



THE

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THE LANGUAGE



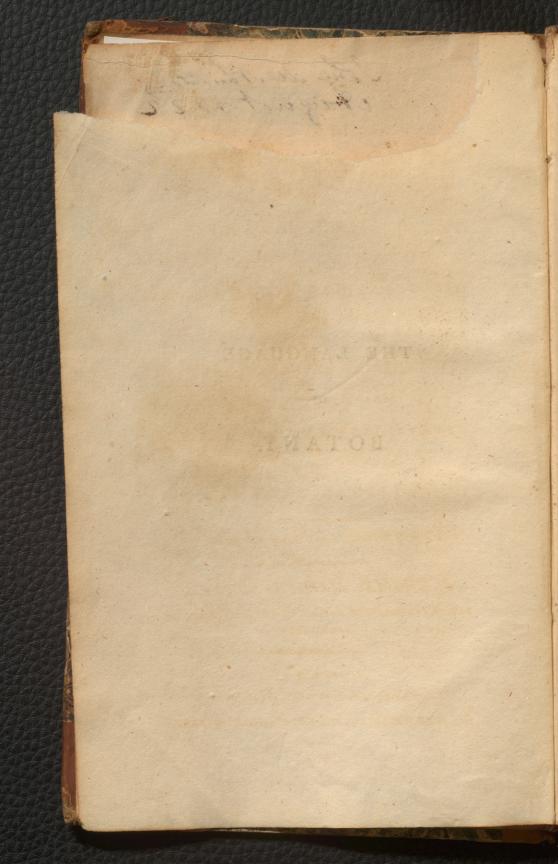
THE

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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.

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LARCE MITTERN ADERES NOBEC 4

#### JAMES EDWARD SMITH,

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

DEAR SIR, SOLD TOTAL OF METERS

THE following GLOSSARY would probably never have appeared in print, had it not been for the favourable reception which an imperfect effay on the fame fubject 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 sound 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 fo well the difficulties that attend on accuracy and precision, there needs no apology for the errors and imperfections of the work that now prefumes to claim your protection. The great and extensive task which I am now bringing to a period, has not left me leifure to use the file: and the fubject 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 PhiloPhilosophia 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 myfelf that you will take in good part this public testimony which

## viii DEDICATION.

which a veteran in our Science bears to your worth and abilities: and that you will permit me to subscribe mytelf,

Your very fincere 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 every where 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.

B

which

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 savourite 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 sounder 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 inftitution 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

B 2

now renew the attempt which I made fome time fince \* 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 peen satisfied with what has been already done by feveral learned and ingenious writers, I should certainly not have obtruded my ideas upon the public, after fuch a multitude of elementary books had been printed: and even now the errors, omissions, and defects of various kinds, which those who are skilled in Philological Botany will easily detect in this little volume, require an apology. I must request the public therefore to confider it as a mere attempt, that may hereafter be improved into fomething more worthy of their regard, if learned Botanists and Philologists will condescend to consider the subject more deeply.

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

trifles.

<sup>\*</sup> Differtation printed in vol. I. of the Transactions of the Linnean Society.

trifles. But if they be fuch, they lead not to any ferious 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 indiffensably 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 B 3 adopted

adopted by the learned of every country in Europe, and received in great part into the vernacular tongues of feveral. 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 fense? 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 ourfelves.

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 agreement

\* Arched or Vaulted. Fornicatus.

Awn. Arista.

Banner or Standard. Vex-

Barb. Glochis.

Bark, outer. Cortex.

-, inner. Liber.

Barren. Sterilis.

Beaked. Rostratus.

Beard. Barba.

Bellying. Ventricosus.

Berry. Bacca.

Boat-shaped. Navicularis.

Bough or Branch. Ramus.

Bowed. Arcuatus.

Bristle. Seta.

Bud. Gemma.

Cell. Loculamentum.

Chaff. Palea.

Chinked. Rimofus.

Clasper or Tendril. Cirrus.

Clasping or Stem-Clasping.

Amplexicaulis.

Claw. Unguis.

Cleft. Fisus.

Club-shaped. Clavatus.

Clustered or Crowded.

Confertus.

Cobwebbed. Arachnoideus.

Coiled. Tortilis, Tortus.

Columnar. Teres.

Condensed. Coarctatus.

Converging. Connivens.

Cotton, nap or flocks. To\_

Creeping. Repens.

Crescent-shaped. Lunatus.

B4 Cross-

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

Cross-wife. Cruciatim. Curled. Cripus. Dotted. Punctatus. Double. Geminus. Doubled. Duplicatus. Down. Pappus. Drooping. Cernuus. 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. Rictus. Gaping. Hians. Gashed. Incisus. Hair. Pilus. Halved. Dimidiatus. Hanging down. Dependens. Partition. Head. Capitulum.

Headed. Capitatus. Heaped. Congestus. Heart. Corculum. Helmet. Galea. Hoary. Canus, Incanus. Hollow. Cavus. Hook. Hamus. Horn. Cornu. Tag. Lacinia. Jaws or Throat. Faux. Jointed. Articulatus. Keel. Carina. Knotted. Nodosus. Latticed. Cancellatus. Leaf. Folium. Lip. Labium. Male. Mas. f. Masculus, Manifold. Multiplex. Marrow or pith. Medulla, Mouth. Os. Naked. Nudus. Neck. Collum. Nessling. Nidulans. Nodding. Nutans. Pair. Jugum. Dissepimentum. Permanent. Persistens. Pitcher-

have fubjoined a lift of doubtful terms, many of which may perhaps be used indifferently at difcretion\*. The learned will of course

Pitcher-shaped. Urceola- Smooth. tus. Pitted. Locunofus. Plaited. Plicatus. Prickle. Aculeus. Protruded. Exfertus. Punched. Pertusus. Rib. Costa. Root. Radix. Rough. Asper. Runner. Reptans flagellum. Salver-shaped. Hypocrateriformis. Sap. Succus, Alburnum. Scaly. Squamosus. Scattered. Sparfus. Scored. Exaratus. Seed. Semen. Sheath. Vagina. Shrivelling. Marcescens. Shrub. Frutex. Sickle-shaped. Falcatus. Silky. Sericeus.

Glaber. Spur. Calcar. Stalk or Stem. Caulis. Stiff. Rigidus. Stings. Stimuli. Straight. Reclus. Sucker. Stolo. Tail. Cauda. Tapered. Attenuatus. Toothed. Dentatus. Tree. Arbor. Twin. Didymus. Twining. Volubilis. Twisted, or Coiled. Tortus, Tortilis, Tortuosus. Veil. Calyptra. Vessels. Vasa. Undershrub. Suffrutex. Wing. Ala. Woody. Lignofus. Wool. Lana. Wrinkled. Rugosus. Writhed. Contortuplicatus.

Bitten or Præmorfe.

Bladder

<sup>\*</sup> Awl-shaped or Subu- Bell-shaped or Campanulate. late.

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 Veficle. Blistered or Bullate. Blunt or Obtufe. Border, brim, or limb. Limbus. Bright or Lucid. Bundle or Fascicle. Clammy or Viscid. Climbing or Scandent. Coated or Tunicated. Coriaceous or Leathery. Cottony, downy, nappy, or Tomentose. Cowled or Cucullate. Crenate or Notched. Dagger-pointed, or Mucronate. Erect or Upright. Feathered or Plumofe. Gnawed or Erofe. Heart-shaped or Cordate. Hoofed or Ungulate.

Kidney-shaped or Reni-Kneed, Knee-jointed, or Geniculate. Mule or Hybrid. Ragged or Squarrofe. Rugged or Scabrous. Sabre-shaped or Acinaciform. Shaggy or Hirfute. Sharp or Acute. Thorn or Spine. Tongue-shaped or Lingui-Top-shaped or Turbinate. Trailing or Procumbent. Warted or Verrucofe. Waved or Undulated. Wedge-shaped or Cuncifor:n. Wheel shaped or Rotate. 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 sew\*.—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. Fork from Furca. Fruit from Fructus. Nut from Nux. Ray from Radius. Round from Rotundus. Unarmed from Inermis.

\* Seed. Leaf. Stalk. Flower. Fruit. Cell for Loculamentum. Partition for Diffepimentum. Seed-veffel for Pericarpium.—See the lifts 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 fense in English, it avoids confusion to translate them, rather than to use the originals themselves\*. So, likewise, when they do not affimilate 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 consussion, 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 Hypocrateri-formis.

- \* As in Adversus, Exasperatus, Strictus.
- + As in Teres, Amplexicaulis, Hirtus.
- ‡ As in rendering Deciduus and Caducus by falling; Plumosus by feathery; and Pinnatus by feathered. Diebotomus by forked, &cc.

**fcattered** 

feattered 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 underflood, I here put down a few instances to illustrate it. With respect to Plurals, Nestarium should make Nectariums, not Nestaria. Nestary should make Nestaries. 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 fcientifical mode of arrangement, which Linneus has adopted, and from him most of his followers, has the advantages of elegance and of prefenting 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 fort, in order to be perfect, should contain a complete scientific arrangement, accompanied by a copious explanatory index or gloffary; fomething in the manner of Mr. Lee's fecond and following editions of his Introduction. But the scientifical 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 rifen 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

This Gloffary, fuch as it is, will be found to contain the terms of Linneus's Philosophia Botanica, Termina, Botanici, and Delineatio Plantæ; 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 treatifes. 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 feems necessary, or could be given with any degree of fatisfaction: fometimes a variety of derivations is fet down, with a view of shewing the uncertainty that we find in this branch of our philological enquiries. Laftly, inftances are fubjoined, where they were at hand, of the most knownplants, 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 fometimes 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 Presace 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 æneis. It contains the Insti-

tutes

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 Plantæ, 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 Naturæ, by Gmelin, in 1791.

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

<sup>\*</sup> See Dr. Pulteney's General View of the Writings of Linneus, p. 46-50.

fome circumstances relative to their phyfiology, under the title of Regnum Vegetabile.

But the first appearance of a complete lift of Botanical Terms, accompanied with explanations, and detached from other matter, was in the fixth volume of Amanitates Academica, printed in 1764. It is entitled Termini Botanici; and is a thefis read by J. Elmgren, in 1762.—This was reprinted here, with additions, in 1779, by Dr. Rotheram, under the title of Caroli a Linnè Termini Botanici, definitionibus pluribus aucti: atque Systematis Sexualis Explicatio. Opere Job. Rotheram, jun. M. D. Novicastri, 1779. I2mo.

Dr. Gifeke also, of Hamburgh, has printed the fame work, with the addition of other matters, under the title of Termini Botanici Classium Methodi Sexualis Generumque Plantarum Characteres Compendiofi. Recudi cum interpretatione Germanica definitionum Terminorum, curavit Paulus Dietericus Gifeke, M.D.

M. D. &c.—Editioni buic alteri accesserunt Fragmenta Ordinum Naturalium Linnæi, 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 Plantæ, 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 fecond contains compendious Characters of Linneus's Genera, fuch 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 fixth edition of Linneus's Genera Plantarum; with the new Genera added in their proper places.—I C2 have

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 Termini Botanici to the second edition of his Flora Anglica, in 1778.—And the Lichsield Society have given it, together with the Regnum Vegetabile and Delineatio Planta, 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 tranflation of Linneus's fundamental treatife, Mr. Rose undertook this task, which had long been much defired 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 C 3

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 Linguæ Botanicæ: 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 fatisfied 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 Plantsan Explanation of the Scientific Terms used by Morison, Ray, Tournesort, 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 Diftribution of the Genera-Descriptions of the various Tribes, or natural Families of Plants, their Habit and Structure, Virtues, sensible Qualities, and acconomical Uses-An impartial Examination of the Doctrine of the Sex of Plants—with a Discussion of several curiou 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 fecond 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:

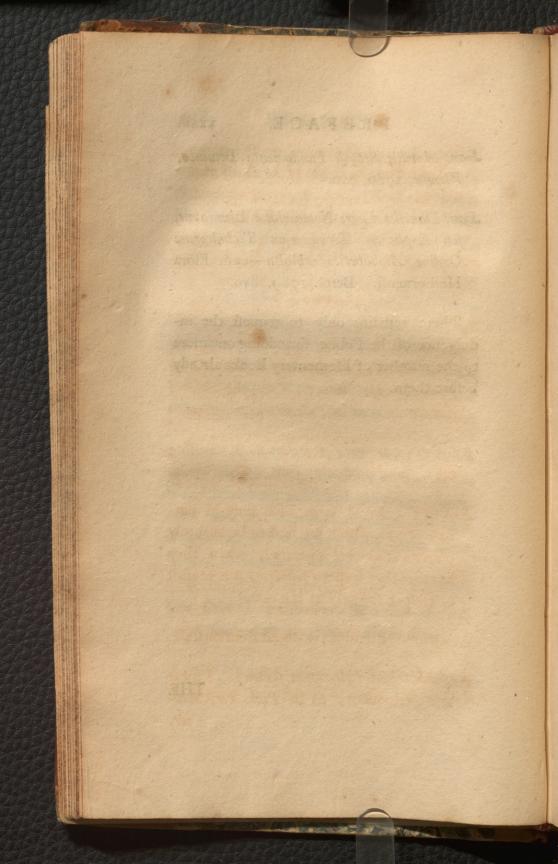
Geo. Chr. Oeder Elementa Botanica—pars 1, 1764.—pars 2. 1766. Hafn. 8vo.

Joan.

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

Joan. Danielis Leers Nomenclator Linneanus, feu Explicatio Terminorum Technicorum Ordine Alphabetico exhibita—cum Flora Herbornensi. Berol. 1789, 8vo.

There remains only to request the indulgence of the Public, for adding one more to the number of Elementary Books already before them.



## THE LANGUAGE

OF

# BOTANY.

### A B A C

ABBREVIATED perianth (Abbreviātum perianthium). Shorter than the tube of the corolla: as in Pulmonaria maritima.

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

ABRUPT leaf. A term used only in pinnate leaves, which are said to be abruptly pinnate (abruptè pinnata), when they have neither leastet (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. Philof. 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 fmall needle. The trivial name of a fmall sharp-pointed Scirpus.

Acinaciform leaf (Folium acinaciforme). Fleshy, 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 diffinct 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 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.

Acotylebonous plants (Plantæ acotyledones). Without cotyledons or lobes to the feed; and confequently not having any feminal 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). Mucro pungens, contici tantum affixus. Lin. See Prickle.

Acuminate or sharp-pointed (Acuminatus).

point. Frequent in leaves: in the calyx, as in Itea, &c.

Acute, sharp. Acūtus. Ending in an acute angle. Applied to leaves: and to the perianth, as in Primula, &c.

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 folutus, 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 Adverse leaf). The upper side turned to the south.

AEQUALIS

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 Vigiliæ. See Vigiliæ.

Astivatio (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 affemble or collect together). That which has fome part of the fructification common to several florets. Or, when several florets are so combined by the intervention of some part of the fructification,

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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 floscule or floret.

There are feven kinds of aggregate flowers. 1. 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, Statice, &c. 5. Amentaceous. 6. Glumose, as the grasses. 7. Spadiceous, as the Palms, also Calla, Dracontium, Pothos, Arum, Zostera.

Hence Aggregatæ is the name of the forty-eighth order of plants, in Linneus's Fragments of a Natural Arrangement, in Philof. Bot. containing fuch vegetables as have their flowers properly aggregate. See Lin. Gen. ed. 6. at the end.

ALA.

ALA. Wing. A membrane on the fides of a petiole or footstalk of a leaf; or attached to a seed or seed-vessel. ALE. The two side petals of a papilionaceous slower. 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.

Alatus. See Winged.

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

ALBURNUM. The foft white fubstance in trees, between the liber or inner bark and the wood, gradually acquiring folidity, and becoming genuine wood.—Intermedia fubstantia libri & ligni. Lin. Workmen call it the Sap.

ALGÆ (Flags). The fecond of the feven Families, and the eighth of the nine Tribes or Nations into which Linneus divides all D vegetables.

vegetables. Comprehending such as have the root, leaves and stem all in one: as the Lichens or Liverworts, Fuci or Seaweeds, &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 fuccession or gradation. Contrasted with opposite.

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

ALVEOLATE (Alveolatum f. favofum) receptacle. Divided into open cells, like an honey-comb, with a feed lodged in each: as in Onopordum.

AMENT (Amentum). Called by others Julus,

lus, Nucamentum, Catulus. In English, Catkin, from the French Châton, on account of its refemblance to a cat's tail,-Amentum; gemmaceum, imbricatum, commune\*: f. Inflorescentia, ex receptaculo communi paleaceo gemmaceo +. A species of calyx, or rather of inflorescence, from a common, chaffy, gemmaceous receptacle; or, confifting of many chaffy scales, ranged along a stalk as slender as a thread, which is the common receptacle.—In the class Monæcia, the male flowers are frequently thus disposed; as in hazle, birch, oak, walnut, sedge, &c. also in willow, poplar, &c in class Diacia. The ament of the willow in vulgar language is called a Palm.

AMENTACEÆ. The name of the fixteenth 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-

<sup>\*</sup> Lin. Regn. Veg.

<sup>†</sup> Lin. Philos. Botan.

gregate; borne or growing in an ament or catkin

AMPLEXICAULE folium; a Stem-clasping leaf, embracing, clasping or furrounding the stem by its base. Some leaves go only half round; these are called Semiamplexicaulia.

Ancers caulis (an ancipital stem). Angulis 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 evop and youn); bearing male and female flowers, on the fame root, without any mixture of hermaphrodites. Such plants

plants are to be found chiefly in the class Monæcia.

Androgynous flowers, having stamens or piftils only.

ANGIOSPERMIA. 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, Gymnospermia, which has naked seeds.

ANGULAR stem (Angulatus caulis). Excavated or grooved longitudinally with more than two hollow angles. Called triangular, &c. (trigonus, &c.) according to the number of these angles:—obtuse-angled or acuteangled, 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.

D 3 ANOMALOUS,

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 (AvInga, Anthera), Apex or Chive of Ray; Capfula staminis of Malpighi. Summit, Semet, Pendent, or Tip, of Grew and other English writers.—Pars storis gravida polline, quod matura dimittit: or sæta granulato polline, et boc fovilla. A part of the slower, big with pollen or sarina which it emits or explodes when ripe; or, big with granulated pollen, and that with sovilla. 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 diffension 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:

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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 fide, in Paris and Afarum. On the piftil, in Ariftolochia.

On the receptacle, in Arum, Annona.

They

They burst

On the fide, 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. Globu-

Connate, coalescent, united. Solanum, Syngenesia.

Twin (didymæ), fwelling outwards with two knots. Boerhaavia, Salicornia, Blitum, Ammannia, Potamogeton.

Upright, pointing upwards. Salicornia, Ligustrum, Olea, Chionanthus, Verbafcum, Tulipa.

Incumbent, horizontal, and then versatile, being fixed only in the middle so as to move freely. Gladiolus, Globularia, Dipsacus, Scabiosa, Passifica.

Exfert, or standing out or beyond the corolla, in some species of Erica.

Included, or enclosed within it. Jasminum, Syringa, Primula.

Awned,

Awned, ending in an awn, in fome fpecies of Erica.

Horned (bicornes), cloven at the tip, and the clefts fpreading 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, Graffes.

Globular, in Mercurialis.

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

Angular, in Tulip.

Horned, in Hamamelis, Erica, Vaccinium, Pyrola.

Forked (bifurcatæ), in most Graffes.

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.

Hastate, or shaped like the head of a halbert, 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 Limeum, Gladio-lus, Commelina, Convolvulus.

Three-cornered (trigona), in Rofa.

Four-cornered (tetragona), in Cannabis, Populus, Dictamnus, Cestrum, 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, Afclepias, Daphne, Helleborus.

Three cells, in Orchis.

Four cells, in Fritillaria, Tropæolum, Pæonia, Salix.

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

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

APHYLLOUS

APHYLLOUS (Aphyllus); leaflefs, destitute of leaves: applied to the stem, and opposed to foliatus, leafy.

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

APPENDICULATE, Appendicled, of Appendaged, (Appendiculatus). Ramentis 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 plants. Growing in or near water.

ARACHNOIDEUS, Cobwebbed. Covered with a thick interwoven pubescence, refembling a cobweb. Leaf, peduncle, calyx.

Arboreous (Arboreus) stem. Single, woody and permanent; as the trunk or bole of a tree. Opposed to shrubby, undershrubby 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 Hesperidea, 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 feem that either term might be adopted indifferently.

ARCUATUS.

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

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

ARISTA and Aristatus. See Awn and Awned.

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

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

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

internodiis geniculatus. Articulatum folium, folio ex apice folii excrescente. Delin. Plantæ. See Jointed.

Articulate-pinnatum. See Pinnatum.

ARTICULUS. Joint. Culmi pars geniculis duobus interjecta. See Joint.

Artificial Class and System. See Class.

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 *Philof. Bot.* and *Delin. Plantæ*, to be the fame with *Scaber*, rugged; but it feems to be a term of more extensive fignification than that. See *Scaber*, and *Rugged*. *Exasperatus*, roughened.

ASPE-

Asperifolia (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, decling 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.

AWL-SHAPED. See Subulatus. I cannot approve of Awled.

Awn

Awn (Ariffa). A flender sharp process iffuing 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

Dorfal, placed on the back or outlide 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 fometimes terminates in an awn.

AWNED (Aristātus). 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 feeds of Adonis, &c. An awn, however, is faid to be mutica when it is not sharp-pointed; acumine destituta.

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.

## B

BACCA, a Berry: which fee.

Bacciferous. Berry-bearing.

BAG. See Folliculus.

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

BARB (Γλωχις, Glochis). A straight pro-E cess, cefs, armed with feveral teeth pointing backwards, like the sting of a bee. This is one fort of pubescence in plants; and is distinguished from the hook (bamus) by the point not being bent.

Barba. See Beard.

Barbatus. 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 feed, which the abortient flower might have done in favourable circumstances.

BAY colour, from the Greek Basos, the fpadix of the Palm; whence it is called Spadiceus in Latin.

BEAKED (Rostrātus). Terminated by a process, shaped like the beak (rostrum)

of a bird, applied to fruits. See Rof-tratus.

Beard (Barba). In pubefcence, 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 (Barbātus). Having parallel hairs, or tufts of hairs. Applied to leaves—to the corolla, as in Dianthus barbatus, Gentiana campestris—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 (Campanulātā). Swelling or bellying out, without any tube, as in Campanula, Convolvulus, Atropa, Gentiana, &c.—This term is applied properly

perly to monopetalous corollas only, afthough it be fometimes extended to fuch as are polypetalous—Calyxes, as in Chironia; and Ne Fariums, as in Narcifus, are also bell-shaped. Tournefort has a class of Campanulate or Bell-shaped flowers.

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

Bellying 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 bellying corolla, with as much delicacy as Poets of bellying sails.

BERRY (Bacca). A facculent or pulpy pericarp or fruit, without valves, containing naked feeds. These are sometimes dispersed loose among the pulp (nipulantia), as in Nymphæa; but they

are generally placed on receptacles, as in Currant, Goofeberry, &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.

E 3

BICAPSULAR (bicapfulāre) pericarp. Having two capfules containing feeds, to each flower. As in Pæonia.

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 perifhing. 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.

Bifariously bairy, 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 Pæsti." 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 feveral folioles or leaflets at the end of each division. Bigemina folia, petiolo dichotomo apice annestent foliola plura.

