Besides the antient kind of Anagram, there have been new ones invented; as, the Mathematical Anagram, invented in 1680; by which the Abbot Catelan found, that the eight Letters of the Name of Lewis XIV. made Vrai

Heros, i. e. true Hero.

nagram; where the numeral Letters (i. e. fuch as in the Roman cyphering stood for Numbers) taken together, according to their numerical Values, express some Epocha: Of which kind is that Distich of Godart on the Birth of the late French King, in the Year 1638, on a Day wherein there was a Conjunction of the Eagle with the Lion's Heart:

eXorlens DeLpbIn agVILæ CorDIgqVe LeonIs Congress V galLos spe Lætlilaq Ve refeClt.

ANALECTA, a Greek Term, fignifying Collection;

form'd of avaneyw, I gather

ANALEMMA, a Planisphere; or Projection of the Sphere, on the Plane of the Meridian, orthographically made, by strait Lines and Ellipses; the Eye being supposed to be at an infinite Distance; and in the East or West Points of the Horizon. See PLANISPHERE, PROJECTION, and SPHERE.

ANALEMMA, is also used for an Astrolabe; or kind of Instrument, confissing of the Furniture of the same Projection, drawn on a Plate of Brass or Wood; with an Ho-

rizon or Cursor sitted to it. See ASTROLABE.

Its use is for finding the Time of the Sun's rising and setting, the Length of the longest Day in any Latitude, and

the Hour of the Day.

The Analemma is also of confiderable use among Dialists, for laying down the Signs of the Zodiack, with the Length of Days, and other Matters of Furniture, upon Dials. See DIAL, and FURNITURE.

The Word is derived from the Greek avannua, of avanau-

Bava, resumo.

ANALEPTICKS, in Medicine, Restoratives; or Remedies proper to restore the Body, when wasted or emaciated, either by the Continuance of a Disease, or the Want of Food. See RESTORATIVE.

The Word is Greek, 'Avanna funds, derived of 'Avanaußavo,

I re-establish, restore.

ANALOGY, a certain Relation, Proportion, or Agreement, which several Things, in other respects different, bear to each other.—Such is that between the Bull in the Hea-

vens, and the Animal fo called on Earth.

The Word is Greek, 'Αναλογία; which the Latins usually render by Comparatio, and Proportionalitas: And hence, among Geometricians, Analogy is frequently used for a Similitude of Ratio's; called also Proportion. See Proportion.

Reasonings by Analogy may serve to explain and illustrate, but not to prove any thing; yet is a great deal of our philosophizing no better founded. See SIMILITUDE, PHILOSO.

PHIZING, Ec.

In Matters of Language, we fay, New Words are form'd by Analogy, i. e. new Names are given to new Things, conformably to the establish'd Names of other Things of the like Nature and Kind. See LANGUAGE, and WORD. The Difficulties and Obscurities in a Language, are chiefly

to be clear'd up by Analogy. See ETYMOLOGY.

The Schoolmen define Analogy to be a Resemblance, join'd with some Diversity: Its Foundation, according to them, is laid in the Proportion of several Things, consider'd as that Proportion proceeds upon different Confiderations. See Bony, &c.

PROPORTION.

Thus, a found Animal, a found Food, and a found Proposition, agreeing in this, that they have a common Denomination, but the Reason or Quality whereon the Denomination is founded, different; are faid to have an Analogy, or

Accordingly, Analogous Things are defined to be such as have a common Name, but the Thing immediately signified by that common Name, different; yet with some Correspondence or Relation discernible therein. See GENERAL Term.

Philosophers usually distinguish three Kinds of Analogy, viz.—of Inequality, where the Reason of the common De-nomination is the same in Nature, but not in Degree or Order: In which Sense, Animal is analogous to Man, and Brute. Of Attribution; where, the the Reason of the common Name be the same, there is a difference in its habitude or respect thereto: In which Sense, Healthy is analogous both to a Man, and an Exercise. Of Proportionality; where, tho the Reasons of the common Name do really differ, yet they bear some proportion to each other: In this Sense, the Gills of Fishes are said to be analogous to the Lungs in terrestrial Animals: and thus, the Eye and the Understanding are said to bear an Analogy to each

ANALOGISM, ANALOGISMUS, in Logick, an Argument from the Cause to the Effect. See CAUSE, &c.

ANALYSIS, in Logick, a Method of applying the Rules of Reasoning, to resolve a Discourse into its Principles; in order to a Discovery of its Truth, or Falshood. See PRIN

Or, Analysis is an Examination of some Discourse, Propos We are now likewise furnish'd with the Numerical A- sition, or other Matter, by searching into its Principles, and separating and opening its Parts; in order to consider them more diffinctly, and arrive at a more precise Knowledge of the Whole. See DISCOURSE, PROPOSITION, REDUCTION,

Ec.
The Word is Greek, avaluois, which literally fignifies, Refolution; form'd of ara, and how, solvo, resolvo, I loolen, I

Analysis makes one great Branch or Species of Method; called also Resolution. See METHOD, and RESOLUTION.

ANALYSIS, in Mathematicks, a Method of folving, or resolving Mathematical Problems. See Problem.

There are two general Methods of finding Truth in Mathematicks; Synthesis, and Analysis.—Analysis is the Demonstration or Confidence on the Confidence of the Confiden monstration, or Confideration of the Consequences drawn from any Proposition; in which a Man proceeds, till he comes to some known Truth, by means whereof, he may be able to give a Solution of the Problem. See RESOLUTION.

The Method of Analysis confists more in the Judgment and readiness of Apprehension, than in any particular Rules, where pure Geometry is made use of, as it was among the Antients; but at present Algebra is principally used on this Occasion, which furnishes certain Rules to perform or arrive

at the End proposed. See ANALYTIC.

This Method, under its present Improvements, must be allowed the Apex or Height of all human Learning; being the great Instrument or means whereby so many surprizing Discoveries have been of late Years made, both in Mathematicks, and Philosophy. It furnishes the most perfect Inflances, and Examples of the Art of Reasoning; gives the Mind a surprizing Readiness at deducing and discovering Things unknown, from a few Data; and by using Signs for Live and State of Things unknown, the state of the s for Ideas, presents Things to the Imagination, which otherwise seem'd out of its Sphere. By this, Geometrical Demonstrations may be wonderfully abridg'd; and a long Series of Argumentations, wherein the Mind cannot without the utmost Effort and Attention discover the Connection out the utmost Effort and Attention discover the Connection of Ideas, are hereby converted into fensible Signs, and the feveral Operations requir'd therein, effected by the Combination of those Signs. But what is yet more extraordinary, by means of this Art, a Number of Truths are frequently express'd by a fingle Line, which in the common way of explaining and demonstrating Things, would fill whole Volumes: Thus, by mere Contemplation of one fingle Line, whole Sciences may fometimes be learnt in a few Minutes time; which otherwise could scarce be attained in many Years. See Mathematicks, Knowledge, Theorem, &c.

Analysis, is divided, with regard to its Object, into that of Finites, and that of Infinites.

Analysis of finite Quantities, is what we otherwise call Specious Arithmetick, or Algebra. See Algebra, and Specious ARITHMETICK.

Analysis of Infinites, called also the New Analysis, is particularly used for the Method of Fluxions, or Differential Calculus. See FLUXIONS, and CALCULUS.—See also

Analysis, is also used in Chymistry, for the decompounding of a mixt Body; or the Reduction thereof into its Prin-See PRINCIPLE, REDUCTION, DECOMPOSITION, ciples.

To analyze Bodies, or resolve 'em into their component Parts, is the chief Object of the Art of Chymistry. See CHYMISTRY.

The Analysis of Bodies is chiefly effected by means of See FIRE.

All Bodies, by a Chymical Analysis, resolve into Water, Earth, Salt, Sulphur, and Mercury; tho every Body does not afford all these Parts, but some more, some less, according to the Kingdom they belong to. See ELEMENT.—See alfo WATER, EARTH, SALT, &c.

The Analysis of Vegetables is easy; that of Fossils, particularly Metals and Semi-metals, difficult. See VEGETABLE,

Fossil, Metal, &c.
Some Bodies of the Fossil Tribe confist of Particles so very minute, and so firmly united, that the Corpuscles thereof need less heat to carry them off, than to separate 'em into their Principles: So that the Analysis is impracticable in fuch Bodies.—Hence the difficulty of analysing Sulphur, See SULPHUR.

The Anatomical Diffection of an Animal, is a kind of

Analysis. See Anatomy, and Dissection.

Analysis is also used for a kind of Syllabus, or Table of the principal Heads, or Articles of a continued Discourse; disposed in their natural Order, and Dependency.—Analyses are more scientifical than Alphabetical Indexes; but are less used, as being more intricate.

ANALYTIC, ANALYTICAL, formething that belongs to, partakes of the Nature of Analysis. See ANALYSIS.

Thus, we say, an Analytical Demonstration; Analytical Enquiry; Analytical Table, or Scheme; Analytic Method, &c. See Method.

Esc. See Method.

The Analytic Method stands opposed to the Synthetic.—

As in Mathematicks, says Sir I. Newton, so in Natural
Philosophy, the Investigation of difficult Things by the
Analytic Method, ought to precede the Method of Composition. This Analysis consists in making Experiments,
and Observations, and in drawing general Conclusions
therefrom by Induction, and admitting of no Objections

therefrom by Induction, and admitting of no Objections against the Conclusions, but such as are drawn from Experiments and other certain Truths. And tho the arguing from Experiments and Observations by Induction, be no Demonstration of general Conclusions; yet it is the best way of arguing which the Nature of the Things admits of; and may be effeem'd fo much the stronger, as the Induction is more general. And if no Exception occur from Phænomena, the Conclusion may be pronounced generally. By this way of Analysis, we may proceed from Compounds to Ingredients; and from Motions to the Forces producing

them; and in general, from Effects to their Causes, and from particular Causes to more general ones, till the Argument end in the most general.—This is the Analytic The Synthetic confifts in affuming the Causes discovered, and established as Principles; and by them explaining the Phænomena proceeding from them, and proving the Explanations.' See Synthesis.

ANALYTICS, ANALYTICA, the Dostrine, and Use of

Analyses. See ANALYSIS.

The great Advantage of the present Mathematicks above

the antient, is chiefly in Point of Analyticks.

The Authors on the antient Analyticks, are enumerated by Pappus, in the Preface to his 7th Book of Mathematical Collections; being, Euclid, in his Data, and Porismata; Apollonius, de Sectione Rationis; Apollonius, in his Conicks, Inclinations, and Tactions; Aristaus, de Locis Solidis, and Eratosthenes, de mediis proportionalibus. But the antient Analyticks were very different from the modern.

To the modern Analyticks, principally, belong Algebra; the History of which, with the several Authors thereon, see

under the Article ALGEBRA.

The chief Writers upon the Analysis of Infinites, are its Inventors, Sir Isaac Newton, in his Analysis per Quantitatum Series, Fluxiones & Differentias, cum enumeratione Linearum 3ⁱⁱ ordinis; and de Quadratura Curvarum: and M. Leibnitz, in AEt. Eruditor. An. 1684: The Marquis de l'Hopital, in his Analyse des Insiniment petites, 1696: Carre, in his Methode pour la messure des Surfaces, la di-menssion des Solides, &c. par l'application du calcul integral, 1700: G. Mansredius, in a posthumous Piece, de Constructione Equationum differentialium primi gradus, 1707: Nich. Mercator, in Logarithmotechnia, 1668; Cheyne, in Methodo Fluxionum inverfa, 1703; Craig, in Methodo figurarum lineis rectis & curvis comprehensarum Quadraturas determinandi, 1685; and de Quadraturis sigurarum curvilinearum & locis, &c. 1693: Dav. Gregory, in Exercitatione Geometrica de dimensione sigurarum, 1684; and Niutione Geometrica de dimensione figurarum, 1684; and Niuentiit, in Considerationibus circa Analyseos ad quantitates infinite parvas applicatæ, principia, 1695.—The Sum of what is found in l'Hopital, Carre, Cheyne, Gregory, and Craig; is collected into one Volume, and very well explain'd by C. Hayes, under the Title of, A Treatise of Fluxions,

ANALYTICK, in Logick, is a Part of that Science, teaching to decline and construe Reason, as Grammar doth

ANAMORPHOSIS, in Perspective and Painting, a monstrous Projection; or a Representation of some Image, either on a plane or curve Surface, deformed; which at a certain distance shall appear regular, and in proportion. See

The Word is Greek; compounded of ava, and mosquoss,

formatio, of poson, form.

To make an Anamorphosis, or monstrous Projection on a Plane.—Draw the Square ABCD, (Tab. Perspective, Fig. 18.) of a bigness at pleasure, and subdivide it into a Number of Areolas, or lesser Squares.—In this Square, or Reticle, called the Craticular Prototype, let the Image to be difforted be drawn.—Then draw the Line ab=AB; and divide it into the same Number of equal Parts, as the Side of the Prototype AB; and in E, the middle thereof, erect the Perpendicular EV, so much the longer; and draw VS perpendicular to EV, so much the shorter, as the Image is desir'd to be distorted. From each Point of Division draw right Lines to V, and join the Points a and S; as also the right Line aS. Thro' the Points def g, draw Lines parallel to a b; then will abod be the Space that Lines parallel to a b; then will abcd be the Space that the Monstrous Projection is to be delineated in; called the Gratioular Ectype.

Lastly, in every Arcola, or small Trapezium of the Space a bcd, draw what appears delineated in the correspondent Areola of the Square ABCD: by this means you will obtain a deformed Image, which yet will appear in just Proportion to an Eye distant from it the length FV, and raifed above its height, VS. See Designing.

It will be diverting to manage it so, that the deformed Image do not represent a mere Chaos; but some other Image: Thus, we have seen a River with Soldiers, Waggons, &c. marching along the fide of it; fo drawn, that when viewed by an Eye in the Point S, it appears to be the fa-

tyrical Face of a Man.

An Image also may be distorted mechanically, by perforating it here and there with a Needle, and placing it against a Candle, or Lamp; and observing where the Rays which pass thro' these little Holes fall on a plane, or cover Superficies; for they will give the correspondent Points of the Image deformed: by means whereof, the Deformation may be compleated.

To draw the Anamorphofis, or Deformation of an Image upon the convex Surface of a Cone.

It is manifest from the former Case, that all here required, is to make a Craticular Ectype on the Superficies of

the Cone, which shall appear to an Eye duly placed over its Vertex, equal to the Craticular Prototype.

