus*) corolla. A ringent corolla. *Irregularis in duo labia personata.*—*Monopetala irregularis, & limbo divisò in duo labia.* Philos. Bot. pl. 52, 135. An irregular one-petalled corolla, the border of which is usually divided into two parts, called the *upper* and *lower lip*. The first has sometimes the name of *Galea* or *Helmet*: the second of *Barba* or *Beard*. The opening between them is named *Riçlus* or the *Gape*: the opening of the tube, *Faux*, the *Throat* or *Jaws*: the prominent swelling in the *Faux* is *Palatum*, the *Pulacre*: the upper part of the tube is *Collum*, the *Neck*. The Ringent corolla is exemplified in the clafs *Didynamia.*—See *Labiatus*.

**Rising leaf or petiole.** See *Aurgens.*
Rolled back. See Revolutus.

Root, Radix. That organ of a vegetable which draws in the nourishment, and produces the herb with the fructification. — It is composed of Medulla or Pith, Wood, inner and outer Bark: and consists of the Caudex, stock or main body; and the Radiculae or fibres, by which the moisture is immediately imbied. We commonly regard all that part of a vegetable only which is under ground as the Root; but Linneus comprehends the ascending caudex, or what we commonly term the body, trunk or bole, within his idea. According to him, therefore, trees and shrubs are all root, except the leaves and fructification; and consequently if a tree be turned upside down, the descending caudex will produce leaves, and the ascending caudex will put forth fibres.

A Root in Duration is,

In Form,
a. 4. Fibrose. 5. Branching. 6. Fusiform. 7. Præmorſe or bitten off.

In Substance,
23. A Fibril.

Rooting Stem. Caulis Radicans. Bending to the earth and striking root, but not creeping along.—A rooting leaf. Folium radicans. Shooting forth roots; as in some aquatic plants: this is sometimes called Folium radicatum.

Root-Leaf. Folium radicale. Proceeding immediately from the root, or growing next the ground: frequently different from
from the leaves on the stem and branches; as in Campanula rotundifolia.—Peduncles sometimes spring from the root, and may be named Root-peduncles.

**Rootlet, Radicle, or Fibre.** See Radicula.

Root-leaf and Rootlet are more proper in English than Radical leaf and Radicle, on account of the analogy.

**Rosacea corolla.** A Rosaceous or Rose-like corolla. A species of the Polypetalous; consisting of four or more regular petals, inserted into the receptacle by a short, broad claw; as in the wild Rose. This is a term of Tournefort’s; and such flowers form his sixth class, entitled Rosacei.

**Rostellum** (dimin. from Rostrum, a beak). The Rostel, or descending plane part of the Corele or heart, in the first vegetation of the seed.—Pars corculi simplex descendens.

**Rostratus fructus.** A beaked fruit. Having a process resembling the beak of a bird: as in Geranium, Scandix Pecten.
**Rotaceae** (*Rota*, a wheel). The name of the fifty-second order in Linneus's Fragments; and of the twentieth in his Natural Orders.

**Rotata corolla.** A Wheel-shaped corolla. Monopetalous; spreading flat, without any tube: as in *Borago, Veronica, Lysimachia.*—Applied to the nectary in *Narcissus poeticus*.

**Rotundum folium.** A round leaf. *Quod angulis privat*ur. Philos. Bot.—In p. 233, *Rotundatum* is opposed to *angulatum.*—By this term therefore Linneus does not mean a circular, or what we should call a round leaf, in English; but one which has a curve without any breaks for the circumscripting line. *Orbiculatum* is his term for circular or round.

**Rotundo-trigonum.** Obtusely three-cornered or three-sided with the corners rounded off: as in the germ of *Hyacinthus*.

**Rough:** *Asper.* Made synonymous with *Scaber* by Linneus.—He uses it however in a sense much more general.
Roughened. Exasperatus.—Applied to the calyx.

Round and Rounded. Rotundum and Rotundatum. Bent into a curve. For Circular see Orbiculatum.


Rugged or Scabrous. Scaber. Rough with tubercles, or prominent stiffish points. Applied to the leaf and stem: also to the calyx of the Oak.

Rugosum folium. A Wrinkled leaf, Cum venæ foliorum contraæiores evadant quam discus, ut interjecit substantia ascendent. When the veins are more contracted than the disk, so that the intermediate substance rises above them. As in Sage, Primrose, Cowslip, Cistus incanus, &c.

Runcinatum folium (Runcina, a large saw). A Runcinate leaf. Pinnatifidum, ita ut lobi antice convexi, postice sint transversi. A sort of pinnatifid leaf, with the lobes
lobes convex before and straight behind, like the teeth of the large double saw used in sawing timber. Exemplified in common Dandelion. This term does not occur in Philosophia Botanica, and was not originally distinguished by Linneus from his Pinnatifid leaf, of which it is only a variety.—Runcina seems rather to be a plane.

**RUNNER.** Reptans flagellum. A shoot producing roots and leaves at the end only, and thus propagating the plant: as in Strawberry. See Sarmentofus.

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**S**

**SABRE-SHAPED leaf.** Folium Acinaciforme. See Acinaciform.

**SAGITTATUM folium** (from Sagitta, an arrow). A Sagittate leaf. Shaped like the head of an arrow,—Triangulare, basi excavatum, angulis poslicis instructum. Philof Bot.—Triangulare, angulis poslicis
cis acutis finu divisis.—Triangular, hollowed at the base, with angles at the hinder part—or, with the hinder angles acute divided by a sinus.—As in Convolvulus arvensis and Sepium. Sagittaria. Rumex Acetosella, or common Sorrel. Erica vulgaris, or common Heath.—This term is applied also to the Stipula, as in Pea, and Anther, as in Crocus, Elder, &c.

**Salver-shaped. Hypocrateriformis corolla.** Monopetalous, rising from a tube, with a flat border.

**Sap. Succus.** The juice or watery part of the vegetable.—Also the tender white part of the wood (Alburnum), in trees; newly formed from the liber or inner bark.

**Sarmentaceae** (Sarmentum, the twig or spray of a vine; from ἄρπο to prune, which is from the Greek ἄρπω, and that from ἄρπη, a pruning-knife). The name of the forty-ninth order in Linneus's Fragments; and of the eleventh in his Natural Orders.
Sarmentosus caulis. A Sarmentose stem.
Repens subnudus. Philof. Bot.—Filiformis geniculis radicantibus. Delin. Pl.—Fili-
iform, almost naked; or having only leaves in bunches at the joints or knots, where it strikes root.—It seems to be in shrubs, what the runner is in herba-
ceous plants. See Runner and Flagel-
lum.

Scaber. Scabrous or Rugged; something like Shagreen.—Punctis eminentibus rigi-
diisculis exasperatus. See Rugged. Hence

Scabridæ. The name of the twentieth Order in Linneus's Fragments; and of the fifty-third in his Natural Orders.

Scabrities. Ruggedness. Componitur par-
ticulis, nudis oculis vix manifestis, quibus ad-
spertitur plantarum superficies.—A sort of Pubescence, composed of particles scarcely visible to the naked eye, scattered over the surface of vegetables.

Scabrous. See Rugged.
Scalloped leaf. This term may be applied to the *folium Repandum*, which see.

**Scaly.** Squamosus. A scaly root or bulb: composed of scales lying over each other; as in the *Lily*.—A scaly stem or peduncle: having scales scattered over it.

Scandens caulis. A scandent or climbing stem. *Alta petens, aliis sustinendus*. Weak, and requiring support in mounting; the clasper or tendril is usually the agent; as in the Everlasting Pea, and many other Leguminous plants.—It is different from *caulis volubilis*, which mounts by twining.

Scapus (from *σκηπος*, to lean upon; whence *σκηπων*, *σκηπανων*, and *σκηπερον*, and the Latin *scutium*, for a staff; and *scapus*, the shaft of a column, and the straight stalk of an herb resembling it.) A scape or shaft. —According to Linneus—*truncus elevans fructificationem, nec folia*. A stem bearing the fructification, without leaves: as in *Narcissus, Pyrola, Hyacinthus*, &c. *Pedunculus* would with more propriety be rendered *Flower-stalk* than this.
Scariosum folium. A Scariose leaf. Called Skinny by Dr. Withering. Substantia fìca a rida tabe sornra. Of a dry substance, innoxious to the touch.—Applied to a pangth, which is membraneous, tough, thin, and semi-transparent; as in Statice Armeria, or Thrift, Centaurea glastifolia, &c.—Also to the nectary; in Narcissus poeticus—Spike, &c.

Scattered. Sparsus. Applied to branches, leaves, &c. which come out without any apparent regular order. See Sparsus.

Scitamina. Scitamina. (Scitamentum f. Scitum edulium. An eatable of a racy flavour, pleasant spicy plants.) The name of the third order in Linneus's Fragments; and of the eighth in his Natural Orders.
—In the Artificial System these are in the first class.

Scored stem. Fruratus caulis. Marked deeply with parallel lines, or rather grooves.
—It does not seem to differ from fulcatus, furrowed or grooved.

Z Scu-
Scutellum (dimin. from Scutum, a buckler). *Fructificatio* (Lichenum) orbiculata concava, margine undique elevato.—An orbicular concave fructification (in some Lichens), with the edge raised all round. The *Pelta* is flat.

Scymitar shaped. See *Acinaciform*.


Secundus (*Sequundus, a sequendo*, from following). *Floribus ad unum idemque latus versis.*—All turned towards one side—pointing one way—directed or inclining the same way. We have no proper English term for this. *One-ranked* tends to mislead, because a plant may have more ranks or rows of flowers than one directed to the same point of the horizon, or nearly so.—It is exemplified in the flowers of *Erica herbacea*—in the spike of *Dactylis cynosuroides*—and in the panicle of *Dactylis glomerata*, several of the *Festuceae*, &c.

*Seed.*
**SEED.** *Semen.* The rudiment or embryo of a new plant. Or, the deciduous plant of a vegetable, containing the rudiment of another vegetable of the same species, vivified by the pollen.—It is analogous to the egg in animals.

A Seed consists of three principal parts—1. The Tegument or skin. 2. The Albumen splitting into cotyledons or lobes. 3. The Corculum, Corcle or heart.—Some seeds also have a *Hilum* or eye—others an *Aril*—others again a coronet, *Coronula*: which is either the calyx adhering; a *Pappus* or Down; a wing, tail, hook, awn, or other process, to assist in their dispersion.

**Seed-bud.** See *Germen*.

**Seed-coat.** See *Aril*.

**Seed-leaves.** The primary leaves; being the cotyledons or lobes of a seed expanded, and in a state of vegetation.

**Seed-lobes.** See *Cotyledon*.
Seed-vessel. See Pericarpium.

Segmenta. Segments. The parts into which a calyx is cut.