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

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

BILAMELLATE stigma (stigma bilamellatum). The form of a flatted sphere, E 4 lonlongitudinally bisid. Globus compressus & longitudinaliter bisidus.

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 Locusta, 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 (binātum folium); digitatum foliolis duobus terminatum. Having a fimple petiole connecting two lea ets at the top of it: a species of digitate leaf, which see. Binati pedunculi, Peduncles growing in pairs; as in Capraria, and Oldenlandia zeylanica.

BIPAR

BIPARTIBILE. Bipartile. Divisible into two: as the fruit of umbellate plants into two feeds.

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 fide of it: as in Athamanta Libanotis, Anemone Puljatilla, &c. and many of the Ferns.

BIPINNATIFID, or doubly-pinnatifid, Leaf.
When the common petiole has pinnatifid leaves on each fide of it. See

Pinnatifidum.

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

Bitten root, leaf, corolla. See Præmorsus.

BIVALVE, or two-valved, Pericarp. In which the covering, or feed-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 graffes, is generally bivalve, or confifting 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

Border or Brim (Limbus). The upper fpreading part of a monopetalous or one-petalled corolla. See Limbus.

BOTANY (from Bolown, an herb or plant). That branch of Natural History which treats of Vegetables.

"Botanicus est ille, qui Vegetabilia similia similibus, et distincta distinctis nominibus, cuicunque intelligibilibus, noscit nominare." Lin.

Bough. A fubdivision of the trunk, in a tree. See Branch, which is of a more extensive fignification.

Bowed (arcuatus). Bent like a bow. Applied to frond, filament, anther, legume, Flexus, with its derivatives, fignifies—bent at an angle.

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 Decustated.

BRACTEA, Bracte, or Floral leaf. "Se"quentis 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,
Nigelia, Passon-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, Bartsia Hebenstreitia, Mussanda, Fumaria. See Coma.

It feems better to preferve 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. Bractea is by no means an English plural.

BRACTED (bracteātus). Furnished with bractes; as the Peduncle, and Verticil or whorl.

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

Branched or Branching (Ramofus). 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 (ramofilima).

When

When it has only a few lateral divisions, it is said to be fubramose.

BRANCH-LEAVES (Ramea folia). Leaves growing on the branches.

BRANCHLET (Ramülus), dimin. of Branch.
A subdivision of a branch; a twig.

Branch-Peduncle (ramëus pedunculus).

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 (plumosæ), and stellate or rayed (stellatæ).

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

BRISTLY (fetosum), set with bristles: as fome 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 expresses it, on the ascending caudex. It consists of stipules, or petioles, or the rudiments of suture leaves, or cortical scales.—Hence Buds are called Stipular, Petiolar and Cortical.

Most plants in cold countries, but fcarcely 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-bearsing (floralis): as in Daphne, Ulmus, Cornus, Amygdalus.
- 6. Leaf and Hower-bearing together (communis): as in most trees.

See Læssing. Diss. de Gemmis, in Aman. Acad.

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 (fquamatus), as in Lily. 2. Solid, as in Tulip. 3. Coated (tunicatus), as in Onion. 4. Jointed, as in Lathræa, Martynia, Adoxa.

Some flowers are succeeded by Bulbs instead of seeds: as in Allium. The stem, in this case, is call Bulbiferous or Bulbbearing.

Bulbous

Bulbous plants (Bulbosa). Growing from bulbs. The title of a Class in Cæsalpinus, Ray, and other systematic writers.

Roots that are folid 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.

sirl T

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 fort of tuberous root, with the tubers or knobs collected in bundles: as in Paonia.

Leaves are fasciculate (folia fasciculata),

CA

or grow in bundles or bunches, in the Larch.

BU

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 Papilionacea.

CADUCOUS (Caducus, from cado, to fall). Falling off quickly. Applied to stipules and bractes; to leaves that fall before the end of the fummer (brevi decidentia, nec per integram aftatem permanentia. Delin. Pl.) to calyxes and petals falling before the corolla is well unfolded.-Papaver and Epimedium are instances of the caducous calyx: Aslaa and Thalistrum, of caducous petals .-

This

This term is different from deciduous; which fee.

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 ejustem basis productio conisormis. 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, Antirrhimum, Valerian, Pinguicula, Utricularia. See Spur:

CALYCANTHEMI. The fortieth order in Linneus's Fragments of a Natural Arrangement.

F 2

CALYCINF. Of or on the calyx: as calycine fcales—calycine thorns.

CALYCLE (Calyculus). A row of small leastlets 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, Coreopsis, Bidens, Crepis, Chondrilla, Prenanthes, Hedypnois, Lapfana.

CALYPTRA, Calyptre, or veil (from καλυπ]ω, 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 calyptred,

tred, calyptrate or veiled; having a loose covering over the pericarp.

CALYX (καλυξ from καλυπω, not καλίξ α 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 plantæ in fructificatione Delin. Pl. This term includes præsens. not only the Perianth, which is often exclufively called the Calyx; but also the Involucre, Ament, Spathe, Glume, Calyptre, and Volva; and therefore is of a much more extensive fignification 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 nahit a cup; and, if it be admitted at all, should be confined to what we call the Perianth—which fee.

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

CAMPANULATA corolla. From campanüla (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 canālis a canal or channel). Supra fulco profundo longitudinaliter excavatum. See Channelled.

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

CANDELARES (Candela, a candle). The fixty-fecond 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 (Capillaceus f. Capillaris, from Capillus, a hair.) Long and fine, like a hair - Applied to leaves, that are longer than the setaceous or briftle-shaped leaf; as in Ranunculus aquatilis, Artemisia capillaris.-To glands, refembling hairs; as in Ribes, Scropbularia, Cerastium, Silene. -To the filaments; as in Dipfacus, the Graffes, &c .- To the style-And to the pappus or down, affixed to fome feeds; as in Sonchus, Lactuca, Chondrilla, Prenanthes, Leontodon, Hieracium, Crepis, Andryala, Carduus, Onopordum. This is by fome called pilosus; and is opposed to plumosus or feathered. Ray calls the stamens, capillamenta.

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

CAPITATÆ (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-F 4

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). Constat floribus plurimis in globum ferme congestis: Gomphrena. See Head.

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

Capsule (Capsula, a little cheft 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, differently in different plants. The parts of which a capfule is composed, are—1. The Valves or outer covering (valvulæ). 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.

Capfules are diftinguished from the number of their valves and cells. Thus we fay, a five-valved capfule, or a capfule of five valves: a two-celled capfule, or a capfule of two cells. Bilocular, is not fo proper, because we translate loculamentum by the term cell.

Some flowers are fucceeded by more capfules than one: fuch fruits are called bicapfular, two-capfuled, or fruits of two capfules, &c. according to the number fucceeding to each flower.

Capfules are twin or double (didymæ)
—dicoccous, or two-grained—tricoccous, or
three-

three-grained. — Jointed (articulatæ). — Ciroumfcissæ, opening in the middle transversely into two hemispheres. Elastic, or opening with a sudden spring. Instated, or pussed 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 prominency upon the back, like the keel of a vessel.

CARNOSUM folium. A Fleshy leaf. See Fleshy.

CARTILAGINOUS leaf (Cartilagineum folium). Having the edge strengthened by a tough rim of a substance very different from the disk—margine subosseo.

CARYOPHYLLÆUS flos—caryophyllæa corolla. Refembling that of a fingle pink or carnation (Caryophyllus); having five regular petals, ending at bottom in a long, narrow

Tournefort: but hence Linneus has confituted an order of plants, called Caryophyllaa, in his Fragments of a Natural Method, and his Natural Orders.

CASTRATA stamina s. filamenta. Without anthers; as in some species of Geranium.

CATKIN and Catulus. See Ament.

CAUDA. See Tail.

CAUDEX (from cædo, to cut down). The ftem or trunk of a tree. According to Linneus, when a feed 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 (\*\*\au\lambda\_0\signs). But the fignification 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 Colesced), come from caulis, as well as Cauliflower vulgarly Collystower: but immediately from the Low-Dutch Kool. See Stem.

Cell (Loculamentum). The hollow part of a pericarp, and particularly of a capfule in which the feeds are lodged.—According to the number of these, pericarps are called one-celled, two-celled, &c.

CERNUUS

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 (Cespes, 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 (Palea). The dry calyx of corn and graffes, 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; paleaceum receptaculum. In which the florets are divided by interposed chaffs or scales. As in Dipsacas, facus, Scabiosa, Hypochæris, Catananche, Arctium, Onopordum, Serratula, Bidens, Santolina, Athanasia, Xeranthemum, Zinnia, Anthemis, Achillea, Verbesina, Sigesbeckia, 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 (Rimofus). Applied to the outer bark of trees, especially old ones.

A dry membranaceous body interpofed

CHIVE. Put by fome English writers for Stamen.

CICATRISATUS truncus f. caulis. A fearred ftem. Marked with the remains of leaves that have fallen off.

CILIATUM folium. A ciliate leaf (from ciliæ, 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, Tropæolum.

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 sit; ut apex centrum obtineat. Delin. Pl.—Circinalia folia, quum deorsum spiraliter involvuntur. Philos. Bot.—A term in foliation or leasing; importing that the leaves are rolled in spirally downwards, the tip occupying the centre. As in Ferns, and

fome Palms.—For this we have no equivalent English term, unless we may use the word spiral, which scarcely expresses the idea.

CIRCULAR. See Orbiculatum.

CIRCUMSCISSA capfula. Quæ maturo fructu horizontaliter discedit. s. quæ media fere parte in hemisphæria duo dissilit.—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, Hyoseyamus.

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

CIRROSUM folium: a cirrofe leaf. Terminating in a cirrus or tendril: as in Gloriofa, Flagellaria, Lathyrus, &c.

CIRRUS

Some derive it from nepas, a horn; others from neigew, to shear; others from onippos, a hard tumour; others again from circum, q. capilli circum torti: fuch 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 (Class). The primary division in a system or arrangement. Tournesort defines it to be—congeries generum, quibus nota quædam 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 genera of plants.—According to Linneus it is—generum plurium convenientia in partibus fructificationis, fecundum principia natura & artis. The agreement of feveral 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 general which are evidently related to each other: as Umbellate, Verticillate, Siliquose, Leguminose plants, the Compound slowers, and Grasses.

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 fystem or general arrangement of vegetables has twentyfour

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 incrassfatus; growing gradually thicker toward the top. Applied to the leaf, as in Anabasis foliosa—to the petiole and peduncle—t the calyx, as in Silene—to the style, as in Leucoium vernum—to the capsule, as in Paparer 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 bisid, trisid, quadrisid,

drifid, quinquefid, multifid; or two-cleft, three-cleft, &c.—The term is also applied to the Perianth, and to Stipules, in the fame 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.

COADUNATÆ, the fifty-fecond 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.

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

COCCUM (NONNOW), 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 sive-grained fruit.

or fnail-shaped legume or pod. Turned G3 like

like a screw, or the shell of a snail. As in Medicago.

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 Bartha.

fule. Pars connectens parietes internos cum seminibus. Philos. Bot. The part connecting the inside with the seeds. A receptaculo adjcendens, circumcirca semina affigens. Delin. Pl. Taking its rise from the receptacle, and having the seeds fixed to it all round.

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

COLUMNIFERÆ (plantæ) or columniferi (flores). The name of the thirty-fourth order, order, in the Fragments of a Natural Method, in Linneus's Philosophia Botanica: the thirty-feventh 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 (Koun, a bead of hair). A species of bracte, terminating the stem in a tuft or bush. As in Crown Imperial; Salvia Horminum, Sylvestris, Sclarea, &c .- A fpike of flowers terminated by a coma is named Comose: and plants with fuch flowers are ranged in the thirty-fixth of the Natural Orders, in Linneus's Philasophia Botanica.

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

Common G4

Common receptacle; connecting feveral 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 graffes.

Composite, 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 feveral leaflets on one petiole, which in this cafe is called a common petiole.—Flower: a species of aggregate flower, containing feveral florets, enclosed in a common perianth, and on a common receptacle; with the anthers connected in a cylinder; as in the class Syngenefia. - Raceme: composed of several racemules, or small racemes, - Spike: composed of several spicules or spikelets .- Corymb: formed of feveral fmall corymbs.—Umbel: having all the rays or peduncles bearing umbellules, or small umbels, at the top.—Fructification: confifting of feveral 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-mucro-nate.—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 circumfcribe 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 fide, and having the feeds loofe in it. As in Apocynum, Asclepias, Stapelia.

Condensed branches (coarctāti rami).

Pressed or squeezed together, so close, as almost

almost to be incumbent, or lie over each other, at their ends.

Conduplicate, doubled together. Conduplicate vernation of leafing; fignifying, that in the bud, the two fides 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 somnus) 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; comprehending 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 Conifera.

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 slowers, are as it were squeezed together: opposed to distans.

CONFLUENT leaves (folia Confluentia).
Thronging, Withering. Ad basin inter se cohærentia; united at the base: growing in tusts, so as to leave the intermediate parts of the stem bare. Consluent lobes; running

running one into another: in opposition to distinct.

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

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

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 diffused. 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.

CONIFERE. 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 connātum). 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 silaments and anthers, united into one body; as in the classes Monadelphia and Syngenesia.

CONNIVENS corolla. Cujus limbi lobi apicibus convergunt. Connivens somnus: quando duo folia opposita pagina superiore tam arcte ad se mutuo applicantur, quasi unicum esset esset folium.—Conniventes antheræ. See Converging.

CONTORTÆ (Contorqueo, to twist together). The twenty-ninth order in the Fragments of a Natural Method, in Philos. Bot. and the thirtieth of the Natural Orders in Gen. Pl. Lin.

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 Writhed.

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

CONTRARIUM dissepimentum. See Partition.

Converging (connivers). Applied to the corolla, when the tips of the petals meet fo 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, twisted into rings or spirals.

CONUS. See Cone and Strobile.

CORCULUM (dimin. from Cor, the heart).

The corcle, heart, or effence of the feed.

The rudiment of the future plant. Attached to and involved in the cotyledons.

Confifting of the plume, or fcaly afcending part; and the roftel, or radicle, the fimple descending part.—Novæ plantæ compendium, connectens Cotyledones; confans Rostello acuminato, deorsum germinante;

nante; Plumula imbricata, sursum excrescente. Regn. Veg.

CORDATE or heart-shaped leaf (folium cordatum). So called, from its resemblance to a longitudinal section of the heart.—
Ovate or subovate, hollowed at the base, without any angles there. Ovatum, basi excavatum, destitutum 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 parchment. Applied to the leaf, calyx, and capfule.

CORNERED or angular stem: 3-6, cornered (trigonus, &c.) Having three, &c. prominent longitudinal angles.

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

CORNUTUS. Horn-shaped.

COROLLA (dimin. from corona, a crown).

Liber plantæ 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 diftinguished from the perianth, by the fineness of its texture and the gayness of its colours: whereas the perianth is usually rougher and thick-But there are many exer, and green. ceptions; the perianth in Bartha is coloured-the corolla in Daphne Laureota is green.-Linneus makes the distinction between the corolla and perianth to confift, in the former having its fegments 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;

H 2

and of Chenopodium, Urtica, Parietaria, which have no corolla. See Philof. 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 Syst. Veget.—and on the contrary, the calyx or perianth of Polygonum in Lin. Gen. is the corolla in Syst. Veg.

To get rid of the difficulty, which fometimes 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 slowers of fruittrees. Beside this it is contrary to the principles that ought to regulate us in forming technical terms.

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

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

The diminutive Corollet or Corrollule (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;

H 3 fuch

fuch as for their beauty are adapted to the making of garlands (coronæ).

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 epidermis; plated, lax, dry, hard, often in chinks.—Secundum integumentum plantæ, laminosum, laxum, siccum, durius, sæperimosum.

its origin from the scales of the bark—
e corticis ramentis.

CORYDALES (from 2000s, 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 stores petiolis propriis instruuntur, situ elevato proportionali.

tionali.—It is made up of a spike, whilst each flower is furnished with its proper petiole [peduncle], in an elevated proportional fituation.-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 " fpike, 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 leffer flower-stalks " of unequal lengths are produced along "the common peduncle on both fides, " and rife to the fame height, fo as to " form a flat or even furface at top."-Berkenhout fays-" Linneus makes it a " species of inflorescence, in which the "flowers grow in clusters, each upon a " feparate pedunculus, as in the filiquose " plants in general."—Rofe's explanation is the most intelligible, but it is not Linneus's.—There is plainly a reference to the fpike for the general fimilitude, with two distinctions .- 1. That each flower is H 4

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 fituation, fo that all the flowers form nearly a flat furface at top. If this be not the fense intended by fitu 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. Spiraa opulifolia, Ledum, and those of the Siliquose or Tetradynamia class. A corymb may be either simple or compound. Corymbus, in Pliny, fignifies a cluster of ivy berries-" hederæ racemus in orbem circumactus." Columella puts it for the head of the artichoke.

" Hæc modo purpureo furgit glomerata
" corymbo."

It is a Greek word (noguncos), from nogus a helmet, and that from naga 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 rife from different heights; but the lower ones being longer, they all form nearly an even furface at top.
- 2. In the Cyme, the peduncles take their rife from the same centre; but the subdivisions are irregular.
- 3. In the *Umbel*, the peduncles take their rife from the fame centre, and the whole is disposed with a striking regularity.
- CORYMBIFERÆ. The name of one of Ray's classes; and of the third subdivifion in the order of compound flowers, in Linneus's Natural Arrangement.

COSTATUM folium. A ribbed leaf: as in Echites siphilitica.

Cattany. See Tomentosus.

COTYLEDON (κοτυλη, a cavity). The lobe, or placenta of the feed, destined to nourish the heart, and then to perish.-Corpus laterale seminis, bibulum, caducum. The lateral body of the feed, bibulous or imbibing moisture, and caducous or falling off quickly. Gifeke defines it to befolium primum germinantis seminis, 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 stateand the feed-leaf, when the feed is in a growing state.—The greater part of feeds have two lobes; fome 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 piperisque sis 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, scolloped or notched leaf (folium crenatum, from crena a notch). Cujus margo angulis neutram extremitatem respicientibus secatur. Having the edge cut with

with angular or circular incifures, not inclining towards either extremity: as in Primula farinofa.—When the edge of a leaf is cut into fegments of small circles, instead of angular teeth, it is said to be obtusely crenate; when the larger fegments 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 incifuris is rightly substituted in Delin. Pl. for angulis.

The fame term is applied to the corolla, in Linum, Dianthus chinenfis, &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 fpikes: as in Acrostichum pellinatum. The diminutive lunulata is applied to the keel of the flower in Polygala myrtifolia. - Moonshaped is abfurd, 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. refembling the moon in any period of her first quarter; fince this term does not occur very frequently.

CRESTED (cristatus). Having an appendage like a crest or tust: as the slower of Polygala and some anthers.

CRINITUS (crinis, hair). Crinite. Hairy,

or having long hair, or beards refembling hair; as in *Phleum crinitum*.—Applied also to *Fronds*.

CRISPUM folium. A curled leaf. Cum peripheria folii major evadit, quam discus admittit, ut undulatum siat. Philos. Bot. p. 45.—Cum foliorum peripheria augetur, ut circumcirca fluctuet quasi undatus limbus, p. 217.—Margine luxuriante ut discus evadat longior sua rachi. Delin. Pl. See Curled.

CRISTATUS. See Crested.

CROSSWISE (cruciatim). This term is applied to leaflets in a whorl, when there are four of them forming a crofs—alfo to anthers; as in Glecoma and Hippomane.

Cross-armed. See Brachiate.

CROWDED. See Confertus.

Crown of the feed (corona feminis). An appendage to the top of many feeds, enabling

enabling them to disperse. This is either the calycle, as in Scabiosa, Knautia, Ageratum, Arctotis—or a Down (Pappus), as in Hieracium, Sonchus, Crepis, Scorzonera, Tragopogon, &c.

CRUCIFORM or cross-shaped corolla (cruciformis s. cruciata). Consisting of sour
equal petals, spreading out in form of a
cross. Petalis quatuor æqualibus patens:
in Delin. Pl. is added, ungue quam lamina
longiore—the claw longer than the border.
—These flowers constitute the fifth class
in Tournesort's System; and are a principal character in the class Tetradynamia
of Linneus. In the Natural Orders he
has preferred the title of Siliquosæ.

CRYPTOGAMIA (ueunlos and yauos, 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 or Ferns. 2. Musci or Mosses.

3. Algæ or Flags. 4. Fungi.

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

Cucullatum folium. Lateribus ad basin 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.

CVLM (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.

CULMINIÆ (Culmen, the top). The twenty-fixth order in Linneus's Fragments of a Natural Method.

CUNEIFORME folium. A cuneiform or wedge-shaped leaf. Cujus diameter longitudinalis superat transversalem, & sensim deorsum angustatur. 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 sib of the leaf: as in Curled Parsley.—All curled leaves are monsters, or productions of art.

Curled nectary (nectarium crifpum): 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, introfum nutans. A stem curved or nodding inwards.

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.

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, Dienthus chinensis, &c.—to the style—and to the spike.

CYMBIFORMIS. See Boat-shaped.

CYME or CYMA (Kuna, fætus). It fignifies properly a sprout or tender shoot, particularly of the cabbage. Dr. Withering calls it a tuft.-Linneus explains it to be an aggregate flower composed of several florets fitting on a receptacle, producing all the primary peduncles from the fame point, but having the partial peduncles scattered or irregular; all fastigiate, or forming a flat furface at top. Opulus, Cornus sanguinea, Ophiorhiza .-Flos aggregatus ex flosculis pluribus infidentibus receptaculo, in pedunculos fastigiatos, primores ex eodem puncto productos, posteriores autem sparsos. Philof. Bot. p. 78.—Receptaculum ex centro eodem universali, partialibus vero vagis, elongatum in pedunculos fastigiatos, p. 55. Umhella composita ramulis alternis. Regn. Veg.

Veg. The Cyme is either naked, or with bractes. See Corymb.

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

CYMOSÆ. The fixty-third of Linneus's Natural Orders in Philosophia Botanica.

## time of receptacle, producing

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DÆDALEUM folium. A Dædal leaf.—
Und flexuosum 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.

DECAGENIA (Sexa ten, and youn a woman or wife). Ten-styled. The name of one of

of the orders in Linneus's Artificial System; comprehending those slowers which have ten styles. This occurs only in the class Decandria.

DECANDRIA (dena ten, and anno a man or husband). Ten stamened. The name of the tenth class in Linneus's Artificial System; comprehending all hermaphrodite slowers with ten stamens.—It is also the name of an order in the classes Monadelphia, Diadelphia, Gynandria, and Diacia.

DECAPHYLLUS calyx. A decaphyllous or ten-leaved calyx; as in Hibifcus.

DECEMFIDUS calyx. Cut into ten parts. A ten-cleft calyx, or rather perianth. As in Potentilla and Fragaria. See Cleft.

DECEMLOCULARE pericarpium. A tencelled pericarp or feed-vessel: as in Linum.