Let the Base ABCD, therefore, of the Cone, (Fig. 19.) be divided by Diameters into any Number of equal Parts, that is, the Periphery thereof: And let some one Radius be likewise divided into equal Parts, and thro' each Point of Division draw concentrick Circles: thus will the Craticular Prototype be made.—With double the Diameter AB, as a Radius, describe the Quadrant EFG, (Fig. 20.) so as the Arch EG be equal to the whole Periphery: then this Quadrant folded duly up, will form the Superficies of a Cone, whose Base is the Circle ABCD.—Divide the Arch AB into the same Number of equal Parts as the Craticular Prototype is divided into, and draw Radii from each of the Points of Division. Produce GF to I, so that FI=FG, and from the Centre I, with the Radius IF, draw the Quadrant FKH, and from I to E draw the right Line IE. Divide the Arch KF into the fame Number of equal Parts, as the Radius of the Craticular Prototype is divided into; and draw Radii thro' each of the Points of Division, from the Centre I meeting EF, in 1, 2, 3, &c. Lastly, from the Centre F, with the Radii, F 1, F 2, F 3, &c. describe the concentrick Arches.—Thus will the Craticular Ectype be form'd, each Areola whereof will appear equal to other.

Hence, what is delineated in every Areola of the Craticular Prototype; being transferred into the Areolas of the Craticular Ectype: the Image will be difforted or deformed: yet an Eye being duly raised over the Vertex of the Cone,

will perceive it in just proportion.

If the Chords of the Quadrants be drawn in the Craticular Prototype, and Chords of their fourth Part in the Craticular Ectype, all things else remaining the same; you will have the Craticular Ectype on a quadrangular Pyramid.

And hence it will be easy to deform any Image, in any other Pyramid, whose Base is any regular Polygon.

Because the Eye will be more deceived, if from contiguous Objects it cannot judge of the distance of the Parts of the deformed Image; therefore, these kinds of deformed Images are to be view'd thro' a small Hole.

ANANAS, in Natural History, by some called Nanas, by others Fayama, and by us popularly the Pine-Apple on account of the resemblance it bears to the Cones of Pines or Firs; is a fine Indian Fruit, which grows on a Plant like

the Fig-tree, and of the Size of an Artichoke.

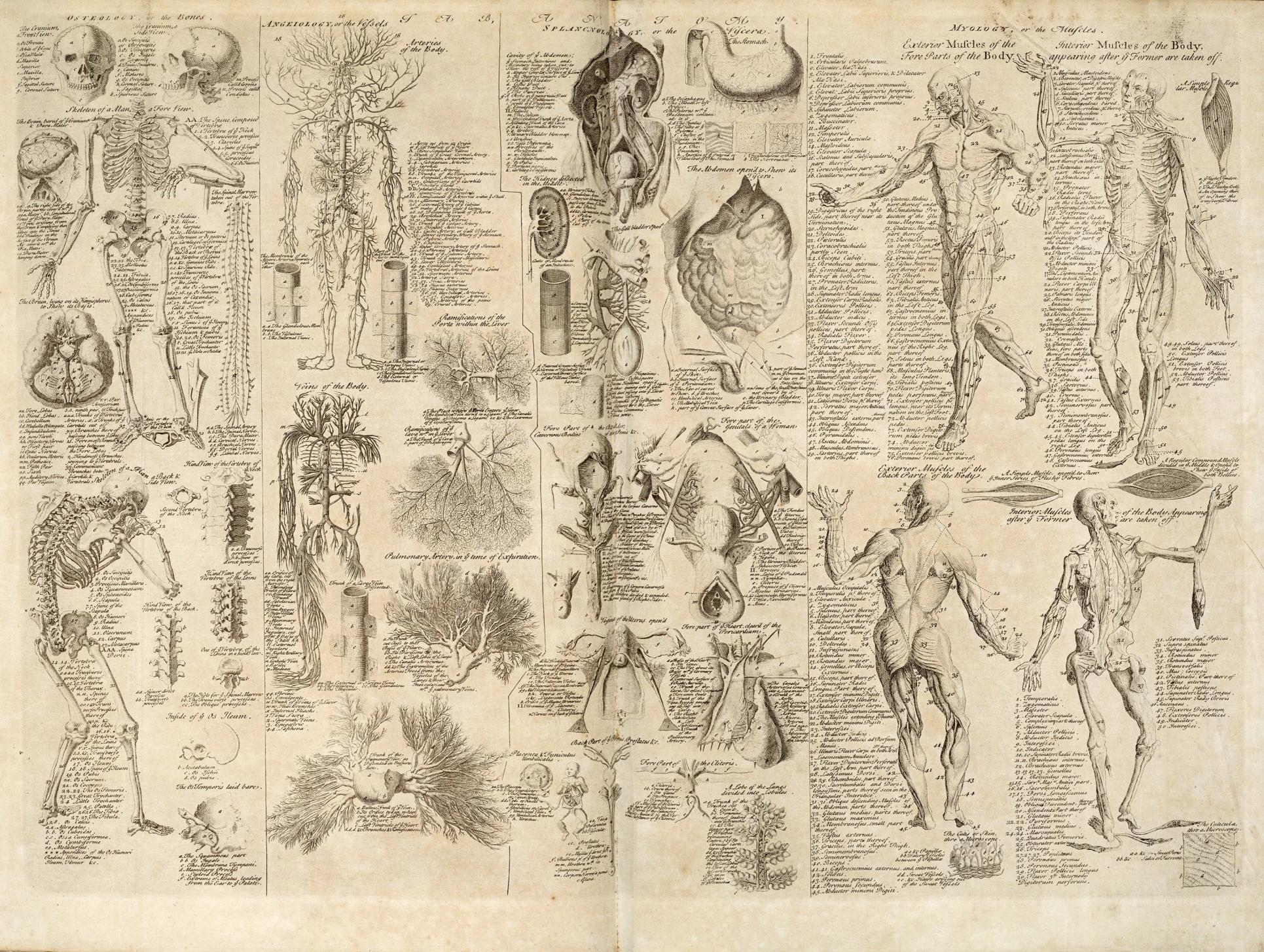
The Fruit is adorned on the Top with a little Crown, and a bunch of red Leaves resembling Fire. The Flesh is fibrous, but dissolves in the Mouth; having the delicious Taste of the Peach, the Quince, and the Muscadine Grape, all together.—M. du Tertre describes three Kinds of Ananas. They make a Wine from the Juice, which is almost equal to Malmsey Sack, and will intoxicate as soon.

It is good to strengthen the Heart and Nerves, against nauseating, to refresh the Spirits, and excites Urine powerfully; but is apt to occasion Abortion in Women.—They make a Confection of the Ananas on the Spot, which they bring hither whole; and is found of good service to restore

a decay'd, or aged Constitution.

The Anana, or West-India Pine-Apple, is generally allow'd, both for its rich and delicious Flavour, and its beautiful Colour, for the King of Fruits .- Great Endeavours have of late been used to cultivate the Plant in Europe; in which they have succeeded, and there are now produced de-licious Fruits of this kind, in some of the fine Gardens in England.—They are usually about the Size of a Tennis-Ball.

ANAPEST, ANAPESTUS, a Foot in the Greek and Latin Poetry, confisting of two short, and one long Syllable. See



Such is the Word Legerent.

The Word is derived from avanaia, contra ferire; this Verse being the Reverse of the Dactyl. See DACTYL Anapestick Verses, i. e. Verses wholly composed of such

Feet, were much in vogue among the Antients.

ANAPHORA, in Rhetorick, a Figure whereby the same Sound is repeated in the Beginning of several Sentences, or Verses. See FIGURE.

The Word is Greek, avapoed, fignifying Relation, or Re-

petition.

ANAPLEROTICKS, in Medicine, fuch Remedies as incarnate, and fill up Ulcers and Wounds with new Flesh. See WOUND, and ULCER.

Anapleroticks are the same with what we otherwise call

Incarnatives. See Incarnative.

The Word comes from the Greek avandness, to fill up. ANARCHY, the want of Government in a Nation, where no supreme Authority is lodged, either in the Prince or other Rulers; but the People live at large, and all things are in confusion. See GOVERNMENT.

The Word is derived from the Greek Privative a, and

asxi, Command, Principality.

ANASARCA, in Medicine, a fort of universal Dropsy, wherein the whole Substance of the Body is stuffed, or bloated with pituitous Humours. See DROPSY.

The Anafarca is otherwife called Leucophlegmatia. See

LEUCOPHLEGMATIA.

The Word is form'd of the Greek avasagna. - The Anafarca is a further degree of a Cachexia. See CACHEXY.

In an Anafarca, the Legs swell at the beginning, especially towards Night, and then pit remarkably: The Urine is pale, the Appetite decays; at length the Swelling rifes higher, and appears in the Thighs, Belly, Breast, Arms. The Face becomes pale and cadaverous; the Flesh soft and lax; a difficulty in Respiration comes on, attended with a flow Fever, &c.

ANASTOMASIS, or ANASTOMOSIS, in Anatomy, is fometimes used to express such an Aperture of the Mouths of the Vessels, as lets out their Contents. See VESSEL, &c.

The Word is form'd of the Greek ava, per, thro', and

soua, Os, Mouth.

ANASTOMASIS is more frequently used to denote the opening of two Vessels into one another; or the Union and Juncture of the Mouths of two Vessels, whereby they come to communicate with one another.

There are various Anastomases of this kind, e.g. of an Artery with an Artery, a Vein with a Vein, or a Vein with an Artery. See ARTERY, and VEIN.

The Circulation of the Blood in the Fœtus is effected by means of the Anastomases, or Inosculations of the Vena Cava with the Pulmonary Vein; and of the Pulmonary Artery with the Aorta. See FOETUS.

The same Circulation is also perform'd in Adults, by the Anastomases or Continuations of the Capillary Arteries with

the Veins. See CIRCULATION of the Blood.

After the Circulation of the Blood thro' the Heart, Lungs, and large Blood-Veffels, was demonstrated by Harvey; it was only guess'd how the Extremities of the Arteries transmitted the Blood to the Veins: till Leewenboeck's Microscopes had discover'd the Continuations of the Extremities of those Veffels, in Fish, Frogs, &c.-However, there were not wanting those who doubted of the like Continuations of the Extremities of the Arteries and Veins in human Bodies and Quadrupeds; fince those Animals it had hitherto been chiefly feen in fatisfactorily, were either fuch Fish, or amphibious Kinds, as have but one Ventricle in their Hearts, and their Blood actually cold; befide that their Blood does not circulate with fuch Rapidity, as in Animals whose Hearts have two Ventricles. This difference in the principal Organs of Circulation, moved Mr. Cowper to make Experiments on Animals, whose Organs differ only from the Human in their gross Figure, and not in their intimate Structure.—The Refult was a plain Discovery of the like Inosculations of the Arteries and Veins, in the Omentum of

George Frederick Francus, of Frankenau, a Physician of Copenhagen, published, in the Year 1705, a learned and co-

pious Work, intitled, Anastomasis Retecta.

ANASTOMATICS, or Anastomatic Medicines, are such as have the Faculty of opening, and dilating the Orifices of the Veffels; and by that means of making the Blood circulate the more freely.

The Word comes from the Greek 'Avasouba, I open, unstop. ANATHEMA, an Excommunication, attended with

Execrations and Curfes. See Excommunication. There are two Kinds of Anathema's; the one Judiciary,

the other Abjuratory.

The former can only be pronounced by a Council, a Pope, Bishop, or other qualified Person; and differs from a fimple Excommunication in this, that an Excommunication only prohibits the Criminal from entering within the Church, or from holding Communion with the Faithful; whereas

an Anathema cuts him off from the Body, the Society, and even the Commerce of the Faithful, and delivers him over to the Devil.

The latter kind of Anathema usually makes a Part of the Ceremony of Abjuration; the Convert being obliged to anathematize the Herefy he abjures. See ABJURATION.

Most Greek Writers distinguish Anathema, written with a long e, 'Aναθήμα; from Anathema with a short e, 'Αναθεμα: Yet Beza rejects the Difference.—Pollux, in his Lexicon, observes that the Word properly signifies, Gifts dedicated to the Gods: This Interpretation is confirm'd by Hespelius, who explains Anathema by Ornaments; these Gifts being hung up as Ornaments in the Temples.

The Criticks and Commentators are divided about the manner wherein St. Paul wishes to be Anathema for his Brethren, Romans, Cap. IX. 3. Some render it by accurred for, others by separated from, &c.
ANATOCISM, ANATOCISMUS, an Usurious Contract,

wherein the Interests arising from the principal Sum, are added to the Principal it felf, and Interest exacted upon the

Anatocism is what we popularly call Interest upon Interest, or Compound Interest. See INTEREST.

This is the worst Kind of Usury, and has been severely condemn'd by the Roman Law, as well as the Common Laws of most other Countries. See Usury.

The Word is originally Greek, but is used by Cicero in Latin; whence it has descended into most other Languages. It comes from the Preposition dva, which in Composition signifies Repetition or Duplication, and Toxos, Usury.

ANATOMY, the Art of diffecting, or artificially taking

to pieces, the folid Parts of Animal Bodies; in order to an exact Discovery of their Structure and Oeconomy. Sec A-NIMAL, BODY, DISSECTION, and OECONOMY.

Anatomy makes a great Branch of that Division of Medicine called Physiology. See MEDICINE, and Physiology.

It is fometimes divided, with regard to its End, into Speculative and Practical; a Division of very little use and moment.—It is also divided, with regard to its Subject, into Human and Comparative.

Human, which is absolutely and properly denominated Anatomy, is that employ'd on the human Body; called also

Anthropology. See ANTHROPOLOGY.

Comparative Anatomy, is that which confiders Brutes, and other Animals, and even Vegetables; chiefly with a View to illustrate the human Structure. See Comparative

The Subject of Anatomy, viz. the Body, is variously divided into Parts, Organical, and Inorganical; Similar, and Dissimilar; Spermatick, &c. See Part.—See also Simi-

Its more obvious Division, is into Solids and Fluids, or Containing and Contained Parts. See SOLID, and FLUID.

Under the Solids come the Bones, Muscles, Nerves, Arteries, Veins, Cartilages, Ligaments, Membranes, &c. Under the Fluids, come Chyle, Blood, Milk, Fat, Lymph, &c. fee each under its proper Article, Bone, Muscle, Nerve, Artery, Vein, Cartilage, Membrane, &c.

See also Chyle, Blood, Milk, Fat, &c.

The antient Writers of Anatomy, Hippocrates, Democritus, Aristotle, Galen, and others, look'd upon this as the most important Part of Physick, and that, without which the Uses of the Parts of an human Fabrick, and consequently the Causes of Diseases incident thereto, could no way be discovered. And yet this Art, useful as it is, was entirely discontinued for several Ages; till in the XVIth Century it began to flourish asresh.—The Dissection of an human Body was look'd upon as Sacrilege before that time; and we have feen a Consultation which the Emperor Charles V. appointed to be held by the Divines of Salamanca, in order to be fatisfied, whether or no it were lawful, in point of Conscience, to dissect a dead Carcase.—We may add, that to this Day the use of Anatomy and Skeletons, is forbid in Muscovy; the first as inhuman, the latter as subservient to Witchcraft: And Olearius affures us, that one Quirin, a German Chirurgeon, being found with a Skeleton, hardly escap'd with Life; and the Skeleton, after being folemnly dragg'd about the Streets, was burnt. Boyle's Usefulness of Philos.

Vefalius, a Flemish Physician, who died in 1564, was the first who set Anatomy on any tolerable footing. He was teconded by Carpus, Sylvius, Fernelius, Fallopius, Eustathius, Fabricius, Pareus, Baubinus, Hoffman, Riolanus, &c.