Segregata Polygania. Segregate Polygamy. Cum flosculi plures Calyce communi comprehensi propriis Perianthiis etiam in- struuntur. When several florets comprehended within a common calyx are furnished also with their proper perianths.—These constitute the fifth order of the class Syngenesia.

Sejugum folium. A sejugous leaf; or a pinnate leaf having six pairs of leaflets.

Semen. See Seed.

Semiamplexicaule folium. A half-stem-clasping leaf. Embracing the stalk half way.

Semicolumnar. See Semiteres.

Semiflosculus. A Semifloret. Flos se-miflosculosus. A Semiflosculous flower, or a flower
a flower composed of semiflorets. These are terms of Tournefort's; and answer to the corollula and corolla ligulata of Linneus. Ray calls such compound flowers —planipetali. Hence

Semiflosculose or Semiflosculosi, the name of a sub-division in the order of compound flowers, both in the natural and artificial system of Linneus: comprehending such as are made up wholly of fertile ligulate florets; as Dandelion, Lettuce, Sowthistle, Hawkweed, &c.

Seminale folium. See Seed-leaves.

Seminatio. Semination, or the natural dispersion of seeds.

Semiorbiculatum fæmen. A semiorbicular seed. In shape of half a sphere.

Semiquinquefidos calyx. A half-five-cleft calyx.
Semisagittata stipula. Shaped like half the head of an arrow: as in Ervum tetra-


Semiteres. Semicolumnar. Flat on one side, and rounded on the other; as the stem of Allium vineale—and the leaves of Narcissus Jonquilla. Linneus calls them Semicylindracea.—Applied also to the petiole.

Sempervirentia folia. Evergreen leaves. This is an improper expression: for though the plant be evergreen, the leaves are not so.

Sena folia. Six-fold leaves, or growing in fixes; as in Galium spurium, &c. A species or variety of the Stellate leaf.

Senticosæ (Senticis, a brier or bramble). The name of the thirty-fifth order in Linneus's Fragments, and Natural Orders.

Sepiariae (Sepes; a hedge). The name of the twenty-fifth order in Linneus's Fragments; and of the forty-fourth in his Natural Orders: containing the hedge plants.

Sericeum folium. A Silky leaf. Tectum pilis appressis mollissimis. Covered with very soft hairs pressed close to the surface.

Serpentine. See Rependum.

Serrat us (from Serra, a saw). Serrate, toothed like a saw—but not sawed. Quod angulis acutis imbricatis extremitatem re- spicientibus notatur. Having sharp imbricated notches about the edge, pointing towards the extremity. The direction of the notches is the essential character of the Serrate leaf. They are not always imbricate, and that circumstance is omitted in Delin. Pl.—This term is applied to the leaf
leaf in *Vaccinium Myrtillus*, *Arbutus Unedo* and *alpina*, *Papaver orientale*, and many others.

When a ferrate leaf has small serratures upon the large ones, it is said to be Doubly-ferrate, *Duplicato serratum*: as in *Elm*.

The term Serrate is applied also to the calyx in *Hypericum*—to the Corolla in *Tilia, Alisma*—and to the Stipule.

*Serrato-ciliatum folium*. A Serrate-ciliate leaf. Having fine hairs, like the eyelashes, on the serratures.

*Serrato-dentatum folium*. A Serrate toothed leaf. Having the serratures toothed.

*Serrulatum folium*. A ferrulate leaf. Finely ferrate, with very small notches, or teeth.

*Sesquialter flocculus*. A Sesquialteral floret. When a large fertile floret is accompanied by a small abortive one: as in *Aira villosa*. 
villosa. Haller applies this term to flowers in which the stamens are half as many again in number as the leaves or segments of the calyx or corolla.

Sessile folium. A Sessile leaf. Connected immediately with the stem or branch, without the intervention of a petiole: opposed to the Petioled leaf.—Applied to a flower which has no peduncle: as in Trillium sessile.—To the Crown, Pappus or Down, which having no stipe is placed immediately on the seed: opposed to Stipitate or Stiped.

Seta. A Bristle. A strong, stiff, roundish hair. A sort of pubescence.—Linneus also puts it for the scape of the capsule in Mosses.

Setaceous. Bristle-shaped. Having the thickness and length of a bristle. Applied to the leaf; and to the leaflets or divisions of the calyx.

Setosus. Bristly. Having the surface set with bristles. Applied to the Leaf and to
the Receptacle.—These two terms are sometimes confounded, though nothing can be more distinct.

Sexangularis caulís. A hexangular stem: as in Eriocaulon.

Sexfídus calyx. Sexfíd, or six-cleft; as in Pavía.—Sexfídum necláríum. A six-cleft nectarí: as in Nárcíssus minor.

Sexloculare pericáríum. A six-celled pericarp: as in Asírum, Aristólóchia.

Sexus. Sexes in vegetables are, 1. Male. 2. Female. 3. Hermaphrodite. Having the two first in the same flower. 4. When they are separate, either on the same or different individuals; such plants are called Androgy nous. 5. When Hermaphrodites are accompanied with one or both of the two first, such a plant is denominated Polygámus.

Shaft. Put by some authors for the style.

Sharp. Acē tus.

Sharp-pointed or pointed. Acuminātus.

Sheath. Vagina. A membrane investing a stem or branch; as in Graffes.—Very different from Spatha, which see.

Sheathed. Vaginātus. Invested by a sheath or cylindrical membranaceous tube, which is the base of the leaf: as the stem in Polygonum amphibium, and the culm in Graffes.

Sheathing. Vagināns. When a leaf invests the stem or branch by its base in form of a tube: as in Polygonum, Rumex, Cistus incanus.—Applied also to the Petiole and Stipule.

Shining. See Lucidus.

Shoot. See Surculus.

Shrivelling, or Withering. Marcescens. Decaying without falling off: as the corolla of Plantain.

Shrub. Frutex. In its general acceptance,
tion, it is a vegetable with several permanent woody stems, dividing from the bottom, more slender and lower than in trees. Linneus makes the distinction of a shrub from a tree to consist in its having no buds: but trees have not buds in hot climates. He acknowledges indeed that nature has placed no limits between them.

Shrubby. *Fruticosus*. Perennial, with several woody stems.

**Sickle-shaped.** *Falcatus*. Applied to the keel of a papilionaceous flower.

**Silicula** (dimin. from *Siliqua*). A Silicule, Silice, little Pod or Pouch. A two-valved pericarp, having the seeds fixed along both futures, and the transverse diameter equal, or nearly so, to the longitudinal. This pericarp varies in shape; being orbiculate, ovate, or flattened; entire at the end, or emarginate. Hence

**Siliculosa.** The name of the first order in the class *Tetradynamia*.

**Siliqua**. A Silique or Pod. An oblong, mem-
membranaceous, two-valved pericarp, having the seeds fixed along both futures. — The *Silicula* does not differ from this essentially, but only in form and size. Accordingly Linneus, in *Philos. Bot.* gives an explanation common to both—*Pericar- tium bivalve, affirmens femina secundum fut- taram utramque*—and makes no mention of *Silicula*. — The proper *Siliqua* is two-celled, having a partition running the whole length of it. Some pericarps, however, having the same form, take the same name, although they have no partition, and are therefore one-celled; as in *Fumaria*, and *Chelidonium*. — When antique, critique, and burlesque were first introduced into our language, they were written antick, critick, and burlesk: had this orthography obtained, we should have written this pericarp *Silick*, and thus have avoided the French termination. I shall not contend with any one who would retain the Latin final; nor with any other who would appropriate the English term *Pod* to this, exclusive of the Legume.
Siliquosa. The name of the second order in the class Tetradynamia: containing those plants which have a proper Siliqua for a pericarp.

Siliquosae. The name of the fifty-seventh order in Linneus's Fragments; of the thirty-ninth in his Natural Orders; and of the twentieth class in Ray's method. They are the same with the Cruciformes of Tournesort.

Silky leaf. Sericeum folium. Covered with a fine pile of soft close-pressed hairs, so as to be very smooth to the touch.

A Simple fructification or flower; in opposition to that which is composed of several florets.—A Simple spike. Having no subdivisions, spicules or spikelets.—A Simple Umbel. Having only one set of rays, or having the receptacle divided once only: as in *Anthiriscus Peduncle.*—Simplex Calyx. A simple calyx. Having only one row of leaflets, as in *Tragopogon*; opposed to *Calycled* and *Imbricated.*—Simplex Pappus. A simple down: opposed to *Plumose* or feathered.—Applied also to Bristle, Tendril, Stigma, &c.

*Simplicissimus.* Very simple, absolutely simple.—As the stem of *Lathrea Squamaria;* and the spadix of *Acorus.*

**Single flower.** *Unicus flos.* Only one on a stem, as in the *Tulip;* opposed to many.—In common language, it is used in opposition to a double or monstrous flower.

*Sinuatum folium.* A Sinuate leaf. Having large curved breaks, in the margin, resembling bays (*Sinus*). As in the *Oak.*
Sinuato-angulofum. A sinuante-angular leaf: as in Hollybock.

Sinuato-dentatum. A sinuate-toothed leaf

Sitting. See Sejfile.

Situs foliorum. Situation of leaves. Their disposition on the stem: as stellate, tern or threefold, &c. Opposite, alternate, scattered, crowded, imbricate, fascicled or in bundles, distich or in two rows.

Six-petalled. Hexapetala corolla. A flower having six distinct petals to the corolla.

Skinny. See Scariofum.

Sleep of Plants. Somnus plantarum. The form and appearance which plants put on during the night, very different from what they have in the day; chiefly in the leaves.

Slender. Tenuis. Applied to the stem. Tenuifolia planta. A slender-leaved plant: in
in opposition to latifolia, broad-leaved.—
Tenuis however is often put for thin.

**Smooth.** Glaber. Having a slippery surface void of roughness. Opposed to scabrous, not to pilosus, hairy: and exemplified in Daphne Laureola, Arbutus Unedo, Geranium peltatum, &c. Greater degrees of smoothness are expressed by nitidus or nitens and lucidus; shining, bright, glittering, glossy, &c.

Snipt leaf. Folium incisum. See Gashed; and Incisum.

Solares Flores. See Vigiliae.

**Solidus bulbus.** Solida radix. A solid bulb; as in Tulip. A solid root; as in Turnep. Of a fleshy, uniform, undivided substance.—Solidus caulis. A solid stem. Full within; in opposition to inanus, which has only a light spongy substance in it; and fistulosus, hollow like a pipe.

**Solitarius.** Solitary, separate, one only in a place. Solitaria stipula. A solitary stipule; as in Melianthus.—Solitarius pe- A à dunculus.
dunculus. A solitary peduncle; as in Convolvulus tricolor.—Solitarius flos. A solitary flower: only one to each peduncle; as Euphorbia Peplis, Dianthus chinen-fis.—Solitarium semen. A solitary seed: one only in a pericarp.