Deciduous (Deciduus) Leaf: falling off in the autumn. Deciduum folium: per-

acta unica æstate casurum.—Calyx or perianth: falling after the corolla opens. Deciduum perianthium: post storis explicationem cadens. As in Berberis, and the class Tetradynamia.—Corolla or petals: falling off with the rest of the flower. Decidua corolla: cum storis casu.—Applied also to stipules; as in Padus, Cerasus, Populus, Tilia, Ulmus, Quercus, and many other trees—Bractes—and Legumes. See Caducous.

clining stem. Arcuatim descendens. Descending archwise. The least degree of curvature towards the earth. Opposed to ascending.—Applied also to the Peduncle—Stamen—and Style.—Declinatum folium. A declined or declining least. Deorsum stexum instar carinæ naviculæ. Bent downwards like the keel of a boat.

DECOMPOUND leaf. Folium decompositum.

When the primary petiole is fo divided that each part forms a compound leaf.—

The different kinds of the decompound leaf

leaf are—Bigeminate, Biternate, and Bipinnate: which fee in their proper places.
—Applied fometimes to an umbel (umbella decomposita), which is otherwise
called Proliferous.—Flower (decompositus
flos): compounded of compound flowers,
or containing within a common calyx
smaller calyxes, 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 Cassa—Stem: caulis decumbens, lying on the ground with the base higher than the other parts.

DECURRENT leaf. Folium decurrens. A fessile leaf having its base extending downwards along the stem. As in Symphytum, Verbesina, Carduus, Sphærantbus.

—Applied also to the petiole, and the stipule.

DECURSIVELY-PINNATE leaf. Folium decursive pinnatum. Having the leaslets 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.

Deflexus ramus. A deflected branch.

In arcum deorsum inclinatus. Delin. Pl.

Bowed or bending down archwise.

DEFLORATUS. Having discharged the Farina or Pollen.

Defoliation, or shedding the leaves.—Tempus autumnale, quo arbores folia dejiciunt, eoque indicant progressum autumni & insequentis hyemis.—Here Linneus puts it, not for the action of unleasing, or shedding leaves; but for the season

feason in which this action is performed.

—So

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

Deltoides. Folium deltoides, or deltoideum.—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 Philosophia 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 it has no refemblance 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 fense 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 fufficiently 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 fides of the rhomb, connecting the lateral angles with the base or point of infertion of the petiole, must be shorter than the upper fides, connecting the same lateral angles with the apex of the leaf, or angle opposite to the petiole. This fense 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 fatisfaction 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 fide 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 sinuatum 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 refemblance to a rhomb; and that it would be abfurd to expect mathematical exactness in substances fo various in their forms as leaves. Dr. Withering translates deltoideus triangularly angularly fpear-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 demerfe leaf. Growing below the surface of the water. Frequent in aquatic plants. The same with Submersum.

Dense panicle. Densa panicula. Having abundance of flowers very close. A greater degree of congesta, heaped.

Dentata (Dens, a tooth) radix. A toothed root. Moniliformis, ex articulis concatenatis. Confisting of a concatenation of joints, resembling a necklace.

DENTA-

DENTATUM folium. A toothed leaf. Quod acumina horizontalia, folii confistentia, 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.—Exemplied in Leontodon hastile, autumnale, alpinum, bispidum, hirtum. Primula veris & minima. Epilobium montanum.

Dentato-finuatum. Toothed, and at the fame time with finuses, bays or large hollows about the edge. Tooth-sinuate.

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

DENTICULATUS (denticulus, 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 seed; as in Bidens.

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

DEPENDENS folium. Aleaf 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.

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.

DE DI

Convex, in Philof. Bot. and to Compressed, in Delin. Pl.

Applied also to seeds; as in Cyno-glossium.

Dextra torfio, and Dextrorfum volubilis. See Torfio and Twining.

DIADELPHIA (from die twice, and adexpos a brother). Two brotherboods. The name of the feventeenth class, in Linneus's Artificial System; comprehending those plants which bear hermaphrodite flowers, with two fets of united stamens.-This is a natural class, with papilionaceous or pea flowers, and leguminous fruits. is nearly the same with the Papilionacei of Tournefort; the Irregulares Tetrapetalæ of Rivinus, and the Leguminofæ 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 (dis, and aung a husband). The fecond class of Linneus's Artificial System, comprehending all hermaphrodite flowers, which have two stamens.—Also the name

of an order, in classes Gynandria, Monæcia, Diæcia.

Haller calls fuch plants Distemones.

Dichotomous stem. Caulis dichotomus (διχα and τεμνω, 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 corymbs, in which the pedicles divide and subdivide in pairs. As in Achyranthes corymbosa, which is distinguished by having—panicula dichotomo-corymbosa.

Dicoccous or two-grained capfule (capfula dicocca). Confifting of two cohering grains or cells, with one feed in each.

DICOTYLEDONES. Those plants which have feeds that split into two lobes in germinating.

DIDYMA (διδυμος, twin) anthera, capfula, bacca.—Duobus nodis extus protuberantes.

—Didyma capfula, bacca, eadem ac dicocca effe videtur. See Twin.

DIDYNAMIA (dis twice, and duvamis power).

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

It is a natural class, containing the Labiati and Personati of Tournesort, and the Monopetali irregulares of Rivinus.

Linneus

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

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 fibi respondentibus. The parts of which do not correspond cither in fize or proportion.

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

Difformia folia. Difform leaves. Diversa figura in eadem planta. Of different shapes on the same plant. As in Ranunculus aquatilis, Rudbeckia triloba, Euphorbia beterophylla, Lepidium perfoliatum, Hibiscus virginicus, pentacarpos, Sabdariffa.

It is observable, that Aquatic plants fometimes have the leaves under water K 2 finely

finely cut, whilft those above water are not so. On the contrary, in mountain plants, the upper leaves are usually most cut.

fpreading branches—ramis patentibus; as Teucrium Scordium.—Panicle. Diffusa panicula, hanging loose: opposed to coarcatata close or compact. Cum laxe divaricantur pedicelli, angulis rectis sive obtus. 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 leastets at the end of it. Cum petiolus simplex apice adnectit foliola plura. This is a fort 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 leastets spreading out like the open singers: but Linneus makes binate, ter-

nate and quinate leaves to be species of the digitate; and the leaves of Horse-chesnut, though they have more leaslets than five, are nevertheless called digitate.

DIGYNIA (dig and youn). 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, s. involucellum, extrorsum situm, estque patens vel dependens: ut in Æthusa.

Dioica (die, and oixos a house) planta. A diæcous plant. Having male and semale flowers on distinct individuals. Hence

DIECIA. The name of the twenty-fecond class in Linneus's Artificial System, com-K 3 prehending prehending those plants which have no hermaphrodite flowers; but male and se-male flowers on distinct individuals.—

Mares & famina habitant in diversis thalamis & domiciliis.

DIPETALOUS (dipetăla) corolla, or twopetalled; having two petals only: as Circæa, Commelina.

DIPHYLLOUS (dig, and qualow a leaf) or two-leaved calyx: as in Papaver and Fumaria.—Applied also to the cirrus or tendril, as in Lathyrus—and to the peduncle, as in Gomphrena.

Disk of a leaf. The whole furface—
fupinus, the upper—pronus, the under
furface.—Disk of a flower, is the central
part in radiate compound flowers, confifting generally of regular corollules of
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 dispermous 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 s. dissectum as a superseded term, and refers to Laciniatum, which he thus explains, in p. 43, —varie sectum in partes, partibus itidem indeterminate subdivises. 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 s. incisa [folia] sectiones continentia plerumque numero determinatas.

DISSEPIMENTUM. Paries quo fructus interne distinguitur in concamerationes plures.

See Partition.

Dissiliens pericarpium. A dissilient, bursting or elastic pericarp or fruit. Bursting K 4 open 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 (stamina distantia), as in Mint.

Distichus (die, and elizoe 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 distinction); storibus ad utrumque latus spectantibus: all the slowers pointing

pointing two ways. Opposed to Secunda. —Spica tetrasticha, a four-ranked spike—hexasticha, a six-ranked spike.

Distinct leaves. Folia distincta. Quite separate from each other. Contrasted wite connate: as in several of the Mesembryanthema.—Foliola distincta. Distinct leastets, as in Jasminum officinale; contrasted with confluent, as in J. grandiflorum.—Antheræ distinctæ. Distinct or separate anthers, as in most flowers; contrasted with connate.

DIVARICATE (Straddling. With). Standing out wide. Divaricati rami: a trunco ad angulum obtufum discedentes. Divaricate branches; making an obtuse angle with the stem. Opposed to Coarctati. Philos. Bot. p. 233.—Divaricata panicula: a divaricate panicle; when the pedicels form an obtuse angle with the main peduncle.

—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 discedentes.

—Applied also to the sleep of plants. Divergens somnus: when the leaslets, in their state of repose, approach each other at the base, but spread out at the tips.

DODECANDRIA (Subena twelve, and anne a busband). 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 singer, 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 hatchetshaped 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 dolabrisorme.

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

Dotted leaf. Folium punctatum. Befprinkled 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 stipules. Two and two by pairs.—Double peduncle. Two from the same point.

Different

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

Doubled together. See Conduplicate.

Doubly-compound. See Decompound.

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

Doubly-pinnate. See Bipinnate.

Doubly-ferrate. Duplicato-ferratum. Having fmall teeth on the larger.

Doubly-ternate. See Biternate.

Down is properly the English term for fome forts 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, Thisse, a. feathered or plumose—or else, 2. capillary, hairy or simple. Corona pennacea, pilosave volitans. Some of these crowns are stiped, other session.

not to be used in both senses. Pappus cannot well make an English word. Feather is not proper, for we cannot say—a feathered seather, and a hairy seather. Seed-Down will distinguish it from Pubescence. See Pappus.

Downy leaf. See Tomentofus.

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 fee.

DRUPA. Pericarpium farctum evalve, nucem continens. A Drupe is a pulpy pericarp or fruit without valves, containing a nut or ftone with a kernel. As Plum, Apricot, Peach, Almond, Olive, &c. Some call this fort 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.

Dumosæ (dumus, a bush). The nineteenth order in Linneus's Fragments, in Philos. Bot. and the forty-third of the Natural Orders in Gen. Pl.

DUPLICATO-CRENATUM. Doubly-crenate.

Duplicato-pinnate. Doubly-pinnate or Bipinnate.

Duplicato-serratum. Doubly-ferrate.

Duplicato-ternatum. Doubly-ternate, of Biternate.

DURATION of plants. The continuance of their life or existence.—As Cadūcous or quickly perishing. Ephemeral, creatures of a day. Annual, Biennial, Perennial.

## E

EARED. Auritus, Auriculatus (auris, an ear). Having an appendage like a little ear. Exemplified in the leaf-leafletand frond .- Aurita folia: cordata ceterum, sed angulis 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 fmaller lateral lobe near the base. This is the proper sense of auritus or auriculatus.— Auriculatum foliolum: twifted into the form of a little ear, as in Jungermannia ciliaris. Berkenb .- We have instances of Eared Fronds in Acroftichum punctatum, Polypodium Pica, marginale.

The diminutives Earlet and Earletted feem scarcely necessary.

EBRACTEATUS racemus, pedunculus. A raceme

raceme or peduncle, without any bracte or floral leaf; as in Ciftus guttatus.

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

ECHINATUM pericarpium. An echinated or burrypericarp. Beset with prickles like a hedge-hog (exivos). As in Datura Stramonium.—Prickly is the proper translation of aculeatus.

ECHINUS. 'A Burr, or prickly pericarp.

The time of the month in which different forts of plants first shew their flowers.

EGG-SHAPED (Ovatus). See Ovatum.—
I cannot approve of Egged.

EGLANDULOSUS petiolus. A petiole without glands.

EGRET. From Aigrette, the French term for the Fappus, Down, or feathery Crown of some seeds. See Pappus.

EIGHT-

Eight-Petalled corolla; or confisting of eight distinct petals. Octopetăla corolla: as in Mimusops.—When it is only deeply divided into eight parts, it is said to be eight-cleft or octofid; (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 Distannus albus. Not different from Distilliens; which see.

ELLIPTIC leaf. Folium ellipticum. Lanceolate, but with the breadth of an ovate
leaf. Lanceolatum latitudine ovati folii.
Delin. Pl.—In Philof. Bot. it is made
fynonymous with ovale.—Both the elliptic and oval leaf are in the form of an
ellipfe; 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. Emarginātum. Notched at the end. End-nicked, Lichf. Soc. Applied to the leaf—to the corolla, as in Agroftemma 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 f. enerve folium. A nerveless leaf. Having no apparent nerves. Opposed to nervosum.

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

ENNEA-

Enneapetala corolla. A nine-petalled corolla: or, a flower of nine petals: as in Thea viridis, Magnolia, and Lirio-dendron.

ENODIS. Knotless. Without knots or joints. In opposition to nodosus knotted.

—Enodis culmus: qui continuus st, nec articulis interceptus.—As in Schænus, Cyperus, Scirpus.—Nodum in Scirpo quærere, is proverbial.

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

Ensiform leaf (folium ensisterme). 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 fcarce

fearce any branches. Simplicissimus, ramis vix ullis. Philos. Bot.—In Delin. Pl. it is explained to be, Simplicissimus, ramis angustatis; and simplicissimus is ramis vix ullis; whereas simplex is defined to be, continua serie virsus apicem extensus: that is, the simple stem has no branches, and the most simple stem has sew—which seems strange.

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

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

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

EPIDERMIS.

EPIDERMIS. 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 faid to be equal (aqualis), when the parts are of the fame fize and figure. In Utricularia, the calyx is equal; in Primula, Limofella, &c. the corolla is equal. Regular expresses the idea better.

Equal Polygamy. See Æqualis.

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

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. Philof. Bot.—When the fides of a leaf converge in parallel lines, fo that the inner leaves are inclosed by the outer ones: which is not the case in conduplicate leaves.—It is a term used

L 3

in foliation or leafing. In Delin. Pl. it is called equitans vernatio, and is thus explained—marginibus conniventia folia situ 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 perfendiculum 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 faid 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

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

An erect flower has its aperture directed upwards: as in Trillium fessile. 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 fide.

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

The dimin. erecliuscula 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 obtus acquirit.—It has the appearance of being gnawed or eaten by insects.

L 4 ESSENTIAL

ESSENTIAL Character of Vegetables. Character Effentialis. A fingle or peculiar natural mark, diftinguishing one genus from all others in the same natural order. Innumerable instances of such occur in Linneus's Systema Vegetabilium.

Even. See Lavis.

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

EXARATUS. Scored.

Exasperatus. Roughened.

Expansus. Expanded, fpread 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 Antirrbinum canadense.

Exserta (from exsero, to put forth) stamina; exsertæ antheræ. Protruded stamens 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 parvi-flora, &c.

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

ftipules. Growing on the outside of the leaves, or below them.—Infra folium collocatæ. As in Betula, Tilia, and the class Diadelphia. Opposed to intrafoliaceæ—It is applied also to peduncles, and prickles.

EYE of a feed. Hilum-which fee.

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 (Philos. Bot.) divides the vegetable world into feven families. 1. Fungi. 2. Algæ. 3. Musci, or Mosses. 4. Fisices, 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 (farcio, to stuff or cram). Stuffed, crammed, or full; without any vacuities.

—Farclum 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 fascis), a bundle. A species of inflorescence, or manner of flowering, in which several upright, parallel, sastigiate, approximating flowers are collected together: as in Dianthus barbatus.—Colligit stores erectos, parallelos, sastigiatos, approximatos. Hence

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

Fasciculata folia: fascicled leaves. Growing in bundles or bunches from the same point, as in Larix.

FASTI-

FASTIGIATUS (fastigium, the pointed top, or roof of a building).-Caulis: ramis æqualis altitudinis. A fastigiate stem, having branches of an equal height .--Fastigiati pedunculi: cum ita attollunt fructificationes in fasciculum, ut superne æquales altitudines evadant, ac fi horizontaliter detonsi essent. Peduncles are fastigiate, when they elevate the fructifications in a bunch, fo that they are all of an equal height, as if they had been shorn off horizontally-or, when they are fo proportioned as to form an even furface at top, like a flat roof: as in Dianthus and Silene .- Umbella fastigiata: gradatim assurgens. Delin. Pl. A fastigiate umbel, rifing gradually. This is a different idea from the former: and in Philof. Botan. the umbellate flower is thus describedest aggregatus ex stosculis pluribus imsidentibus receptaculo in pedunculos fastigiatos, omnes ex eodem puncto productos.-Here we are probably to understand fasigiatos in the former fense of level-topped: but I am at a loss to conceive how Linneus

with the state came

came to annex this idea to fastigium 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 fastigiatus seems applied to losty and pointed buildings. Thus Solinus says of the pyramids—turres sunt in Ægypto fastigiatæ, ultra celsitudinem omnem, quæ sieri manu possit.

FAVOSUM receptaculum. A honey-combed receptacle. See Alveolate.

FAUX. The jaws, chaps, throat, or opening of the tube of the corolla—or, between the fegments of the corolla, where the tube ends.—As in the class Didynamia and the Asperifoliæ in class Pentandria.—Hiatus inter lacinias corollæ 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.

FE

FEATHERED. Plumofus. See Down and Plumofus.

Some put feathered for pinnate, but improperly.

FEMALE plant. Femina planta. Which has female flowers only. Quæ 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.

FFRRUGINOUS colour. Color ferrugineus. The colour of rusty iron.

FERTILE flowers, producing feed.

FIBRE. Fibra—of a root. A thread or longitudinal canal, imbibing moisture from the earth. Canalis longitudinalis humidum terræ sugens.—These fibres properly constitute the roots of vegetables; the

the main body, whence they usually proceed, 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 confisting wholly of fibres, as in many Grasses, is termed a fibrous root. Radix fibrosa.

Fiddle-shaped. See Panduræforme.

FILAMENT. Filamentum (Filum, a thread). The thread-like part of the stamen, supporting the anther, and connecting it with the flower. Pars elevans adnectensque antheram.

Filaments, in the fame 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 sew are bissid; and others Tricuspidate, or broad and trifid at the end.

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

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 decurrens in caule, & ciliatus in flore. Gifeke.—Almost the same with decurrent in the stem, and ciliate in the slower.—It appears to me, that it has no relation to the sirst, and that it is sufficiently distinct from the second.—I do not find this term either in Philosophia Botanica or Delineatio Planta. See Fringed.

Fingered leaf. See Digitate.

Fissum folium. Divisum sinubus linearibus, marginibusque rectis.—Hinc bisidum, trisidum, quadrisidum, quinquesidum, &c.
multisidum, a numero sinuum.—Indiviso
opponitur. See Clest.

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 nectary; as in Aconitum.

FIVE-CLEFT. Quinquefidus. 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-PARTED leaf. Quinquepartitum folium.—Five-parted Corolla. Corolla quinquepartita. See Partitum.

M

FIVE-TOOTHED. Quinquedentatus. Applied to petal and Capfule. See Dentatum.

Tive-Valved Quinquevalvis. Applied to the capfule. See Valva.

FLACCIDUS caulis, pedunculus. A flaccid flem or peduncle. So feeble as not to fupport 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 furface; 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.

FLATTED. Compressus. Better expressed by Compressed—which see.

FLESHY leaf. Folium carnofum. 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. Eafily 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, s. a flore ad florem horsun vorsum flexus.

FLOATING leaf. Folium natans. Lying flat on the furface of the water.

FLORAL bud. Gemma floralis. 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.

FLORESCENTIA. Florescence, or the flowering season. The time when vegetables usually expand their flowers.

FLORET. Flosculus. 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.

FLOSCULOSUS flos. A floscular flower. A term of Tournefort's, for which Linneus substitutes

fubstitutes tubulosus. It is opposed to semi flosculosus—ligulatus of Linneus. See Tubulosus.

FLOSCULUS, est slos partialis sloris aggregati, compositi, umbellati, cymosi. See Floret.

FLOWER. The organs of generation in vegetables, with their coverings.—A flower, when complete, confifts of a calyx, corolla, flamen, and piftil; but the effential parts are the anther and fligma, which are fufficient to conflitute a flower, either together in hermaphrodite flowers, or feparate 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.

M 3

FOLIATIO\*

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 oppofition to Aphyllus, leafless.

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

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

FOLIUM (from φυλλον). Organum motus plantæ. Delin. Pl.—Folia transpirant & adtrabunt (uti Pulmones in Animalibus), umbramque præbent—in se tamen re ipsa musculi analoga sunt, licet non uti in animalibus caudá affixa, cum motus voluntarius

in bis dari nequeat. Philos. Botan.—Folium expandens par aëra superficiem, volatile, sæpe petiolatum. Regn. Veg. See Leaf.

Folliculus (dimin. from follis, a bag) a follicle. A univalvular pericarp, opening on one fide longitudinally, and having the feeds loofe in it. Pericarpium univalve latere altero longitudinaliter dehifcens, nec futuræ semina affigens. Exemplified 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 bisid or trisid from the number of divisions. Exemplified in Berberis, Ribes, Gleditsia, &c.

Forked, furcatus: branched or fub-divided, usually into two—Applied to anthers—to briftles; 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 fee.

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 Verticillate plants.—Siliqua tetragona, a fourcornered silique, 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 fativus.

Four-10BED leaf. Folium quadrilobātum, See Lobatum,

Four parted leaf. Folium quadripartītum. See Parted.

FRINGED corolla.—Fimbriāta. The edge furrounded by hairs or briftles not parallel or so regularly disposed as in the ciliate corolla. Exemplified in Menyanthes trifoliata.

(from Bovo pullulo, to germinate or bud); and fignifying 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 æstatis, quo species singulæ 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 stos; a leasy proliferous flower. It sometimes happens in the Rose, Anemone, &c.

FRUCTESCENTIA comprehendit tempus, quo femina matura dispergunt Plantæ. Fructescence, or the fruiting season, is the time when vegetables scatter their ripe seeds.

FRUCTIFICATIO: vegetabilium pars temporaria, generationi dicata, antiquum terminans, novum incipiens. Fructification, or fruiting, fruiting, is a tempory part of vegetables, appropriated to generation, terminating the old and beginning the new vegetable.

—The effence of it confifts in the flower and fruit; and there is no fructification without anther, figma, and feed.—When perfect it confifts of feven parts—

1. Calyx. 2. Corolla. 3 Stamen.

4. Piftil. 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 feed 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 Linneus's Artificial System; comprehending such of the Compound slowers as have perfect florets in the disk, producing

producing seed; but impersect florets in the ray, which for want of a stigma are barren.—Cum flores disci bermaphroditi stigmate instruuntur & semina proferunt; flosculi vero radium constituentes, quum stigmate careant, semina proferre nequeunt.

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

FRUTEX. A shrub. Caulis adscendens supra terram absque gemmis—sed intra Fruticem & Arborem nullos 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, foon falling off: as the corolla of some flowers.

Fulcrum (from fultum, which is from fulcio), Fulcre, prop, or support. A help

to vegetables for their commodious suftentation.—Fulera adminicula plantæ sunt, pro commodiore sustentatione.

Fulcres are of seven kinds.—1. Stipula or Stipule. 2. Bractea or Bracte. 3. Spina or Thorn. 4. Aculeus or Prickle. 5. Cirrus, Clasper or Tendril. 6. Glandula, a Gland. 7. Pilus, Hairs or pubescence.

In Delin. Pl. these are otherwise enumerated. 1. Petiolus, the petiole, leas-stalk or foot-stalk. 2. Stipula. 3. Cirrus. 4. Pubes. 5. Arma, Arms or instruments of desence; comprehending Prickles, Thorns and Stings. 6. Brastea. 7. Pedunculus, the peduncle, flower-stalk and fruit-stalk.—These terms are explained in their several places.