These were succeeded by others, to whom some of the finest Discoveries in Anatomy are owing .- Asellius, in the Year 1622, discovered the Lacteal Veins; and in 1628, the immortal Harvey publish'd his admirable Discovery of the Circulation of the Blood. See LACTEAL, and CIRCULA--Pecquet discovered the Reservoir of the Chyle, and the Thoracick Duct, in 1651. See RECEPTACULUM Chyli, and THORACICK Duct.—Rudbecks, a Swede, and Bartholine, a Dane, found out the Lymphatick Veffels, in 1650, and 1651. See LYMPHATICK. - Wharton, in 1655, Z Aa Bb

discovered the lower Salival Ducts; and Steno the upper Salival Ducts, those of the Palate, the Nostrils, and Eyes, in 1661. See Salival.—Wirtsungus, in 1642, discover'd the Pancreatic Ducts. See PANCREATIC.--Willis, who came after him, publish'd an Anatomy of the Brain, and Nerves, in a manner much more exact than had been done before him; yet he had omitted fome confiderable Things, which were afterwards observ'd by Vieusens. See NERVE. —In effect, Glisson treated particularly of the Liver; Wharton of the Glands; Havers of the Bones; Graaf of the Pancreatick Juice, and the Parts of Generation; Lower of the Motion of the Heart; Thurston, of Respiration; Peyer, of the Glands of the Intestines; Brown, of the Muscles; Drelincourt, of the Conception of the Ova in Women, the Placenta, and the Membranes of the Fœtus. See Liver, Gland, Bone, Generation, Respiration, FOETUS, &c.

Malpighi, who died in 1694, is one of those to whom Anatomy owes the most: He made a great Number of Discoveries in the Lungs, Brain, Liver, Spleen, Glands, and Lymphaticks, by help of the Microscope, &c. Nor must it be omitted that Ruysch, still living, has let great Light into many of the finer and more intricate Parts of the human Frame, particularly the Glands; by means of his Injections.

See Microscope, and Injection.

Mauget, and Le Clerc, two Physicians of Geneva, have given us a Bibliotheca Anatomica; containing all the new Discoveries that have been made in this Art.

The best Systems of the Art, as it now stands, are those

of Verheyen, Drake, Keill, &c.
ANATOMY of Plants. See Plant.—See also Root,
BRANCH, BARK, PITH, WOOD, LEAF, FLOWER, SEED, &c.—See also Vegetation, &c.

The Word comes from the Greek avarous, Section, or

Cutting; of avareure, diffeco.
ANATRON, or NATRON, a kind of native Salt-petre, or Nitre, found in Egypt. See NATRON, and NITRE. ANATRON, is also a volatile Salt, skimm'd from the Com-

position of Glass, when in fusion. See GLASS.
When pounded, it yields a kind of Pouder; which being diffolv'd in the Air, or in a proper Liquor, becomes common Salt, after Coagulation.

Anatron is likewise the Name of a nitrous Juice, which condenses in Vaults, Arches, and other subterraneous Places.

Anatron is also used by some Writers for a compound Salt, made of Quicklime, Alum, Vitriol, common Salt, and Nitre. See SALT.

ANBURY, a kind of Wen, or spongy Wart, growing

upon any part of a Horse, or Cow, full of Blood.

ANCESTORS, Progenitors; or those from whom a Person is descended. See PROGENITOR.

The Word is deriv'd from the Latin Ancessor, wrote, by Contraction, for Antecessor, goer before.

The Law diffinguishes between Ancestor and Predecessor; the former being applied to a Natural Person, as such an one, and his Ancestor; and the latter to a Body Politick or Corporate, as a Bishop, and his Predecessors.

ANCESTREL, in Law.—Homage Ancestrel, fignifies Homage that hath been done or performed by one's Ances-

See HOMAGE.

Action Ancestrel. See Action.

ANCHOR, an Instrument used at Sea, and in Rivers;

to retain and fasten a Vessel by. See Ship.

An Anchor is a large strong piece of Iron, crooked at one End, and form'd into two Barbs, resembling a Hook; fasten'd at the other end by a Cable. See CABLE, &c.

The Goodness of the Anchor is a Point of great Impor-tance; the Safety and Conservation of the Vessel depending principally thereon.—Great Care is to be taken, that the Metal it is made of, be neither too foft, nor too brittle; the latter rendering it liable to break, and the former to straiten. See IRON.

Travellers tell us of People in the Indies who make use of wooden Anchors in their Navigation.—The Inhabitants of the Island of Ceylon, in lieu of Anchors, use huge round Stones; and in some Places, the Anchors are a kind of Machines of Wood, loaden with Stones.

The Word comes from the Latin Ancora, of the Greek

a'γκυεα, which comes from α'γκυλος, incurvus, crooked.
The Parts of an Anchor, are, 1°, The Ring, into v that which runs down into the Ground: at the End of which is, 4°, The Flouke, or Fluke, by some called the Palm; being that broad and picked Part with its Barbs like an Arrow-head, which fastens into the Ground: 5°, The Stock, a piece of Wood fasten'd unto the Beam, near the Ring, ferving to guide the Fluke, so that it may fall right, and fix in the Ground.

There are three Kinds of Anchors commonly used: the Kedger, the Grapnel, and the Stream-Anchor: which see under their respective Articles.

Aubin, in his Dictionary of Sea-Affairs, printed at Amsterdam in 1702, observes, that the Anchor of a large heavy Vessel is smaller, in proportion, than that of a lesser and lighter one. The Reason he gives, is, that tho the Sea employs an equal Force against a small Vessel as against a great one, supposing the Extent of Wood upon which the Water acts, to be equal, in both; yet the little Vessel, by reason of its superior Lightness, does not make so much resistance as the greater; the Desect whereof must be supplied by the Weight of the Anchor.

ANCHOR, in Architecture and Sculpture, an Ornament in form of an Anchor, or Arrow's-head; frequently carved on the Echinus, or Quarter-round, in the Dorick, Ionic, Co-

rinthian, &c. Capitals. See CAPITAL, &c.

The Anchors are usually intermix'd with Representations of Eggs; whence the Echinus it felf is popularly called Eggs

and Anchors. See Echinus, Quarter-Round, &c.
ANCHORAGE, or Anchoring, Ground fit to hold a
Ship's Anchor, fo that fhe may ride fafely. See Anchor.

The best Ground for a Ship to anchor in, is stiff Clay or hard Sand; and the best riding at Anchor, is when a Ship is Land-lock'd, and out of the Tide.

ANCHORAGE, in Law, a Duty taken of Ships for the Pool of the Haven, where they cast Anchor. See Dury.

No Man can let an Anchor fall on the King's Ground in any Port, without paying for it to the King's Officer appointed by Patent.

ANCHORED, in Heraldry .- A Cross-Anchored, or ANCREE, is a form of Cross so called, because the four Ex-

tremities resemble the Flouke of an Anchor. See Cross.

This Cross is so like the Cross Moline, that the Resemblance has occasioned many Mistakes in Heraldry. See Mo.

ANCHORET, ANCHORITE, or ANACHORITE, a Hermit, or devout Person, living alone in some Desart; to be surther out of the reach of the Temptations of the World, and

more at leisure for Meditation. See HERMIT.

Such were St. Anthony, St. Hilarion, &c. Paul the Hermit was the first of the Tribe of Anchorites.—The Word comes from the Greek ἀναχωςέω, I retire into a By-

These People are very numerous among the Greeks; confisting principally of Monks, who not caring for the Fatigues and Offices of the Monastery, purchase a little Spot of Ground, with a Cell, whither they retreat, and never appear in the Monastery again, excepting on solemn Days. See Mong.
These are also called Ascetæ and Solitaries. See Asceta,

The Anchorites of Syria and Palestine retire into the most obscure, and unfrequented Places; hiding themselves under Rocks, and Mountains, and living on the spontaneous Productions of the Earth.—The Anchorites in America, are look'd upon there, as by far the most perfect fort of Monks; and are held in much higher Opinion and Veneration than the Conobites, or Monks refiding in Monasteries. See Con-

Many of these retire, with the leave of their Abbots, and have an Allowance from the Monastery.-The People, in regard of their Piety, present them with good Sums of Money, which they carefully hoard up, and at their Death, bequeath it to the Monastery they had belong'd to.

ANCHOVY, in Matters of Commerce, &c. a little Sea Fish, much used by way of Sauce, or Seasoning.

Scaliger describes it as of the Herring-kind, about the

Length of a Finger, having a pointed Snout, a wide Mouth, no Teeth, but Gums as rough as a Saw. - Others make it a fort of Pilchard: But others, with better Reason, hold it a peculiar Species, very different from either. See Fish.

The Anchovy is caught in the Months of May, June, and July, on the Coasts of Catalonia, Provence, &c. at which Season, it constantly repairs up the Straits of Gibraltar,

into the Mediterranean.

The Fishing is chiefly in the Night-time; when, a Light being put out on the Stern of their little Fishing-Veffels, the Anchovies flock round, and are caught in the Nets. See

When the Fishery is over, they cut off the Heads, take out the Guts; then lay 'em in Barrels and falt 'em.—The common way of eating Anchovies, is as Salad, with Oil, the Cable is fasten'd: 2°, The Beam, or Shank, which is the Tails, Fins, &c. slipp'd off. They are made into Sauce that which runs down into the Ground of the Francisco of the Anchor: 3°, The Arm, which is by mincing, adding to 'em a Cutlet of Veal or Ham with Pepper, &c. over the Fire.

The Word is derived from the Spanish Anchora, or ra-

ther from the Italian, Anchoia.

ANCHYLOPS, in Medicine, a Species, or rather Degree of Fistula Lachrymalis; frequently confounded with Ægilops, &c. See FISTULA, and ÆGILOPS.
ANCIENT. See ANTIENT.

ANCO, or Ancon, the Tip of the Elbow; or the backward and larger Process of the Cubitus. See Cubirus.

The Ancon is the same with what the Greeks call Olecranum. See OLECRANUM. And hence,

ANCONÆUS Musculus, in Anatomy, the fixth Muscle of the Elbow; fo called, as being situate behind the Folds of the Ancon or Elbow.

It arises from the back part of the Extremities of the Humerus, passes over the Elbow, and is inserted into the lateral and internal Part of the Cubitus; about three or four Fingers Breadth above the Olecranum.—Its use is to affift

ANCONY, in the Iron Mines, a Bloom wrought into the Figure of a flat Iron Bar, about three Foot long, with two fquare rough Knobs, one at each End. See Iron, and BLOOM.

ANCREE, in Heraldry, the same with anchored. See that of Brutes. See ZOOTOMY.

ANCHORED.

ANCYLE, or Ancile, in Antiquity, a little Buckler, which fell, as 'tis faid, from Heaven, upon Numa Pompilius; at the same time that a Voice was heard, which declared that Rome should be Mistress of the World, while she preserv'd that Buckler. See Buckler.

The Ancyle was, as it were, the Palladium of Rome.

See PALLADIUM.

Different Authors give different Etymologies of this Word.—Some derive it from the Greek agrico, crooked: Varro derives it ab Ancisu; as being cut or arch'd on the two Sides, like the Bucklers of the Thracians, called Peltæ. Plutarch thinks the Word may be derived from the Greek Lyndy, Elbow, this Weapon being wore on the Elbow: But the Opinion of Varro is the most probable.

Tho there was but one Ancyle that fell from Heaven; yet were there twelve preserv'd: Numa, by the Advice, as 'tis said, of the Nymph Egeria, having ordered eleven others, persectly like the first, to be made; that if any should attempt to steal it, as Ulysses did the Palladium, they might not be able to distinguish the true Ancyle from the false

These Ancylia were preserved in the Temple of Mars; and were committed to the Care of twelve Priests or Salii, instituted for that purpose. See Salii.

They were carried every Year, in the Month of March,

in procession around Rome; and the 30th Day of that Month, were again deposited in their Place.

ANCYLE, is also used in Anatomy, for the Contraction of

the Ham.

ANCYLOGLOSSUS, avrunognoso G, one that is Tonguety'd, or has an Impediment in his Speech, arising from a Contraction of the Franum of the Tongue. See Tongue. ANCYROIDES, is used by some Writers in Anatomy,

for the Process or shooting forth of the Shoulder-bone, in

form of a Beak. See OMOPLATA.

ANDABATÆ, in Antiquity, a kind of Gladiators, who fought hood-wink'd. See GLADIATOR.

They were called Andabatæ, quasi drasami, ascensores, because they fought on Horseback, or out of Chariots.

ANDREW.—Knights of St. Andrew, or the Thistle.

See THISTLE.

Andrew's Cross, is a Badge wore in the Hat, by the People of Scotland, on the Day of the Feast of that Saint.

It confifts of blue and white Ribbands, disposed into a Cross, or Saltier; and is intended as a Commemoration of the Crucifixion of St. Andrew, the tutelary Saint of Scotland. See Cross, and SALTIER.

ANDROGYNE, or Androgynus, an Hermaphrodite; fomething born with two Sexes, being Male and Female in

the fame Person. See HERMAPHRODITE.

Many of the Rabbins are of opinion, that Adam was reated Androgynus; that he was Male on one Side, and Female on the other; and that he had even two Bodies, the one of a Man, and the other of a Woman: fo that God; to create Eve, only separated those two from each other.

Plato tells us, that in the Beginning People were born double, and with both Sexes; but that this Duplicity of Members, giving them too much Strength and Vigour, they became infolent, and even declared War against the Gods.— Upon which, Jupiter, to tame their Pride, split each of them into two; but so as that each Moiety still retain'd a strong Passion to be re-united: and hence that Philosopher

derives the natural Love between the two Sexes.

The Astrologers also give the Appellation Androgynus to fuch of the Planets as are sometimes hot, and sometimes cold; as Mercury, which is reputed hot and dry when near the Sun, and cold and moist when near the Moon.

The Word comes from the Greek dir Soyuvo, Male and

ANDROIDES, an Automaton, in figure of a Man; which by virtue of certain Springs, &c. duly contrived, Walks, Speaks, &c. See AUTOMATON.

Albertus Magnus, is recorded as having made an Androides.—The Word is compounded of the Greek airis, airdess, Man, and elsos, form.

ANDROLEPSY, ANDROLEPSIA, in Antiquity.—If an Athenian were kill'd by a Citizen of some other Place; and such City refused to deliver up the Criminal to Punishment; it was held lawful to take three Inhabitants of fuch City, and punish the Homicide in them.—This the Greeks called Androlepsia, and the Romans Clarigatio. See CLARIGATIO.

Some Authors also use Androlepsia for Reprizals. See

The Word is form'd of a'ving, Man, and λαμβάνω, capio, I take. in extending the Arm.

ANCONES, in Architecture, are the Corners or Coins of Chus, in Pharmacy, is a capital Alexipharmic Composition; called also Venice Treacle. See Therraca, and Alexipharmic Composition; called also Venice Treacle.