Somnus Plantarum. Sleep of Plants. Est forma faciesque, quam plantae sub nocte induunt, maxime a diurna earum facie diversam, nulla habita ratione partium internarum seu fructificationis. Estque in foliis præsertim conspicuus.

Spadix. The receptacle in Palms, and some other plants, proceeding from a spathe.—It is either branched, as in Palms; or simple, as in Dracontium, &c.—In some it is one-flowered; in others many-flowered.—Hence

Flos spadiceus. A spadiceous flower. A sort of aggregate flower, having a receptacle common to many florets, within a spathe.—As Palms, Arum, Calla, Dracontium, Pothos, Zoster, Acorus. Spadiceus
Spadiceus color. The colour of the spadix in the Palm; it is commonly translated a Bay-colour, from the Greek βαύος. Ray says it is a colour approaching to bay or chestnut, but with more red in it.

Span. A long span, or Dodrans—a short span, or Spithama. See Measures.

Sparsus. Scattered. Neither opposite nor alternate, nor in any apparent regular order. Applied to branches—to leaves, as in several sorts of Lily—to peduncles or flowers—to calycine scales, as in Crepis barbata. "With regard to branches," says Dr. Berkenhout, "an accurate observer will find that, notwithstanding their irregular appearance, they form a spiral line round the trunk, regularly completing the circle in a determinate number of steps."

Spathe. A Spathe (Sheath is the English term for Vagina). The calyx of a spadix, opening or bursting longitudinally, in form of a sheath.—It is applied also to the calyx of some flowers which have no spadix; as Narcissus, Crocus, Iris, &c.

A a 2

A Spathe
A Spathe may be—
One-valved, or two-valved.
Halved. *Dimidiata.* Investing the fructification on the inner side only.
Imbricate.
One-flowered, two-flowered, &c.—Hence *Spathaceae.* The name of the eighth order in Linneus's Fragments; and of the ninth in his Natural Orders.

*Spatulatum folium.* A Spatulate or Spatula-shaped leaf. *Cujus figura subrotunda, basi angustiore lineari elongata.* Roundish, with a long, narrow, linear base: like a spatula or a battledore: as in *Cistus incanus.*

*Spear-Shaped.* See *Lanceolatum.*

*Species.* The distinct forms of vegetables originally so created, and producing, by certain laws of generation, others like themselves.—There are therefore as many species as there are different invariable forms or structures of vegetables now existing. We commonly use the same termination both in the singular and plural,
as we do in some other words of the same structure from the Latin. The duplication of the final is disagreeable to the ear, and I suppose that we acquiesce the more readily in this anomaly, because so many of our plurals terminate in es.

Specific Character. A circumstance or circumstances distinguishing one species from every other species of the same genus.

Specific Name. Prænomen triviale. Commonly called the Trivial Name.—One of those happy inventions of Linneus, by which he has facilitated and diffused the science of Botany in a wonderful manner—A plant is perfectly named, says Linneus (Philos. Bot. 202), when it is furnished with a generic and specific name. —In the same page he distinguishes the latter from the nomen triviale; and calls it the Essential Difference.—Nomen specificum legitimum plantam ab omnibus congeneribus distinguat; triviale autem legibus etiamnum caret.—Nomen specificum est itaque Differentia essentialis.
Spica (from Spes, hope; from σπειρα, to extend; or from σπειραξις, Ael. for σπειραξις, whence Spicus, Spica, and Spicum; for it is used in all the three genders). A Spike.

—Flores sessiles sparsim alterni in pedunculo communi simplici.—In Term. Bot. 461, sparsim is omitted.—A species of inflorescence, in which sessile flowers are (scattering) alternate on a common simple peduncle.—As in an ear of Wheat, Rye, or Barley; many of the Grasses; in Lavender, Mullein, Agrimony, &c.—A Spike is

1. Simple, Distich, Compound, Glomerate.
2. Ovate, Cylindric, Ventricose, Interrupted.
3. Imbricate, Jointed, Branching, One-ranked (secunda), Linear, Ciliate, Leafy, Bristle-shaped, Comose or terminated with a bush of leaves, Scariose.

Spicula. A Spicule or Spikelet. A partial spike, or a subdivision of it: as in some Grasses.

Spina. A Spine or Thorn.—Mucro e ligno plantae protrusus.—Fulcrum terminans cornu lignoso. Regn. Veg.—See Thorn.

Spindle-
Spindle-shaped root. See Fussiformis.

Spinescent. Becoming hard and thorny. Incident to petioles and stipules.

Spinosus. Spiny or Thorny.—Spinosum folium. Quod margine exit in acumina duriora, rigida, pungentia. Opposed to In-erme.—Spinosus caulis. Spinis armatus.

Spiralis. Spiral. Twisted like a screw.
As the cotyledons of the Holeracea; the anthers of Chironia; the tails of the seeds in Geranium, &c.

Spithama. A short Span, or seven Paris inches. See Measures.

Spreading. Patens. Spreading a little, Patulus. See these two words.

Spur or Horn. Calcar, Cornu. The hinder part of the nectary in some flowers, shaped like a cock’s spur, or a horn.—This kind of nectary is called Nectarium calcaratum; and a corolla having such a nectary is named Corolla calcarata; as in Larkspur, Orchis, &c.—A calyx having such a spur is called Calyx calcaratus; as in Tropæolum.
Squamosus f. Squamatus (Squama, a Scale). Bulbus, Caulis. See Scaly.

Squarrosus (A squamarum piscium similitudine, quorum cutis exurgat ob affiduam inluviem.

Varronum ac rupicum squarrosa incondita rostra.

Lucilius.

Or, according to others, from Squarra, anciently written Scara, which is from the Greek ερχα, Scurf). Squarrose, by some translated Ragged; by others, Scurfy. Squarrosus calyx. Ex squamis undique divaricatis patentissimis. Consisting of scales very widely diverging, or spreading every way: as in Carduus, Onopordum, Conyza, Achyrantes muricata. —Squarrosum folium. In lacinias elevata nec plano parallelas divisum. Divided into shreds or jags, raised above the plane of the leaf, and not parallel to it.

Stalk, or Stem. Caulis. See Stem.

Stamen. A Stamen; in the plural Stamens, not Stamina, in English.—Viscus pro pollinis præparatione.—Viscus externus e ligno.

Genitale
Genitale masculum. Regn. Veg.—An organ or viscus for the preparation of the pollen; and formed, according to Linneus, from the wood.—It is the third part in the fructification; and consists of the filament and anther.—Some English writers call it the Chive.

Stamineus flos. A staminceous flower. Having no corolla: a term used by Ray. *Apetalus* is the term which Linneus has adopted from Tournefort. Others call such flowers Imperfect or Incomplete.

Staminiferus flos. A staminiferous flower. Having stamens without a pistil. The same with the male flower of Linneus.—*Staminiferum nectarium*. A nectary having stamens growing on it: as in *Kleinhovia*.

Standard or Banner. *Vexillum*. The upper petal of a papilionaceous corolla: as in the *Pea*.

Statuminatæ (from *Statumen*, a prop or support, as the stakes put to vines, &c. from *statuo*). The name of the sixty-first order in Linneus’s Fragments of a Natural
Natural Method, in *Philosophia Botanica*; containing only *Ulmus, Celtis, Bofea*.

**Stellata** (*Stella, a star*) *folia*. Stellate leaves. *Cum folia plura quam duo verticillatim caulem ambiunt*. When more leaves than two (frequently six, eight or more) surround the stem in a whorl; or radiate from the stem like the spokes of a wheel; or like a star, as it is vulgarly represented: exemplified in *Galium*. They are otherwise called *Verticillata*; and come out regularly in sets one above another.—*Stellata feta*. A Stellate bristle. When a little star of smaller hairs is affixed to the end.—Applied also to the Stigma: as in *Asarum*. *Stellatus flos*. A Stellate flower. The same with the *Radiatus* of Tournefort, which Linneus has adopted.

**Stellatae**. The name of the forty-fourth order in Linneus's Fragments, in *Philos. Bot.*—and the forty-seventh in his Natural Orders, at the end of *Gen. Pl.*—The name of a class also in Ray's and Herman's Methods.
Stem or Stalk. Caulis. The body of an herb, bearing the branches, leaves and fructification.—According to Linneus, Truncus is the generic term, of which Caulis is a species; but in English we apply Trunk to the body of a tree, and Stalk to that of herbaceous plants.—Stem might be adopted as the generic term. See Truncus.

Stem-clasping. Amplexicaulis. Applied to a leaf (folium amplexicaule), when the base surrounds the stem: as in Potamogeton perfoliatum, Verbascom Blattaria, Hyoscyamus niger, &c.—Applied also to the petiole.

Stem-leaf. Folium caulinum. Inserted into the stem. Opposed to the radical or root-leaf. Applied also to the peduncle.


Stiff.
STIFF. Rigidus. Impatient of bending. See Rigidus and Strictus.

STIGMA. (From (στω, inuro, to brand or mark.) A Stigma.—Summitas pistilli madida humore Pollen rumpendo—Roridum, pubescens, supremum. Regn. Veg.—The top of the pistil, pubescent and moist, in order to detain and burst the Pollen or prolific powder.—Grew named it the Knob or Button; and Withering the Summit.—I have sometimes asked myself, how Linneus came not to adopt the more elegant, classical term of Fibula, which had been given to this part of the pistil by some authors who wrote before him?

The Stigma differs in number, figure, and structure.—It is

Simple or divided.

Acute; ending in a sharp, single tip.

Perforated; having a cavity in the middle.

Capitate; shaped like a head or globular.

Peltate; or shaped like a round buckler;

or like the foregoing, flatted by the stroke of a hammer.

Bila-
Bilamellate; Capitate or globular, compressed, and longitudinally bifid.

Stimuli (q. Stigmuli, from σηγμος). Stings.

In Philos. Bot. a species of pubescence; defined to be—punäura venenata que animalia nuda arcent. Exemplified in Urtica or Nettle, Iatropha, Acalypha, Tragia.—In Term. Bot. 393, they are separated from Pubes, and enumerated with thorns and prickles, among Arma, the defences of plants against animals.—They are thus defined—mucones punäuras inflammatorias efficientes, unde pruriginose evadunt partes. Processes or sharp points from a plant, producing inflammatory itching punctures.—They are usually on the stem or leaf; which is then called Urens.