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

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

Full flower. Flos plenus. When the co-rolla

rolla is fo multiplied as to exclude allthe stamens. Polypetalous flowers are generally the object of plenitude. See Luxurians.

Fungi, Funguses 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 fixty-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 fometimes 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, Parsnep. 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.

GAPING corolla. Hians. In opposition to closed, clausa.

GASHED leaf. Folium incifum 1. dissectum. Having the sections or divisions usually determinate in their number; or at least more so than in the Laciniate leaf.—

The

The Gashed 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 Dissectum and Laciniatus.

Hence Linneus has formed feveral compound terms, which fee under Incifum.

GEMINA folia. Eodem petiolo duo folia annectente.—Geminæ stipulæ. Duæ & duæ per paria.—Geminatus pedunculus. Ex eodem puncto bini. See Double.

GEMMA. A Gem or Bud. Hybernaculum plantæ e rudimentis foliorum præteritorum. See Bud.

GEMMATIO. Gemmation or Budding. Gemmæ 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.

GENERIC Character. The definition of the Genus. This is factitious, effential or natural. See Genus and Character.

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

With.) 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—internodiis interceptus, which is the same with nodosus. In my opinion this is the difference—that nodosus 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,
N 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 fynonymous with nodus. See *Knot* and *Knotted*.

Gentes. Nations, great Tribes, or rather Casts of Vegetables. Linneus makes nine of them—1. Palmæ. 2. Gramina or Grasses. 3. Lilia. 4. Herbæ. 5. Arbores, Trees. 6. Filices, Ferns. 7. Musci, Mosses. 8. Algæ. 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 sructification.—Genera tot dicimus, quot similes constructæ fructificationes proferunt diversæ species naturales. Philos. Bot.—Genera tot sunt, quot attributa communia proxima distinctarum specierum, secundum quæ in primordio creata suere. Gen. Pl. in Præf.

Genuses

Genuses 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, fince it contains the rudiments of the feeds.—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 faid 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

N 2

its

its base below it, then it is called Inferior (corolla insera, flos inserus).—When a germ is elevated on a sulcre, besides 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 pulpa. See Convex.—This term, when applied to a perianth, means only swelling out at bottom. Instances of this we have in the classes Diadelphia and Tetradynamia.

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—fuperficie lubrica. See Smooth.

GLADIATA filiqua. Gladiatum legumen. A gladiate or fword-shaped silique or legume. As in Cleome arabica, Dolichos ensiformis.

GLANDULA. A Gland or Glandule. Papilla humorem excernens. Or, as it is
explained in Regn. Veg.—fulcrum fecernens liquorem. An excretory or fecretory
duct or veffel. Exemplified in Urena,
Ricinus, Iatropha, Passifiora, Cassia, Opulus, Turnera, Salix tetrandra, Heliocarpus,
Bryonia zeylanica, Acacia cornigera, Bauhinia aculeata, Prunus armeniaca, Amygdalus, Morisona.

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

Glandulatio. Vafa fecretoria offert. The fituation and structure of glands.

Glandulōſum folium. Quod glandulas infidentes gerit, vel in dorso, vel in ferraturis.

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

Glass-shaped. See Cyathiformis.

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

Globoso-depressum pericarpium. A flatted-globular, or more properly an oblate spheroidal pericarp or fruit.

GLOCHIS (γλωχις, cuspis, a point). Glochides: mucrones apice retrorsum multidentati, nec curvati.—In Philos. Botan. we have bami triglochides, as in Lappula; but the hamus or hook has a curved point—the glochis a straight one. See Barb.

GLO2

of yarn or thread) spica—panicula. A glomerate spike—spiculis varie congestis; having the spikelets or component spikes variously heaped together: as in Panicum italicum.—The glomerate panicle is exemplified in Poa ciliaris, and Dassylis 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 fmall 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. I. c. 48): "Spica—N 4

"in ordeo & tritico tria habet continentia, "granum, glumam, aristam.—Gluma est folliculus ejus.—Arista & granum om-"nibus fere notum: gluma paucis.—"Videtur vocabulum etymon habere a "glubendo, quòd 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 filiforme, cujus basis instruitur gluma communi.—A glumose flower is a kind of aggregate flower, having a filiform receptacle, with a common glume at the base. As in corn and grasses, Scirpus, Cyperus, Carex.

GLUTINOSITAS (gluten, glue). Glutinosity

or glueiness. Qualitas humoris lubrici.

The quality of slippery moisture.

GLUTINOSUM folium. A glutinous leaf. Humore lubrico illitum. Besmeared with slippery moisture,

Gnawed. See Erofum.

GRAMINA. Graffes. The fifth family, and the fecond 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 graffes are contained in the second order of the fifth class.

GRANULATA radix. A granulate root. (Beaded, With.)—Particulis carnofis adfpersa. Consisting of several little tubers or sleshy knobs, resembling grains of corn: as in Saxifraga granulata.

Grooved. See Furrowed.

GYMNOSPERMA planta (γυμνος naked, and σπερμα feed). A plant bearing naked feeds; in opposition to that which has the feeds inclosed in a capsule or other vessel.

GYMNOSPERMIA. 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 slower, succeeded by four naked seeds.—
These are the same with the Labiati of Tournesort; and the Verticillatæ of Ray, and Linneus in his Natural Orders.—See Didynamia and Angiospermia.

GYNANDRIA (youn a woman, and aung a man). The name of the twentieth class in the Linnean Artificial System, containing all plants with hermaphrodite slowers, 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 babitat.

Habitus plantæ. Commonly called the babit 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 fuch characters are called Characteres 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 Caryophylleæ, Verticillatæ, Asperisoliæ, Umbellatæ, Leguminosæ, Siliquosæ, Columniseræ, Filices. In forming the characters of the genus, these have been neglected, since the fructisication 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 Hastate.

HALVED head. Dimidiatum capitulum. He-mispherical,

mispherical, or resembling half a head: round on one side and slat on the other.

—A halved spathe. Dimidiata spatha. Investing the fructification on one side only.—A halved involucre. Dimidiatum involucrum. Placed wholly on one side: as in Æthusa.

Hamus. A hook. Mucro acuminatus curvatus. Hamus feminis: quo adhæret animalibus. See Hook and Pubescence.

Hamosus. Hooked. Hamosa seta. A bristle curved at the end.

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

Handed or band-shaped root—leaf. See Palmata.

HANGING leaf. Folium dependens. Pointing directly to the ground.

HASTATE leaf. Folium hastatum. Refembling the head of a halbert. Triangular, hollowed at the base, and on the sides, with the angles spreading.—Triangulare,

angulare, basi lateribusque excavatis, angulis patulis. Philos. Bot.—In Delin. Pl. it is thus explained. Sagittatum, angulis posticis sinu divisis ad latera prominentibus.—Exemplished in Rumex and Scutellaria hastisfolia.

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. A-bundant in flowers, but not so close as in densa panicula.

HEART of a feed. Corculum. The rudiment of the future plant. It confifts 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. Galea. The upper lip of a ringent corolla.

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 (enla seven, and arms a husband). The seventh class in the system of Linneus, comprehending those plants which have seven stamens to the slowers.

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, sulcres, 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 fuch as perish annually down to the root.

Herbaceous stem, perishing annually, foft 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.

HESPERIDEÆ. 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 (ex fix, and youn 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 (e.g., and army a man or hufband). The name of the fixth class in Linneus's system; comprehending those plants which have hermaphrodite flowers with fix 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 fixth, ninth, tenth, and eleventh orders, in Linneus's Natural Arrangement, with the admixture of fome others.

HEXAPETALA corolla. A corolla confifting of fix diffinct petals.

HEXAPETALOIDES corolla. Divided fo 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 fix leaves or leaflets.

HILUM. The Eye—commonly fo called in the bean. The external mark or fear of the umbilical chord on some seeds, where they adhere to the pericarp.—Cicatrix umbilicalis. Regn. Veg.—Cicatrix externa seminis ab ejustem affixione in fructu. Philos. Bot.—As in Cardiospermum, Staphylæa, Dolichos, &c.

Hirsurus. Hirfute, rough with hair, fhaggy.—Nearly the fame with bifpid, but

but having more hairs or briftles, 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 birsutus. 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 leas. Having brittle stiffish bristles scattered over the disk, as in Turritis hirsuta.

Since we cannot easily find fignificant 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 preserable 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 O 2 with

with a white pubescence: as in Draba incana, Cistus incanus.

Holeraceæ, Holoraceæ, commonly written Oleraceæ (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, s. 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 filicle of the Rose of Jericho.

Sent O Louis

Hook.

HOOK. Hamus. A crooked pointed process.

Hooked. Hamosus—A hooked bristle. Hamosa seta. A fort 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 restum a caule
discedit. Philos Bot. Paginam superiorem
calo 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
furface, and parallel to it.

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

Horn-shaped. Cornutus.

Husk. See Gluma.

HYALINE, Hyalinus. (Years, from vw pluo,

the colour of rain water.) The colour of glass, with its transparency.

Hybernaculum. The Hybernacle.—
Herbæ compendium super radicem antequam excrescit. Philos. Bot.—Compendium berbæ totius, squamosum. Regn Veg.—
A compendium of the whole herb, before it grows up. Or, in which the embryo of the suture 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 suture leaves.

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

Hypocrateriformis corolla. A falverfhaped corolla. Monopetalous, with the
border fpreading out horizontally or flat
from the tube, like an old fashioned falver. As in some of the Asperifolia.—Heliotropium, Myosotis;—in Diapensia, Aretia,
Androsace, Hottonia, Phlox, Samolus.

the class of the populs are fixed into the

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 bisid, 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 (excor twenty, and arme a husband). The name of the twefth class in the Linnean fystem; 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 infide of the calyx. To confound this class with *Polyandria* is abominable.

IMBERBIS corolla. A beardless corolla. Applied to some forts of Iris, in opposition to other forts, 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 ferratures, in the bud; or, a term in foliation—to the stem, when covered with scales: tectus, ut nudus non appareat—to the calyx, as in Hieracium, Sonchus, and other Syngenesia—to the spike, having slowers 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 unequallypinnate leaf; terminated by an odd or fingle leaflet.

IMPERFECT

IMPERFECT flower. Imperfectus flos. Defitiute either of the anther or stigma.—
In Rivinus and some other authors it is fynonymous with apetalus of Tournesort, stamineus of Ray, and incompletus of Vaillant.

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

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

Incanus. Hoary; which see.—Linneus makes it synonymous with tomentossus.—
Folia (incana) quæ colorem glaucum habent & sere argenteum, quod ex superficie singulari oritur. Philos. Bot. 219.

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

Inciso crenatum. Gash-crenate, ordeeply cut; as in Geranium Reichardi.—Incisodenticulatum. Gash-toothletted.—Incisomultisidum.

multifidum. Gash-multifid.—Inciso-serratum.—Gash-serrate. These compound words sound 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 fomnus. When alternate leaves approximate to the stalk during the night, fo that the flower or tender twig is protected between them.

Incluse anthera. Inclosed within the corolla: as in some forts of Erica. Opposed to exserta.

INCOMPLETUS flos. Qui caret perianthio 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 Impersect. Every apetalous flower is incomplete; but every incomplete flower is not apetalous. An impersect flower wants one or both the essential parts; an incomplete

incomplete flower wants one or both the covers.

Incrassatus pedunculus. A peduncle incrassatus pedunculus. A peduncle incrassatud, 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 silament: opposed to upright, erecta—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 arcuatur versus caulem; bowed or curved upwards towards the stem. Made to be synonymous with instexum in Philos. Bot.—aculeus incurvus; introrsum stexus; 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.

INERME folium. An unarmed leaf; without thorns or prickles. Opposed in Philos. Bot. p. 44, to spinosum; in 233, to pungens.

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 Tournesort'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 Monæcia, and the order Syngenesia.

INFLATUS. Inflated. Hollow and puffed or blown up like a bladder. Applied to the perianth, as in *Physalis*—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 planta annectuntur. The various modes in which flowers are fastened to the plant by means of the peduncle. These are—1. Spadix. 2. Cyme. 3. Um-

bel. 4. Spike. 5. Ament. 6. Strobile. 7. Corymb. 8. Raceme. 9. Panicle. 10. Thyrse. 11. Fascicle. 12. Head (Capitulum). 13. Whorl (Verticillus). These are all explained in their proper places.

INFRACTUS caulis f. culmus.

Bent in at angle, so as to appear as if it were broken; as in Alopecurus geniculatus.

Infundibuliformis corolla. A funnelshaped corolla. Monopetala, conica, tubo
imposita. Monopetalous; Having a conical border, rising from a tube. As
in Lithospermum, Anchusa, Cynoglossum,
Pulmonaria, Asperugo, Lycopsis, Tournefortia.

INTEGER calyx. An entire calyx. Opposed to fissus.—Exemplified in Genipa.—Integer caulis. Simplicissimus, ramis vix ultis. Philos. Bot.—Simplicissimus, ramis angustatitis.—Delin. Pl. where Simplicissimus is explained by ramis vix ultis.—In Philos. Bot. Integer is a species of the Simplex; which means, that the stem is continued

continued in one unbroken feries 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 destitutum. Undivided, having no sinus.

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

Interfoliaceous flowers or pedunculi. Interfoliaceous flowers or peduncles.—Interfolia opposita, sed alternatim collocati. Between opposite leaves, but placed alternately

nately with them: a in Asclepias. Contrasted with oppositifdii.

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 anglisize the Latin term. The joint is properly the articulation itself, from junctura; 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 pinnatun folium. An interruptedly pinnate eaf. Foliolis alternis minoribus. Having smaller leaslets between each pair of larger ones.

Intorsio. Flexio partium versus alterum latus. Philos. Bot.—In Delin. Pl. it is called Torsio, and is thus explained. Directio plantæ in unan alteramve plagam a verticali diversam.—The writhing, bend-

ing, turning, twning or twifting of any part in a vegetible towards one fide or other-or, in any direction from the ver-Thus the stem in some plants twines from right to left; as in Tamus Dioscorea, Rajonia, Menispermum, Cissampelos, Hippocatea, Lonicera, Humulus, Helxine. - In others from left to right; as in Phaseolus, Dolichos, Clitoria, Glycine, Securidaca, Convolvulus, Ipomæa, Cvnanche, Periploca, Ceropegia, Euphorbia, Tragia, Basella, Eupatorium, Tournefortia. It is also applied to the Clasper or Tendril; as in Leguminous plants, Vine, In this last it is observed by Bryony. Grew, that the tendril having made two or three turns one way, is then directed the contrary way, in order to be more fure of its hold. To the corolla, which, twists to the left in Asclepias, Nerium, Vinca, Rauwolja, Periploca, Stapeliato the right in Pedicularis, Trientalis, Gentiana.—It is applied also to the Pistil and Germ-to he Spike-to the Awn, as in the Wild Jat—to the beak of the Seed, as in Germium—to the peduncle,

P

fpeak of right and left, we suppose the spectator to have his face turned towards the south. See Twining.

Intortus stylus. A style twisted inwards.

INTRAFOLIACE A stipulæ. Intrasoliaceous stipules. Growing above or within the leaves.

Inversely beart-shaped. See Obcordatum.

Invertens fomnus. When during the night the more tender furface of the leaves is protected, by being inverted.

INUNDATE. 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 fuch 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 involucre; placed beneath a single flower.

Involucres are one-leafed, &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 latere deficiens; deficient on one side.

Involucratus. Involucred. Having an involucre. As umbels, whorls, &c.

Involucellum. An Involucret. A little or partial involucre. (Partial Fence, Withering.) As in Umbellate plants and Euphorbia.

INVOLVENS fomnus. When the leastets of P2 compound

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

Involuted foliatio f. vernatio. Involuted foliation or vernation. Quum margines laterales (foliorum in gemma) utrinque introrfum 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.

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

baucamos

IRREGU-

TRREGULARIS corolla. An irregular corolla. Quæ limbi partibus, figura, magnitudine, aut proportione diversa est. Philos. Bot. In Delin. Pl. we read et proportione. Different in the figure, fize, 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 fub-P 3 stituted stituted Amentum. Hence Herman and others had a class of trees entitled Juliferæ.

## K

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

Keeled. 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.

knots or fwelling 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. Continuus 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.

flem of force plants of sixtemiarly insecure and graffes. An admirable provides to

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 dissectus est. Having the border very finely cut.

Lacerum folium. A lacerated leaf.

Quod margine varie fectum est segmentis
difformibus. Having the edge variously
cut into irregular segments—as if it were
rent or torn.

LACINIA corollæ. Quævis pars in quam limbus corollæ monopetalæ dissetus 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 laciniæ is said to be bissidus, &c. Philos. Bot. p. 63.

LACINIATUS. Jagged. Folium laciniatum, Varie sestum in partes, partibus itidem indeterminate subdivisis. 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 Tournefort's,

for which Linneus puts multifida co-rolla.

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

LACTESCENTIA. Lactescence or Milkiness.

Copia liquoris, qui effluit læsa planta.

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 interjectas. When the disk is depressed between the veins. Contrary to rugosum, wrinkled, in which it rises.

Lævis. Even, level, very fmooth, polished.
This term does not occur in *Philosophia Botanica*. In *Delin. Pl.* it is applied to the

the stem, and is explained to be fupersicis aquali. Having an even surface. Opposed to striatus and sulcatus, streaked and surrowed or grooved. Whereas glaber, smooth, is opposed to asper, scaber, &c. rough and rugged.—The Even stem is exemplified in Chelidonium by-bridum.

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. lævis is opposed to albo-tomentosus. In Ethulia divaricata, it is opposed to pubescens. And in Philos. Bot. Glaber is interpreted to be, superficie lævi. The French translate it lisse. There is classical authority for lævis being not only planus, politus, tasu non asperus, as læve clypeum; but also glaber, depilatus. Pers. 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 lamella.

LAMINA. The border. Corollæ polypetalæ pars fuperior patula. The upper, broad or spreading part of the petal, in a polypetalous corolla. Called limbus, in a monopetalous corolla.

LANA. Wool. Pili curvi densi. Delin. Pl.

— servans plantas ab astu nimio. Philos.

Bot. Crooked or curling, close, thick hairs: the principal use of which is to defend plants against too great a degree of heat.—As in Salvia canariensis, and Æthiopis. Sideritis canariensis. Marrubium. Verbascum. Stachys. Carduus eriocephalus. Onopordum. See Wool.

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 fensim versus extremitatem attenuatum. Oblong, and gradually tapering towards each extremity: like the head of a lance.—Exemplified in Plantago lanceolata.—Some call it spearshaped, others lance-shaped or lanced; but Lanceolate appears to me in all respects preserable.—It is applied also to the Stipule, Brasie, and Perianth.

Lanceolato-ovatum folium. A lanceolateovate 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.

LANUGO. Down. Pili molles plantarum partes vestientes. Soft hairs clothing the parts of plants.

LATERIFOLIUS flos s. pedunculus. Ad latus baseos folii. By the side of the base of the leaf.

leaf. As in Claytonia, Solanum, Asperi-

LATTICED. Cancellatus. Applied to the involucre in Atractylis cancellata. And to the capfule 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.

Leafits. 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.

Leafless. Aphyllus. Destitute of leaves. Applied to the stem and branches.

Leaf-stalk. See Petiolus.

LEAFY. Foliatus. Furnished with leaves: in opposition to leastess.—Or abounding in leaves, contrasted with such stems 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 suturam 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 joirted—others again divided

divided transversely into several cells (istibmis 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 samiliar to the English
ear. Dr. Withering calls it the shell.

LEGUMINOS.E. Leguminous plants. Such as have a legume for the pericarp. The fame 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 fcabrities (from Lens, a lentil). A fort 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 arbore reluatur, s. resolvatur, or to use Cato's word glubatur. As from cresco comes creber; from sacio, faber; from suo, suber; so from luo comes luber, and thence liber.—But a more probable derivation is from the Æolic letto for letto, which by changing  $\pi$  into  $\mathcal{E}$  became letto,—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 exfuccus, induratus, agglutinatus. The liber, or inner bark of the preceding year, deprived of its juice, hardened, and glued fast together.

Q

LIGULATUS (from ligula, a strap; which fome 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-floscular flowers of Tournefort; and are comprised in the first division of the first order of Linneus's nineteenth class, Syngenesia Polygamia Æqualis.

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

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

Liliaceae. Liliaceous or Lily-like plants.

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 sine 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 crefcent at the root of the finger nail. See Measures.

LINEARE folium. A linear leaf. Æquali ubique latitudine, interdum utraque extre-Q 2 mitate ritate tantum angustatur. Of the same treadth 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 litter.

Lineari-lanceolatum. Linear-lanceolate.

Lineari-subulatum. Linear-subulate.

LINEATUM folium. A lineate leaf. Nervis appressis. The furface slightly marked bingitudinally with depressed parallel lines. Lined is improper, as being used in a different sense.—This term has been sometimes consounded 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 sleshy, blunt at the end, convex underneath, and having

having usually a cartilaginous border, as in Mesembryanthemum, Aloe, Hæmanthus coccineus.

Lingulatus flos. A term of Pontedera's.

The fame with ligulatus; which fee

Lip. See Labium.

Lobus. A lobe. The part into which fome 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 distantes,
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 folium
fissum, the cleft or cloven leaf.—These
leaves take the names of bilobate, tribbate,
&c. or two-lobed, three-lobed, &c. from
the number of lobes into which they are
divided.

Q3 Locy-

LOCULAMENTUM pericarpii. The cell of a pericarp or fruit. Concameratio vacua pro feminum loco.—Pericarpium uniloculare, biloculare, &c. A unilocular or onecelled; 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 ferve as a general rule in the like cases.

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

in Pliny, a lotu, being made by washing. But it also signifies farina fricta, parched meal, or, according to others, farina fabacea, bean meal.) The name of the sifty-sixth order in Linneus's Fragments; and of the thirty-third in his Ordines Naturales.

Loose. Laxus. Which fee.

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. Philof. Bot .- In Delin. Pl. it is called Lunatum, and the explanation is fomewhat differently worded-subrotundum, basi sinu divisum, angulis posticis acutis.- It is fingular that Dr. Berkenhout, who feldom gives any equivalent English terms, should translate lunatum, moon-shaped; and lunula, a half-moon; though he explains it, rightly enough-fhaped like a fmall In which fense only it is used crescent. in botany; though among the ancients lunatus is put for the shape of the moon, both when full and in a crefcent.

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

LURIDÆ. (Luridus, a dusky or livid colour. Linneus makes it synonymous with Q 4 fuscus.)

fuscus.) 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 effentiales ejusaem partes destruantur. 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 Lyrefhaped 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.

## M

MALE flower. Masculus flos. 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-flowered glume and perianth. Gluma multiflora. Perianthium multiflorum. Inclosing several flowers.—Many-flowered peduncle and stem. Pedunculus & caulis multiflorus. Supporting several flowers.

Many-fold corolla. See Multiplex and Multiplicatus.

Many-leaved calyx or tendril. Polyphyllus.

Many-parted leaf. Folium multipartitum. See Partitum, Parted.

Many-

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 fix; calling the rest polypetalous. Linneus also makes the distinction of dipetalous, tripetalous, &c. but calls them all polypetalous.

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

MARCESCENS f. MARCIDUS. Withering, Shrivelling. Contabescit nec decidit. Decaying without falling off. Applied to the perianth, in the class Diadelphia: and to the corolla, in Campanula, Orchis, Cucumis, Cucurbita, Bryonia, &c.