ANDROTOMY, ANDRATOMY, the Anatomy or Dif-

fection of human Bodies. See Dissection.

It is thus called in opposition to Zootomy, which denotes

Anatomy is the Genus, and comprehends all Diffections in general, whether of Men, Beafts, or Plants; and Androtomy and Zootomy are the Species. See ANATOMY.

ANECDOTES, ANECDOTA, a Term used by some Authors, for the Titles of Secret Histories; that is of such as relate the secret Affairs and Transactions of Princes; speaking with too much Freedom, or too much Sincerity, of the Manner and Conduct of Persons in Authority, to allow of being made publick.

Herein they imitate Procopius, who gives this Title to a Book which he publish'd against fustinian and his Wife Theodora; and feems to be the only Person among the Antients, who has represented Princes, such as they are in their domestick Relation.-Varillas has published Anecdotes of the

House of Medici.

The Title Anecdotes is also given to such Works of the Antients as have not yet been published. - In this Sense, M. Muratori gives the Name Anecdota Graca, to several Writings of the Greek Fathers, found in the Libraries, and first publish'd by him. - F. Martene has given a Thesaurus Anecdotarum Novus, in Folio, 5 Vol.

The Word is Greek avendora, q. d. Things not yet known,

or hitherto kept Secret.

ANEMIUS Furnus, among Chymists, a Wind-Furnace; used to make sierce Fires for melting, &c. See FURNACE. The Word is form'd of the Greek areus, Wind.

ANEMONE, ANEMON, or Wind-Flower; a general Name, under which Hesychius comprizes all Flowers that

are of a short Duration, and that are easily beaten down, russed, and destroy'd by the Wind. See Flower.

The Word is derived from drsuos, Ventus; in regard of

the Effects which the Wind has on fuch Flowers:rather derives it hence, that the Anemone never opens but when the Wind blows. Others fay, it was thus called from a Nymph of that Name.

ANEMOSCOPE, a Machine invented to foretel the Changes of the Wind. See Wind.

It has been observ'd, that Hygroscopes made of Cats-gut,

&c. prove very good Anemoscopes; seldom failing, by the turning of the Index about, to foretel the shifting of the Wind. See Hygroscope.

The Anemoscope used by the Antients, seems, by Vitruvius's Description of it, to have been intended rather to shew which way the Wind actually blew, than to foretel

into which Quarter it would change.

The Word is deriv'd from the Greek avenue, Wind, and

σιέπομαι, to look. See Anemometer.

Otto de Gueric also gave the Title Anemoscope, to a Machine invented by him, to foretel the Change of the Weather, as to fair and rain. See WEATHER.

It confisted of a little wooden Man, who role and fell in a Glais Tube, as the Atmosphere was more or less heavy. -Accordingly, M. Comiers has shewn, that this Anemoscope was only an Application of the common Barometer. See BAROMETER.

ANEMOMETER, a Machine wherewith to measure the

Strength of the Wind. See WIND.

The Anemometer is variously contrived. In the Philosophical Transactions, we have one described, wherein the Wind being supposed to blow directly against a flat Side, or Board which moves along the graduated Limb of a Quadrant; the Number of Degrees it advances, shews the comparative Force of the Wind .- Wolfius gives the Still flure of another, which is moved by means of Sails, like those of a Wind-Mill; which raise a Weight, that, still the higher it goes, receding further from the Centre of Motion, by sliding along an hollow Arm fitted on to the Axis of the Sails, becomes heavier and heavier, and preffes more and more on the Arm, till being a Counterpoise to the Force of the Wind on the Sails, it stops the Motion thereof. An Index, then, fitted upon the same Axis at right Angles with the Arm, by its rifing or falling points out the Strength of the Wind, on a Plane divided, like a Dial-plate, into Degrees. See its Figure, Plate PNEUMATICS.
The Word is compounded of the Greek avenue, Winas

and perest, Measures

ANEU+

ANEURISM, ANEURISMA, in Medicine, a fost yielding Tumor, form'd of Blood extravalated and spread under the Flesh, by the Rupture or Dilatation of an Artery. See ARTERY, and TUMOR.

Aneurisms usually proceed from an Artery being accidentally cut, or prick'd in bleeding; or from some preternatu-tal Distention, or a Corrosion of its Coats, &c. See Phle-

If an Artery happen to be cut, the Blood gushes out impetuoufly, by starts; and is not easily stop'd: an Inflammation and Discolouration of the Part succeeds, with a Tumor, and Inability to move the Part. The Symptoms are nearly the same in case of a Corrosion of the Coats of the Artery, only less violent. See WOUND.

If the Blood cease to flow from the wounded Artery, and pour it self between the Interstices of the Muscles; recourse is had to manual Operation; which being neg-lected, the Extirpation of the Limb frequently becomes unavoidable.—An Aneurism from a Distention of the Canal, is feldom fatal; tho reckon'd, when large, incurable: 'The chief Inconveniencies are the Magnitude of the Tumor, and

the Pulfation. See HEMORRHAGE.

M. Littre gives us the History of an Aneurisma of this kind, in the Aorta; the Cause whereof he attributes to an extraordinary Diminution of the Cavity of the Axillary and Subclavian Arteries. Hist. de l'Acad. R. An. 1712. Another History of an Aneurisma of the same Part, we have in the Philosophical Transactions. It was occasioned by some violent Shocks the Patient receiv'd on the Breast, which threw him into spitting of Blood, and soon after form'd the Tumor, whereof he dy'd. Upon Dissection, the Aneurisma was found so big, that it filled the whole Cavity of the Thorax on the right Side. N° 265.

The Word comes from the Greek aveuseus, dilato, I dilate. ANGARIA, a Term in Law, fignifying any troublesom, or vexatious Duty or Service, paid by the Tenant to the Lord.—The Word is form'd of the French Angarie, Personal Service; that which a Man is bound to perform in his own Person.—Prastationes Angariarum& Periangariarum plau-

ftrerum & navium, impressing of Ships. See Service, &c.
ANGEIOGRAPHY, a Description of the Weights, Meafures, Vessels, &c. used by the several Nations. See MEA-

SURE, WEIGHT, VESSEL, &c.

The Word is compounded of ayfetor, Vas, Vessel, and

yedow, scribo, I describe.

ANGEIOLOGY, ANCEIOLOGIA, in Anatomy, the Hiftory, or Description of the Vessels in a human Body; e.g. the Nerves, Arteries, Veins, and Lymphaticks. See VES-

Angeiology is a Branch of Sarcology. See SARCOLOGY. The Word feems to be derived from a'y seion, a Vessel, and λόγος, Speech, or Discourse.

ANGEL, a spiritual, intelligent Substance; the first in

Rank and Dignity among created Beings. See SPIRIT.

The Word Angel, is not properly a Denomination of Nature, but of Office; denoting as much as Nuntius, Messena Person employ'd to carry one's Orders, or declare his Will .- Thus it is St. Paul represents Angels, Heb. I. 14. where he calls them Ministring Spirits: And for the same Reason the Name is given, in the Prophet Malachy, C. II. 7, to Priests; and by St. Matthew, C. XI. 10, to St. John Bap-Jesus Christ himself, according to the Septuagint, is call'd in Isaiah, C. IX. 6, the Angel of the mighty Council; a Name, says Tertullian, de Carne Christi. C. IV. which fpeaks his Office, not his Nature.—So the Hebrew Word used in Scripture, for Angel, is also a Name of Office, and not of Nature מלאך Legatus, q. d. Legate, Envoy, Minister: and yet Custom has prevailed; infomuch that Angel is now

commonly taken for a Denomination of Nature.

The Existence of Angels is supposed in all Religions.—
Indeed, the antient Sadducees are represented as denying all Spirits; and yet the Samaritans and Caraites, who are reputed Sadducees, openly avow it: witness Abusaid, the Author of an Arabick Version of the Pentateuch; and Aaron, a Caraite Few, in his Comment on the Pentateuch; both extant in Manuscript, in the King of France's Libra-

ry. See SADDUCEE, CARAITE, &c.
In the Alcoran, we find frequent mention of Angels.—The Muffulmen believe 'em of different Orders or Degrees, and destin'd for different Employments, both in Heaven, and on Earth. They attribute exceeding great Power to the Angel Gabriel; as, to be able to descend in the Space of an Hour from Heaven to Earth; to overturn a Mountain with a fingle Feather of his Wing, &c. The Angel Afrael, they suppose, appointed to take the Souls of such as die; and another Angel, named Efraphil, stands with the Trumper ready in his Mouth to proclaim the Day of Judgment. See Alcoran, Mahometanism, &c.

The Heathen Philosophers and Poets, were also agreed as to the Existence of intelligent Beings, superior to Man; as is shewn by St. Cyprian, in his Treatise of the Vanity of Idols, from the Tellimonies of Plato, Socrates, Trismegistus, &c. See Platonism, &c.—See also Damon, Ge-

NIUS, &C.

Some Christian Writers, after Lactantius, Institut. Lib. I. c. xv. alledge the *Energumeni*, and the Operations of Magick, as convincing Proofs thereof. St. *Thomas* produces other Confiderations, in behalf of the Opinion, Lib. II. contra gentes, c. xlvi.

Authors are not so unanimous about the Nature as the Existence of Angels .- Clemens Alexandrinus believ'd they had Bodies; which was also the Opinion of Origen, Cæsarius, Tertullian, and several others. Athanasius, St. Basil, St. Gregory Nicen. St. Cyril, St. Chrysostom, &c. hold em mere Spirits.

Ecclefiaffical Writers make an Hierarchy of nine Orders of

Angels. See HIERARCHY.

Angel is more particularly understood of a Spirit of the ninth and lowest Class, or Order of the Hierarchy, or Heavenly Choir. See HIERARCHY.

The Scripture makes mention of the Devil and his Angels.—We also say, the Fallen Angels, Guardian Angels, &c.

See GUARDIAN, DEMON, GENIUS, &c.

In the Apocalypse, the Denomination Angel is also given to the Pastors of several Churches.—The Angel of the Church of Ephefus; the Angel of the Church of Smyrna, &c.

Du Cange adds, that the same Name was antiently given to certain Popes and Bishops; by reason of their singular Sanctity, &c.

Angel is also used in Commerce, for an antient Gold Coin struck in England; so called from the Figure of an Angel impress'd upon it. See Coin.

Its Value in 1 Hen. VI. was 6s. 8d. in 1 Hen. VIII. 7s. in 34 Hen. VIII. 8 s. and in 6 Edw. VI. it was 10 s.-And the half Angel, or, as it was fometimes called, the Angelot, was the Moiety of this.

The Angel now subsists no otherwise than as a Money of

Account. See Money.

The French have also had their Angels, Demi-Angels, and Angelots; now difused.

ANGELIC, or Angelical, something belonging to, or

that partakes of, the Nature of Angels. See ANGEL.

Thus, we fay, an Angelical Life, &c.—St. Thomas is styled the Angelical Doctor.—The Angelical Salutation is called by the Romanists Ave Maria. See AvE.

The Greeks distinguish two Kinds of Monks: Those who profess the most perfect Rule of Life, are called Monks of

the Great or Angelical Habit.

ANGELICA, called also ARCHANGELICA, and Radix Siriaca, a medicinal Plant, thus named, on account of its great Virtue as an Alexipharmic or Counterpoifon. See A-LEXIPHARMIC.

It is of a sweet Smell, and aromatick Taste; and is loaded with a highly exalted Oil, and volatile Salt.-It is reputed cordial, stomachick, cephalick, aperitive, sudorifick, vulnerary, resists Poison, &c. tho the chief Intention wherein it is now prescribed among us, is, as a Carminative.

Its Root is in the most esteem; tho the Leaves are also

uled.

ANGELICA-Water, is one of the compound Waters of the Shops; thus called from the Angelica Roots, which are the Basis thereof. See Angelica-WATER.

ANGELICA, ASyerium, was also a celebrated Dance, among

the antient Greeks, perform'd at their Feasts. See DANCE. It was thus called, from the Greek a yseros, Nuntius, Mesfenger; by reason, as Pollux affures us, the Dancers were

dress'd in the Habit of Messengers. Angelica Vestis, among our Ancestors, was a Monkish Garment, which Laymen put on a little before their Death, that they might have the Benefit of the Prayers of the

It was from them called Angelical, because they were called Angeli, who by these Prayers anime faluti succurrebant.

—Hence, where we read the Phrase ad succurrendum in our old Books, it must be understood of one who had put on the Habit, and was at the Point of Death.

ANGELICI, were an antient Order of Knights, instituted in 1191, by Isacius Angelus Flavius Commenius, Empe-

ror of Constantinople. See KNIGHT, and ORDER.

They were divided into three Classes; but were all under the Direction of one Grand Master.—The first, were called Torquati, from a Collar which they wore, and were 50 in number.—The second were called the Knights of Justice, and were Ecclesiasticks.—And the third were called Knights Servitors.

Justiniani will have this Order to have been instituted in the Year 313, by Constantine; and supposes the Occasion thereof to have been the Appearance of an Angel to that Emperor, with the Sign of a Cross and these Words, In book signo vinces: But, that there was such a thing as any Military Order in those Days, is a mere Fable. See MILITARY Order.

Angelici were also a Sect of antient Hereticks .- St. Augustin supposes 'em thus call'd from their yielding an extravagant Worship to Angels, and such as tended to Idolatry: Tho Epiphanius derives the Name from their holding that the World was created by Angels.

rona, or Angeronia, the Goddess of Patience and Silence. See FEAST.

Festus and Julius Modestus, quoted by Macrobius, Saturn. 1. 1. c. 10. derive the Name from Angina, Squinancy; and suppose the Goddess to have been thus denominated, by reason she presided over that Disease.--Others fuppose it form'd from Angor, Grief, Pain; to intimate that the gave Relief to those afflicted therewith. Others deduce it from Angeo I prefs, I close; as being reputed the Goddess of Silence, &c. See God and Goddess.

ANGINA, in Medicine, a Disease, popularly call'd the

Quincy, Squinancy, or Esquinancy. See SQUINANCY.
Angina is a Difficulty of Respiration and Deglutition, from a Disease in the Muscles and Glands about the Throat and Larynx. See LARYNX, &c.

The Word is formed from the Greek afxeir, strangulare

to strangle, suffocate.

If any Symptoms appear on the outfide of the Throat, the Angina is faid to be external; if none appear, inter--It is fometimes supposed to be epidemical.

In the external Angina, before any Suppuration appears, recourse is had to repeated Venæsection in the Jugulars.— Vesicatories, and Cupping are also used; with Purgatives, emollient Gargles, &c.

ANGLE, ANGULUS, in Geometry, the Aperture or mu-

tual Inclination of two Lines, which meet, and form an Angle in their Point of Interfection. See Line.

Such is the Angle ABC, (Tab. GEOMETRY, Fig. 91.) form'd by the Lines AB, and AC, meeting in the Point A— The Lines AB and AC, are called the Legs of the Angles; and the Point of Interfection, the Vertex. See Leg and VERTEX.