Stipes (σύνος, a stake). A Stipe. Basis frondis. Proprius Palmis, Filicibus, Fungis.—Truncus in folia transiens. Delin. Pl.—A folio non distinctus. Begn. Veg.—The base of a frond: or, a species of stem passing into leaves, or, not distinct from the leaf. The stem of a Fungus is likewise called Stipes: which Dr. Withering translates the Pillar.
It is also put for the thread or slender stalk, which supports the *pappus* or down, and connects it with the seed. *Filum elevans conne&centumque Pappum & Semen.*

**Stipitatus.** Stipitate or Stiped. Elevated on a Stipe. Applied to the *pappus* or down.

**STIPULA** (dimin. from *Stipa*, which is from *στυπη* tow). A Stipula or Stipule.—

*Squama basi petiolorum nascentium adsilans.*

A scale at the base of the nascent petioles—or peduncles, according to Philos. Bot.—As in *Papilionaceae*, *Tamarindus*, *Caffia*, *Rosa*, *Melianthus*, *Liriodendron*, *Abricot*, *Peach*, *Bird-cherry*, &c.—Some natural classes have no stipules; as the *Asperifoliae*, *Personatae*, *Verticillatae*, *Stellatae*, *Siliquose*, *Lilaceous*, *Orchideae*, and most of the *Compositae.*—

Stipules are,

1. In pairs; Solitary; or None.
2. Lateral; Extrafoliaceous; Intrafoliaceous; Oppositifolious.
3. Caducous; Deciduous; Permanent; Spinescent.
4. Sessile; Adnate; Decurrent; Sheathing.
5. Su-
5. Subulate; Lanceolate; Sagittate; Lunate.
6. Erect; Spreading; Reflex.
7. Very Entire; Serrate; Ciliate; Toothed; Cleft.
8. Very Short; Middling; Long.

*Stipularis f. stipulacea gemma.* A Stipular bud. Formed of stipules or scales.

*Stipules glandulæ.* Glands growing on stipules, or close to them.

*Stipulatio.* Stipulation. The situation and structure of the stipules.

*Stipulatus caulis.* A Stipulate or stipuled stalk. Having stipules on it.

*Stolo.* A Sucker from the root. See *Sucker.*

*Stoloniferus caulis.* A Stoloniferous stem. Putting forth suckers.

*Straddling.* Put by Dr. Withering for *Divaricatus.*

*Straight stem.* *Rectus caulis.* Making one right line; not bent.—*Erectus* is upright, or perpendicular to the horizon.— *Rigidus*
Rigidus is stiff, difficult to bend. Striclus
is both stiff and straight.

Straightish. Rectiusculus.

Wrap. Ligula. An appendage to the
leaf in some Grasses.—Also the flat part
of the corollet in ligulate florets.

Strap shaped. See Ligulatus. Dr. Wither-
ing has given this name to the linear leaf.

Striatus. Striated or Streaked.—Striatus
caulis, culmus. Lineis tenuissimis excavat-
tis inscriptus. Stalk or Culm—marked
or scored with superficial or very slender
lines. In the explanation of the Striated
leaf the word parallel is added.

Strictus (Stringo, to tie fast). Stiff and
straight.

Strict will not do in English, and I do
not recollect that we have any one word
to express this idea. Straight is put
for rectus, and Stiff for rigidus.—Linneus
in one place refers Stricta (folia) to Recta;
adding, that it strengthens the signifi-
tation, and means the same as Rectissima.
Philos. Bot. p. 219.—In another place (p. 233) he opposes \textit{strictus} to \textit{laxus}, \textit{flaccidus}.—In Term. Bot. 28, \textit{Erectus} is explained to be a stem rising in almost a perpendicular direction—\textit{Strictus} (29), to be altogether perpendicular without bending.—I do not conceive that this term has any thing to do with perpendicularity of direction.

It is applied to the stem in \textit{Astragalus sulphatus}, &c.—to the culm—branch—leaves, in \textit{Campanula patula}—and to the peduncle.

\textit{Strictissimus}. Very stiff and straight. Applied to branches.

\textit{Striga} (from \textit{Strigo} for \textit{Stringo}). In Term. Bot. 363, \textit{Strigae} are thus described—\textit{pili rigidiusculi planiusculi}.—In Philos. Bot. Linneus only says—\textit{arcent fetis rigidis animalcula & linguas}; and gives for examples \textit{Calthas}, \textit{Malpighia}, \textit{Hibiscus}, \textit{Rubus}.—They seem to be stiffer, flatter bristles—and from the derivation we should suppose that they grow in a sort of order or rank. Their use is to keep off the smaller animals, and the tongues of larger ones, from injuring the plants.—

\textit{Bb} We
We have no English name for this term.

**Strigosus** (from *Strigo*). *Strigosum foli-um*. A Strigose leaf. *Aculeis lanceolatis rigidis*. Set with stiff lanceolate bristles. *Term. Bot.* 246. In *Philos. Bot.* Linneus refers to *Hispidum*. Dr. Berkenhout interprets it, lank, lean, or drawn up as if hide-bound; I know not on what authority, but probably misled by one sense of the verb *strigare*, which is, to leave a furrow unfinished in ploughing; whence a horse or ox unable to go though his work was called *Strigosus*.

**Strobilus**. A Strobile. *Pericarpium ex Amento factum—squamis induratis*, is added in *Term. Bot.* 618.—A Pericarp formed from an Ament—by the hardening of the scales.—In *Regn. Veg.* it is thus expressed—*Strobilis imbricatus Amenti coarctati*. That is, a Strobile is made up of scales that are imbricate, or lie over each other, from an Ament contracted or squeezed together, in this state of maturity.—This term includes not only the Cone of former writers, but also some other fruits which recede considerably in structure.
Structure from that sort of pericarp; as that of *Magnolia*. To translate *Strobilus* therefore by *Cone* is improper, as creating confusion.

*Strobiliformis spica.* A Strobile-shaped spike: as in *Justicia Ecbolium*.

*Stylus* (from στυλός, a column). The style. 

*Pars pistilli, stigma elevans a germine*—or, as it is expressed in another passage of Philol. Bot.—*pes stigmatis, connectens illud cum germine.* The middle portion of the pistil, connecting the stigma with the germ.—It is called by some English Botanists the *Shaft.*—We are to attend to the number, proportion, situation, division, and figure of Styles.


In situation they may be—1. *Erect*, or upright. 2. *Declined*, or bending down. 3. *Ascending*, or bending up.

*Sub*, in composition, is used frequently by Linneus for *almost*, *nearly*, *somewhat*, *thereabouts*, *approaching to*, *most commonly*.
We must consider the meaning of the word to which it is the prefix, in order to determine which of the English Adverbs we should prefer. In some cases perhaps we may preserve the Latin prefix: in others we may use the English termination *ish*: as *subrotundus, roundish*. Though it were to have been wished, for distinction sake, that we might express the Latin *sub* by some of the foregoing adverbs; and the diminutive termination *uscus* by *ish*. Thus *subobtusus*, somewhat blunt; *obtusiusculus*, bluntish.—The following are some instances of the use of *sub*, among many:

*Subacaulis*. Almost without stem.

*Subaequalis*. Nearly equal.

*Subamplexicaulis*. Slightly embracing the stem.


*Suberosus*. As if a little eaten or gnawn.

*Subexcedens*. A very little longer.
Sublanatus. Somewhat woolly.

Subnudus. Almost naked.

Suborbiculatus. Almost orbiculate.

Subovatus. Subovate. Almost or nearly ovate.

Subpetiolatus. Scarcey petioled, or with a very short petiole.

Subramosus. Having only a chance branch or two.

Subrependus. Somewhat repand.

Subsessilis. Subsessile, or almost sessile.

Subtrifidus. Slightly trifid.

Subuniijlorus. Having one or two flowers only, or most commonly one—one or thereabouts.

Sometimes however Sub has the common meaning of Under: as folium submersum is a leaf growing under water. Herbae submarinæ. Herbs growing at the bottom of the sea.—Subdivisus does not mean somewhat or a little divided, but divided again, in the usual sense of our English subdivided.
Suberosus (*Suber*, cork). Corky, like cork. Applied to a stem clothed with a bark, soft and elastic like cork—To be carefully distinguished from *sub-erosus*, which is applied to leaves which have little irregular sinuses on their edges, giving them the appearance of having been gnawed by insects. Applied also to the stem in *Ariilfolochia peltata*.—In this case it seems better to drop this equivocal term, in English.

Substantia. The substance of a vegetable consists of the *Epidermis*, or Cuticle, covering the Cortex or Outer Bark, depositing from its inner surface the Liber or Inner Bark, which changes gradually into hard rings of Wood, clothing the Medulla or Pith.—Or, taking it the other way, it is the Medulla or Pith clothed by the wood, which is formed from the Liber, separating from the Cortex, and covered by the Epidermis.

Subulatus (*Subula*, an awl). Subulate, or awl-shaped (not, awled). *Folium subulatum*. A subulate leaf: *Inferius lineare, ad versus apicem attenuatum*. Linear at bottom,
bottom, but gradually tapering towards the end. As in *Arenaria saxatilis, Sedum rupestris*.—Applied also to the Filament, in the class *Didynamia, &c.*—to the scales of the Calyx, in *Dianthus chinensis*—to the Stipule, Anther, Style and Receptacle.

**Succulentæ (succus, juice).** The name of the forty-sixth order in Linnaeus's Fragments, and of the thirteenth in his Natural Orders.

**Succulentum folium.** A Succulent leaf. Full of juice; in opposition to *Exsuccum*, juiceless or dry. Applied also to the Drupe, as in the Plum or Peach; opposed to *Sicca*, dry, as in the Almond.

**Sucker.** *Stolo.* A shoot from the root of a vegetable, by which it may be propagated: as in *Violet, Ranunculus repens*, and most Shrubs. See Runner and *Sarmentosus*.

**Suffrutex (Subunder, and Frutex a Shrub).** An Undershrub. Permanent or woody at the base, but the yearly branches decaying; usually of a lower growth than the Frutex
Frutex or Shrub: as in Lavender, Sage, Thyme, &c.

Suffruticosus. Suffruticoso, Under-thrubby.

Sulcatus (*Sulcus, a furrow) Caulis, Culmus. A Furrowed, grooved or fluted stem or culm. Scored with deep broad channels longitudinally. Applied also to succulent leaves.

Super-decompound. See Supra-decompositum.

Superficies. The surface or disk of a leaf.—The upper surface is called Pagina superior, or discus supinus; the lower, or back of the leaf, Pagina inferior, or discus pronus.

Superflua Polygania. Superfluous Polygamy. The name of the second order in the class Syngenesia wherein the florets of the disk are hermaphrodite and fertile; and the florets of the ray, though female only, are also fertile.

Superus flos s. calyx. A Superior flower or calyx. Having the receptacle of the flower
flower above the germ. *Superum germen.* A superior germ. Included within the corolla: this must have an inferior calyx; and the contrary.

*Supinus* discus folii. The upper surface of a leaf.

Support. See Fulcrum.