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.

Maskep

MA ME

MASKED corolla. See Personata.

Measures. Linneus feldom 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.

- a hair. One-twelfth of a line.
  - 2. Linea. A Line. The length of the little crefcent at the root of the finger nail. One-twelfth of an Inch.
  - 3. Unguis. A Nail. The length of a nail. Half an Inch.
  - 4. Pollex. An Inch. The length of the first joint of the thumb.
  - 5. Palmus. A Palm, or hand. The breadth of the four fingers. Three Inches.
  - 6. Spithama. A fhort Span. The space between the end of the thumb and

## ME

of the fore-finger extended.—Seven Inches.

- 7. Dodrans. A long Span. The space between the end of the thumb and of the little finger extended.—Nine 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 fomething more than eighteen inches English.
- 10. Brachium. An Arm. From the armpit to the end of the middle finger.

  —Twenty-four Inches.
- 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 Reman 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 fame 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.

MEDULLA. Marrow or Pith. Substantia intima vesiculosa, internumve parietem trunci cavi obducens. Regn. Veget.—
Crescit extendendo se & integumenta.—
Fibræ medullaris extremitas per corticem protensa solvitur in gemmam imbricatam ex foliolis nunquam renascituris. Philos. Bot. See Marrow.

MEMBRANACEUS. The fubstance of parchment. Membranacea stipula. A membranaceous stipule; as in Arenaria rubra.

—Membranacea valvula. — Membranaceus calyx

calyx—petiolus, complanatus more folii; flatted 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 vigiliæ. When flowers open and shut according to the temperature of the air. See Vigiliæ.

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. (Movos and αδελφος one brotherhood.) The name of the fixteenth class in the Linnean System. Comprehending those plants which have hermaphrodite flowers, with one set of united stamens.

stamens. They form a natural class, entitled Columniferæ.

Monandria. The name of the first class in the Linnean System, comprehending those plants which have only one stamen in a hermaphrodite flower.

Monocotyledones planta. Plants which have only one cotyledon or lobe in the feed; as Grasses, Palms, and Liliaceous plants. Linneus remarks that these are more properly Acotyledonous, since the cotyledon continues within the seed.

Monœcia. (Movos, and oixos a house.)

The name of the twenty-first class in the Linnean system; comprehending the androgynous plants, or such as produce male and semale 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.

Monopetaled corolla. A monopetalous of one-petalled corolla. The whole in one petal. It may be cut deeply, but is not feparated 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 oneleafed perianth. All in one; if cut,
not feparated to the base. As in Datura, Primula. Applied also to the Involucee.

Monosperma planta. A plant that has one feed to each flower. As in Polygonum, and Collinsonia. A monospermous or one-feeded plant.—Monosperma bacca. A one-feeded berry; called monopyrena by the older botanical writers.

Monostachyos (μονος, and σλαχυς a spike) caulis. A stem bearing a single spike.

Moon-

Moon-shaped. See Lunulatum and Crescent-shaped.

Mosses. See Musci.

Mouth. Os. The opening of the tube in the corolla.

Mucro. (From pargos, long, according to fome; from pargos, 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.

MULTANGULARIS f. Polygonus caulis. A multangular stem. Having several corners.

MULTICAPSULARE Pericarpium. A multicapfular pericarp; or, a fruit of many capfules. Having several pericarps succeeding to a flower. As in Caltha, Trollius, Helleborus.

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MULTIDENTATA corolla. A many-toothed corolla. Cujus limbus aut petala margine diffecta funt. Having the border (in a monopetalous corolla) or the petals (if it be polypetalous) cut about the edge.

MULTIFIDUM folium. A multifid or manycleft leaf. Divided into feveral parts by linear finuses and straight margins. See Fissum and Cleft.

Multifidus cirrus. A many-cleft tendril. Multoties divifus. Divided and subdivided feveral times.

Multifida corolla. A many-cleft corolla. The fame with laciniatus flos of Tournefort. Exemplified in Convolvulus Soldanella.

MULTIFLORUS. Many-flowered. Common to feveral flowers.—Caulis. A many-flowered ftem; as in feveral 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 flogcules.—Pedunculus. A many-flowered peduncle; as in Browallia elata.

MULTILOCULARE pericarpium. A manycelled pericarp. Divided internally into feveral cells; as in Nymphæa.

MULTIPARTITA corolla. A many-parted corolla. Multipartitum folium. A many-parted leaf. Divided into feveral 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 fort of Luxuriant flower, having the corolla multiplied fo far as to exclude only fome 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

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first essay towards fulness.—In common larguage we improperly call all these variations Double slowers.

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-thrd order in the Fragments of a Natural Method, in Philof. Bot.; and of the twenty-fixth in the Ordines Naturales, at the end of Linneus's Genera Plantarum. Comprehending those plants which have several siliques or pods succeeding to each slower. As Columbine, Hellebore, &c.

Multivalvis gluma. A multivalve or many-valved glume. Having more than two valves.

MUTIENS formus. When the upper leaves of a plant, which during the day had fpread out horizontally on long petioles, dop them at night, and hang down fo

as to form an arch all round about the stem.

MURICATUS. Muricated. Punctis futulatis adspersus. Having subulate points scattered over it; or armed with sharp prickles, like the Murex shell-fish.—Applied to the stem—to the calyx, as in Crepis biennis—to the pod, as in Eunias—to the seeds, as in Caucalis, Amm.

Hence we have

MURICATÆ for the name of the elerenth order in Linneus's Fragments of a Natural Method.

Musci. Mosses. The third of the Families, and the seventh of the Nations or Casts, into which Linneus has distributed all Vegetables.—The fixty-fifth order in his Fragments; and the fifty-fixth of his Ordines Naturales.—They form the second order of the class Cryptogama, in his Artificial System.

Hedwig has made confiderable difcoveries with respect to the fructification of Mosses.

R 3

Muticus.

Muticus.—Awnless.—Opposed to aristatus, awned, in Philos. Botan.— Mutica gluma; acumine destituta. Without any point at the end. Delin. Pl.—In this sense we have Arista 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 berbacea.

MUTILATUS f. Mutilus flos. A mutilated flower. Not producing a corolla, when it ought regularly to do it. This defect is commonly owing to a want of fufficient heat, either from climate or fituation: fometimes it is the effect of culture.

## N

NAKED. Nudus. When applied to the Stem or Trunk of a vegetable, it fignifies, that it is without leaves, fulcres or arms. Qui foliis, fulcris & armis caret. Delin. Pl.

-In Philof. Botan. it is faid only to be destitute of leaves, but that is expressed by the term aphyllus, leafless. - When applied to the Leaf, it fignifies, that it is destitute of all pubescence. Setis ac pilis destitutum: Delin. Pl. and is opposed to teclum, covered, in Philos. 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, briftles or chaffs.—When applied to a Head of flowers (Capitulum), it is opposed to foliofum, 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 fame fense it is applied to the Raceme, Petiole, Peduncle, &c.

NAP. Tomentum. Soft interwoven hairs fcarcely difcernible.

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NAPPY

NAPPY or Tomentose. Tomentosus. Covered with a whitish down, or with hairs interwoven and scarcely distinguishable. As the leaves of Cerastium tomentosum, &c.

NATANS folium. A floating leaf. Placed on the furface of the water, in many aquatic plants; as Nymphæa, Potamogeton.

Nations. See Gentes.—The fense 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 affemblage of several genuses of plants, agreeing in their parts parts of fructification, general appearance and qualities. We have inflances of fuch in the Umbellatæ, Verticillatæ, Siliquofæ, Leguminofæ, Compositæ, Gramina, &c.

Navicularis f. Cymbiformis Valvula. A boat-shaped valve. As in Isatis and Thlaspi.

NECESSARY Polygamy. Polygamia 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 semale 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 fometimes entirely diffinct from it, and is then called a *Proper* Nectary. It is frequently in form of a horn or fpur:

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fometimes 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, stigmata, &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. Nidulans. Applied to feeds which lie loofe in pulp or cotton, within a berry or other pericarp.

NITIDUM folium. Glittering, glossy. Quod glabritie lucidum est s. 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 slower 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. — Nodosus caulis: geniculis crassionibus interceptus. See Knotted.

Notched leaf. Folium crenatum. See Crenate, which is a better term.

Nucamentum; the fame with Amentum. Hence Nucamentacea, the name of the feventeenth order in Linneus's Fragments of a Natural Method.

Nucleus. A Kernel. The feed of a nut and of stone fruits, contained within a shell—Putamen.

Nudus. See Naked.

Nudiusculus. Almost, or rather naked.

Nur. Nux. A feed covered with a shell.

Extending

Extending not only to Nuts, commonly fo called, but to the Acorn, and all Stone-fruits.

NUTANS. See Nodding.—Nuto properly fignifies to nod with the head, or to nod affent. Cicero uses it for nodding to its fall, or being ruinous; also for hesitating or doubting in an opinion.

Nux. See Nut.—Semen tectum epidermide offeo. 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 class Monadelphia.—Obcordatum legumen; an inversely

versely heart-shaped legume: as in Polygala.—Obcordata silicula; an inversely heart-shaped silicle: as in Thlaspi Bursa Pastoris, or Shepherd's Purse.

Oblique Molium. An oblique leaf. Basi cælum, 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 exemplished 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.

Obliques caulis. An Oblique stem. A perpendiculari borizontalive 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 segmento fegmento 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. Wornout, 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.

Obtufiusculus. Rather or somewhat obtuse or blunt—bluntish.

OBVERSUM folium, s. verticale. An obverse or vertical leas. Cujus basis angustior, ita ut basis concipiatur 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 (ORTW and arng, eight hufbands). The name of the eighth class in the Linnean fystem; comprehending those plants which have hermaphrodite flowers with eight stamens.

Octofidus calyx. An eight-cleft calyx, as in Tormentilla. See Cleft.

OLERACEÆ. See Holeraceæ.

ONE-CELLED Capfule. Capfula unilocularis. As in Primula, Trientalis, &c.

ONE-FLOWERED Glume. Gluma uniflora. Including one flower only.—A one-flowered peduncle. Pedunculus uniflorus; fustaining 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 inferted on one fide.

ONE-VALVED. Univalvis. Applied to the Glume in some Graffes—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 oppo-fition to Nitidum, or Lucidum.

OPERCULUM (operio, to cover). A lid or cover to a capfule: as in fome Mosses, and Hyoscyamus.—Hence such a capsule is faid to be Operculata, Operculate, Operculed, 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.—Opposite 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.

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Oppositè-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 Lensalso to a globular spike.

ORCHIDEÆ. The name of the fourth order in Linneus's Fragments; and of the feventh in his Ordines Naturales; containing Orchis and other genera allied to it.

Order. A fubdivision of a Class; or the second branch in a System. This subdivision is usually arbitrary; and is adopted principally, that too many general 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 sisteenth, from the pericarp.

carp. In the fixteenth, feventeenth, eighteenth, twentieth, twenty-first, and twenty-second, from the number, &c. of stamens. In the nineteenth, from the disposition and character of the florets.

ORGYA. A Fathom. See Measures.

Os. See Mouth.

OVALE folium. An Oval leaf. Cujus diameter longitudinalis superat transversalem, superiore & inferiore extremitate angustiore. Philos. Bot. - Ex orbiculato oblongum, utraque extremitate rotundata æquali. Delin. Pl.—Having the longitudinal diameter longer than the transverse one, and the curvature the fame at both ends. In Philof. Botan. the Elliptic leaf is made fynonymous with this; but in Delin. Pl. they are distinguished .- In truth, an Oval leaf has nearly the fame proportion with the fection 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 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 consounded, 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 ovateoblong leaf, or feed. Ovate lengthened out.

Ovato-

Ovato-subulata capsula. An ovate-subulate capsule. Between ovate and awl-shaped, but most tending to the latter. As in Aconitum.

### P

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 faid to be bijuga, trijuga, &c. from having two, three, &c. pairs of leaflets.—Two-paired, three-paired, &c.

PALATUM. The Palate. Gibbositas prominens in fauce corollæ. Philos. Bot.—Processus labii inferioris superiora versus quo rictus occluditur. Delin Pl.—A prominency 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.

S 3

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 Dipfacus, Scabiofa, &c. See Chaffy.

Paleaceus Pappus. A Chaffy crown or down to some seeds; as in Bidens, Silphium, Tagetes, Coreopsis, &c.

PALMÆ. The fixth 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. Confisting of several oblong tubers or knobs, spreading

ipreading out like the fingers. As in fome forts of Orchis.

Palmatum folium. A Palmate or handfhaped leaf.—Longitudinaliter in partes
plures fubæquales divifum versus basin, qua
tamen cohærent in unum. Philos. Bot.—Divisum ultra dimidium in lobos subæquales.
Delin. Pl.—Divided beyond the middle
into several lobes that are nearly equal:
as in Passifisora cærulea. It resembles the
hand with the singers spread; and is one
of the simple leaves: whereas the Digitate leaf resembles the singers spread,
without the hand; and, having all the
leaslets separate, is one of the compound
leaves.

Panduræforme (Paudura, a musical instrument of the guitar kind, in Mersennus) 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. Oblong, broader below, contracted on the sides. In Delin. Pl. the explanation is differently worded.—Oblongum, lateribus S 4 inferne

inferne coarctatum. Oblong, contracted below at the fides. The former appears to me to be right.—It is exemplified in Rumex pulcher, and Convolvulus panduratus.

PANICULA (Dimin. from panica, manual coma; or rather from panus, the woof about the quill in the shuttle). Panicle.—
Fructificatio Sparsa 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 congesta. A heaped panicle. Having great abundance of flowers.

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 fpike: as in several of the Grasses, which are commonly called Spiked Grasses.

Panicula

Panicula contracta. A greater degree of the foregoing.

Panicula coarclata. 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 Graffes. Having their fructifications in a panicle.

Papilionacea (Papilio, a Butterfly). A Papilionaceous or Butterfly-shaped co-tolla.—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 rifes upwards, is called vexillum, standard or banner: the two fide ones ftand fingly, being separated by the keel, and are called alæ, the wings.—The keel is fometimes fplit, and then this corolla is properly five-petalled. These flowers form a natural class, called Papilionaceæ; and are to be found in the fifty-fifth order of Linneus's Fragments, and in the thirtyfecond 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 Leguminofæ of Ray and other authors. The Pea being the most obvious of these, fome call them Pea-bloffomed flowers.

Papillosum (Papilla, a nipple) folium.

Quod tegitur punctis veficularibus. 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 sleshy 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 feed of thiftles, &c. being like the gray hairs of old age.) Commonly translated Down: but hence arifes a confusion between this and the lanugo or tomentum on the furface 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 fays-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 fay 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 (seminis) pennacea pilosave 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 seed, and is then said to be sessible; or essential there is a thread interposed between it and the seed, 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.

PAPULOSUM folium. (Papula, a pimple.)
A pimply, bladdery or blistered leaf.—
Tectum punctis vesicularibus. Covered with little blisters.

PARABOLICUM folium. A Parabolic leaf.

Cujus diameter longitudinalis superat transversalem, & a basi sursum angustatur in semiovatum. 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 fo 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 primariæ. 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 prodiit ex universali.—The involucre at the soot of this is called the Partial involucre. Involucrum partiale.—Pedunculus partialis, a Partial peduncle, is a subdivision of a common

Pedunculus. See Umbella and

PARTITION. Dissepimentum. 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 Delin. Pl.—narrower, when the valves by being squeezed or contracted become concave. Angustius ubi valvulæ coar Etatæ evadunt concavæ. This is exemplified in Biscutella and Thlaspi.-Linneus borrowed these terms from Tournefort; and fays that they are to be understood cum grano salis.—I should have conceived a parallel partition in a filiqua 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. Bipartite.

partite or two-parted; Tripartite or threeparted, &c.—It is applied in the fame fense to the Perianth and Corolla.

PATENS folium. A Spreading leaf. Quod ad angulum acutum cauli infidet. 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 s. 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 loofe 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 fort of pinnate leaf, in which the leaflets are toothed like a comb: as in Artemisia pectinata.

PEDATUM folium (Pes, a foot,). A Pedate leaf. Cum petiolus bifidus latere tantum interiore adnectit foliola plura. When a bifid petiole connects feveral leaflets on the infide only. This is a species of Compound leaf, and bears some resemblance to a bird's foot. It is exemplified in Passifora, Arum and Helleborus fætidus. 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 feparate; but connected, as in the feet of water fowl. Exemplified in Arum muscivorum.

Pedicellus. A Pedicel or Pedicle.—In Philof. Botan. it is interpreted—pedunculus partialis, a partial peduncle. But in Delin. Pl. a Partial peduncle is a fubdivision of a Common peduncle, supporting a few flowers.—The genuine notion

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. Berkenhout came to derive it from the noun Pedo, splay-footed). A Peduncle. By older writers called the Foot-stalk; 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 fecond, because, the peduncle being the support of the flowers as well as the fruit, we are reduced to the abfurdity of faying 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

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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 storiferus; 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 sirst.

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 *Pedunculus*, because the former signified a fort 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-pe-duncle—a branch-peduncle.

- 4. Petiolaris. Petiolary, or proceeding from the petiole.
- 5. Cirrhiferus. Cirrhiferous, or tendrilbearing.
- 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 fide of it.
- 10. Interfoliaceus. Among the leaves—I rather think that this is a mistake for Intrafoliaceus, within the leaf.
- outside of the leaf.
  - 12. Suprafoliaceus. Inserted into the stem higher than the leaf or its petiole.

With

With respect to their Situation, peduncles may be

- 1. Opposite to each other; or, 2. Aiter-
- 3. Sparsi, scattered; without any regular order.
- 4. Verticillati, in whorls.

With respect to their Number, they may be

- 1. Solitarii. Solitary or fingle.
- 2. Geminati. Double; two together, or in pairs.

In an Umbellule there are feveral equal peduncles diverging from the fame 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

duncle may be,

- I. Appressus. Pressed close to the stem.
  - 2. Erectus. Upright.
  - 3. Patens. Spreading.
  - 4. Cernuus. Drooping. Pointing to the ground.
  - 5. Resupinatus. Upside down.
  - 6. Declinatus. Bowed or curved down-wards.
  - 7. Nutans. Nodding. Curved downwards more than in n. 6. but less than in n. 4.
  - 8. Adscendens. Rifing gradually.
- 9. Flaccidus. Weak, fo as to bend with the weight of the flower.
- vards with the leaf.
- 11. Strictus. Stiff and straight.
  - 12. Flexuosus. Bending this way and that,
  - 13. Retrofractus. Bent backwards, as if broken.

T 3 With

With respect to its Measure, a pe-

- 1. Brevis-brevissimus. Short, very short.
- 2. Longus—longissimus. Long, very long.

  With respect to its Structure, a peduncle is,
- I. Teres. Round, cylindric, or rather columnar.
- 2. Triqueter. Three-fided.
- 3. Tetragonus. Four-cornered.
- 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.
- 7. Clavatus. Club-shaped. Thick at the end.
- 8. Nudus. Naked.
- 9. Squamosus. Scaly.

10. Foliatus.

10. Foliatus. Leafy.

11. Bracteatus. Furnished with bractes.

12. Geniculatus. Kneed, Bent at the joints.

13. Articulatus. Jointed.

Peduncularis. Growing from a peduncle: as fome tendrils do.

Pedunculatus flos—verticillus. A peduncled flower or whorl: in opposition to one that is close to the stem—fessilis.

PELTA. A flat fructification on fome Lichens, refembling a round shield; whence its name.

Peltatum folium. A Peltate or Targetfhaped leaf. Having the petiole inserted into the disk of the leaf, instead of the edge or base, as is most usual. As in Nymphæa, Hernandia, Colocasia, Hydrocotyle, Tropæolum, Geranium peltatum.—
Applied also to a stigma, when it is round and stat, like a pelta.

Penicilliformis appendix. An appendix to

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. Ray. A feathered leaf. The same with Pinnatum, which see.

Pentacocca capfula. A pentacoccous or five-grained capfule. Swelling out in five protuberances; or having five united cells, with one feed in each.

Pentagonus caulis. A pentagonal or fivecornered 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 Umbellatæ, &c.

PENTAPHYLLUS Calyx. A pentaphyllous or five-leaved calyx, or rather perianth: as in Cifus, 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 impersection.

Perfoliate or perforated leaf. Si basis folia undique cingat transversim caulem. Philos. Bot.—Basi trans-

transversum cingente (nec antice debiscente) caulem. Having the base of the leaf entirely furrounding 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 Philof. Bot. be carefully attended to. The base of that is faid to furround the sides of the stem; whereas in this, the base encircles it quite round; fo that it feems 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.

PERFORATÆ. The name of the fixtieth order in Linneus's Fragments of a Natural Method. So called because the plants contained in it have the leaves perforated with small holes.

Perfo-

Perforation 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 ανθος 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—corollæ 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 fignification. See Calyx.

Perianth of the fructification, includes the framens 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.—Perfishens, permanent. Continuing after the flower is withered.
- 2. Proprium, Proper. Belonging to one flower.—Commune, Common. Belonging to feveral.

3. Mono-

- 3. Monophyllum, &c. Polyphillum. One-leafed, &c. Many-leaved.
- 4. Bifidum, &c. Two-cleft, Three-cleft, &c.—Bipartitum, &c. Two-parted, &c.—Integrum, Entire.
- 5. Tubulosum.—Patens.—Restexum.—Inflatum.—Tubular. Spreading. Restex. Instated, hollow, or pussed 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.
  - 7. Obtusum. Blunt.-Acutum, sharp.
  - 8. Spinosum. Thorny. Aculeatum. Prickly.
- 9. Æquale. Equal. Having all the parts corresponding in fize and proportion.

  —Inequale, Unequal.
- to. Labiatum, Labiate, or lip-shaped.
- 11. Superum, Superior. Above the germ.—
  Inferum, Inferior. Below the germ.

Squarrofe, or having a ragged appearance, from the irregular disposition of the scales.—Calyculatum. Calycled. Having a smaller calyx or perianth at the base of the larger. Scariosum Scariose. Tough, thin, and semitransparent.—Turbinatum. Turbinate, top-shaped: inversely conical: shaped like a boy's top or a pear.

Pericarpium (περι, and καρπος fruit or feed). A Pericarp, Seed-vessel or Seed-case. Viscus gravidum seminibus, quæ matura dimittit.—Vasculum semina producens dimittensque.—Ovarium sæcundatum. Philos. Bot. 52, 56, 92.—Germen destoratum seminiferum. 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 slower is past; containing ripe seeds analogous to fruitful eggs.

The most remarkable pericarps are the Capfule

Capfule — Silique — Legume — Follicle — Drupe—Pome—Berry—Strobile.

Perichætium (περι, and χαιτη juba). Involucrum fetofum, quod inter foliola bafin cingit.—A briftly involucre, furrounding the base, among the leaslets: in Mosses.

PERMANENT. Perfistens.—Applied to leaves that remain on the plant till the fruit is ripe or after the fummer is over—To stipules continuing after the leaves drop off; as in the class Diadelphia, and the order Polygynia of class Icosandria.—To calyxes, abiding after the corolla is withered; as in the class Didynamia.

Personata (Persona a mask) corolla.