Angles are fometimes denoted by a fingle Letter affix'd to the Vertex, or angular Point, as A; and sometimes by three Letters, that of the Vertex being in the middle, as

BAC.

The Measure of an Angle, whereby its Quantity is expressed, is an Arch, DE, described from its Vertex A, with any Radius at pleasure, between its Legs, AC and BC. See ARCH.

Hence Angles are distinguished by the Ratio of the Arches which they thus fubtend, to the Circumference of the whole Circle. See CIRCLE and CIRCUMFERENCE. And thus, an Angle is said to be of so many Degrees, as are the Degrees of the Arch DE. See DEGREE.

Hence also, fince similar Arches, AB and DE, fig. 87. have the same Ratio to their respective Circumferences; and the Circumferences contain each the same Number of Degrees; the Arches AB, and DE, which are the Mea-fures of the two Angles ACB, and ADE, are equal; and therefore the Angles themselves are so too.——Hence, -Hence, again, as the Quantity of an Angle is estimated by the Ratio of the Arch, subtended by it, to the Periphery; it does not matter what Radius that Arch is described withal: But the Measures of equal Angles are always either

equal Arches or fimilar ones; and contrarily.

It follows, therefore, that the Quantity of the Angle remains still the same, tho' the Legs be either produced or diminished.

—And thus similar Angles, and in similar Finder of the Legs be either produced or diminished. gures, the Homologous or Corresponding Angles are also

equal. See SIMILAR, FIGURE, &c.

To measure, or find the Quantity of an Angle.

1°. On Paper—Apply the Centre of a Protractor on the Vertex of the Angle O; (Tab. Surveying, fig. 29.) fo as the Radius Op lie on one of the Legs: The Degree shewn in the Arch, by the other Leg of the Angle, will give the Angle required. See PROTRACTOR.—To do the same

with a Line of Chords, see Chords.

2°. On the Ground—Place a surveying Instrument, E.gr. a
Semi-circle, fig. 16. in such manner as that a Radius thereof CG may lie over one Leg of the Angle, and the Center C over the Vertex.—The first is obtain'd by looking thro' the Sights F and G, towards a Mark fixed at the End of the Leg; and the latter, by letting fall a Plummet from the Centre of the Instrument——Then, the moveable Index HI being turn'd this way and that, till thro' its Sights, you discover a Mark placed at the extreme of the other Leg of the Angle: The Degree it cuts in the Limb of the Instrument, shews the Quantity of the Angle. See SEMI-CIRCLE.

To take an Angle with a Quadrant, Theodolite, plain Table, Circumferentor, Compass, &c. see Quadrant, Theodolite, Plain Table, Circumferentor, Com-

PASS, Cc.

To plot or lay down any given Angle; i.e. the Quantity of the Angle being given, to describe it on Paper, see PLOTTING and PROTRACTING.

To bisset a given Angle, as HIK, fig. 92. from the Centre L, with any Radius at pleasure, describe an Arch

ANGERONALIA, in Antiquity, folemn Feasts, held LM. From L and M, with an Aperture greater than by the Romans, on the 21st of December, in honour of Ange- LM, strike two Arches, mutually intersecting each other rona, or Angeronia, the Goddess of Patience and Silence. in N. Then, drawing the right Line IN, we have HIN n N. Then, drawing the right Line IN, we have HIN = NIK.

To triffest an Angle, see Trissection.

Angles are of various Kinds, and Denominations .-With regard to the Form of their Legs, they are di-

vided into Rectilinear, Curvilinear, and Mix'd.

Rectilinear, or right-lined Angle, is that whose Legs are both right Lines; as ABC (Tab. GEOMETRY, fig. 91.) See RECTILINEAR.

Curvilinear Angle, is that whose Legs are both of 'em Curves. See Curve and Curvilinear.

Mix'd, or Mixtilinear Angle, is that, one of whose Sides is a right Line, and the other a Curve. See Mix'D.

With regard to their Quantity, Angles are again divided into Right, Acute, Obtuje, and Oblique.

Right ANGLE, is that form'd by a Line falling perpendicularly on another; or that which fubtends an Arch of 90 Degrees Such is the Angle KLM, Fig. 93. See

PERPENDICULAR, &c.
The Measure of a right Angle, therefore, is a Quadrant of a Circle; and confequently all right Angles are

equal to each other. See QUADRANT. Acute Angle is that which is less than a right Angle, or

than 90° --- as A E C, fig. 86. See ACUTE.

Obtuse Angle, is that greater than a right Angle, or whose Measure exceeds 900 ——as AED. See Obtuse.

Oblique Angle, is a common Name both for Acute

and Obtuse Angles. See Oblique.
With regard to their Situation in respect of each other, Angles are divided into Contiguous, Adjacent, Vertical, Alternate, and Opposite.

Contiguous Angles, are fuch as have the same Vertex, and one Leg common to both——Such are FGH, and

HGI, fig. 94. See Contiduous.

Adjacent Angle, is that made by producing one of the Legs of another Angle—Such is the Angle AEC, fig. 86. made by producing a Leg ED, of the Angle AED, to C. See ADJACENT.

Two adjacent Angles, x and y; or any other Number of Angles made on the fame Point E, over the fame right Line CD, are together equal to two right ones; and confequently, to 1800--And hence, one of two contiguous Angles being given, the other is likewife given: as being the Complement of the former to 180°. See COMPLEMENT.

Hence, also, to measure an inaccessible Angle in the Field; taking an adjacent accessible Angle, and substracting the Quantity thereof from 180°, the Remainder is the Angle required.

Again, all the Angles x,y,o,E, &c. made a-round a given Point E, are equal to four right ones; and therefore all

Vertical ANGLES, are those whose Legs are Continua-

tions of each other—Such are the Angles o and x, fig. 86. See VERTICAL. If a right Line A B, cut another, C D, in E, the vertical Angles x and o, as also y, and E, are equal.—And

hence, if it be required to measure in a Field, or any other Place, an inaccessible Angle, α ; and the other vertical Angle, o, be accessible: This latter may be taken in lieu of the former. See Surveying.

Alternate Angles. See Alternate. the Angles x and y; fig. 36.

The alternate Angles y and x, are equal. See Oppo-SITE Angles.

Opposite Angles. See Opposite.—Such are u and y, and also z and y.

External Angles, are the Angles of any right-lined Figure made without it, by producing all the Sides feve-

All the external Angles of any Figure taken together, are equal to four right Angles: And the external Angle of a Triangle is equal to both the internal and opposite ones, as is demonstrated by Euclid, Lib. 1. Prop. 32.

Internal Angles, are the Angles made by the Sides of

any right-lined Figure within.

The Sum of all the internal Angles of any right-lined Figure, is equal to twice as many right Angles as the Figure hath Sides, excepting four. This is easily demonstrated from Euclid, Prop. 32. Lib. 1.

The external Angle is demonstrated to be equal to the internal opposite one; and the two internal opposite ones,

are equal to two right ones.

Homologous Angles, are fuch Angles in two Figures, as retain the same Order from the first, in both Figures. See

ANGLE at the Periphery, is an Angle whose Vertex and Legs do all terminate in the Periphery of a Circle-Such is the Angle EFG, fig. 95. See PERIPHERY.

Angle in the SEGMENT, is the same with that at the Periphery. See SEGMENT. It

It is demonstrated by Euclid, that all the Angles in the fame Segment are equal to one another; that is, any Angle EHG, is equal to any Angle EFG in the fame

Segment EFG.

The Angle at the Periphery, or in the Segment, is comprehended between two Chords AB and BD, and stands on the Arch AB. See CHORD, &c.

The Mcasure of an Angle without the Periphery G, (fig. 96.) is the Difference between half the Concave Arch LM, whereon it flands, and half the Convex Arch, NO, intercepted between its Legs.

ANGLE in a Semi-circle, is an Angle in a Segment of a Circle, whose Base is a Diameter thereof. See SEGMENT.

It is demonstrated by Euclid, that the Angle in a Semicircle is a right one; in a Segment greater than a Semi-circle, is less than a right one; and in a Segment less than a Semi-circle, greater than a right one.

Since an Angle in a Semi-circle stands on a Semi-circle,

its Measure is a Quadrant of a Circle; and therefore is a

right Angle.

ANGLE at the Centre, is an Angle whose Vertex is in the Centre of a Circle, and its Legs terminated in the Periphery thereof. Such is the Angle CAB. See CENTRE.

The Angle at the Centre is comprehended between two Radii, and its Measure is the Arch BC. See RADIUS,

Euclid demonstrates that the Angle at the Centre, BAC, is double of the Angle BDC, standing on the same Arch BC.—And hence, half of the Arch AD, is the Meafure of the Angle at the Periphery.

Hence also, two or more angles HLI, and HMI (fig. 97.) standing on the same Arch HI, or on equal Arches, are

ANGLE without the Centre, HIK, is that whose Vertex K is not in the Centre, but its Legs HK and IK are terminated in the Periphery.

The Measure of an Angle without the Centre, is half of the Arches HI and LM, whereon it and its Vertical K do

ANGLE of Contact, is that made by the Arch of a Circle

ANGLE of Contact, is that made by the Arch of a Circle and a Tangent in the Point of Contact.——Such is the Angle HLM, (fig. 43.) See Contact.

The Angle of Contact, in a Circle, is proved by Euclid to be less than any right-lined Angle: But from hence it does not follow, that the Angle of Contact is of no Quantity, as some have imagined.—Sir Isaac Newton shews, that if the Curve HAE, fig. or, be a cubick Parabola the Angle if the Curve HAE, fig. 97. be a cubick Parabola, the Angle of Contact, where the Ordinate DF is in the fubtriple Ratio of the Abscisse AD, the Angle BAF contained under the Tangent AB in its Vertex, and the Curve, is infinitely greater than the circular Angle of Contact BAC; and that if other Parabola's of highter kinds be described to the same Axis and Vertex, whose Abscisses AD are as the Ordinates DF4, DF5, DF6, &c. you will have a Series of Angles of Contact going on infinitely, of which any one is infinitely greater than that next before it.

Angle of a Segment, is that made by a Chord with a Tangent, in the Point of Contact.—Such is the Angle MLH.

See SEGMENT.

It is demonstrated by Euclid, that the Angle MLC, is equal to any Angle MaL in the alternate Segment MaL.

For the Effects, Properties, Relations, &c. of Angles, when combined into Triangles, Quadrangles, and polygonous Figures, see Triangle, Quadrangle, Square, Pa-RALLELOGRAM, POLYGON, FIGURE, &c.

Angles are again divided into Plane, Spherical, and Solid.

Plane ANGLES are those we have hitherto been speaking of; which are defined by the Inclination of two Lines in a Plane, meeting in a Point. See PLANE.

Spherical Angle is the Inclination of the Planes of two

great Circles of the Sphere. See CIRCLE and SPHERE.

The Measure of a Spherical Angle, is the Arch of a great Circle at right Angles to the Planes of the great Circles forming the Angle, intercepted between them.

For the Properties of Spherical Angles, fee SPHERICAL

Solid ANGLE is the mutual Inclination of more than two Planes, or plane Angles, meeting in a Point, and not contain'd in the same Plane.

For the Measure, Properties, &c. of solid Angles, fee

SOLID Angle.

We also meet with other less usual forts of Angles among

some Geometricians; as,

Horned ANGLE, Angulus Cornutus, that made by a right Line, whether a Tangent or Secant, with the Periphery of a Circle.-

Lunular Angle, Angulus Lunularis, is that form'd by the Intersection of two Curve Lines; the one Concave, and the other Convex. See LUNE.

Ciffoid ANGLE, Angulus Ciffoides, is the inner Ingle, made by two Spherical Convex Lines interfecting each other. See CISSOIDES.

Sistroid Angle, Angulus Sistroides, is that in Figure of

a Sistrum. See Sistrum.

Pelecoid ANGLE, Angulus Pelecoides, is that in figure of a Hatchet. See Pelecoides.

ANGLE, in Trigonometry. See TRIANGLE and TRI-GONOMETRY.

For the Sines, Tangents, and Secants of Angles, he

SINE, TANGENT, and SECANT.

ANGLE, in Mechanicks—Angle of Direction, is that comprehended between the Lines of Direction of two

conspiring Forces. See DIRECTION.

ANGLE of Elevation, is that comprehended between the Line of Direction of a Projectile, and a horizontal Line-Such is the Angle ARB, (Tab. MECHANICS, fig. 47.) comprehended between the Line of Direction of the Projectile AR, and the horizontal Line AB. See ELEVATION and PROJECTILE.

ANGLE of Incidence, it that made by the Line of Direction of an impinging Body, in the Point of Contact

Such is the Angle DCA, (fig. 63.) See Incidence.

Angle of Reflexion, is that made by the Line of Direction of the reflected Body, in the Point of Contact from which it rebounds, -- Such is the Angle ECF. See RE-FLEXION.

Angle, in Optics--Visual or Optic Angle, is the Angle included between two Rays drawn from the two extreme points of an Object, to the Centre of the Pupil—Such is the Angle ABC, (Tab. OPTICS, fig. 69.) comprehended between the Rays AB, and BC. See VISUAL Angle.

Objects seen under the same, or an equal Angle, appear equal. See MAGNITUDE and VISION.

ANGLE of the Interval, of two places, is the Angle fubtended by two Lines directed from the Eye to those places.

ANGLE of Incidence, in Catoptrics, is the lefter Angle made by an incident Ray of Light, with the Plane of a Speculum; or, if the Speculum be concave or convex, with a Tangent in the point of Incidence—Such is the Angle ABD (fig. 26.) See RAY and MIRROUR.

Every incident Ray, AB, makes two Angles, the one acute, ABD, the other obtuse, ABE; tho sometimes both right—The leffer of fuch Angles is the Angle of Inci-

dence. See INCIDENCE.

ANGLE of Incidence, in Dioptrics, is the Angle ABI, (fig. 56.) made by an incident Ray, AB, with a Lens or other refracting Surface, HI. See LENS, &c.

ANGLE of Inclination, is the Angle ABD, contained between an incident Ray, AB, and the Axis of Incidence,

DB. See Axis, &c.

Angle of Reflection, Sin Catoptrics. See Reflection.

Tion.

Angle of Refraction, in Dioptrics. See REFRAC-TION. Refracted ANGLE,

Angle, in Aftronomy—Angle of Commutation. Sec COMMUTATION.

Angle of Elongation, or, Angle at the Earth. See ELONGATION.

Parallactic Angle. See PARALLACTIC Angle. Angle at the Sun, or the Inclination, is the Angle RSP, (Tab. Astronomy, fig. 25.) under which the Distance of a Planet P, from the Ecliptic PR, is feen from the Sun.

See INCLINATION. ANGLE of the East. See NONAGESIMAL.

ANGLE of Obliquity, of the Ecliptic. See OBLIQUITY

and ECLIPTIC.
The Angle of Inclination of the Axis of the Earth, to the Axis of the Ecliptic, is 23°, 30'; and remains inviola-lably the fame in all points of the Earth's annual Orbit. By means of this Inclination, fuch Inhabitants of the Earth as live beyond 45° of Latitude, have more of the Sun's Heat, taking all the Year round; and those who live within 45°, have less of his Heat, than if the Earth always moved in the Equinostial. See HEAT, &c.