Supra-axillaris. See *Supra-foliaceus.*

Supra-decompositum folium. A Super-decompound leaf. *Cum petiolus aliquoties divisus ad necit plurima foliola.* When a petiole divided several times connects many leaflets; each part forming a decompound leaf: as in *Pimpinella glauca, Ranunculus rutaefolius.*—Tergeminate, Trternate, and Triplinate leaves are species of this; and are explained in their proper places.

Supra-foliaceus f. Supra-axillaris pedunculus f. flos. A peduncle or flower inserted into the stem above the leaf, or petiole, or axil.

Surculus. A little branch or twig. *Quod in*
in ramis simplex assurgit tenerum & exile.
—A shoot.—It is probably a diminutive from Surus or Surrus, an old word for a large branch, such as was fit to make a stake or palisade of. The original word was probably Surcus from Surgo, which was anciently Surco.—Linneus puts Surculus for a branchlet of Mofs, and a shoot of Ferns.

Swimming or Floating leaf. Natans. Lying on the surface of the water.

Sword-shaped leaf. Folium Ensiforme. See Ensiform.

Syngenesia (συν and γενεσίς, congeneration). The name of the nineteenth class in Linneus’s Artificial System; comprehending those plants which have the anthers united into a cylinder.—The orders are six—1. Polygamia Aequalis. 2. Polygamia Superflua. 3. Polygamia Frustranea. 4. Polygamia Necessaria. 5. Polygamia Segregata. 6. Monogamia.—The five first orders contain the Compound flowers, and form a Class truly Natural.
Systema. A System is a regular arrangement of natural bodies, according to some certain characters.—In Botany it consists of five members or divisions—1. Class. 2. Order. 3. Genus. 4. Species. 5. Variety.

TAIL. Cauda. A process or thread terminating a seed, and facilitating its propagation.—This term was used formerly for the narrow base of a petal in a polypetalous corolla, which Linneus calls Unguis, the Claw.

Tapered or Tapering. See Attenuatus.

Taper-pointed. See Acuminate.

Target-shaped. See Peltatum.

Tendril or Clasper. Cirrus. One of the Fulcres. A filiform spiral band, by which a plant is fastened to another body—or by which a weak plant supports itself on others: as the Vine, Pea, &c.

A Ten-
TE

A Tendril is,

1. *Axillaris*, from the axil.
2. *Foliaris*, from the leaf.
3. *Petiolaris*, from the petiole or footstalk.
4. *Peduncularis*, from the peduncle or stalk.

Or it is,

1. *Simple*.
7. *Revolutus*, turned back after having made half a turn.

*Tenuis* is put both for *Slender* and *Thin.*

*Tenuifolia planta.* A plant with narrow leaves.

*Teres.* Without angles. It may often be safely expressed in English by *Round.*

Since
Since we cannot well preserve the Latin term, it is more accurate to translate it by Columnar than by Cylindric. For stems and branches, leaves, petioles, and peduncles, to which it is applied, resemble the shaft of a column, tapering gradually from the bottom upwards. Allium vineale and oleraceum are instances of columnar leaves.

Tetritinsculus. Almost or inclining to columnar.

Semiteres is Semicolumnar. Flat on one side and round on the other.

Tergeminum folium. A Tergeminate or thrice-double leaf. Petiolus bifidus utroque apice foliola duo & insuper foliola duo ad divaricationem petiola communis.—When a forked petiole is subdivided, having two leaflets at the extremity of each subdivision; and also two other leaflets at the division of the common petiole. Thus I understand it, though the explanation given above from Delin. Pl. does not express as much; because it is a species of the Super-decompound leaf, the essence of which
which I apprehend to consist in its dividing thrice at least.

**Terminalis.** Terminating, or coming out at the end of a branch or stem. Applied to scape, peduncle, flower, spike, cyme, anther, awn, and thorn. Opposed to axillary.

**Terna folia.** Three-fold leaves, in threes, or three and three: expressing the number of leaves in each whorl or set. As in *Statice sinuata.* See *Stellata.*

**Terni pedunculi.** Peduncles in threes, or three together from the same axil: as in *Impatiens zeylanica.*

**Terni flores.** Flowers growing three and three together; as in *Bete Cicla.*

**Ternatum folium.** A Ternate leaf. Having three leaflets on one petiole: as in *Trefoil, Strawberry, Bramble, &c.*—Linneus makes it a species of the *Digitate.*

**Doubly-ternate.** See *Bitemate.*

**Triply-**
Triply-ternate. See Tr ternatum.

Tesselatum folium, petalum. A Tesselate or chequered leaf or petal. Painted or spotted like a chess-board.—For the leaf, Linneus refers to Satyrium repens, and Cy-pri pedium bulbofum: and as an instance of a flower, we may cite Fritillaria Mele-agris.

Tetradynamia (τετραδύναμος, four, and δύναμις power). The name of the fifteenth class in the Linnean System; comprehending those plants which bear hermaphrodite flowers with six stamens, four of them (more powerful) longer than the other two. This is a truly natural class, and the same with the Cruciformes of Tournefort— the Siliculofae and Siliquofae of Ray; which last are the names of the orders into which the class is divided by Linneus.

Tetraedra siliqua. A four-sided siliqua or pod.

Tetragonus caulitis. A four-cornered stem.
—Having four prominent longitudinal angles: as in Passiflora alata. A species of
of the Anceps, according to Linneus in Philos. Bot.

TETRAGYNYIA (τεσσαφες and γυνη). One of the orders in several classes of Linneus’s System; comprehending those plants which have four pistils.

TETRANDRIA (τεσσαφες and ανηφ). The fourth class in the Linnean System; comprehending those plants which have hermaphrodite flowers with four stamens of equal lengths.

TETRAPETALA corolla. A tetrapetalous or four-petalled corolla. Consisting of four distinct petals: as in the class Tetradyynamia.

TETRAPHYLLUS calyx. A four-leaved calyx. Consisting of four distinct leaves, or leaflets, as Linneus calls them. Exemplified in Sagina, Epimedum, and the class Tetradyynamia.

TETRASPERMA planta. A four-seeded plant. Producing four seeds in each flower: as in the Asperifolias and Verticillatae.
Textura vegetabilium. The texture of vegetables consists of Vasa succosa; succiferous vessels: Tracheae ævriae. Tracheae or air vessels: and Utriculi secretorii; Utricles, or secretory vessels. See Vessels.

Thalamus. See Receptaculum.

Theca. See Aril.

Thorn or Spine. Spina. A sharp process from the woody part of a plant, for its defence; as in Prunus, Crataegus, &c. See Prickle. It commonly disappears by culture; as in Pear, Orange, &c.

A Thorn may be either—Terminating; placed at the end of a branch or leaf: or Axillary; proceeding from the angle formed by a branch or leaf with the stem.

Foliary, or growing on the leaf.
Calycine, or growing on the calyx.
Simple or Single—Divided or Branched.
Aloe has thorns at the edges of the leaves.
Thistle has them on the calyx.

Many fruits are protected by them: as Trapa, Tribulus, Spinacia, Datura, &c.
THORNY. *Spinifus.* Set with thorns: as the stem of many shrubs.—A Thorny leaf. *Folium spinosum.* Running out at the edge into hard, stiff, sharp points. Opposed to *Inerme.*—Sometimes a petiole, stipule, or bract, becomes hard and sharp: it is then said to be *Spinescens,* Spinecent, or to become thorny.—This, though a very different idea, has been sometimes confounded with *Spinifus.*

*Thread.* Dr. Withering's term for the Filament.

*Thread-shaped.* See *Filiform.*

*Three-capsuled Pericarp.* *Tricapsulare Pericarpium.* Having three capsules succeeding to each flower; as in *Veratum,* *Delphinium.*

*Three-celled Pericarp.* *Triloculare Pericarpium.* Divided into three cells within: as *Lilium.*

*Three-cleft.* *Trispidus.* Divided into three parts by linear sinuscs with straight margins.—Applied to the Leaf in *Reseda lutea* —to the Calyx in *Alisma,* *Cliffortia*—to the
the Neetary in *Nigella*—to the Stigma in *Amaryllis formosissima*—to the Cirrus, &c.

*Three-cleft-palmate leaf.* *Folium trisido-palmatum.* A Palmate leaf with only three divisions.

*Three-cornered* or *Three-edged.* *Trigonus.* A species of the *Anceps* or ancipital stem, according to Linneus, who says, *Anceps angulos duos oppositos habet.*—*Caulis trigonus* therefore should have three opposite angles, which is impossible.—This term is explained by Berkenhout to be three-sided, with the sides either concave or convex—by Withering, as having three angles, and the sides not flat—by the Lichfield Society, as having three prominent longitudinal angles; which agrees nearly with the explanation in *Term. Bot.*—hollowed longitudinally with three angles: See *Three-sided*.

*Three-flowered Peduncle.* *Triflorus Pedunculus.* Bearing three flowers together.

*Three-fold leaves.* See *Terna.*

C c 2  THREE-

THREE-LOBED leaf. *Folium trilobum.* Divided to the middle into three parts, standing wide from each other, and having convex margins: as in *Leonurus Cardiaca,* *Reseda odorata.*

THREE-NERVED leaf. *Folium trinervium.* Having three distinct vessels or nerves running longitudinally without branching.

THREE-PARTED leaf. *Folium tripartitum.* Divided into three parts down to the base, but not entirely separate; as in *Eryngium campestre.*—Applied also to the Cyme.

THREE-PETALLED or *Tripetalous corolla.* *Tripetala.* Consisting of three distinct petals; as in *Alisma,* *Sagittaria.*

THREE-SEEDED capsule. *Trisperma.* Containing three seeds: as in *Euphorbia.* Applied also to the Berry.

THREE-SIDED stem. *Triquetra caulis.* Having
ing three plane sides: as in *Viola tricolor*.

Culm, in *Carex*.—Leaf, in *Anthericum offiiragum*. Applied also to the scape, petiole, peduncle, and pericarp.

**Three-valved** pericarp. *Trivalve pericarpium*. Opening with three valves: as in *Viola, Polemonium, Cistus Helianthemum*.

**Throat.** See *Faux*.

**Thyrsus** ὀυγόσες, from ὄω, *impetu feror, erumpo*, to burst forth. Put for branches, or the flame of a lamp or torch; which have a conical form. Hence the spear with ivy bound about the head, carried in sacrifices to Bacchus, was named *Thyrsus*.

A *Thyrse*. Linneus puts it for a species of inflorescence; and explains it to be, a panicle contracted into an ovate form, as in *Syringa* and *Petasites*. Our gardeners have corrupted this term into *Truss*.