A personate or masked corolla. Ringens, fed 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 Linneis 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 feeds ripening in the calyx as in a capfule: as in Salvia; Horminum, Marrubium, Chamædrys .-A Personate flower differs from this in having the pistil becoming a capfule entirely distinct from the calyx. It has fomething 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 fome irregular monopetalous flowers which Linneus includes under his Ringentes, that are neither Labiati nor Perfonati of Tournefort: as Digitalis and Scropbularia.

Pertusum. Punched. Applied to a leaf which has hollow dots all over the furface. See Perforatum.

Pes and Pedalis mensura. The measure of a foot. See Measures.

PETALUM (πελαλον, from πελαω, to expand). A Petal. The Greek word fignifies 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 corollaceous 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 fpeak 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.

U Petalodes

Petalodes flos. A petalled flower; or, a flower having petals; in opposition to Apetalous, destitute of petals, or having no corolla.

Retiolus. A Petiole, Leaf-stalk or Foot-stalk. Trunci species, adnectens folium. nec fructificationem. Philos. Bot. Fulcrum sustinens folium. Delin. Pl. Ramus foliiferus, 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.

Petiolaris cirrus. A petiolar tendril. Proceeding from the petiole of a leaf.—Pedunculus. A petiolar peduncle. Inferted into a petiole.—Gemma. A petiolar bud. Formed from a petiole.—Glandula. A petiolar gland. Growing on the petiole:

as in Ricinus, Iatropha, Passistora, 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.

PILOSUM folium. A hairy leaf. Having the surface covered with long distinct hairs: as in Cortusa, Juneus pilosus, sylvaticus, campestris.—Pilosum semen. A hairy seed. As in Centaurea and Tragopogon.—Pilosum receptaculum. A hairy receptacle. Having hairs between the florets.

Pilus. A hair. Ductus excretorius planta fetaceus. 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.

U 2

PIMPLED

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 leastet of some compound leaves.

A fubdivision of the pinna is called Pinnula.

PINNATIFIDUM folium. A Pinnatifid leaf. By the Lichfield Society called Feather-cleft.—Transversim divisum laciniis 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 adnectit foliola plura.—A species of compound leaf, wherein a simple petiole has several leaflets sastened 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

Pinnatum cum impari. Unequally pinnate. Terminated by a fingle or odd leaflet.

Pinnatum abrupte. Abruptly pinnate. Not terminated either by a leaflet or tendril.

Cirrhofum. Cirrhofely pinnate. Terminated by a tendril.

Pinnatum opposite. Oppositely pinnate. Having the leaslets placed over against each other in pairs.

Pinnatum alternatim. Alternately pinnate. Having the leaflets alternate along the common petiole.

Pinnatum interruptè. Interruptedly pinnate. Having smaller leassets interposed between the principal ones.

Pinnatum articulate. Jointedly pinnate. When the common petiole is jointed.

Pinnatum decursive. Decursively pinnate. When the leastlets run into one another along the common petiole.

U3 Pinnulatum

Pinnulatum folium, f. pinnulata pinna. When each pinna is subdivided.

PIPERITÆ (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 adhærens, 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 persect, it consists of three parts—I. Germen; the Germ or Ovary. 2. Stylus; the Style. 3. Stigma.

Pistilliferus flos. A pistilliferous flower. Having a pistil without stamens. Called a Female flower by Linneus.

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 Lacunofum.

Placenta. See Receptaculum.

PLACENTATIO. Placentation. Est cotyledonum dispositio sub ipsa seminis 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 Convolvulus:—to the nectary; as in Narcissus Tazetta. It is also a term in Foliation and Placentation.

PLANTA. A Plant. In common language fynonymous with Vegetable: but fre-U 4 quently quently 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 sunk the word Plantæ; and has divided them into Lilia, Herbæ, Arbores.

PLANUM folium. A Plane or flat leaf.—
Quod utramque superficiem ubique parallelam gerit. Having the two surfaces
parallel.—In Delin. Pl. it is—superficie
æquali. Having an even surface: but
this explanation is desective.

Plano-convexum Stigma. A plano-convex stigma. Flat on one side, and rising on the other.

Plenus. See Full.

PLICATOS. Plaited. — Plicatum folium.

Quum discus folii versus marginem ad
angulos adscendit & descendit. — Plicata
foliatio:

foliatio: In plicas varias coarctata. See Plaited.

PLUMOSA or Plumata Seta. A plumose or feathered bristle. Villosa, composita. Having hairs growing on the sides of the main bristle. Resembling a feather.

Plumosus Pappus. Plumose, seathered or compound Down. Pilis pennatis conflans—f. villosus compositus.—A slying crown to some seeds, composed of compound or seathery hairs: as in Crepis, Scorzonera, Tragopogon. Opposed to Capillary. See Pappus.

PLUMULA. The Plume, or afcending fealy part of the Corculum or Heart of the feed.

Pod. See Siliqua.

Pointal. See Pistillum.

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 bursts like a bladder, and explodes elastically a substance inperceptible to the naked eye; which he calls Fovilla.— Pulvis storis, humore rumpendus, atomosque elasticos ejaculans—vel, appropriato liquore madesastus rumpendus, & substantiam sensibus nudis imperscrutabilem elastice explodens.—Est omne Pollen vesiculare, & continet materiam impalpabilem, quam explodit. Philos. Bot. p. 53, 56, 90.

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 f. pollicaris mensura. See Measures.

POLYADELPHIA (πολυς many, and αδελφος 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 ( $\pi o \lambda v c$ , and  $\alpha v \eta e$  a hufband). 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 twelsth class, Icosandria: and their simplicity avoids all consusion with the sixteenth and eighteenth classes—Monadelphia and Polyadelphia.

Polycotyledones Plantæ. Plants which have more than two cotyledons or lobes to the feed; as Pinus, Cupreffus, Linum.

Polygama (πολυς and γαμος, feveral 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 semale flowers, or both; not inclosed 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—

1. Monæcia. 2. Diæcia. 3. Triæcia.

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 Polygamia 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 semale flowers as in the second, third, and sourth.

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 (πολυς, and γυνη a wife). The name of one of the orders, in the fifth, fixth, twelfth and thirteenth classes of the Linnean system; comprehending those plants which have slowers 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-leafed.—Here also Linneus uses diphyllus, triphyllus, &c.

Polysperma capfula—bacca. A many-feeded capfule or berry: containing feveral feeds.

Polystachyus culmus. A culm bearing feveral spikes. As in Scirpus lacustris, holoschænus, and setaceus.

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.

Ромим.

Pomum. A Pome. Pericarpium farcium evalve, capfulam continens. A pulpy pericarp without valves, containing a capfule.

—It includes all the moist fruits which have the feeds 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.

PRECIÆ. Early ripe. The name of an early fort 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 Furcæ, forks or forked prickles; and are called bifid, trifid, &c. from the number of divisions.

PRICKLY. Aculeatus. Armed with prickles. Applied to the stem, stipe, leaf, petiole, and perianth.

PRISMATICUS calyx. Prismaticum stigma—
pericarpium. A prismatic or prism-shaped
calyx or perianth—stigma—pericarp.
Cum lineare polyedrum st, lateribus planis.
Linear, or of the same thickness from top
to bottom with several flat sides.

PROCUMBENS caulis. A procumbent stem.

Horizontaliter supra terram. Philos. Bot.

Debilis terræ innitens. Delin. Pl.—Unable
to support itself, and therfore lying upon
the ground—but without putting forth
roots. See Repens.—The procumbent,
trailing,

trailing, or proftrate stem, as it is sometimes called, is exemplified in Convolvulus Soldanella.

Prolifer caulis. A proliferous stem. Exapicis 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 (sapius plenum) alii flores enascuntur. Having smaller flowers growing out of the principal one: as in Childing Daisy.—Prolifera umbella. A proliferous umbel. Plusquam decomposita. Every compound umbel is twice divided. In a proliferous umbel, the umbellule is subdivided.

PROMINENS disseptimentum. A prominent partition, in a filiqua. 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.

X

Pronus discus s. inferior pagina folii. The lower side, or surface, or back of a leaf.

Prop. See Fulcrum.

PROPAGO. Semen Musci decorticatum, deteclum 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 corcle 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—Involcurum. 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 fingle 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. Hirsuties omnis in planta. Delin. Pl.—vestiens villositate. 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

I. Pili

## PU

- 1. Pili. Hairs. Excretory ducts, in that form.
- 2. Lana. Wool: or close curled hairs.
- 3. Barba. Beard: or parallel hairs.
- 4. Tomentum. Flocks: or interwoven villous hairs fearcely confpicuous.
- 5. Strigæ. Stiffish flattish hairs
- 6. Seta. Briftles. Stiffish roundsh hairs.
- 7. Hami. Hooks. Sharp crookel points.
- 8. Glochides. Barbs. Straight toothed points.
- 9. Glandulæ. Glands. Small papillæ or teats, or excretory ducts in that form.

Glands feem to be improperly enumerated as a species of pubescence.

Pubescens. Pubescent. Covered with one of the foregoing forts of pulescence. Applied to the stem, leaf, corolla, and style.

Pulposum folium. A pulpy leaf, filled with a tenacious substance between the

two furfaces.—Linneus did not originally diftinguish this from Carnofum, which has a firmer pulp.

PUNCHED leaf. See Perforatum and Pertusim.

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.

QUADRANGULARIS caulis. Quadrangulare folium. A Quadrangular stem or leaf. Having four prominent angles.

X 3

QUADRI-

## QUA

QUADRICAPSULARE pericarpium. A Quadricapfular pericap. Having four capfules to a flower: as in Rhodiola.

QUADRIDENTATUS pappus. A four-toothed Seed-Down. Having four teeth on the edge. As in Rudbeckia.

QUADRIFIDUS calyx. A four-cleft perianth: as in Rhinanthus.—Quadrifidum folium. A four-cleft leaf. Cut into four fegments with linear finuses, and straight margins.

QUADRIJUGUM folium. A quadrijugous leaf. Pinnate, with four pairs of leaf-lets.

QUADRILOBUM folium. A four-lobed leaf. Divided to the middle into four distant parts, with convex margins.

QUADRILOCULARE pericarpium. A four-celled pericarp: as in Euonymus.

QUADRIPARTITUM folium. A four-parted leaf. Divided into four parts almost to the base.

QUADRI-

- 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 Stellatæ.
- Quina folia. Five-fold leaves. Five together in a whorl. As in some of the Stellatæ.
- QUINATUM folium. A fort of Digitate leaf, which has five leaflets on a petiole.
- Quinquangulare folium. A five-cornered leaf. Having five prominent angles about the disk.—Quinquangularis caulis. A five-cornered stem.
- QUINQUECAPSULARE pericarpium. Having five capsules to a flower: as in Aquilegia.
- QUINQUEFIDUM folium. A quinquefid or five cleft leaf. Cut into five fegments, with linear finuses, and straight margins. Applied to the corolla—and to the perianth, in Nicotiana.

X 4

QUIN-

Quinquesugum folium. A pinnate leaf, with five pairs of leaflets.

QUINQUELOBUM folium. A five-lobed leaf.
Divided to the middle into five diftant
parts, with convex margins.

QUINQUELOCULARE pericarpium. A fivecelled 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,

## R

RACEMUS (from pak, payos, acinus racemi). A Raceme.—Anciently fignifying 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-fided. Unilateralis. Having all the flowers growing on one fide of the common peduncle.—Secundus. All bent or directed the fame way.—Pedate—Conjugate.
- 3. Erect.—Loose, laxus.—Dependens, hanging down.
- 4. Naked, or leafy.

RACHIS (Paxis, the back-bone) spicæ. The Spine. Receptaculum siliforme stosculos longitudinaliter annectens in spicam. Delin. Pl.—Receptaculum spicæ graminis cui stores 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

## RA

when it is naked or deprived of the florets. Dr. Withering calls it the Spike-stalk.

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, fpreading out like rays. Applied to the ftigma.

RADICALIS pedunculus. A root-peduncle; fearcely different from scape, but sustaining only one flower. See Scapus. Radicale

eale folium. A root-leaf. Proceeding immediately from the root.

RADICANS caulis. A Rooting stem. Altis fe affigens radiculis lateralibus.—Radicans folium. Si folium radices agat. See Rooting.

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.

RADIUS. A Ray. Pars exterior corollæ compositæ.

RADIX (from Radius, according to some; from rado, as others will have it; but more probably from the Greek eads, which however signifies a branch) Alimentum hauriens, herbamque cum fructificatione producens. Philos. Bot.—Organon nutriens

nutriens plantam. Delin. Pl.—Descendens, aquosa sorbens, nutriens. Regn. Veg.—See Root.

Ragged. See Squarrofus.

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.

Ramosus caulis. Ramosa radix. A branched stem, or root. Having lateral divisions, Ramosissimus. Very much branched. Ramis multis absque ordine gravidus.

RAMUS. A Branch. Pars caulis. A fubdivision of the stem.

Ramulus.

Ramulus. A branchlet, little branch, or twig. A fubdivision 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 feveral 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 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.

Seminum. Receptacle of the feeds. The base to which the seeds are fixed: as in Adonis.

3. The Receptacle may be, Nudum. Naked. Without chaffs, hairs or briftles. Punctatum. Dotted.—Pilosum. Hairy.—Setosum. Briftly.—Paleaceum. Chaffy.—Alveolatum s. favosum. Honey-combed; divided into open cells, within each of which a fingle seed is lodged.

Planum. Flat.—Convexum. Convex.— Subulatum. Subulate or awl-shaped.— Ovatum. Ovate.—Globosum. Globular.— Conicum. Conical.

RECLI-

RECLINATUM folium. A reclined leaf.

Quod deorsum curvatur, ut apex siat basis inferior; quibusdam etiam Reslexum dicitur. Philos. Bot.—Deorsum slexum, ut arcus sit basis inferior, apice adscendente.

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 faid 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.

Reflexus. Reflex. Bent back. Rami reflexi. Perpendiculariter dependentes. Delin. Pl.— Hanging down perpendicularly.

—Reflexum folium. A reflex leaf: as in Euphorbia portlandica. — Reflexum perianthium. A reflex perianth: as in Afclepilas and Leontodon.—Reflexus flos. Reflexa corolla. Reflexa petala. A reflex flower, corolla, or petals: as in Lilium chalcedonicum, Cyclamen, Narciffus triandrus, &c.—Applied also to the stipule and bracte.—See Retroflexus.

REFRACTUS. Refracted. As it were broken.—Refracta corolla. Recurvata angulo acuto. Delin. Pl. Bent back at an acute angle. See Retrofractus.

REGU-

REGULARIS corolla. A regular corolla.—

Equalis figura, magnitudine & proportione partium. Equal in the figure, fize and proportion of the parts: as in Privet, Lilac, Jasmin, &c.

Remotus. Remote. Distant.—Remota folia: opposed to approximata.—Remoti pedunculi opposed to conferti.—Remoti verticilli opposed to contigui, as in Galeopsis Ladanum

Reniforme folum. A Reniform or Kidney-shaped leaf.—Subrotundum, basi excavatum, angulis destitutum. Philos. Bot.—Subrotundum, basi exsculptum absque angulis posticis. Delin. Pl.—Roundish, hollowed out at the base, without angles: as in Convolvulus Soldanella, the lower leaves of Campanula rotundisolia, Saxifraga granulata, Glecomi bederacea.—This term is applied also to the anther and Seed.

REPANDUM folium. A Repand leaf.—
Cujus margo angulis, eisque interjectis sinubus, circuli segmento inscriptis terminatur.
The rim of which is terminated by angles,
Y having

having finuses 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 Ir. Berkenhout, having a serpentine margn, 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 curviture in that respects the disk; but in this, the edge only.

Refens radix. A creeping root.—Longe escurrens binc inde germinans, s. radiculas dmittens.—Repens caulis: radiculas binc inde exserens procumbendo; ut in Hedera, Lignonia.

Repans flagellum. A runner. As in Strawbrry. See Creeping and Runner.

RESUPINATA corolla. Cum labium superius toram, inferius cælum spectat. When the upper lip saces the ground, and the lower lip the sky. Or, when that which

is usually the upper lip (in a labiete corrolla) 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 solium. Pagina superiore inferiore, & contra inseriore superiore sacta. 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 striatum.

RETROFLEXUS. Retroflex.—Rami retroflexi: horfum vorfum divaricati. Bending
this way and that, in different directions,
usually in a distorted manner. Thus it
seems to differ from Reflex, which is only
Y 2 imply

fimply 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 fense of the term, or the explanation. It does not occur in *Philosophia Botanica*.

RETROFRACTUS. Retrofracted. Applied to the Peduncle.—Vi quafi 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 sinu obtuso. Ending in a blunt sinus: as in Frankenia pulverulenta, Crotalaria retusa.—Applied also to the seed in Lycopus.

REVOLUTUS. Rolled back or downwards.

—Revoluta vernatio f. foliatio. Revolute foliation or leafing. Quorum margines laterales

laterales utrinque retrorfum, f. versus paginam inferiorem spiraliter convolvunter. When the fides of the leaves (in the bud) are rolled spirally back, or towards the lower furface. - Revolutum folium. A Revolute leaf. Quod deorfum revolvitur .-Having the edges rolled back or towards the lower furface: as in Rosemary, Teucrium fruticans.—Revolutus cirrus. A Revolute tendril. Spira dimidio itinere retorta. 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 filiqua of Cardamine.—This term is opposed to Involute or rolled inwards.

RHŒADES f. RHŒADEÆ (from Rhæas, Corn Poppy). The name of the thirtieth order in Linneus's Fragments, and of the twenty-feventh in his Natural Orders; containing vegetables allied to the Poppy.

Y 3

Rном-

RHOMBEUM folium. A Rhombed or rhombshaped leaf. Having sour equal sides, but
the angles not right angles: as in Poplar.

—Linneus has not this term in his Philosophia 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 Philos. Botan.

RIB. Costa. The continuation of the petiole along the middle of a leaf, and from which the veins take their rife.

Ribbed. Costatum: which see.

RICTUS. The Gape. Hiatus inter utrumque labium. The opening between the two lips in a labiate flower.

RIGIDUS. Rigid, stiff, instexible, impatient of bending: opposed to laxus. Applied to the stem, leaves and bristles.—The stem is called Rigosus in Glinus dictamnoides. Has this term the same meaning with

with the other? But rigofus 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 pives, nares, the nostrils, whence rictus) corolla. A ringent corolla. Irregularis in duo labia personata. - Monopetala irregularis, & limbo diviso in duo labia. Philof. 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 fecond of Barba or Beard. The opening between them is named Rictus or the Gape: the opening of the tube, Faux, the Throat or Jaws: the prominent fwelling in the Faux is Palatum, the Palate: the upper part of the tube is Collium, the Neck. The Ringent corolla is exemplified in the class Didynamia. - See Labiatus.

RISING leaf or petiole. See Afurgens.

Y 4

Rolled

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 confifts of the Caudex, stock or main body; and the Radiculæ or fibres, by which the moisture is immediately imbibed. We commonly regard all that part of a vegetable only which is under ground as the Root; but Linneus comprehends the afcending 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 confequently if a tree be turned upfide down, the defcending caudex will produce leaves, and the afcending caudex will put forth fibres.

A Root in Duration is,

1. Annual. 2. Biennial. 3. Perennial.

## In Form,

- a. 4. Fibrose. 5. Branching. 6. Fusiform. 7. Præmorse or bitten off.
- b. 8. Creeping. 9. Jointed. 10. Toothed.
- c. 11. Globular. 12. Tuberous. 13. Fafcicled or bundled. 14. Palmate.
- d. 15. Bulbous. 16. Granulate. 17. Tunicated. 18. Solid. 19. Scaly.

## In Substance,

- 20. A Bulb. 21. A Tuber. 22. A Fibre. 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 sour or more regular petals, inserted into the receptacle by a short, broad claw; as in the wild Rose. This is a term of Tournesort's; and such slowers form his sixth class, entitled Rosacei.

ROSTELLUM (dimin. from Rostrum, a beak).

The Rostel, or descending plane part of the Corcle 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.

ROTACEÆ

ROTACEÆ (Rota, a wheel). The name of the fifty-fecond order in Linneus's Fragments; and of the twentieth in his Natural Orders.

ROTATA corolla. A Wheel-shaped corolla. Monopetalous; spreading slat, without any tube: as in Borago, Veronica, Lysimachia.—Applied to the nectary in Narcissus poeticus.

ROTUNDUM folium. A round leaf. Quod angulis privatur. Philof. 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 circumscribing 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: Afper. Made fynonymous with Scaber by Linneus.—He uses it however in a sense much more general.

Ronghened. Exasperatus.—Applied to the calyx.

ROUND and ROUNDED. Rotundum and Rotundatum. Bent into a curve. For Circular see Orbiculatum.

Roundish leaf. Folium subrotundum. Nearly circular. Orbiculato proximum. Which is improper. See Rotundum.

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 contractiores evadant quam discus, ut interjecta substantia adscendat. When the veins are more contracted than the disk, so that the intermediate substance rises above them. As in Sage, Primrose, Cowssip, Cistus incanus, &c.

RUNCINATUM folium (Runcina, a large faw). A Runcinate leaf. P.nnatifidum, ita ut lobi antice convexi, postice sint transversi. A fort 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 Pinnatisid 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 Sarmentosus.

pur, of the wood Aburmun, in trees; newly formed field the liber or miner bark.

the vonestile calls tender white

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 posticis instructum. Philos Bot.—Triangulare, angulis posti-

cis acutis sinu 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. Rumen
Acetosa, 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.

Monopetalous, rifing 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.

SARMENTACEÆ (Sarmentum, the twig or fpray of a vine; from farpo to prune, which is from the Greek αρπω, and that from αρπη, 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 Sarmentofe stem. Repens fubnudus. Philof. Bot.—Filiformis geniculis radicantibus. Delin. Pl.—Filiform, 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 herbaceous plants. See Runner and Flagellum.

Scaber. Scabrous or Rugged; fomething like Shagreen — Punctis eminentibus rigidius 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 particulis, nudis oculis vix manifestis, quibus adfergitur plantarum superficies.—A fort of Pubescence, composed of particles scarcely visible to the naked eye, scattered over the furface of vegetables.

Scabrous. See Rugged.

Scalloped leaf. This term may be applied to the folium Repandum, which fee.

Scaly. Squamofus. 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.

Scandent or climbing stem. Alta petens, aliis suffinendus. 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 σκηπω, to lean upon; whence σκηπων, σκηπωνον, and σκηπρον, and the Latin scipio, 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.

Scantosum folium. A Scariose leaf. Called Skinny by Dr. Withering. Substantia sieca arida tactu sonora. Of a dry substance, sonorous to the touch.—Applied to a perianth, which is membranous, tough, thin, and semi-transparent; as in Statice Armeria, or Thrist, Centaurea glastisolia, &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. (Scitamentum f. Scitam 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. Exaratus caulis. Marked deeply with parallel lines, or rather grooves.

—It does not seem to differ from fulcatus, furrowed or grooved.

SC SE

ler). 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.

SCYPHIFER. Cup-bearing. A fubdivision of the *Lichens*, having the fructification in an elevated obconical form, like a drinking-glass.

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 slowers than one directed to the same point of the horizon, or nearly so.—It is exemplished in the slowers of Erica herbacea—in the spike of Dactylis cynosuroides—and in the panicle of Dactylis glomerata, several of the Festucæ, &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, vivisited by the pollen.—It is analogous to the egg in animals.

A Seed confifts 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 affist in their dispersion.

Seed-bud. See Germen.

Seed-coat. See Aril.