ANGLE of Longitude, is the Angle which the Circle of a Star's Longitude makes with the Meridian, at the Pole

of the Ecliptic. See LONGITUDE.

ANGLE of right Ascension, is the Angle which the Circle of a Star's right Ascension makes with the Meridian at the Pole of the World. See RIGHT Ascension.

Angle, in Navigation --- Angle of the Rhumb, or See RHUMB and LOXODROMY.

Loxodromic Angle. See Rhumb and Loxodromy.

Angles, in Fortification, are understood of those formed by the feveral Lines used in Fortifying. See FORTIFI-

ANGLE of, or at the Center, is the Angle formed at the Center of the Polygon, by two Semi-diameters drawn this ther from the two nearest Extremities of the Polygon. See POLYGON -- Such is the Angle CKF (Tab. FORTIFICAT.

ANGLE of the Circumference, is the mixed Angle made by the Arch drawn from one Gorge to the other. See GORGE.

ANGLE of the Counterfearp, is that made by the two Sides of the Counterscarp, meeting before the middle of

the Curtain. See COUNTERSCARE

ANGLE of the Curtain, or of the Flank, is that made by, or contain'd between, the Curtain and the Flank; fuch is the

Angle BAE. See Curtain.

Angle of the Complement of the Line of Defence, is the Angle arising from the Intersection of the two Complements one with another. See COMPLEMENT

Diminished ANGLE, is the Angle which is made by the meeting of the exterior Side of the Polygon, with the Face of the Bastion-Such is the Angle BCF.

Angle FCN, formed at the Point of the Bastion C, by the meeting of the two outermost Sides or Bases of the Polygon, FC and CN.

ANGLE of the Epaule, or Shoulder, is that form'd by the Flank and the Face of the Bastion-Such is the Angle

ABC. See EPAULE.

ANGLE of the Interior Figure, is the Angle GHM, made in H, the Center of the Bastion, by the meeting of

the innermost Sides of the Figure GH and HM.

Flanking ANGLE outward, or ANGLE of the Tenaille, is that made by the two rafant Lines of Defence, i. e. the two Faces of the Bastion when prolonged. See TENAILLE.

Angle flanking inward, is the Angle CIH, made by

the flanking Line with the Curtain.

Angle flanked, by some call'd the Angle of the Bastion, is the Angle BCS, made by the two Faces of the Bafrion, BC, CS; being the outermost part of the Bastion, and that most exposed to the Enemy's Batteries, and therefore by some call'd the Point of the Bastion. See BASTION.

Angle of the Triangle, in Fortification, is half the An-

gle of the Polygon.

ANGLE forming the Flank, is that confifting of one

Flank, and one Demi-gorge.

Angle forming the Face, is that composed of one Flank and one Face.

Angle of the Moat, is that made before the Curtain, where it is interfected. See Moat. Re-entring, or Re-entrant Angle, is that whose Vertex is turned inwards, towards the Place. See Ren-

Saillant ANGLE, is that which advances its Point to-

wards the Field. See SAILLANT.

ANGLE of the Tenaille, or the outward flanking Angle, called also the Angle of the Moat, or the dead Angle, is made by the two Lines fichant in the Faces of the two Baftions, extended till they meet in an Angle towards the Curtain-This always carries its Point in towards the Work.

ANGLE of a Wall, in Architecture, is the Point, or Corner, where the two Sides or Faces of a Wall meet. See

WALL, COIN, &c.

ANGLES of a Battalion, in the Military Art, are the Soldiers where the Ranks and Files terminate. See BATTA-

The Angles of a Battalion are said to be blunted, when the Soldiers at the four Corners are removed, fo that the square Battalion becomes octagonal: which was an Evolution very common among the Antients, tho now disused. See EVOLUTION.

Angles, in Anatomy, are understood of the Canthi, or Corners of the Eye, where the upper Eye-lid meets with

the under. See EYE and EYE-LID.

That next the Nose is call'd the great or internal, and that towards the Temples, the less or external Angle or Can-

rbus. See Can'thus,

Angles, in Aftrology, are certain Houses of a Figure or Scheme of the Heavens—Thus the Horoscope of the first House is termed the Angle of the East. See House,

ANGLICISM, a Diction in the English Idiom; or a Manner of Speech peculiar to the English Tongue. See

IDIOM and ENGLISH.

ANGLING, the Art of catching Fish by means of a Rod, with Line, Hook and Bait fitted thereto. See Fish

and FISHING.

There are several prudential Rules observed by thorough Anglers; as, not to wear any white or shining Apparel, but be cloathed in a dark sky-Colour: To invite the Fish to the place intended for Angling, by casting in from time to time proper Foods, as boil'd Corn, Worms, and Garbage: To keep them together in the time of Angling, by throwing in Grains of ground Malt; or finking a Box of Worms, with small holes for them to creep flowly out at, &c. To draw Salmon or Trout together, they use a Composition of fine Clay incorporated with Blood, and Malt ground.

To learn what Bait is best for any Fish at any time; after having caught one, they slit his Gills, and take out the Stomach; and thus find what he last fed on.

The several Methods of Angling for Salmon, Trout, Carp, Tench, Perch, Pike, Dace, Gudgeon, Roach, Flounder, &c. See the Articles Salmon-FISHING, Trout-FISH-

For the Rules of Angling with the Fly, fee Fly-Fish-

Angling-Rod. See Fishing-Rod. In Angling, they observe, after having struck a large Fish, to keep the Rod bent; which will hinder him from running to the utmost Length of the Rod-Line, by which he would be enabled to break his Hold or Hook.

Angling Line is either made of Hair, twisted; or Silk; or the Indian Grass-The best Colours are the Sorrel, White and Grey; the two last for clear Waters, the first for muddy ones. Nor is the pale watery Green despisable: this Colour is given artificially, by steeping the Hair in a Liquor made of Allum, Soot, and the Juice of Walnut-Leaves boil'd together.

Angling Hook. See Fishing Hook. ANGLO Saxon. See FISHING Fly. ANGLO Saxon. See English.

ANGUINEAL Hyperbola. See Hyperbola and

ANGULAR, fomething that relates to, or hath, Angles.

See ANGLE.

Angular Objects at a distance appear round; the little Inequalities disappearing at a much less distance than the Bulk of the Body. See Vision.

Angular Motion, is a compound kind of Motion, wherein the Moveable both slides and revolves at the same time.

See Motion, Sliding, &c.

Such is the Motion of the Wheel of a Coach, or other Vehicle. See WHEEL.

The Phænomena, &c. of fuch Motion, see accounted for

under the Article ROTA Aristotelica. Angular Motion, in Astronomy, is the Increase of the Distance between any two Planets, revolving round any Body as the common Center of their Motion. See PLANET,

CENTER, &c.

The Quantity of this Motion is expressed by two right Lines drawn from the faid Center, to the revolving Bodies; which will open wider, and consequently grow greater, as the revolving Bodies part farther and farther from one an-

ANGUSTICLAVIA, or Angusticlavus, in Antiquity, a Roman Tunica, embroider'd with little purple Studs.

See TUNICA.

The Angusticlavia was wore by the Knight. See KNIGHT. The Word is compounded of Angustus, narrow, small; and Clavus, Nail or Stud: in regard those Ornaments were smaller in this Garment than in the Laticlavus wore by the Senators. See LATICLAVUS. See also SENATOR,

ANHELITUS fignifies a shortness and thickness of Breath; as in an Afthma. See RESPIRATION and ASTH-

The Word is Latin, form'd of the Verb anhelo, I puff

ANIL, in Natural History, the Plant from which Indigo is procured. See Indigo.

ANIMA, a Soul; whether Rational, Sensitive, or Vegetative. See Soul, RATIONAL, SENSITIVE, and VEGETA-

The Word is pure Latin, form'd of the Greek arenos, Ven-

tus, Wind, Breath. See SPIRIT.

ANIMA Mundi, q.d. Soul of the World, or of the Universe, is a certain pure, ethereal Substance or Spirit, dif fused, according to many of the antient Philosophers, thro the Mass of the World, informing, actuating, and uniting the divers parts thereof into one great, perfect, organical, vital Body or Animal. See WORLD, UNIVERSE, ANI-MAL, &c.

Plato treats at large of the Juxi To x60 ps, in his Timeus; and is even supposed to be the Author of the Dogma: Yet are Interpreters much at a lofs about his Meaning. Aristotle, however, taking it in the common and obvious sense, strenuously opposes it. See PLATONISM, &c. Serranus, on Plato's Timeus, explains this Doctrine

Serranus thus: 'Our Philosopher will have the Universe (200) Eu-· 40 Xov Errer, confisting of Body and Spirit; the Spirit he makes to be that Analogy, or Symmetry, whereby things of different Nature, are amicably affociated in the grand Com-'pages of all things. In which fense the Mima Mundi fig-'nifies as much as the Form of the Universe.' See HAR-

Others will have the Anima Mundi to fignify I know not what ignific Vertue, or vivific Heat, infused into the Chaos, and diffeminated thro its whole Frame; for the Conservation, Nutrition, and Vivification thereof. See HEAT, &c.

Hence that of the Poet,

Igneus est Ollis Vigor & Calestis Origo-

Others suppose Plato, by his Anima Mundi, to have meant God, or the Spirit of God; and to have taken the Hint from Moses, who in his Account of the first Day's Creation, says, The Spirit of God moved on the Face of the

Decp. See God, Abyss, &c.

The modern Platonists explain their Master's Anima

Mundi by a certain universal, ethereal Spirit, which in the Heavens exists perfectly pure, as retaining its proper Nature; but on Earth, pervading elementary Bodies, and intimately mixing with all the minute Atoms thereof, assumes somewhat of their Nature; and becomes of a peculiar Kind-So the Poet:

Spiritus intus alit, totumq; infusa per orbem Mens agitat molem, & magno se corpore miscet.

They add, that this Anima Mundi, which more immediately refides in the Celestial Regions as its proper Seat, moves and governs the Heavens in fuch manner, as that the Heavens themselves first received their Existence from the Focundity of the same Spirit: For that this Anima, being the primary Source of Life, every where breathed a Spirit like itself, by virtue whereof various kinds of things were framed conformable to the Divine Ideas. See IDEA, PLATONIST, &c.

The Notion of an Anima Mundi is rejected by most of the modern Philosophers; tho M. du Hamel thinks, without any great reason; for the generality of them admit fomething very much like it—The Peripatetics have recourse to celestial Influxes, in order to account for the Origin of Forms, and the fecret Powers of Bodies. See FORM, PERIPATETIC, &c.

The Cartesians have their subtile Matter, which answers to most of the Uses, and Intentions of Plato's Anima Mundi; being supposed to flow from the Sun and the other heavenly Bodies, and to be diffused thro all the Parts of the World, to be the Source or Principle of all Motions,

Ec. See Subtile Matter, Cartesian, &c.
Some later Philosophers substitute Fire; and others a fubtile elastic Spirit or Medium diffused thro all the Parts See FIRE, Subtile MEDIUM, &c. NEWTO-

NIAN, &c.

The principal thing objected, on the Christian Scheme, against Plato's Doctrine of the Anima Mundi, is, that it mingles the Deity too much with the Creatures; confounds, in some measure, the Workman with his Work, making this, as it were, a part of that, the several Portions of the Universe so many parts of the Godhead—Yet is the same Principle afferted by Seneca, Epist. 92. Totum hoc quo continemur, & unum est, & Deus. Et socii ejus sumus & membra-

ANIMA Hepatis, q. d. the Soul of the Liver; a Term applied by the Chymists, to the Sal Martis, Salt of Iron or Steel; on account of its Use in Distempers of that Part.

See Iron, Mars, Steel, Salt, Liver, &c.
It is fometimes also prescribed under the Name of Vi-

triolum Martis. See VITRIOL.

ANIMA Articulorum is a Denomination fometimes given to Hermodactyls; on account of their Efficacy in Diforders of the Joints. See HERMODACTYL.

ANIMA Pulmonum, is used for Crocus, or Saffron; by reason of its great Use in Diseases of the Lungs. See SAF-

FRON and LUNGS.

ANIMA, or Gum ANIME, in Pharmacy, a kind of Gum or Refin; whereof there are two kinds, Western and The first flows from an Incision of a Tree in New Spain, called Courbati; it is transparent, and of a Colour like that of Frankincense: its Smell is very agree-

able, and it easily consumes in the Fire. See Gum, &c.

The Eastern Gum Anima is distinguished into three Kinds; the first white; the second blackish, in some respects like Myrrh; the third pale, resinous, and dry.

All the several Kinds of Anima are used in Persumes, by reason of their charming Smell; they are also applied externally in cold Disorders of the Head and Nerves, in Passes and Catarrhs; but are little known among us in Palfies and Catarrhs; but are little known among us; infomuch that our Apothecaries usually sell Bdellium for Gum Anima. See BDELLIUM.

ANIMADVERSION, fometimes fignifies Correction; fometimes Remarks, or Observations made on a Book, &c. and fometimes, a ferious Confideration and Reflection on

any Subject, by way of Criticism.

The Word is formed of the Latin animadvertere, to animadvert: of animus, the Mind; and adverto, I turn to,

ANIMAL, a Being, which, befides the Power of growing, increasing, and producing its like, which Vegetables likewise have, is further endowed with Sensation, and fpontaneous Motion. See Being, Sensation, and Mo.

The Word Animal is derived from the Latin Anima, Soul; and literally denotes fomething endued with a Soul.

See ANIMA and Soul.

An Animal, respect being only had to the Body, not the Soul, may be defin'd with Boerhaave to be an organical Body, confifting of Veffels and Juices; and taking in the Matter of its Nutriment, by a Part called a Mouth; whence it is conveyed into another called the Intestines, into which it has Roots implanted, whereby it draws in its Nourishment, after the manner of Plants. See Mouth.

According to this Definition, an Animal is distinguished from a Fossil, in that it is an organical Body; and from a Vegetable by this, that it has its Roots within itfelf, and a Plant without itself. See Fossik and VEGE-

In effect, the Intestines of an Animal are, in reality, no more than its Earth, or the Body it adheres to; into which it fends forth its Roots; that is, the lacteal Vessels, which thence draw the Matter of its Life and Increase. See INTESTINES.

An Animal is better defin'd from its Mouth than its Heart; fince we don't know whether the whole Triba have such a Part; for as several have 16 Hearts, particularly the Silk-Worm, and fome even 60; fo 'tis possible o. thers may have none at all. See HEART.

Nor can any general Character of an Animal be taken from the Brain, the Lungs, or the like; fince we know of many quite destitute thereof. See BRAIN, LUNGS,

The genuine Characteristic, then, of an Animal, is to be free and at large with respect to the Subject it derives its Nourishment from: for every thing is taken in by the Mouth; and the Mouth does not adhere to any thing: Whereas all Plants are connected, in some manner or

other, to the Body which furnishes them Food.