**Ttip.** Dr. Withering's name for the Anther. See *Apex*.

**Tomentosus** (*Tomentum*, down, nap, cotton, or flocks, from τέμων; or, as others think,
To think, from *tumeo*, to swell up; being used to stuff pillows, bolsters, &c. It is properly the short wool that is not carded and spun; and was applied to the nap on the leaves of some plants, which was used for the same purpose. Hence *Gnaphalium* from γναφαλον, which has the same signific\-cation). Tomentose; or, if we must translate the term—Downy, Nappy, Cottony, or Flocky. It is applied to the stem and leaf, when they are covered with hairs so interwoven as scarcely to be discernible: and is a species of pubescence. It is generally white, as on sea plants, and such as grow in exposed situations. Ex-emplified also in *Cerastium tomentosum*, *Origanum Onites*, *Althaea officinalis*, *Cistus incanus*,

**Tongue-shaped leaf.** *Folium linguiforme.* Linear and fleshy, blunt at the end, convex underneath, and having usually a cartilaginous border: as in some *Aloes*, *Mesembryanthemum linguiforme*, *Hæmanthhus coccineus*.

**Toothed.** See *Dentatum*. 

**Toothed.**
Toothed a little, or somewhat toothed. Subdentatus. Having very few teeth.

Toothletted. Denticulatus. Having very small teeth.

Tooth-ferrate. Dentato-ferratus.

Tooth-spined. Dentato-spinosus: as in Agave.

Top-shaped. See Turbinatum.

Tor. See Lacera.

Torosus. Torose, protuberant, swelling out in knobs; like the veins and muscles. Applied to some siliques; and other pericarps, as Lycopersicum, Phyto-lacca.

Torulosus. Swelling a little.

Torso (Torqueo, to twist). Directio plantae in unam alteraneae plagam a verticali diversam.—Delin. Pl. See Intorsio.

Tortuosum folium. A twisted leaf: as in Narcissus major.—Torta or Contorta corolla. A twisted corolla: as in Nerium, Asclepias, Vinca.—Tortum legumen. A twisted legume. When the apex is not in the same line with the base.


Trailing. See Procumbens.

Transversum dissepimentum. A Transverse partition. The same with Contra-rium. At right angles with the valves of the pericarp, in the silique. Opposed to Parallel. See Partition.

Trapeziforme folium. A leaf having the shape of a trapezium, or plane figure with four unequal sides.

Tree. Arbor. A Vegetable with a single woody trunk.—Trees (in Linneus's Regnum
num Vegetable) occupy the fifth tribe, division, or cast of the Vegetable kingdom.
—In the Artificial System they are incorporated with herbs that have the same character of the fructification. Ray and Tournecfort kept them separate, but Rivi-nus had united them before Linneus.

Triandria (τρίς, three, and ἄνδρας a husband). The name of the third class in the Linnean System, comprehending those plants which bear hermaphrodite flowers with three stamens.—The second order Digynia contains most of the Grasses.

Triangularis caulis. A triangular stem.
Ex numero angulorum prominentium. A stem is called Triangular, Quadrangular, &c. from the number of prominent angles. In these terms respect is had only to the number of angles.—Trigonus, Tetragonus, &c. are variations of the caulis anceps, in which the angles are sharp, and the sides not flat.—Triquetter must have three flat sides.

Triangulare folium. A triangular leaf.
Cum tres anguli prominentes ambient discum.

This
This seems to me an inaccurate expression; for how angles can surround a disk I do not understand. I apprehend Linneus to mean no more, than that every leaf having three angles in the circumference, is a Triangular leaf, whatever its form may be in other respects.

Tribus vegetabilium. Tribes of vegetables, are reckoned to be three, in Regn. Veg.

1. Monocotyledones, containing Palms, Corn, and Grasses, Liliaceous plants; the three first Gentes or Nations.

2. Dicotyledones, comprising Herbs and Trees; the fourth and fifth Nations.

3. Acotyledones, or Cryptogamia: the Ferns, Mosses, Algas, and Funguses; which are the four last Nations.

Trichotomus caulis. A Trichotomous stem. Dividing by threes.—Pedunculus, as in Marjoram.

Tricocca capsula. A Tricoccous or three-grained capsule. Swelling out in three protuberancies, internally divided into three cells,
cells, with one seed in each: as in *Euphorbia*. Hence

Tricoccæ, the name of the forty-seventh order in Linneus's Fragments, and of the thirty-eighth in his Natural Orders.

Tricuspidatum stamen. A three-cusped or three-pointed stamen: as in some species of *Allium*. See *Cuspidatum*.

Trifidus. See *Three-cleft, Cleft, and Fissum*.


Triglochis. See *Glochis*.

Trigonus. See *Three-cornered and Triangularis*.

Trigynia (τρίγυν, and γυνή a wife). The name of the third order in the first thirteen classes of the Linnean System, except the first, fourth, and seventh; including those plants which have three pistils to each flower.

Trihilatae (Three-scarred, see *Hilum*). The name of the fiftieth order in Linneus's
neus's Fragments; and of the twenty-third in his Natural Orders.

**TRIJUGUM folium.** A Trijugous leaf. A pinnate leaf with three pairs of leaflets.

**TRILOBUM folium.** See Three-lobed.

**TRILOCULARE pericarpium.** See Three-celled.

**TRINERVE folium.** A three-nerved leaf. Having three nerves or unbranched vessels meeting *in* the base of the leaf.

**Trinervatum.** Having them meeting *behind* or *beyond* (ponè) the base.

**Triplinerve.** In which they meet *above* (supra) or short of the base.

I must confess that I do not see how these terms are expressive of such distinctions; which are given in *Term. Bot.*—I should have conceived that by the last of them we were to understand, a leaf having three-fold nerves, or running three and three together: and thus Dr. Berkenhout has explained it.
TR

Triœcia (τρι, and οίκος a house). The name of the third order in the class Polygamia; and signifying that there are hermaphrodite, male and female flowers of the same species on three distinct individuals.

Tripartitus. See Three-parted.

Tripetala corolla. See Three-petalled. Hence

Tripetalodeæ. The name of the sixth order in Linneus's Fragments; and of the fifth in his Natural Orders.

Triphyllus calyx. See Three-leaved.

Tripinnatum folium. A Tripinnate, or three times pinnate leaf. A species of Superdecompound leaf; when a petiole has bipinnate leaves ranged on each side of it: as in common Fern, Pteris aquilina.

Triplinerve. See under Trinerve.

Triply Compound. See Supradecompositum.

Triqueter f. Triquetrus caulis—latera tria plana obtinet. See Three-sided.
**Trisperma** capsula, bacc. See Three-seeded.

**Triternatum** folium. A Triternate, or triply-three-fold leaf. A species of Super-decompound leaf, when a petiole has three biternate leaves.—*Cum petiolus affigit tria foliola biternata.*

**Trivalve** pericarpium. See Three-valved.

**Trivialia nomina.** Trivial names. The common or vulgar names for the species of plants, which added to the name of the genus, form a complete denomination of the species. These were invented by Linneus, and first used in the *Pan Suecus*; afterwards in the *Species Plantarum*, and thenceforward in all his other works. Antecedent to this, what we now call the *Diagnösis* or *Specific character* seems to have been considered as the *Specific name*, which see.

**Tropici Solares flores.** Tropical Solar flowers. *Mane aperiuntur, & ante vesperam exclusuntur quotidie, sed hora explicationis ascendit vel descendit, uti dies adcrecit aut decrecit; adeoque observant horas Turcicas s. inæquales.* See *Vigiliae.*
Truncatum folium. A Truncate leaf.—Quod linea transversali definit. Ending in a transverse line—so that it seems as if the tip of the leaf had been cut off. The Tulip-tree is a remarkable instance of this: This term is applied also to the Petal—and to the Nectary, in Narcissus Tazetta.

Truncus. Anciently and in common English, Trunk is put for the stem, body, stock, or bole of a tree: for which Linneus uses the word Caudex. He applies Truncus to the stem or main body of vegetables in general; and explains it to be—that which produces the leaves and fructification; or the organ multiplying the plant. The stem or trunk of herbs he names Caulis. When it elevates the fructification, and not the leaves, he calls it Scapus, Scape or Shaft. The stem of Corn and Grasses, having a peculiar structure, he names Culmus, Culm or Straw. Stipes is the base of a Frond; or a stem passing into leaves, or not distinct from the leaves. See Stem.

Tuber. A knob, in roots. Solidus particularis indiscretis. Solid, with the component
nent particles all similar.—It is also the Latin name for the Truffle.

Tuberculum (dimin. from Tuber). A little knob, like a pimple.—Fructificatio confians punctis scabris ex pulvere quasi congestis. A little knob, or rough point, on the leaves of some Lichens, supposed to be the fructification.—Hence such are said to be Tubercled, Tuberculati.

Tuberosa radix. A Tuberous or knobbled root. E partibus carnosis filo basi connexis confians—f. subrotundus corporibus in fasciculum colectis.—Consisting of roundish fleshy bodies, or Tubers, connected into a bunch by intervening threads. As in Paeonia, Hemerocallis, Filipendula, Jerusalem Artichoke, Potatoe.

Tubulatus calyx. A tubular calyx. Running into the form of a tube.—Applied to the Corolla, in the class Didynamia—and to the Nectary of Hellebore.

Tubulosus flos. A Tubulous compound flower, composed wholly of Tubulous florets. The same with Flopeculosus flos of Tour-
Tournefort. Exemplified in Tansey, and other naked discous flowers.—*Tubulofus flosculus.* A tubulous floret. Having a bell-shaped border, with five reflex segments, rising from a tube. These are the regular-shaped little component flowers in the disk of Compound flowers: as in the Sun-flower, Daisy, &c.—*Tubulofus caulis.* A hollow stem.—*Tubulofum folium.* A hollow leaf: as in *Onion.*

**Tubus.** A Tube or hollow pipe. Put for the lower, narrow, hollow part of a monopetalous or one-petalled corolla, by which it is fixed into the receptacle. Vaillant and Haller call the style *Tuba,* from its resemblance to a trumpet.

**Tunicatus bulbous.** A tunicated or coated bulb. *Tunicis numerosis constans.* Composed of numerous concentric coats; as the *Onion.*—*Tunicatus caulis.* A tunicated stem. *Membranis vestitus.* Clothed with membranes.

**Turbinatum (Turbo, a top).** Turbinate, or top-shaped. Dr. Withering translates it Turban-shaped, which must surely be a mistake.
Obverse conicum. Delim Pl.—Narrowed at
the base, or inversely conical. Shaped
like a boy’s top, or a pear. Applied com-
monly to the Germ and Pericarp.—Also
to the Perianth, as in Griflea, Memecylon
—and to the Nectary, in Narcissus Bulbo-
codium.

Turgidum legumen. A Turgid or swollen
legume or pod: as in Ononis.—Thought
by some to be the same with Inflatum;
but in the latter I apprehend the pericarp to
be in substance as well as form somewhat
like a blown bladder; whereas in the
former it is merely more swollen out, and
has a wider cavity than is usual.