SEED-LEAVES. The primary leaves; being the cotyledons or lobes of a feed 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 Polygamia. Segregate Polygamy. Cum flosculi plures Calyce communi comprehensi propriis Perianthiis etiam infiruuntur. 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 leaslets.

SEMEN. See Seed.

SEMIAMPLEXICAULE folium. A half-stemclasping leaf. Embracing the stalk half way.

Semicolumnar. See Semiteres.

SEMIFLOSCULUS. A Semifloret. Flas semiflosculosus. A Semiflosculous flower, or a flower a flower composed of semiflorets. These are terms of Tounesort's; and answer to the corollula and corolla ligulata of Linneus. Ray calls such compound flowers—planipetali. Hence

Semiflosculosæ or Seniflosculosi, the name of a sub-division in the order of compound flowers, both in the natural and artificial system of Linners: comprehending such as are made up wholly of fertile ligulate florets; as Dandlion, Lettuce, Sowthistle, Hawkweed, &c.

Seminale folium. See Seed-leaves.

SEMINATIO. Semination, or the natural dispersion of seed.

Pals is an improper expression: for though

SEMIORBICULATUN semen. A semiorbicular seed. In shape of half a sphere.

SEMIQUINQUEFIDIS calyx. A half-fivecleft calyx. SEMISAGITTATA stipula. Shaped like half the head of an arrow: as in Ervum tetra-spermum.

SEMISEXFIDUS calyx. Half-fix-cleft.

Semiteres. Semicolumnar. Flat on one fide, and rounded on the other; as the frem 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.

Sensiles f. Sensitivæ plantæ. Sensitive plants. Situm partium tactæ mutantes. Changing the situation of their parts when touched.

SENTICOSÆ (Sentis, a brier or bramble).

The name of the thirty-fifth order in Linneus's Fragments, and Natural Orders.

SEPIARIÆ (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.

SERRATUS (from Serra, a faw). Serrate, toothed like a faw—but not fawed. Quod angulis acutis imbricatis extremitatem respicientibus notatur. Having sharp imbricated notches about the edge, pointing towards the extremity. The direction of the notches is the effential 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 in Vaccinium Myrtillus, Arbutus Unedo and alpina, Papaver orientale, and many others.

When a ferrate leaf has small ferratures upon the large ones, it is said to be Doubly-serrate, Duplicato ferratum: 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 ferratures.

Serrato-dentatum folium. A Serrate toothed leaf. Having the ferratures toothed.

Serrulatum folium. A ferrulate leaf. Finely ferrate, with very small notches, or teeth.

SESQUIALTER flosculus. A Sesquialteral floret. When a large sertile 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 Seffile 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 fessile.—To the Crown, Pappus or Down, which having no stipe is placed immediately on the seed: opposed to Stipitate or Stiped.

SETA. A Briftle. A strong, stiff, roundish hair. A fort of pubescence.—Linneus also puts it for the scape of the capsule in Mosses.

Setaceous. Briftle-shaped. Having the thickness and length of a briftle. Applied to the leaf; and to the leaslets or divisions of the calyx.

Setofus. Bristly. Having the surface set with bristles. Applied to the Leaf and to the

fometimes confounded, though nothing can be more distinct.

SEXANGULARIS caulis. A hexangular stem: as in Eriocaulon.

Sexfidus calyx. Sexfid, or fix-cleft; as in Pavia.—Sexfidum nectarium. A fix-cleft nectary: as in Narcissus minor.

Sexloculare pericarpium. A fix-celled pericarp: as in Afarum, Aristolochia.

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 Androgynous. 5. When Hermaphrodites are accompanied with one or both of the two first, such a plant is denominated Polygamous.

Shaft. Put by some authors for the style.

SHAGGY. Hirsūtus.

SHARP.

SHARP. Acutus.

Sharp-pointed or pointed. Acuminatus.

SHEATH. Vagīna. A membrane investing a stem or branch; as in Grasses.—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 Grasses.

Sheathing. Vaginans. 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 accepta-

nent 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 betwen 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 feeds fixed along both futures, and the transverse diameter equal, or nearly so, to the longitudinal. This pericarp varies in shape; being orbiculate, ovate, or flatted; entire at the end, or emarginate. Hence

SILICULOSA. The name of the first order in the class Tetradynamia.

Silique or Pod. An oblong, mem-

membranaceous, two-valved pericap, having the feeds fixed along both futures .-The Silicula does not differ from this effentially, but only in form and fize. Accordingly Linneus, in Philof. Bot. gives an explanation common to both-Pericarvium bivalve, affigens semina secundum suturam utramque-and makes no mention of Silicula.—The proper Siliqua is twocelled, having a partition running the whole length of it. Some pericarps, however, having the fame form, take the fame name, although they have no partion, 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 burle/k: 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 fecond order in the class Tetradynamia: containing those plants which have a proper Siliqua for a pericarp.

SILIQUOSÆ. 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 fost close-pressed hairs, so as to be very smooth to the touch.

SIMPLEX. Simple. Undivided.—Simplex Radix. A Simple root. Not subdivided. Opposed to branched.—Simplex caulis. A Simple stem. Continuata serie versus apicem extenditur. Extended in one continued series from the bottom to the top. Opposed to Compositus or compound.—Simplex folium. A simple leaf. Having only one on a petiole. Opposed also to Compound.—Simplex Fruesificatio s. Flos.

A Sim-

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 Anthriscus Pecten.—Simplex Calyx. A simple calyx. Having only one row of leastlets, as in Tragopogon; opposed to Calycled and Imbricate.—Simplex Pappus. A simple down: opposed to Plumosus or feathered.—Applied also to Bristle, Tendril, Stigma, &c.

Simplicissimus. Very simple, absolutely simple.—As the stem of Lathræa 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, refembling bays (Sinus). As in the Oak.

Sinuato-

Sinuato-angulosum. A sinuate-angular leaft as in Hollybock.

Sinuato dentatum. A finuate-toothed leaf

Sitting. See Sessile.

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, distict or in two rows.

SIX-PETALLED. Hexapetala corolla. A flower having fix 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 feed. Tenuifolia planta. A flender-leaved plant:

in opposition to latifolia, broad-leaved.—

Tenuis however is often put for thin.

SMOOTH. Glaber. Having a slippery furface 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 incifum. See Gashed, and Incifum.

Solares Flores. See Vigilia.

Solida solida radix. A folid bulb; as in Tulip. A folid root; as in Turnep. Of a fleshy, uniform, undivided substance.—Solidus caulis. A folid stem. Full within; in opposition to inanis, which has only a light spongy substance in it; and fistulosus, hollow like a pipe.

Solitary, separate, one only in a place. Solitaria stipula. A solitary stipule; as in Melianthus.—Solitarius pe-

SP

dunculus. A folitary peduncle; as in Convolvulus tricolor.—Solitarius flos. A folitary flower: only one to each peduncle; as Euphorbia Peplis, Dianthus chinenfis.—Solitarium femen. A folitary feed: one only in a pericarp.

Solutus. Loofe. Opposed to adnatus.
Applied to Stipules.

Somnus Plantarum. Sleep of Plants. Est forma faciesque, quam plantæ sub nocte induunt, maxime a diurna earum facie diversam, nulla habita ratione partium internarum seu fructissicationis. Estque in foliis præsertim conspicuus.

SPADIX. The receptacle in Palms, and fome other plants, proceeding from a fpathe.—It is either branched, as in Palms; or fimple, as in Dracontium, &c.—In fome it is one-flowered; in others many-flowered.—Hence

Flos spacideus. A spadiceous flower. A fort of aggregate flower, having a receptacle common to many florets, within a spathe.—As Palms, Arum, Calla, Dracontium, Pothos, Zostera, Acorus.

Spadiceus

Spadiceus color. The colour of the spadix in the Palm; it is commonly translated a Bay-colour, from the Greek βαιος. Ray says it is a colour approaching to bay or chesnut, 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 forts of Lily—to peduncles or slowers—to calycine scales, as in Crepis barbata. "With regard to branches," fays Dr. Berkenhout, "an accurate ob—"ferver 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 Narcissius, Crocus, Iris, &c.

A Spathe may be—
One-valved, or two-valved.
Halved. Dimidiata. Investing the fructification on the inner fide only.
Imbricate.

One-flowered, two-flowered, &c .- Hence

Spathaceæ. The name of the eighth order in Linneus's Fragments; and of the ninth in his Natural Orders.

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. monly 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, fays Linneus (Philof. Bot. 202), when it is furnished with a generic and specific name. -In the fame 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.

Aa3 SPICA

Spica (from Spes, hope; from σπιζω, to extend; or from σπαχυς, Æol. for σλαχυς, whence Spicus, Spica, and Spicum; for it is used in all the three genders). A Spike.

—Flores sessions sparsim alterni in pedunculo communi simplici.—In Term. Bot. 461, sparsim is omitted.—A species of inflorescence, in which sessile flowers are (scatteringly) 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, Oneranked (fecunda), Linear, Ciliate, Leafy, Briftle-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 plantæ protrusus.—Fulcrum terminans cornu lignoso. Regn. Veg.—See Thorn.

SPINDLE-

SPINDLE-SHAPED root. See Fusiformis.

Spinescens. 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 Inerme. - Spinosus caulis. Spinis armatus.

SPIRALIS. Spiral. Twisted like a screw. As the cotyledons of the Holeracea; the anthers of Chironia; the tails of the feeds 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 fpur, or a horn.—This kind of nectary is called Ne Jarium calcaratum; and a corolla having fuch a nectary is named Corolla calcarata; as in Larkspur, Orchis, &c .- A calvx having fuch a spur is called Calyx calcaratus; as in Tropæolum. SQUA-

Aa4

Scae). Bulbus, Caulis. See Scaly.

SQUAIROSUS (A squamarum piscium similitudine, quorum cutis exurgat ob assiduam inluviem.

Varronum ac rupicum squarrosa incondita rostra. Lucilius.

Or, according to others, from Squarra, ancently written Scara, which is from the Greek εσχαρα, fcurf). Squarrofe, by ome translated Ragged; by others, Scurfy. Squarrofus calyx. Ex squamis undque divaricatis patentissimis. Consisting of scales very widely divaricating, or spreading every way: as in Carduus, Onoporaum, Conyza, Achyranthes muricata.—Squarrosum solium. In lacinias elevatas vec plano parallelas divisum. Divided into shreds or jags, raised above the plane of the leaf, and not parallel to it.

STALE, or Stem. Caulis. See Stem.

STAMIN. A Stamen; in the plural Stamens, not Stamina, in English.—Viscus pro pollinis præparatione.—Viscus exterius e ligno.

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 confits of the filament and anther.—Some English writers call it the Chive.

Stamineus flos. A stamineous flower. Having no corolla: a term used by Ray. Apetalus is the term which Linneus has adopted from Tournesort. Others call such flowers Impersect or Incomplete.

Staminiferus flos. A staminiserous slower. Having stamens without a pistil. The same with the male flower of Linneus.—
Staminiserum nestarium. A nectary having stamens growing on it: as in Kleinbovia.

STANDARD or Banner. Vexillum. The upper petal of a papilionaceous corolla: as in the Pea.

STATUMINATÆ (from Statumen, a prop or fupport, 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, Bosea.

STELLATA (Stella, a star) folia. Stellate leaves. Cum folia plura quam duo verticillatim caulem ambiunt. When more leaves than two (feldom fewer than four, frequently fix, eight or more) furround 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 fets one above another. - Stellata seta. A Stellate briftle. When a little star of fmaller 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.

Stellatæ. The name of the forty-fourth order in Linneus's Fragments, in Philof. Bot.—and the forty-feventh in his Natural Orders, at the end of Gen. Pl.—The name of a class also in Ray's and Herman's Methods.

STEM

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, Verbascum Blattaria, Hyoscyamus niger, &c.—Applied also to the petiole.

Stem-leaf. Folium caulinum. Inferted into the stem. Opposed to the radical or rootleaf. Applied also to the peduncle.

Stemless. Acaulis. Having no stem, properly so called. Opposed in Philos. Bot. (p. 233) to Caulescens.

Sterilis flos. A Barren flower. A term of Tournefort's. Called Masculus flos, or Male flower, by Linneus.—Ray calls it Paleaceus, and others Abortiens, and Staminiserus.

STIFF.

Stiff. Rigidus. Impatient of bending. See Rigidus and Strictus.

STIGMA. (From (f) ζω, inuro, to brand or mark.) A Stigma.—Summitas pifiilli madida humore Pollen rumpendo—Roridum, pubefcens, f premum. Regn. Veg.—The top of the piftil, pubefcent 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, compreffed, and longitudinally bifid.

STIMULI (q. Stigmuli, from oliques). Stings.

In Philos. Bot. a species of pubescence; defined to be—punsura renenata quæ 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—mucrones punsuras inflammatorias efficientes, unde pruriginosæ 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 (σηυπος, a stake). A Stipe. Basis frondis. Proprius Palmis, Filicibus, Fungis.—
Truncus in folia transiens. Delin. Pl.—A folio non distinctus. Regn. 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 connectensque Pappum & Semen.

Stipitatus. Stipitate or Stiped. Elevated on a Stipe. Applied to the pappus or down.

STIPULA (dimin. from Stipa, which is from ofom tow). A Stipula or Stipule.—
Squama basi petiolorum enascentium adstans.
A scale at the base of the nascent petioles—or peduncles, according to Philos. Bot.—As in Papilionaceæ, Tamarindus, Cassia, Rosa, Melianthus, Liriodendron, Abricot, Peach, Bird-cherry, &c.—Some natural classes have no stipules; as the Asperisoliæ, Personatæ, Verticillatæ, Stellatæ, Siliquosæ, Liliaceæ, Orchideæ, and most of the Compositæ.—

## Stipules are,

- 1. In pairs; Solitary; or None.
- 2. Lateral; Extrafoliaceous; Intrafoliaceous; Oppositifolious.
- 3. Caducous; Deciduous; Permanent; Spinescent.
- 4. Sessile; Adnate; Decurrent; Sheathing.

- 5. Subulate; Lanceolate; Sagittate; Lunate.
- 6. Erect; Spreading; Reflex.
- 7. Very Entire; Serrate; Ciliate; Toothed; Cleft.
- 8. Very Short; Middling; Long.
- Stipularis s. 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. Reclus caulis. Making one right line; not bent.—Ereclus is upright, or perpendicular to the horizon.—

  Rigidus

Rigidus is stiff, difficult to bend. Strictus is both stiff and straight.

Sraightish. Rectiusculus.

STRAP. Ligula. An appendage to the leaf in some Grasses.—Also the flat part of the corollet in ligulate florets.

Strap shaped. See Ligulatus. Dr. Withering has given this name to the linear leaf.

STRIATUS. Striated or Streaked.—Striatus caulis, culmus. Lineis tenuissimis excavatis 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 signification, and means the same as Rectissima.

Philos.

Philos. Bot. p. 219.—In another place (p. 233) he opposes firictus to laxus, flaccidus.—In Term. Bot. 28, Erectus is explained to be a stem rising in almost a perpendicular direction—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 Astragalus fulcatus, &c.—to the culm—branch—leaves, in Campanula patula—and to the peduncle.

Strictissimus. Very stiff and straight. Ap-

plied to branches.

STRIGA (from Strigo for Stringo). In Term.

Bot. 363, Strigæ are thus described—pili rigidiusculi planiusculi.—In Philos. Bot.

Linneus only says—arcent setis rigidis animalcula ilinguas; and gives for examples Cactus, Malpighia, Hibiscus, Rubus.—They seem to be stiffish, flattish bristles—and from the derivation we should suppose that they grow in a fort of order or rank. Their use is to keep off the smaller animals, and the tongues of larger ones, from injuring the plants.—

B b

We have no English name for this term.

STRIGOSUS (from Strigo). Strigosum folium. A Strigose leas. 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 hidebound; I know not on what authority, but probably misled by one sense of the verb strigare, which is, to leave a surrow unfinished in ploughing; whence a horse or ox unable to go though his work was called Strigosus.

A Strobile. Pericarpium ex STROBILUS. 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 fqueezed together, in this state of maturity.—This term includes not only the Cone of former writers, but also some other fruits which recede confiderably in 377 Aructure

structure from that fort 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 Echolium.

STYLUS (from o/ulos, a column). The style.

Pars pistilli, stigma elevans a germine—
or, as it is expressed in another passage of
Philos. 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 sigure of Styles.

The most common figures are—1. Capillary, or hair-shaped. 2. Filiform, or thread-shaped. 3. Cylindric. 4. Subulate, or awl-shaped. 5. Clavate, or club-shaped.

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.

B b 2

We

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 usculus by ish. Thus subobtusus, somewhat blunt; obtusius culus, bluntish.—The following are some instances of the use of sub, among many:

Subacaulis. Almost without stem.

Subæqualis. Nearly equal.

Subamplexicaulis. Slightly embracing the stem.

Subcordatus. Subcordate. Somewhat heart-shaped.

Suberosus. As if a little eaten or gnawn.

Subexcedens. A very little longer.

Sub-

Sublanatus. Somewhat woolly.

Subnudus. Almost naked.

Suborbiculatus. Almost orbiculate.

Subovatus. Subovate. Almost or nearly ovate.

Subpetiolatus. Scarcely petioled, or with a very short petiole.

Subramofus. Having only a chance branch or two.

Subrepandus. Somewhat repand.

Subsessilie. Subsessile, or almost sessile.

Subtrifidus. Slightly trifid.

Subuniflorus. 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.
Herbæ submarinæ. Herbs growing at the
bottom of the sea.—Subdivisus does not
mean somewhat or a sittle divided, but
divided again, in the usual sense of our
English subdivided.

Bb 3

Applied to a stem clothed with a bark, fost and elastic like cork—To be carefully distinguished from fub-erosus, which is applied to leaves which have little irregular sinuses on their edges, giving them the appearance of having been gnawed by infects. Applied also to the stem in Aristolochia 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 leas. Inferius lineare, ad versus apicem attenuatum. Linear at bottom,

bottom, but gradually tapering towards the end. As in Arenaria faxatilis, Sedum rupestre.—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 (fuccus, juice). The name of the forty-fixth order in Linneus's Fragments, and of the thirteenth in his Natural Orders.

Succulentum folium. A Succulent leaf. Full of juice; in opposition to Exfuceum, 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 (Sub under, and Frutex a Shrub).

An Undershrub. Permanent or woody at the base, but the yearly branches decaying; usually of a lower growth than the Bb4 Frutex

Frutex or Shrub: as in Lavender, Sage, Thyme, &c.

SUFFRUTICOSUS. Suffruticose, Undershrubby.

Sulcatus (Sulcus, a furrow) Caulis, Culmus. A Furrowed, grooved or fluted frem or culm. Scored with deep broad channels longitudinally. Applied also to fucculent 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 Polygamia. 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 semale only, are also fertile.

Superus flos f. calyx. A Superior flower or calyx. Having the receptacle of the flower

flower above the germ. Superum germen. A fuperior 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. Sand a not animo

Supra-axillaris. See Supra-foliaceus:

Supra-decompositum folium. A Super-decompound leaf. Cum petiolus aliquoties divisus adnectit plurima foliola. When a petiole divided several times connects many leastets; each part forming a decompound leaf: as in Pimpinella glauca, Ranunculus rutæfolius.—Tergeminate, Triternate, and Tripinnate leaves are species of this; and are explained in their proper places.

SUPRA-FOLIACEUS f. Supra-axillaris pedunculus s. flos. A peduncle or flower inferted into the stem above the leaf, or petiole, or axil.

SURCULUS. A little branch or twig. Quod

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 sit 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 Moss, and a shoot of Ferns.

SWIMMING or Floating leaf. Natans. Lying on the furface of the water.

Sec Subra-foliaceus

Sword-shaped leaf, Folium Ensiforme.

See Ensiform.

SYNGENESIA (συν and γενεσις, 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 fix—1. Polygamia Æqualis. 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.

## T

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-

## 

- Axillaris, from the axil. 10 10 drom
- 2. Foliaris, from the leaf.
  - 3. Petiolaris, from the petiole or foot-stalk.
  - 4. Peduncularis, from the peduncle or stalk.

## Or it is,

- 1. Simple.
- 2. Trifidus, or three-cleft.
- 3. Multifidus, many-cleft.
- ed, four-leaved, &c. Two-leav-
  - 5. Polyphyllus, many-leaved.
  - 6. Convolutus, turned inward.
  - 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 fafely 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.

Teretiusculus. Almost or inclining to columnar.

Semiteres is Semicolumnar. Flat on one fide and round on the other.

TERGEMINUM folium. A Tergeminate or thrice-double leaf. Petiolus bifidus utroque apice foliola duo & infuper foliola duo ad divaricationem petiola communis.—When a forked petiole is fubdivided, having two leaflets at the extremity of each fubdivision; 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 confist in its dividing thrice at least.

TERMINALIS. Terminating, or coming out at the end of a branch or stem. Applied to scape, peduncle, slower, 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 Biternate.

Triply-ternate. See Triternatum.

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 Cypripedium bulbosum: and as an instance of a slower, we may cite Fritillaria Meleagris.

TETRADYNAMIA (restages four, and duraus power). The name of the fifteenth class in the Linnean System; comprehending those plants which bear hermaphrodite slowers 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 Tournesort—the Siliculosæ and Siliquosæ of Ray; which last are the names of the orders into which the class is divided by Linneus.

TETRAEDRA siliqua. A four-sided silique or pod.

TETRAGONUS caulis. A four-cornered stem.

—Having four prominent longitudinal angles: as in Passifistora alata. A species of

of the Anceps, according to Linneus in Philof. Bot.

TETRAGYNIA (τεσσαρες and γυιη). One of the orders in feveral classes of Linneus's System; comprehending those plants which have four pistils.

TETRANDRIA (τεσσαρες and ανηρ). 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. Confisting of four distinct petals: as in the class Tetradynamia.

TETRAPHYLLUS calyx. A four-leaved calyx. Confisting of four distinct leaves, or leaslets, as Linneus calls them. Exemplified in Sagina, Epimedium, and the class Tetradynamia.

TETRASPERMA planta. A four-seeded plant. Producing four seeds in each flower: as in the Asperisolia and Verticillata.

TEX-

TEXTURA vegetabilium. The texture of vegetables: consists of Vasa succosa; succiferous vessels: Tracheæ aëriæ. Tracheæ 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, Cratægus, &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.

Thiftle has them on the calyx.

Many fruits are protected by them: as Trapa, Tribulus, Spinacia, Datura, &c.

Cc

THORNY.

THORNY. Spinosus. Set with thorns: as the stem of many strubs.—A Thorny leaf. Folium spinosum. Running out at the edge into hard, stiff, sharp points. Opposed to Inerme.—Sometimes a petiole, stipule, or bracte, becomes hard and sharp: it is then said to be Spinescens, Spinescent, or to become thorny.—This, though a very different idea, has been sometimes consounded with Spinosus.

Thread. Dr. Withering's term for the Filament.

Thread-shaped. See Filiform.

THREE-CAPSULED Pericarp. Tricapfulare Pericarpium. Having three capsules succeeding to each flower; as in Veratrum, Delphinium.

THREE-CELLED Pericarp. Triloculare Pericarpium. Divided into three cells within: as Lilium.

THREE-CLFFT. Trifidus. Divided into three parts by linear finuses with straight margins.—Applied to the Leaf in Reseductea—to the Calyx in Alisma, Cliffortia—to the

the Nectary in Nigella—to the Stigma in Amaryllis formosissima—to the Cirrus, &c.