Hence it follows, that a Fœtus, while it remains in the Mother's Womb, is a real Plant; as being connected by the Funiculus umbilicalis to the Placenta, and by the Placenta to the Uterus, from whence it receives its Nutriment-If it did not derive its Food by the faid Funiculus, but by its Mouth, it were an Animal; and if it drew it by both, a Neophyte, or Plant-Animal. See FOETUS, NEOPHYTE,

Some have defined Animals from their Loco-Motion, as being capable of Shifting from place to place, and Plants from their sticking fast to the same Subject: but on this Principle, Oysters, Mussels, Cockles, &c. are excluded from the Class of Animals, in as much, as they adhere, or grow to Rocks, &c. yet 'tis certain, that those Creatures are real Animals, as they have Mouths and Stomachs to take in their Food, and Lacteals and Mesenteric Veins to receive it—Indeed, Mussels seem an Exception from the former Definition. That Anomalous Creature breathes, and receives its Nourishment, not at the Mouth, but by the Anus: The Part which we account its Head, tho' without either Eyes, Ears, or Tongue, or any other Apparatus, fave a Hole, which we may call its Mouth, is an immoveable Part; being fastned to one of the Shells, so, that it cannot feek for Food, but the Food must come to feek it. This Food is Water, which, as the Shells open, enters in at the Anus of the Mussel, which opens at the same time; and paffing thence into certain Canals between the inner Surface of the Shell, and the outer Surface of the Animal, is conveyed thence into its Mouth, by a certain Motion, which the *Animal* can produce at pleasure.

We chuse therefore with Dr. Tyson, to fix the Criterion of an Animal in a Ductus Alimentalis, i.e. a Gula, Stomach, and Intestines; all which make but one continued Canal. See Ductus Alimentalis.

All Animals, according to the most probable and receiv'd Opinion, come from Eggs, and are there inclosed, as it weré in Epitome, till the Seed of the Male penetrate their Covering, and stretch them, so as they become ready for hatching. See Egg, Generation, &c.

There enters into their Vessels a chylous Juice; which being push'd forwards by the Spirits, circulates thro the whole Habit of the little Body, nourishes and dilates it by little and little, and thus produces what we call Growth. See Chyle, Chylification, and Nutrition.

This Circulation repeated several times, refines and attenuates the Juices, till at length they became of a red Colour, and are converted into what we call Blood-This natural Operation bears a great refemblance to feveral chymical Operations, by which, in attenuating and diffolying oily or fulphureous Substances, they assume a red Colour. See CIRCULATION, BLOOD, and SANGUIFICATION.

The Philosophers comprehend Man under the Species of Animals; and define him, a reasonable Animal: tho among Naturalists, &c. Animals are usually restrain'd to Irratio-

St. Augustin relates, that a great many scrupulous per-fons in his Time, extended that Prohibition of the Law, Thou shalt not kill, to all Animals: They grounded their Opinion on fome Paffages of Scripture wherein God speaks of Animals as if they had some Principle of Reason ; declaring that he will require the Blood of Man at the hand of Beafts, Gen. c. 9. Adding, in the same place, that he makes a Covenant not only with Man, but with every living Creature. See CARNIVOROUS.

ANIMALS are ordinarily divided into terrestrial, aquatic,

volatile, amphibious, Infects, &c.

Terrestrial Animals, are either Quadrupeds or Reptiles.—Quadrupeds have either the Feet cloven, as the Bullock; or entire, as the Horse; or divided into several Toes or Claws, as the Dog, Lion, &c. See QUADRUPED, INSECT.

The other Divisions will be found under the words FISH,

BIRD, REPTILE, &c.

But, for a compleat and general Account of the various kinds of Animals, we shall here subjoin Mr. Ray's General Scheme.

Animals are either,

[Sanguineous, that is, fuch as have Blood, which breathe either by

Lungs, having either

Two Ventricles in their Heart, and those either

Viviparous.

S Aquatick, as the Whale kind,
Terrestrial, as Quadrupeds.
Oviparous, as Birds.

But one Ventricle in the Heart, as Frogs, Tortoifes, and Serpents.

Gills, as all fanguineous Fishes, except the Whale-

Exanguineous, or without Blood, which may be divided into

Greater; and those either

Naked.

C Terrestrial, as naked Snails,

Aquatick, as the Poulp, Cuttle-fish, &c. Covered with a Tegument, either

Crustaceous, as Lobsters and Crab-fish. Testaceous, either

Univalve, as Limpets, Bivalve, as Oisters, Muscles, Cockles, & Turbinate, as Periwinkles, Snails, &c. Bivalve, as Oifters, Muscles, Cockles, &c.

Leffer, as Infects of all Sorts. Viviparous hairy Animals, or Quadrupeds, are either 'Hoof'd, which are either

Whole-footed or hoof'd, as the Horse and Ass: Cloven-footed, having the Hoof divided into Two principal Parts call'd Biscula, either

Such as chew not the Cud, as Swine. Ruminant, or fuch as chew the Cud, divided into

Such as have perpetual and hollow Horns:

Sheep-kind, Goat-kind.

Such as have folid, branched, and deciduous Horns, as the Deer kind.

Four Parts, or Quadrifcula, as the Rhinoceros and Hippopotamus.

Claw'd, or digitate, having the Foot divided into

Two Parts or Toes, having two Nails, as the Camel-kind.

Many Toes or Claws, either Undivided, as the Elephant Divided, which have either

Broad Nails and an humane Shape, as Apes. Narrower and more pointed Nails, which in respect of their Teeth, are divided into fuch as have

Many Fore teeth or Cutters in each Jaw :

The greater, which have SA shorter Snout and rounder Head, as the Cat-

A longer Snout and Head, as the Dog-kind.

The leffer, the Vermin or Weazel kind. Only two large and remarkable Fore teeth, all which

are Phytivorous and are call'd the Hare-kind. For particulars relating to Animals, their Number, Analogous Structure, Sagacity, Infinct, &c. See ARK, HEAD,

NECK, TAIL, FEET, STORGE, INSTINCT, &e.
ANIMALS confift of Solids, or firm parts, as Flesh, Bones,

Membranes, &c. and Fluids, as Blood, &c.
The Solids are mere Earth, bound together by some Oily Humour; and accordingly are reducible by Fireinto fuch

Earth again. See EARTH, FIRE, SOLID, &c.
Thus a Bone being perfectly purg'd of all its Moisture, by Calcination, is found a mere Earth, which the least force

will crumble into Dust, for want of the natural Gluten: Yet the same Bone by immerging it in Water or Oil becomes firm and strong again; and more so in Oil than Wa-And thus Cupels are made of Animal Earth, which will fustain the utmost Effect of Fire. See Cufel.

The Fluid Parts of Animals are the cruder as they are less distant from the Lacteals, and absorbent Vessels-Thus Chyle is little else but a vegetable Juice; but in its farther progress, gradually lays afide its vegetable Characters, till after a number of Circulations it becomes a perfect Animal Juice, under the denomination of Bood, from whence the other Humours are all derived. See CHYLE, BLOOD, HUMOUR, SECRETION, &c.

The parts of Animals are diffinguished from those of Vegetables by two Circumstances: The first, that when burnt they are found perfectly infipid; all Animal Salts being volatile and flying off with heat: the contrary of which is found in Vegetables, which constantly retain some fixed Salt in all their Ashes. See Salt, Volatile and Fixed.

The fecond, that no fincere Acid is contained in any Animal Juice; nor can any Acid Salt be extracted from the same: The contrary of which is found in all Vegetables: See ACID.

Yet are Animals reconverted into their Vegetable Nature, by Putrefaction. See Putrefaction.

ANIMALS make the Subject of that Branch of Natural Hi-

flory call'd Zoology; fee Zoology.

The Structure of Animals, with their Diforders, Remedies, &c. make the Subject of Anatomy, Medicine, &c. See Anatomy, Medicine, &c.

Animals make the principal matter of Heraldry; both as Bearings and as Supporters, &c. See BEARING, SUP-

"Tis an establish'd Rule among the Heralds, that in Blazoning, Animals are always to be interpreted in the best Sense; that is, according to their most noble and generous Qualities, and so as may redound most to the Honour of the Bearers.

Thus the Fox, being reputed witty, and withal given to filching for his Prey; if this be the charge of an Escutcheon, we are to conceive the Quality represented to be his Wit and

Cunning, not his Thefr.

Guillim adds, that all Savage Beasts are to be figured in their fiercest Action; as, a Lion erected, his Mouth wide open, his Claws extended, &c. Thus formed, he is faid to be Rampant. A Leopard, or Wolf is to be pourtray'd going, as it were, Pedetentim : which form of Action, saith Chassanæus, fits their natural Disposition, and is ter med Passant.—The gentler kinds are to be set forth in their noblest and most advantageous Action; as, a Horse running or vaulting, a Grey-hound courfing, a Deer tripping,

a Lamb going with smooth and easy pace, &c.

Every Animal is to be moving, or looking, to the right fide of the Shield; and it is a general Rule, that the right Foot be placed foremost, because the right side is reckoned the beginning of Motion: add, that the upper part is nobler than the lower; fo that things constrained either to look up or down, ought rather to be defign'd looking upwards.—It must be noted, that notwithstanding these solemn Precepts of Guillim, and the other Masters of Armory; we find by experience, that there are Lions Passant, Couchant, and Dormant, as well as Rampant, and that most Animals look down, and not up.

ANIMAL is also used Adjectively, to denote something that belongs or partakes of the Nature of an Animal Body, fee Body. Thus we say Animal Food, Animal Occonomy,

Ec. See FOOD, OECONOMY.

ANIMAL Actions are those peculiar to Animals; or which belong to Animals, as fuch. See ANIMAL and

Such are Sensation and Muscular Motion. See SENSA-

ANIMAL Motion is the same with what we call Muscular Motion. See Muscular Motion.

It is divided into two Branches; Natural or Involuntary, and Spontaneous. See NATURAL and SPONTANEOUS.

ANIMAL Functions, among Physicians. See Function. Moralists frequently oppose the Animal part, which is the sensible, sleshy part of Man; to the Rational part, which is the Understanding.

ANIMAL Secretion is the Act whereby the divers Juices of the Body are fecreted or feparated from the Mass of Blood, by means of the Glands. See SECRETION,

BLOOD and GLAND. The Theory of Animal Secretion is one of the Improvements in Physic, for which we are indebted to Geometrical Reasoning—The sum of what our late Writers on the Head have shewn, may be reduced to the following

(1.) Different Juices may be separated from the common Mass of Blood by means of the different Diameters of the Orifices of the fecretory Ducts. For all Particles, whose Diameters are less than those of the Ducts, will pass thro' them; fo that any Matter may be evacuated by any of the Glands, provided the Diameters of its Particles be made leffer than those of the fecretory Duct, either by a Comminution of the Matter to be separated, or by an Enlarge-

ment of the separating Passage.

(2.) By the different Angle which the fecretory Duct makes with the Trunk of the Artery. For all Fluids press the Sides of the containing Veffels in a Direction perpendicular to its Sides; which is evident in the Pulfation of the Arteries, it being to that Pressure that the Pulsation is owing. It is likewife evident, that the Blood is urged forward by the Force of the Heart ; fo that the Motion of Secretion is compounded of both these Motions. Now the lateral Pressure is greater when the direct Velocity is so; but yet not in proportion to fuch Velocity: for the lateral Preffure is confiderable, even when the Fluid is at reft; being then in proportion to the Specifick Gravity of the Fluid: And in a Fluid like the Blood in the Arteries which is thrown in a right Direction, or a Direction parallel to the Axis of the Vessel, the lateral Pressure will be in a Proportion compounded of both: From whence it will follow, that if two Particles of equal Diameters, but of unequal Specifick Gravities, arrive, with the fame Velocity, at an Orifice capable of admitting them, yet they will not both enter it and pass, because their Motion of Direction will be different: So that the Diversity of the Angles which the Ducts make with the Trunk of the Artery, is altogether necessary to account for all the possible Diversities of secerned Fluids, even supposing their Diameters and Figures to be the fame.

(3.) By the different Velocities with which the Blood arrives at the Orifices of the fecretory Ducts .-the Secretions are made in a fluid form; no poffible Reason can be assign'd, why some Animals have a soft loose Texture of the folid Parts, and why one Part of the Body is of an eafily separated Texture, and others of a firmer, but this different Velocity of the Blood at the Orifices of the fecretory Ducts, whereby the Particles fecerned for Nourishment, and Accretion, are drove or impacted into the Vacuola, that receive them with a greater or less Force; it being difficult to imagine that such a Diversity in Texture can altogether proceed from the different Solidities and Contacts of the constituent Parts. See further under the

Article SECRETION.

ANIMAL Spirits, are a fine subtile Juice, or Humour in Animal Bodies; fupposed to be the great Instrument of muscular Motion, Sensation, &c. See Muscular Mo-

TION, SENSATION, &C.

The Antients diffinguished Spirits into three Kinds, viz. Animal, Vital, and Vegetative: but the Moderns have reduced them to one fort, viz. Animal; about the Nature of which, and the Matter whence they are formed, great disputes have arisen among the Anatomists, tho' their very

Existence has never been fairly proved.

As it is hard to define what cou'd never yet be brought under the Judgment of our Senses, all that we shall here offer concerning them, is, that they must needs be extremely subrile Bodies, which escape all manner of Examination by the Senfes, tho ever fo well affifted; and pervade the Tracts of the Nerves, which yet have no discoverable Cavity or Perforation; nor could ever by any Experiment be collected; yet are constantly moving in vast Quantities, as they must of necessity be, to perform all those mighty Operations which are ascribed to them-However, the Antiquity of the Opinion claims fome Reverence.

By the Help of these we are furnished with a vast Number of precarious Solutions of great Phænomena; and without them we must leave a great Chasm in the philosophical

History of Animal Bodies.

They are supposed to be separated in the Brain, from the fubtilest Parts of the Blood; and thence carried, by the Nerves, to all Parts of the Body, for the Performance of all animal and vital Functions. See BRAIN and NERVE. See also further under the Article SPIRIT.

ANIMALCULE, ANIMALCULUM, is a Diminutive of Animal; and expresses such a minute Creature as is scarce

discernible by the naked Eye.

Such are those numerous Insects which croud the of Annals. Water in the Summer Months; changing it sometimes of a deep, or pale red, fometimes a yellow, &c. They feem to be of the Shrimp kind, call'd by Swammer-dam, Pulex Aquaticus arborescens. The cause of their Concourse at this time, Mr. Derham observes is to perform their Coit. He adds, that they afford a comfortable Food to many Water Animals—The green Scum on the top of stagnant Waters is nothing else but prodigious Numbers of another smaller Order of Animalcules; which in all probability ferve for Food to the Pulices Aquatici.

The Microscope discovers Legions of Animalcules in most

Liquors, as Water, Wine, Brandy, Vinegar, Beer, Spittle,

Urine, Dew, &c. In the Philosoph. Transact. we have Observations of the Animalcules in Rain-Water, in several Chalybeat Waters, Infusions of Pepper, Bay-berries, Oats, Barly, Wheat, &c. See Microscope.