Turio (q. terio, quia facile teratur; as tu-
gurium, q. tegurium from tego, or q. tene-
rio from tener.—How Dr. Berkenhout
came to derive it from Tyro, a novice, I
am at a loss to conceive). This word is
used by Columella for the extreme twig
or young shoot of a tree. I do not find it
in Philof. Bot.—Termini Botanici—or
Delin. Pl.—Giseke makes it synonymous
with Stolo.—Dr. Berkenhout says it is the
Gemma
Gemma so called, by Ludwig, when proceeding from the root.—Ray, whose ideas and expressions are ever classical, says: *Tenella arborum, fruticum aut herbarum cacumina, quasi teneriones; vel, ut Vof-fius vult, quia facile teruntur.* —Leers explains *Turiones* to be—*tenellae plantarum jōboles, verno tempore cum foliis et terra erumpentes:* ut *Asparagus, Humulus.* The tender shoots of plants which come up in the spring; as in the Asparagus and Hop. Such are called *Asparagi;* the tender sprouts or shoots of any herb from the ground. Ray thus explains the word *Asparagus:* —*dicitur primum germe herb-barum quod edendo est vel oleris cujusque turio antequam in folia explicatur, a σπειρω.*

**Twin anther.** *Didyma anthera.* Swelling out into two protuberances: as in *Ranunculus, Mercurialis.* —Applied also to *Germ* and *Pericarp;* as in *Veronica.*

**Twining stem.** *Caulis Volubilis.* Ascending spirally round a branch, *stem,* or *prop.* This is done either from right to left, contrary to the sun's apparent motion, as
in Hops, Honeysuckle, Black Bryony, &c. or from left to right, with the sun, as in
Convolvulus, Basella, Phaseolus, Cynanche, Euphorbia, Eupatorium.

In order to understand this, we must conceive the spectator to stand with his face towards the south, when of course the east will be towards his left hand. Thus stationed, if he observes a stalk of Convolvulus or Kidney Bean, he will see that it twines from the left or east, by the south, towards the west; and that a Honeysuckle or Hop takes a contrary direction.—Who will reveal the cause of this difference?

Twisted. See Tortilis. If we are to make any difference between this and Coiled, I should conceive the deviation of the latter to be in the same plane, and that of the former to be in different planes.

Two-capsuled. See Bicapsular.

Two-celled. See Bilocular. This term however is to be preferred to that; since we use the word Cell in English.
Two-cleft, or Bifid. See Cleft.—Utricularia is an instance of the two-cleft perianth.

Two-edged or Ancipital, See Anceps.

Two-faced leaves. See Bifarious.

Two-flowered peduncle. Pedunculus biflorus. Proceeding simple from the stem or branch, but bearing two flowers at the end.

Two-fold leaves. Binafolia. Two and two together, from the same place, or at the same joint. See Bina and Binate.

Two-forked. See Dichotomous.

Two-horned. See Bicornes.


Two-lipped corolla. Bilabiata. As in Pinguicula, and most flowers of the Didynamia class.

Two-parted leaf, perianth. *Bipartitum folium, perianthium.* Divided in two down to the base.

Two-petalled corolla. *Dipetala.* As in *Circæa, Commelina.*

Two-ranked or Two-rowed. See *Distichus.*

Two-seeded fruit. *Dispermus fructus.* Containing two seeds.—*Disperma planta.* Having two seeds to each flower: as in Umbellate and Stellate plants.

Two-valved pericarp. *Bivalve pericarpium.* As in *Chelidonium,* and all Siliques and Legumes.—Two-valved glume. *Gluma Bivalvis:* as in the calyx and corolla of most Grasses.

VAGINA.
VAGINA. A Sheath, or membrane investing a stem. Hence

VAGINALES. The name of the twenty-seventh order in Linneus's Fragments of a Natural Method in his *Philosophia Botanica*.

VAGINANS folium. A Sheathing leaf. See *Sheathing*.

VAGINATUS caulis. A Sheathed stem. See *Sheathed*.

VALVA s. VALVULA. A Valve, Valvelet, or Valvule. But there seems to be no occasion to use the diminutives in English; for Linneus makes no distinction between *valva* and *valvula*. He uses *valvula cap-fuile*, and *valva glumae*; but more frequently the diminutive.—Valvula—*paries quo fructus tegitur externe*. The outer coat, shell or covering of a capsule or other pericarp; or the several pieces which compose it. There seems to be an impropri-
ety in explaining *valvula* by *paries* : it is rather the door or opening by which the seeds are to go out or escape. If a pericarp is entire, it is said to be *univalve*, or to consist of one valve. If it is divided, according to the number of pieces or divisions, it is called *bivalve* or two-valved; *trivalve* or three-valved, &c.

The leaflets composing the calyx and corolla in Grasses are also named *Valves* : as are also the substances or scales which close the tube in some flowers: as in *Borage* and other *Asperifoliae*.

*Valvatum petalum.* A valved petal. Resembling the glume in Grasses.

**Varietas.** A Variety. *Est planta mutata a causa accidentalii.*—*Varietates tot sunt, quot differentes planta ex eujdem speciei femine sunt produc ta.*—*Species varietatum sunt,* Magnitudo, Plenitudo, Crispatio, Color, Sapor, Odor.—*Philos. Bot.*—A plant changed by some accidental cause. There are as many Varieties as there are different plants produced from the seed of the
the same species.—Varieties are \textit{Size}, \textit{Fullness}, \textit{Curling}, \textit{Colour}, \textit{Taste}, and \textit{Smell}.

In \textit{Delin. Pl.} it is expressed more fully; thus—\textit{Variation} is a change in some less essential part or quality; as colour, size, pubescence, or age.—Externally; by the plaiting or interweaving of the branches—by bundling or uniting of several stalks into one broad flat one—by the greater breadth, or narrowness, or curling of leaves—by becoming awnless, or smooth, or hirsute.

Internally; by becoming mutilated in the corolla; or having one larger than ordinary—by luxuriancy, multiplication, or fulness—by becoming proliferous, or crested—by bearing bulbs instead of seeds—or by being viviparous.

The usual causes of Variation are, Climate, Soil, Exposure, Heat, Cold, Winds, Culture.

2. \textit{Utriculi alveolis succum conservant.}
In Regn. Veg. it stands thus—

Vasa canales succis per cos promovendis repleti, plerumque recti.

Trachæ; canales spirales aëri recepiento & distribuendo nati.

Utriculi sacculi pulpa ut plurimum viridi pleni, vaforum interstitia explentes.

Here Vafa is put for the Succiferous vessels only. See Vessels.

VAULTED. Fornicatus. Arched like the roof of the mouth: as the upper lip of many Ringent flowers; in Aconite, &c.

VEGETABLE. A Vegetable.—Vita composita, absque motu voluntario. Regn. Veg. —Compound life, without voluntary motion.—Otherwise defined to be—an Organical body, which draws in its nourishment by pores or vessels on its outer surface.—Or, an Organical body destitute of sense and spontaneous motion, adhering to some other body in such a manner as to draw from it nourishment, and having the power of propagating itself by seed.

The
The primary parts of a Vegetable are—
1. The Root. 2. The Herb. 3. The Fructification.

*Vegetable Kingdom.* The second of the three great divisions of natural bodies, comprehending all those substances which are organized and have life, but are destitute of sense and spontaneous motion. Linneus distributes vegetables into three Tribes, seven Families, or nine Nations. In his Artificial System he arranges them in twenty-five classes. He has also made an essay to reduce them into Natural Orders.

*Vegetable Substance.* See *Substantia.*

*Vegetable Texture.* See *Textura.*

*Veil.* See *Calyptra.*

*Venosum folium.* A veined leaf. Having the vessels branching, or variously divided, over the surface.

When it has no veins, at least none that are perceptible to the naked eye, it is called *Folium Avenium,* a veinless leaf.
V E

Ventricosus. Ventricose. Bellied. Dif-
tended. Swelling out in the middle. 
Ventricosaspera: a lateribus gibba. Swelling 
out at the sides.—Applied to the Perianth, 
in Æsculus— and to the Corolla, in Digi-
talis.

Ventriculosus. Swelling out a little: as the 
perianth of Salicornia.

Vepreculæ (from Vepres, a brier). The 
name of the fifty-fourth order in Lin-
neus’s Fragments, and of the thirty-first 
in his Natural Orders.

Vernatio (from Ver, the Spring). See 
Foliatio, which is the term in Philos. Bot. 
for which this is substituted in Term. Bot. 
and Delin. Pl.—In the two latter Reclina-
tion is omitted, and there is some differ-
ence in the explanations.

Verrucosa capsula. A warded capsule. 
Having little knobs or warts on the sur-
face. As in Euphorbia verrucosa—Verru-
cosum folium. A Warded leaf. Teætum 
panicis carnosis. Covered with fleshy 
points. The same with Papillosum.

V er-
VERSATILIS (Verto, to turn) anthera. A Versatile anther. Dr. Withering translates it Vane-like. Quae latere affigitur. Which is placed on the filament by its side. Opposed to Erecta, Upright, which is fixed by its base. Philos. Bot.—In Delin. Pl.—it is explained more fully thus—Parte sui affixa, ceterum libere mobilis. Fixed by some part, but freely moveable. It is there made synonymous with Incumbens. See Incumbent.—Exemplified in Vitex, Linnæa, Geranium.

VERTICALE folium. A Vertical leaf.—In Philos. Bot. the same with Obversum, which see. —A vertically-ovate leaf is the same with an obversely ovate or obovate leaf; and a vertically-cordate leaf is the same with an obversely-cordate or obcordate leaf.—Here the form of leaves is considered, and it seems as if the base and apex had changed places.

In Delin. Pl. the term Verticale appears in that section which sets forth the Direction of leaves; and since it is placed next after Horizontale, we are led to suppose that it is used in opposition to that term; but
but the words of the explanation will not admit of that sense; nor have they any thing to do with the direction of a leaf. I conclude therefore that the term is misplaced.—The words are these, Obversium, ut regio basis angustior evadat regione apicis. A Vertical leaf is Obverse, so that the region of the base becomes narrower than the region of the tip; which is nearly the same with Linneus's explanation of obversium.

After all, I do not see what the term Vertical can have to do with the shape of a leaf; and if it had presented itself to me in company with Horizontal, I should have supposed that the latter term implied a position of the leaf's surface parallel to the horizon: and the former perpendicular to it.

Verticillus (s. Verticulus, à verto. Instrumentum quod fufo adhibetur, ut facilioris vertatur. Plinius). Anglice Wherle dicimus, says Ray. It is commonly written Whorl; but Whirl seems to be the proper orthography, since it must be derived from the verb to Whirl, which signifies to turn round rapidly. A learned friend suggests,
suggests, that it may be derived from Orle, a term in heraldry for the bordure surrounding a shield. If so, it should be spelt Whorl.