Three-cleft-palmate leaf. Folium trifido-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 babet.—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 slat—by the
Lichsield 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. Trifforus Pedunculus. Bearing three flowers together.

Three-fold leaves. See Terna. C c 2

THREE-

## TH

THREE-LEAVED calyx. Tripbyllus. Confifting of three distinct leastlets: as in Tradescantia.

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 tripartītum 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. Tripetăla. Confisting of three distinct petals; as in Alisma, Sagittaria.

THREE-SEEDED capfule. Trisperma. Containing three seeds: as in Euphorbia. Applied also to the Berry.

THREE-SIDED stem. Triqueter caulis. Having

ing three plane fides: as in Viola tricolor.— Culm, in Carex.—Leaf, in Anthericum offifragum. Applied also to the scape, petiole, peduncle, and pericarp.

THREE-VALVED pericarp. Trivalve pericarpium. Opening with three valves: as in Viola, Polemonium, Ciftus Helianthemum.

Throat. See Faux.

THYRSUS Question, from Duw, impetu feror, erumpo, to burst forth. Put for branches, or the slame 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 Trus.

Tip. Dr. Withering's name for the Anther. See Apex.

Tomentosus (Tomentum, down, nap, cotton, or flocks, from τεμνω; or, as others C c 3 think,

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 fome plants, which was used for the fame purpose. Hence Gnaphalium from γναφαλον, which has the same fignifi-Tomentose; or, if we must cation). translate the term—Downy, Nappy, Cottony, or Flocky. It is applied to the stem and leaf, when they are covered with hairs fo interwoven as fcarcely to be difcernible: and is a species of pubescence. It is generally white, as on sea plants, and fuch as grow in exposed fituations. emplified also in Cerastium tomentosum, Origanum Onites, Althaa officinalis, Ciftus 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, Hæmanthus coccineus.

Toothed. See Dentatum.

Tootbed

Toothed a little, or fomewhat 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.

Torn. See Lacera.

Torosus. Torose, protuberant, swelling out in knobs; like the veins and muscles. Applied to some siliques; and other pericarps, as Lycopersicum, Phytolacca.

Torulosus. Swelling a little.

Torsio (Torqueo, to twist). Directio plantæ in unam alteramve plagam a verticali diversam.—Delin. Pl. See Intorsio.

Tortilis, Tortuosus, Tortus. Twisted, or twisting.—Tortilis arista. A twisted awn.

Flexa funis instar. Coiled like a rope.—

C c 4

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.

TRACHEÆ. Air-vessels. Vasa aërem attrahentia. Philos. Bot.—Canales spirales aëri recipiendo & distribuendo nati. Regn. Veg. Spiral channels in vegetables for receiving and distributing air. See Vessels.

Trailing. See Procumbens.

TRANSVERSUM diffepimentum. A Transverse partition. The same with Contrarium. 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 fides.

TREE. Arbor. A Vegetable with a fingle woody trunk.—Trees (in Linneus's Regnum

num Vegetabile) 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 Tournesort kept them separate, but Rivinus had united them before Linneus.

TRIANDRIA (tgess, three, and aung a hufband). The name of the third class in the Linnean System, comprehending those plants which bear hermaphrodite slowers with three stamens.—The second order Digynia contains most of the Graffes.

TRIANGULARIS caulis. A triangular stem.

Exnumero 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.—Triqueter must have three slat sides.

Triangulare folium. A triangular leaf.

Cum tres anguli prominentes ambiunt discum.

This

This feems 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 Graffes, 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 ftem. Dividing by threes.—Pedunculus, as in Marjoram.

TRICOCCA capfula. A Tricoccous or threegrained capfule. Swelling out in three protuberancies, internally divided into three cells, cells, with one feed in each: as in Euphorbia. Hence

TRICOCCÆ, the name of the forty-feventh 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 Fiffum.

TRIFLORUS pedunculus. A three-flowered peduncle. Bearing three flowers.

TRIGLOCHIS. See Glochis.

TRIGONUS. See Three-cornered and Triangularis.

TRIGYNIA (\(\tau\_{\text{\tin\text{\t

TRIHILATÆ (Three-scarred, see Hilum).

The name of the sistieth 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 veffels meeting in the base of the leaf.

Trinervatum. Having them meeting behind or beyond (ponè) the base.

Triplinerve. In which they meet above (fupra) 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.

TRICECIA ( τρεις, and οικος a house). The name of the third order in the class Polygamia; and signifying that there are hermaphrodite, male and semale slowers of the same species on three distinct individuals.

TRIPARTITUS. See Three-parted.

TRIPETALA corolla. See Three-petalled.
Hence

Tripetalodeæ. The name of the fixth 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-fided.

TRI-

TRISPERMA capsula, bacca. 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 Diagnosis or Specific character seems to have been considered as the Specific name, which see.

TROPICI Solares flores. Tropical Solar flowers. Mane aperiuntur, & ante vesperam excluduntur quotidie, sed hora explicationis adscendit vel descendit, uti dies adcrescit aut decrescit; adeoque observant horas Turcicas s. inæquales. See Vigiliæ.

TRUN-

TRUNCATUM folium. A Truncate leaf.—
Quod linea transversali desinit. 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 Graffes, having a peculiar structure, he names Culmus, Culm or Straw. Stipes is the base of a Frond; or a stem paffing into leaves, or not diffinct from the leaves. See Stem.

Tuber. A knob, in roots. Solidus particulis indiscretis. Solid, with the component nent particles all fimilar.—It is also the Latin name for the Truffle.

Tuberculum (dimin. from Tuber). A little knob, like a pimple.—Fructificatio conflans 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 Tuberculati.

TUBEROSA radix. A Tuberous or knobbed root. E partibus carnosis file basi connexis constans—s. Subrotundus corporibus in fasciculum collectis.—Consisting of roundish sleshy bodies, or Tubers, connected into a bunch by intervening threads. As in Pæonia, Hemerocallis, Filipendula, Jerusalem Artichoke, Potatoe.

Tubularus 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 Flosculosus flos of Tour-

Tournefort. Exemplified in Tanfey, and other naked discous flowers.—Tubulosus floseulus. 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.—Tubulosus caulis. Ahollow stem.—Tubulosum folium. Ahollow 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 bulbus. 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 D d mistake.

mistake. Basi angustatum. Philos. Bot.—
Obverse conicum. Delim Pl.—Narrowed at
the base, or inversely conical. Shaped
like a boy's top, or a pear. Applied commonly to the Germ and Pericarp.—Also
to the Perianth, as in Grislea, Memecylon
—and to the Nectary, in Narcissus Bulbocodium.

Turgid or fwollen legume or pod: as in Ononis.—Thought by fome to be the fame 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 swelled out, and has a wider cavity than is usual.

Turio (q. terio, quia facile teratur; as tugurium, q. tegurium from tego, or q. tenerio 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 Philos. Bot.—Termini Botanici—or Delin. Pl.—Giseke makes it synonymous with Stolo.—Dr. Berkenhout says it is the Gemma

Gemma fo called, by Ludwig, when proceeding from the root.-Ray, whose ideas and expressions are ever classical, fays: Tenella arborum, fruticum aut herbarum cacumina, quasi teneriones; vel, ut Vofsius vult, quia facile teruntur.-Leers explains Turiones to be-tenellæ plantarum soboles, verno tempore cum foliis e terra erumpentes: ut Asparagus, Humulus. The tender shoots of plants which come up in the fpring; as in the Asparagus and Hop. Such are called Afparagi; the tender fprouts or shoots of any herb from the ground. Ray thus explains the word Asparagus: - dicitur primum germen berbarum quod edendo est vel oleris cujusque turio antequam in folia explicatur, a σπειρω.

Twin anther. Didyma anthera. Swelling out into two protuberancies: as in Ranunculus, Mercurialis .- Applied alfo 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 fun's apparent motion, as

Dd2

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 lest hand. Thus stationed, if he observes a stalk of Convolvulus or Kidney Bean, he will see that it twines from the lest 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 differerent planes.

Two-capfuled. See Bicapfular.

Two-celled. See Bilocular. This term however is to be preferred to that; fince we use the word Cell in English.

Two-

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. Bina folia. 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-leaved calyx. Diphyllus. As Papaver, Fumaria. Applied to the Tendril—and to the Peduncle in Gomphrena.

Two-lipped corolla. Bilabiata. As in Pinguicula, and most flowers of the Didynamia class.

Two-lobed leaf. Bilobum folium. See Lo-batum.

Dd3

Two-

## TW

Two-parted leaf, perianth. Bipartitum folium, perianthium. Divided in two down to the base.

Two-petalled corolla. Dipetala. As in Circa, Commelina.

Two-ranked or Two-rowed. See Disticbus.

Two-feeded fruit. Dispermus fructus. Containing two feeds.—Disperma planta. Having two feeds 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.

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## d general Violence subject to

VAGINA. A Sheath, or membrane investing a stem. Hence

VAGINALES. The name of the twenty-feventh 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 f. Valvula. A Valve, Valvelet, or Valvule. But there feems to be no occasion to use the diminutives in English; for Linneus makes no distinction between valva and valvula. He uses valvula capfulæ, and valva glumæ; 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 feeds 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 Asperisolia.

Valvatum petalum. A valved petal. Refembling the glume in Graffes.

Varietas. A Variety. Est planta mutata a causa accidentali.—Varietates tot sunt, quot differentes plantæ ex ejusdem speciei semine sunt productæ.—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 fame species.—Varieties are Size, Fulness, Curling, Colour, Taste, and Smell.

In Delin. Pl. it is expressed more fully; thus—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 stat 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.

VASA. Vessels.—Constant Vegetabilia triplicibus Vasis. 1. Succosa liquorem vebunt. 2. Utriculi alveolis succum conservant.

3. Tracheæ aerem attrabunt. Philof Bot.

In Regn. Veg. it stands thus-

Vasa canales succis per eos promovendis repleti, plerumque recti.

Tracheæ canales spirales aëri recipiendo & distribuendo nati.

Utriculi sacculi pulpa utplurimum viridi pleni, vasorum 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.

Fita, 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 veffels 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.

VEN-

VENTRICOSUS. Ventricose. Bellied. Distended. Swelling out in the middle. Ventricosa spica: a lateribus gibba. Swelling out at the sides.—Applied to the Perianth, in Æsculus—and to the Corolla, in Digitalis.

Ventriculosus. Swelling out a little: as the perianth of Salicornia.

VEPRECULÆ (from Vepres, a brier). The name of the fifty-fourth order in Linneus's Fragments, and of the thirty-first in his Natural Orders.

VERNATIO (from Ver, the Spring). See Foliatio, which is the term in Philof. Bot. for which this is substituted in Term. Bot. and Delin. Pl.—In the two latter Reclination is omitted, and there is some difference in the explanations.

VERRUCOSA capfula. A warted capfule. Having little knobs or warts on the furface. As in Euphorbia verrucofa—Verrucofum folium. A Warted leaf. Tectum punctis carnosis. Covered with fleshy points. The same with Papillosum.

VER-

Versatilis (Verto, to turn) anthera. A
Versatile anther. Dr. Withering translates it Vane-like. Quæ 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 Philof. Bot. the fame 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 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, Obversum, ut regio basis angustion 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 obversum.

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 (f. Verticulus, à verto. Inftrumentum quod fuso adhibetur, ut facilius vertatur. Plinius). Anglice Wherles 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 fort of inflorescence made up of many subsessible flowers surrounding the stem in a ring. Fit ex floribus numerosis subsessibles, caulem annulatim ambientibus.—As in Mentha Pulegium, Marrubium, &c.

A Verticil, Whorl or Whirl, may be 1. Seffile or peduncled.

- 2. Naked; that is, without involucre, bracte or briftle. Bracted—or Involucred.
- 3. Crowded. Diftant—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

Verticillatæ. Verticillate plants. These are included

included in the fifty-eighth order of Linneus's Fragments; and the forty-fecond 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 (ματ' εξοχην) 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 carinæque incumbens.

VIGILIÆ plantarum s. florum. Status floris aperti. The state of the open flower.—
Absolvuntur determinatis boris diei, quibus plantæ flores quotidie aperiunt, expandunt & claudunt. These Vigiliæ or Watchings are performed at determined hours of the day, when plants open, expand, and shut their flowers daily.

Linneus calls those flowers which obferve 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.

Ee

2. Tro-

- 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. Villose. Pilis mollibus pubescens. 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 μαλλος—or a velando—or a vellendo—or from ιλλω for ιελω—or from pilus—or from vinnus, cincinnus molliter flexus—fuch is the uncertainty of derivation). It is interpreted—pili collecti, ac flocci vestium; collected hairs, the pile or nap of cloth.—In Linneus's idea, it seems

to be foft 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.

VINACEUM. Granum acine, γιγαςδον. A Grape-stone. Viol shaped. See Panduræsorme.

VIRGATUS (Virga a rod, or wand) caulis.

A rod-like or wand like stem or branch.

—Ramusculis debilibus in æqualibus. 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 cremando, from burning.

Viscidum (Viscum s. Viscus, Birdlime: from Bionos Æol. pro ¿os) folium. A Viscid or clammy leas. Humore non fluido sed tenacioblinitum. Covered or besmeared with a tenacious juice: as in Senecio viscosus. Applied also to the Stem.

Ee 2

VIS-

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 feeds; or by the seeds themselves germinating on the plant, instead of falling as they usually do.—Exemplified in some forts 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.

## UM

3. Proliferous or superdecompound.

#### An Umbel also is

1. Concave. 2. Convex. 3. Fastigiate, 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 twentyfecond order in Linneus's Fragments;
and of the forty-fifth in his Natural Orders. Included in the fecond 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 fometimes 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.

UNANGULATUS caulis. A stem of one angle: as in Iris fætidissima.

UNARMED. Inermis. Without thorns or prickles. Applied to the stem, leaf, and calyx.

Uncinatus. Uncinate. Hooked at the end. As the awn of the feed in Geum urbanum; and the stigma in Viola, Lantana, &c. This term is used, but not explained by Linneus. In what it differs from hamosus I know not.

UNDATUS, Undulatus. Waved. The furface rising and falling in waves, or obtusely; not in angles.—Applied to the leaf

#### UN

in Potamogeton crispum; and to the corolla, in Gloriosa.

Linneus, in Philof. Bot. has only the fecond of these terms, which he applies to a leaf thus—folium undulatum sit, cum discus versus marginem convexe adscendit & descendit.—In Term. Bot. we meet only with the first, thus explained—disco plicis obtusis alternatim slexo.—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. Inaqualis. The parts not corresponding in fize, but in proportion only. Applied to the corolla; and to the florets in many of the Umbellata.

Unguicularis mensura s. 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.

UNGULATA filicula. A Hoof-shaped silicle: as in Rose of Jericho.

UNICAPSULARE pericarpium. A Unicapfular pericarp. Having one capfule to each flower.

UNICUS. One only, fingle. Unicum folium, A fingle leaf on a stem —Unicus slos, synonymous with folitarius in Delin. Pl. Pedunculus solitarius, qui unicus est in loco. Philos. Bot. See Single.

Uniflorus pedunculus. A one-flowered peduncle.

Unilabiata corolla. A one-lipped corolla, or a corolla of one lip.

Unilateralis racemus. A one-fided raceme. When the flowers grow only on one fide 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 faid to be—Approximating when it is near the cap. Remote, when at a distance.

VOLUBILIS. Twining: which fee.

UPRIGHT or Erect. Erectus. See Erect.

URCEOLATUS. Pitcher-shaped. Urceoli s. pelvis instar instatus & undique gibbus. Bellying out like a pitcher. Applied to the calyx, corolla, and nectary.

URENS. Stinging, or armed with stings.

UTRICULI (dimin. from *Uter*, a wine bag or bottle). Utricles. Refervoirs to secrete and receive the sap. See Vessels.

Also the bags or bladders at the root of *Utricularia*.

Ff WAKING

# W

WAKING or Watching of plants. See Vigiliæ.

Wand-like or Rod-like stem. See Virgatus.

Warted. See Verrucofa.

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 trida ylites.

WHEEL-SHAPED corolla. Rotata. Monopetalous, and expanded flat without any tube.

WHIRL, Wherl, or Whorl. See Verticillus.

Wings. Ala. The two fide petals in a papilionaceous corolla.—Also, membranes affixed to the seed.

Winged

Winged petiole. Alatus. Having a thin membrane or border on each fide; or, dilated on the fides: as in Orange. Winged leaf. See Pinnatum.

WITHERING or Shrivelling. Decaying without falling off. See Marcescens.

Wood. Lignum. The folid 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 fort of pubescence, or a clothing of dense curling hairs on the furface of some plants.

Woolly. Lanatus. Clothed with a pubefcence refembling wool: as the leaves of Horehound, Great Mullein, Furze, &c. See Lanatus,

Woollyish, or somewhat woolly. Sublanatus.

WRINKLED. See Rugosum.

WRITHED.

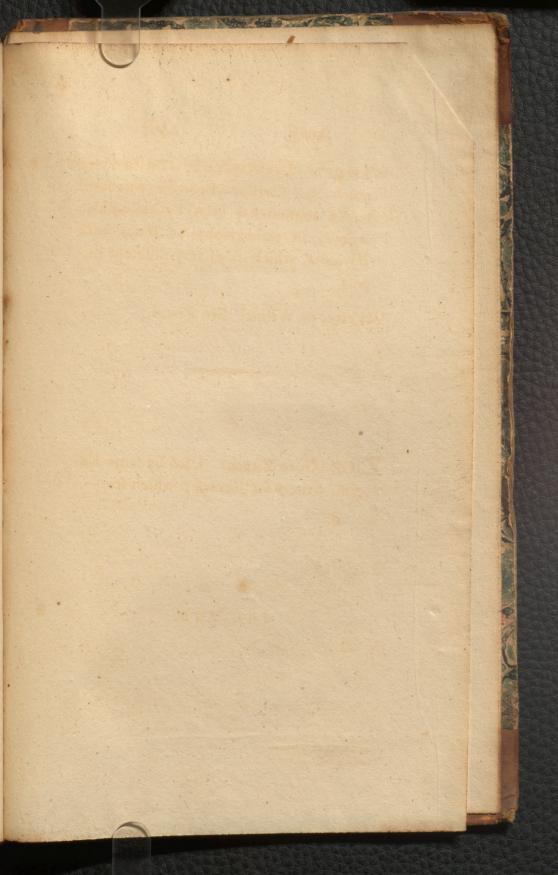
WRITHED. Contortuplicatus. Twisted very much. See Tortilis.—I perceive this word to be confounded even by respectable writers, in orthography at least, with Wreathed, which is of very different import.

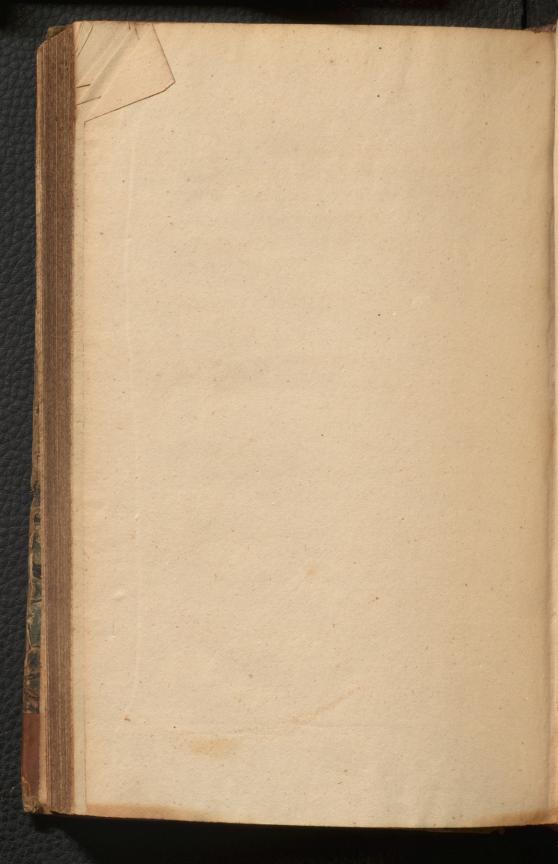
WYTHE, or Withe. See Vimen.

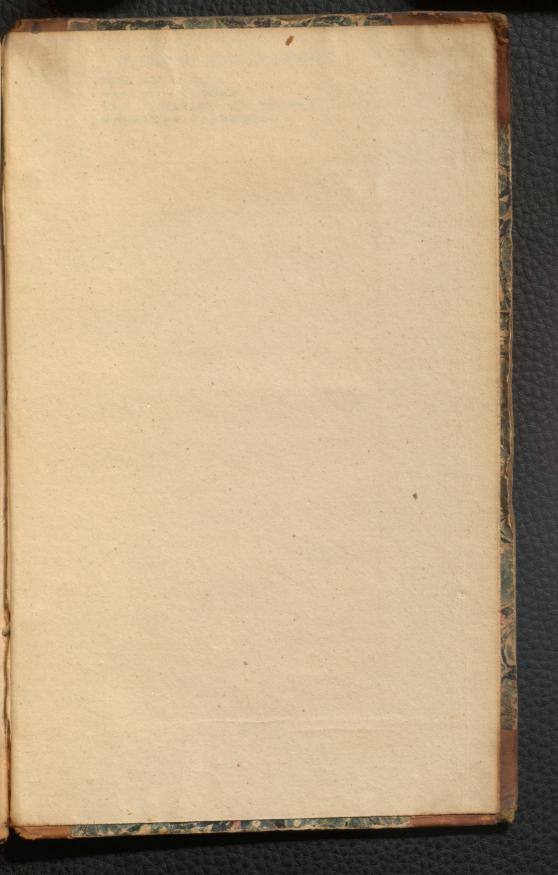
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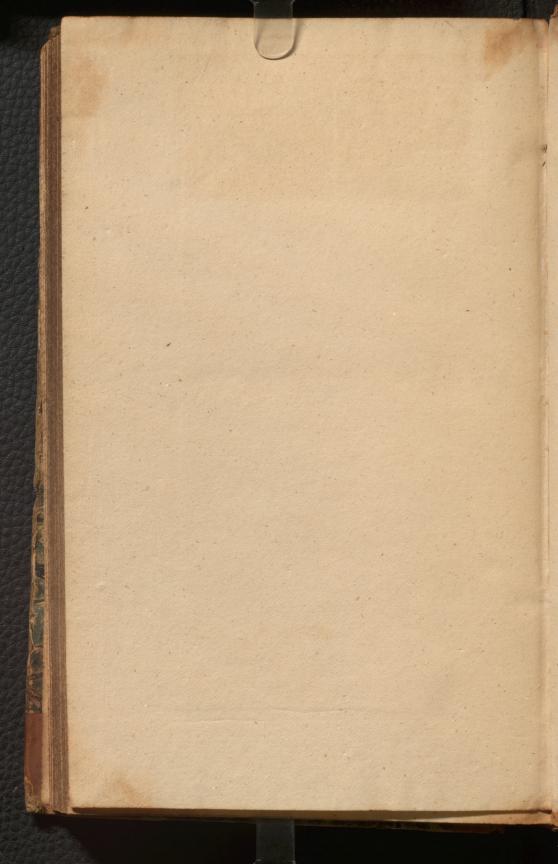
ZIGZAG, or Ziczac. Used by some English writers for Flexuose; which see.

THE END.









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