Linneus puts this term for a sort of inflorescence made up of many subsessile flowers surrounding the stem in a ring. *Fit ex floribus numerosis subsessilibus, caulem annulatim ambientibus.—As in Mentha Pulegium, Marrubium, &c.*

A Verticil, Whorl or Whirl, may be
1. Sessile or peduncled.
2. Naked; that is, without involucre, bracte or bristle. Bracted—or Involucred.
3. Crowded. Distant—or Remote.—Hence

*Verticillati flores. Verticillate flowers; or flowers growing in a Whorl; or round the stem in rings one above another at each joint.—It is applied to peduncles; and sometimes to branches and leaves.—Plants bearing flowers in this manner are styled

*Verticillatae. Verticillate plants. These are included
included in the fifty-eighth order of Linneus's Fragments; and the forty-second of his Natural Orders. In the Artificial System, they form the order Gymnospermia of the class Didynamia. They also constitute one of Ray's classes.

**Vesicularis** (*Vesicula; a little bladder*)

*Scabrities.* Vesicular or bladdery-ruggedness. Having little glands like bladders on the surface: as on the leaves of *Mesembryanthemum, Aizoon, Tetragonia,* &c.—It is applied also in common language, to the pulp of the *Orange, Lemon,* &c.

**Vessels.** *Vasa*—are, 1. *Succiferous or Sap vessels.* Canals commonly straight, and of a very small bore, for conveying the liquor, juices, or sap of the vegetable. These are called *Vasa* (*κατ' εξοχήν*) in *Delin. Pl.*

2. *Utricles,* or little Bags; usually full of a green pulp, filling up the interstices of the vessels, and serving as reservoirs wherein the sap is lodged and perhaps secreted.

3. *Air vessels.* *Tracheæ.* Spiral Canals, usually
usually of a larger bore, for receiving and distributing the air.

On this subject see the learned Grew’s incomparable treatise on the Anatomy of Vegetables.

Vexillum. Standard or, Banner. Petalum corollæ papilionaceæ superius adscendens; alis carinaeque incumbens.

Vigilæ plantarum f. florum. Status floris aperti. The state of the open flower.—Absolvuntur determinatis horis diei, quibus plantæ flores quotidian aperient, expandunt & claudunt. These Vigilæ or Watchings are performed at determined hours of the day, when plants open, expand, and shut their flowers daily.

Linneus calls these flowers which observe this stated rule of opening and shutting, Solar flowers; and divides them into three kinds.—

1. Meteorici. Opening and shutting sooner or later, according to the temperature of the air.
VI

2. *Tropici*, or Tropical Solar flowers. Opening and shutting sooner or later as the days increase or decrease; and therefore observing the unequal or Turkish hours.

3. *Æquinoctiales*, or Equinoctial Solar flowers. Opening, and usually shutting at certain determinate hours of the day; and therefore observing equal or European hours.

Linneus has given a table of these, with some observations, in *Philos. Bot.* p. 273.

**Villosus. Villoso.** *Pilis mollibus pubescent.* Pubescent or covered with soft hairs. As the stem in *Tomex* and *Rhus*. The leaf in *Ulex europæus* or Furze, *Primula villosa*, &c. The stigma.

**Villus** (from \(\mu\alpha\lambda\lambda\alpha\sigma\)—or *a velando*—or *a vellendo*—or from \(\iota\lambda\omega\) for \(\epsilon\lambda\omega\)—or from *pilus*—or from *vinnus*, cincinnus molliter flexus—(such is the uncertainty of derivation). It is interpreted—*pili collecti, ac flocci vestinum*; collected hairs, the pile or nap of cloth.—In Linneus's idea, it seems to
to be soft close hairs, forming a fine nap or pile like velvet.

**Vimen (a viendo, from binding)**  *Virgultum lentum ac flexile, ad ligandum aptum.* A bending Twig or Wythe: flender and flexible, fit for binding.


**Virgatus** (*Virga a rod, or wand*) *caulis.* A rod-like or wand like stem or branch. — *Ramusculis debilibus in equalibus.* Shooting forth slender weak unequal rods or twigs: as in *Artemisia campestris.*

**Virgultum** (q. *Virguletum,* a *Virgula,* dimin. a *virga*). Small twigs or Brushwood. Otherwise called *Cremium,* a *cremendo,* from burning.

**Viscidum** (*Viscum f.* *Viscus,* Birdlime: from Βισκος *Æol.* pro Ζος) *folium.* A Viscid or clammy leaf. *Humore non fluido sed tenaci oblinitum.* Covered or besmeared with a tenacious juice: as in *Senecio viscosus.* Applied also to the Stem.
VI

Viscositas. Viscidity or Clamminess. The quality of tenacious moisture.

Vivipara planta. Viviparus caulis A Viviparous plant or stem. Producing its offspring alive: either by bulbs instead of seeds; or by the seeds themselves germinating on the plant, instead of falling as they usually do.—Exemplified in some sorts of Allium, in Polygonum viviparum, and several of the Grasses.

Umbella. An Umbel. Withering translates it the Rundle. Receptaculum ex centro eodem elongatum in pedunculos filiformes proportionatos. A receptacle stretching out into filiform proportioned peduncles from the same centre. See Corymb.—It is

1. Simple or undivided; as in Panax.

2. Compound: each peduncle bearing another little umbel, umbellet, or umbellule.—The first or larger set of rays constituting the universal or general umbel; the second or subordinate set constituting the partial umbel. Dr. Withering puts Spokes for what Linneus calls Radii.

3. Pro-
3. Proliferous or superdecompound.

An Umbel also is
1. Concave. 2. Convex. 3. Faftigiate, or rising gradually like the roof of a house.

It is also either
1. Erect; or, 2. Nodding.

Flowers growing in this manner are called Umbellati, Umbellate or Umbelled flowers; by old authors Umbelliferous. Hence

Umbellatæ. The name of the twenty-second order in Linneus's Fragments; and of the forty-fifth in his Natural Orders. Included in the second order of the fifth class, in the Artificial System. This order is called by Ray and others Umbelliferæ; by Cæsalpinus Ferulaceæ.

Umbellula. An Umbellule or Umbellet. The same with the Partial umbel. Rundlet of Withering.

Umbilicus. The Navel. Used for the cavity at the end of some fruits opposite
to the footstalk. It is the place of the receptacle in superior flowers, and is commonly surrounded by the remains of the calyx: as in Pyrus.

It is sometimes applied to the centre of a corolla; as in Browallia.

_Umbilicatus flos, fructus_. An umbilicate flower or fruit. Formed in the middle like a navel.

_Ungulatus caulis_. A stem of one angle: as in Iris faetidissima.

_Unarmed. Inermis_. Without thorns or prickles. Applied to the stem, leaf, and calyx.

_Uncinatus_. Uncinate. Hooked at the end. As the awn of the seed in Geum urbanum; and the stigma in Viola, Lantana, &c. This term is used, but not explained by Linneus. In what it differs from hamatus I know not.

_Undatus, Undulatus_. Waved. The surface rising and falling in waves, or obtusely; not in angles.—Applied to the leaf in
in *Potamogeton crispum*; and to the corolla, in *Gloriosa*.

Linneus, in *Philos. Bot.* has only the second of these terms, which he applies to a leaf thus—*folium undulatum* fit, *cum discus versus marginem convexe ascendent* & *descendent.*—In *Term. Bot.* we meet only with the first, thus explained—*disco plicis obtusis alternatim flexo.*—In *Delin. Pl.* both terms occur. But I do not apprehend that they are used in different senses any more than *patens* and *patula, valva* and *valvula,* &c.

**Undershrub.** See *Suffrutex.*

**Unequal.** *Inæqualis.* The parts not corresponding in size, but in proportion only. Applied to the corolla; and to the florets in many of the *Umbellatae.*

**Unguicularis** mensura f. *Unguis.* A measure of six lines, or half a French inch.

**Unguiculatum** petalum. A petal with a claw.
UNGUIS. See Measures.—A Claw. The base of the petal in a polypetalous corolla.


UNICAPSULARE pericarpium. A Unicapsular pericarp. Having one capsule to each flower.


UNIFLORUS pedunculus. A one-flowered peduncle.

UNILABIATA corolla. A one-lipped corolla, or a corolla of one lip.

UNILATERALIS racemus. A one-sided raceme. When the flowers grow only on one side of the common peduncle.

UNILOCULARE pericarpium. A unilocular or one-celled pericarp—or of one cell.

UNI-
Univalve pericarpium. A univalvular or one-valved pericarp.

Universalis umbella. A universal, rather general, or primary umbel.—Universale involucrum. A Universal involucre. Placed at the foot of the universal umbel.

Volva (The Ruffle, Withering). The membranaceous calyx of a Fungus.—This is said to be—Approximating when it is near the cap. Remote, when at a distance.

Volubilis. Twining: which see.

Upright or Erect. Erectus. See Erect.


Urens. Stinging, or armed with stings.

Utriculi (dimin. from Uter, a wine bag or bottle). Utricles. Reservoirs to secrete and receive the sap. See Vessels.

Also the bags or bladders at the root of Utricularia.

F f WAKING
Waking or Watching of plants. See Vigiliae.

Wand-like or Rod-like stem. See Virgatus.

Warted. See Verrucosa.

Waved. See Undatus.

Weapons. See Arms.

Wedge-shaped leaf. Folium cuneiforme. Having the longitudinal diameter exceeding the transverse one, and narrowing gradually downwards: as in Apium graveolens, Saxifraga tridactylites.

Wheel-shaped corolla. Rotata. Mono-petalous, and expanded flat without any tube.

Whirl, Wherl, or Whorl. See Verticillus.

Wings. Ala. The two side petals in a papilionaceous corolla.—Also, membranes affixed to the seed.

Winged
Winged petiole. *Alatus.* Having a thin membrane or border on each side; or, dilated on the sides: as in Orange.—*Winged leaf.* See *Pinnatum.*

Withering or Shrivelling. Decaying without falling off. See *Marcescens.*

Wood. *Lignum.* The solid part of the trunk, formed gradually from the inner bark of the preceding year, become juiceless, hardened, and agglutinated.

Woody stems. Opposed to herbaceous.

Wool. *Lana.* A sort of pubescence, or a clothing of dense curling hairs on the surface of some plants.

Woolly. *Lanatus.* Clothed with a pubescence resembling wool: as the leaves of *Horehound, Great Mullein, Furze,* &c. See *Lanatus.*

Woollyish, or somewhat woolly. *Sublanatus.*

Wrinkled. See *Rugosum.*

Writhed.
WR

W R I H E D. *Contortuexplicatus.* Twisted very much. See *Tortilis.*—I perceive this word to be confounded even by respectable writers, in orthography at least, with *Wreathed,* which is of very different import.

*Wythe,* or *Withe.* See *Vimen.*

Z

**ZIGZAG**, or *Ziczac.* Used by some English writers for *Flexuose*; which see.

THE END.