The human Seed has been observed by divers Authors to contain huge Numbers of Animalcules; which gave occasion to the System of Generation ab animalculo. See

SEED and GENERATION.

ANIMATE, ANIMATED, fomething endued with Life,

or a living Soul. See Life and Soul.

Thus, in Mechanicks, Animate Power is used to denote Man or Brute; in contradiffinction to inanimate ones, as Springs, Weights, &c. See Power, &c.

ANIMATED Mercury, among Chymists, fignifies Quickfilver impregnated with fome fubtile and spirituous Particles, fo as to render it capable of growing hot when mingled with Gold. See MERCURY, AMALGAMA, &c.

ANIMATED Needle, a Needle touch'd with a Load stone.

See NEEDLE, MAGNET, &c.
ANIMATION, fignifies the informing of an animal Bo. dy with a Soul.

Thus the Fætus in the Womb is faid to come to its Animation, when it begins to act as a true Animal; or after the Female that bears it is quick, as the common way of Expression is: See Fortus.

The common Opinion is, that this happens about 40 days after Conception. But Jer. Florentinus, in a Latin Treatise entitled, Homo Dubius, sive de Baptismo Abortivorum, shows this to be very precarious. See Conception, Abor-

TION, &c.
ANISCALPTOR, in Anatomy, a Muscle, otherwise

called LATISSIMUS Dorfi.

ANKER, a liquid Measure, chiefly used at Amsterdam,

See MEASURE.

The Anker is the 4th part of the Aem, and contains two Stekans: each Stekan confifts of fixteen Mingles; the Mingle being equal to two Paris Pints. See PINT, &c.
ANKYLOSIS, a Difease in the Junctures of an human

Body; where the nervous Liquor that shou'd lubricate the Bones, and make their Motions more easy, growing too thick, clog up, and as it were, cement the Bones within one another. See Bone, Articulation, &c.

The Word is derived from the Greek as within which

comes from again, a Hardness, or Callusin a Juncture. ANNALS, Annales, an historical Account of the Affairs of a State, digested in order of Years; see Year.

The difference between Annals and History is variously affigned by various Authors-Some fay that Hiftory is properly a Recital of Things which the Author has feen, or been a by-stander to. What they build upon, is, the Etymology of the Word; History in the Greek, fignifying the Knowledge of Things present, and in effect, isoges, properly signifies to see. On the contrary, Annals, say they, relate to the Transactions of others, and such as the Writer never See HISTORY.

Of this Opinion, the great Annalist, Tacitus himself, seems to have been; in regard, the first Part of his Work, which treats of former Times, he calls Annals; whereas when he comes down to his own Times, he changes his

Title, and calls it History.

Aulus Gellius is of a different Sentiment, and pretends that History and Annals only differ from one another as the Genus does from the Species; that History is the Genus, and implies a Narration or Recital of Things pass'd; and that Annals are the Species, and are also a Recital of Things pass'd, but with this difference, that these last are digested into certain Periods, or Years.

The same Author gives us another Opinion, which he says he borrows from Sempronius Afellio: According to that Writer, Annals are a bare Relation of what passes each Year; whereas History relates not only the Transactions themselves, but also the Causes, Motives, and Springs thereof. The Annalist has nothing to do but to lay only the Teach of the Annalist has nothing to do but to lay only the Park of the Annalist has nothing to do but to lay only the Park of the Annalist has nothing to do but to lay only the Annalist has nothing to do but to lay the Annalist has nothing to do but to lay the Annalist has not have t his Facts, but the Historian reasons and descants on

Of this last Opinion feems Cicero to be, when speaking of Annalists, he says, Unam dicendi laudem putant esse brevitatem, non Exornatores rerum, sed tantum Narratores. He adds, that History, in its Original, was a Composition

The same Cicero relates the Origin of Annals: To preferve the Memory of Transactions, the Pontifex Maximus, fays he, wrote what pass'd each Year; and exposed it on a Table, in his own House, where every one was at liberty to read them—These they call'd Annales Maximi; and the Custom was kept up till the Year of Rome 620. See

Several other Writers, in imitation hereof, took to this fimple, and naked Way of relating Facts; and were hence denominated Annalists—Such were Cato, Pictor, Pilos

ANNATES, Annata, the same with Priminiversary Days, Anniversary Feasts, Anniversary Prayers, tie or First-fruits; so call'd from the Latin Annus Year, because the Rate of First-fruits, paid for spiritual Livings, is

Anniversary Days, Dies Anniversarii, among our Annive after the Value of one Year's Purchase. See PRIMITIE

and FIRST FRUITS.

Annates were antiently a Right paid to the Pope, up-on his granting a Bull for a vacant Benefice, Abby, or Bishoprick; but fince the Reformation they are paid in England to the King. The first Pope that imposed them in England, feems to have been Clement V. who, according to Matthew of Westminster, exacted Annates of all the vacant Benefices in the Kingdom, for the space of two Years, or according to Walfingham for three Years. His Successor John XXII. introduced the like in France.

Yet Polydore Virgil, and some others, take Annates to be of a much elder standing; and to have obtained long before they were paid to the Pope.——'Tis certain at least, that from the Twelfth Century, there were Bishops and Abbots, who by some peculiar Custom or Privilege, took Annates of the Benefices depending on their Diocese

or Abbey.

Matthew Paris, in his History of England, for the Year 746, relates that the Archbishop of Canterbury in virtue of a Grant or Concession of the Pope, received Annates of all the Benefices that became vacant in England. But in after-times the Holy See thought fit to take 'em away from the Bishops and Archbishops, and appropriate 'em to them-

ANNEALING, or as it is popularly call'd Nealing.

See NEALING.

One fine use of Silver, fays Mr. Boyle, was only discovered fince the Art of Annealing upon Glass came to be For prepared Silver, or even the crude Metal being burnt on a Glass Plate, will tinge it of a fine yellow, or golden Colour. And there are several mineral Earths, and other coarse Matters, of use in this Art, which by means of Fire impart transparent Colours to Glass, and sometimes very different ones from those of the Bodies themselves. See Painting on GLASS.

ANNEXATION, in Law, the uniting of Lands or Rents to the Crown. See Annexed.

ANNEXED, fomething join'd to, or dependant of, ano-Thus we fay fuch a Farm, fuch an Advowson is annex'd to fuch a Fee, fuch a Manor, &c. Charles VIII in the Year 1486, annex'd Provence to the Crown of France. ANNIENTED, a Term fometimes used in Law Books,

in the Sense of frustrated, or annull'd.

It is of French original; being form'd of the Verb Annien-

tir to bring to nothing, annihilate.
ANNIHILATION, the Act of reducing a Substance into Nothing; or of totally destroying and taking away its Existence. See Substance and Existence

Annihilation stands opposed to Creation: The one supposes something made out of nothing, the other nothing made out of something. See CREATION.

All Annihilation must be Metaphysical or Supernatural.

See Body, ALTERATION, CORRUPTION, &c.

Bodies naturally admit of Changes and Alterations in

their form ; but not of Annihilation.

Philosophers object against this Notion of Annihilation; in that it supposes an Act required thereto: Whereas, according to them, Annihilation must ensue upon God's merely ceasing to act, or to create a thing. For, if the Conservation of a thing be a continued Creation thereof; as is almost universally allowed: 'Tis evident a thing can no longer endure, than while God continues to create

The Word is compounded of ad to, and nibil nothing. ANNI Nubiles, among Law-Writers, the legal Age, at which a Maid becomes fit for Marriage; which is at 12

Years. See AGE.

ANNIS SEED, or ANISEED, a medicinal Seed or Grain; produced by an Umbiliferous Plant of the same Name,

common in our Gardens. See SEED.

It has a sweetish Taste, intermix'd with something pungent and bitter: Is reputed an Aromatic, and prescribed not barely as a Carminative against Wind; but also as a Pectoral, Stomachic and Digeffive. See CARMINATIVE, &c.

It also yields by Distillation, a white cordial Oil call'd Essence of Annis-seed; of a very strong penetrating Smell, and efficacious in its medicinal Operation : It being also used by the Confectioners to scent their Pomatums, &c.

In diffilling the Annis-feed for the Oil; there is procured a limpid Water call'd Annis-feed Water; which has

much the same Virtues with the Oil.

ANNIVERSARY, is properly the yearly Return of any remarkable Day; and was antiently called a Year-day or Mind-day, that is, a Memorial-day. See ANNUAL DAY, &c. On some extraordinary Occasions such Days have been registered and according to the content of the con been register'd, and annually observed, in gratitude to Founders and Benefactors.-

The Word is form'd from annus and verto, in regard of its returning every Year. In this Sense we say An-

cestors were those Days wherein the Martyrdoms of the Saints were yearly celebrated in the Church; as also Days whereon, at every Year's end, Men were wont to pray for the Souls of their deceas'd Friends. - Anniversaria dies ideo repetitur defunctis, quoniam nescimus qualiter ecrum causa habeatur in alia vita.—This was the Reason given by Alcuinus in his Divine Offices.

ANNOISANCE, or Nufance, in Law, a Hurt or Offence, either to a publick place, as a High-way, Bridge, or common River; or to a private one, by laying any thing that may breed Infection; by incroaching, or the like means.

See NUSANCE.

Annoisance is also used for a Writ brought upon this

Transgression. See Nusance.

ANNOTATION, a fuccinct Commentary, or Remark on any Book, or Writing; in order to clear up some Passage, or to draw some Induction or Consequence from it. See COMMENT, EC.

The Criticks of the last Age have made learned Annotations on the Scriptures, the Classics, &c.

The Word is form'd of the Latin adnotatio; of ad and Nota, Note.

ANNUAL, fomething which returns every Year, or clo-fes at the end of the Year. See YEAR.

Thus we fay an Annual or yearly Feast, Office, Commiffion, Rent, &c. See ANNIVERSARY.

The ANNUAL Motion of the Earth see proved under the Article EARTH.

Annual, is sometimes used for the yearly Rent, or In-

come of a Prebendary, &c. See PREBEND, &c.

Annual Plants, call'd also simply Annuals, are such as only live their Year, i.e. come up in the Spring, and die again in Autumn: And accordingly are to be recruited every Year. See PLANT.

Annuals stand contradistinguished from Bisannuals, Trien-

nials, &c.

Annuat Leaves, are fuch Leaves as come up afresh in Spring, and perish in Winter. See LEAF.—These stand opposed to Perennials. See PERENNIAL.

Anno Domini, q. d. in the Year of our Lord; the Computation of Time from the Epocha of the Incarnation of

Jesus Christ. See EPOCHA, COMPUTATION, &c.

ANNUAL Equation, of the mean Motion of the Sun and Moon, and of the Moon's Apogee and Nodes. See Equa-

TION, MOON, &C.

The annual Equation of the mean Motion of the Sun de pends on the Eccentricity of the Earth's Orbit; and is $16\frac{1}{2}\frac{1}{2}$ of those Parts, whereof the mean Distance between the Sun and the Earth is 1000: whence by some, it is called the Equation of the Center, and when greatest, is i Degree

56', 20".
The greatest annual Equation of the Moon's mean Motion is 11', 40". of its Apogee 20', and of its Node 9', 30".

See Node, &c.

These four annual Equations are always proportionable; fo that when any of them is at the greatest, the three others are also greatest; and vice versa. — Hence the annual Equation of the Center (of the Sun) being given, the other three corresponding Equations will be given; so that one Table (that is, of the central Equation) may serve for all.

ANNUALIA, yearly Oblations antiently made by the Relations of deceafed Persons, on the Day of their Death.

See OBLATION.

This Day they call'd Year-day, &c. and on it, Mais was

celebrated with great Solemnity. See Anniversary.

ANNUENTES Musculi, in Anatomy, a Pair of transverse Muscles, at the Root of the Vertebræ of the Back; call'd also by Mr. Cowper, Resti interni minores, beautiful and the Passister See Brown. cause they lie under the Relli majores. See RECTI.

They are called Annuentes, because they help to nod the Head directly forward. See HEAD, Muscles, &c.

ANNUITY, a yearly Rent or Revenue, paid for Term of Life or of Years, or in Fee and for ever. See REVE-

In Common Law, the Difference between a Rent, and an Annuity confifts in this, that Rent is payable out of Land; whereas an Annuity charges only the Person of the Grantor: and that for the Recovery of a Rent, an Action lies; whereas for that of an Annuity, there only lies a Writ of Annuity against the Grantor, his Heirs and Successive Su fors. See RENT, WRIT, ACTION, &c.

Add, that Annuities are never taken for Affets; as being

no Freeholds in Law. See Assets.

The Computation of the Value of Annuities belongs to Political Arithmetic. See POLITICAL Arithmetic.

Dr. Halley, in his Observations on the Breslaw Bills of Mortality, shews, That it is 80 to 1, a Person of 25 Years of Age does not die in a Year—That it is 5\frac{1}{2} to one, a Man of 40 lives 7 Years; and that one of 30 may reafonably expect to live 27 or 28 Years. So great a difference is there between the Life of Man at different Ages; that it is 100 to 1. one of 20 lives out a Year; and but 38 to 1 that one of 50 doth fo.

Whence, and from fome other Observations, he constructed the following Table; shewing the Value of Annuities for every fifth Year of Life to the 70th.

Age.	Years Purchase.	Age.	Years Purchase
1	10,28	40	10,57
5	13,40	45	9,91
10	13,44	50	9,21
15	т 3,33	55	8,51
20	12,78	60	7,60
25	¥2,27	65	6,54
30	11,72	70	5,32
35	11,12		

ANNULAR, ANNULARIS, fomething that relates to, or refembles, a Ring, by the Latins called Annulus. See

Annular Protuberance, is a Process of the Medulla Oblongata; thus called by Dr. Willis, in regard it furrounds the same, much like a Ring. See MEDULLA

Oblong at a. ANNULAR Cartilage, or ANNULARIS, is the fecond Cartilage of the Larynx; being round, and investing the whole Larynx; called also Cricoides. See LARYNX and

CRICOIDES. Annular Ligament, Ligamentum Annulare, is a frong Ligament, encompassing the Carpus or Wrist; after the manner of a Bracelet. See LIGAMENT.

Its use is to connect or bind the two Bones of the Arm together; and also to restrain the Tendons of the several Muscles of the Hand and Fingers, and prevent their flying out of their places, when in Action. See CARPUS, HAND, FINGER, &c.

The Ligament of the Tarfus is also denominated Annular

Ligament. See TARSUS.

Add, that the Sphincter Muscle of the Anus is also called Annularis, or Annular Muscle; from its Figure.

ANNULAR is also an Epithet given the fourth Finger;

popularly calld the Ring Finger. See FINGER.
ANNULET, q. d. little Ring;

raldry, is a Difference or Mark of Diffinction, which the fifth Brother of any Family ought to bear in his Coat of Arms. DIFFERENCE.

Annulets are also part of the Coat-Armour of several Families: They were antiently reputed a Mark of Nobility, and Jurisdiction; it being the Custom of Prelates to receive their Investiture per Baculum & Annulum. See Bishop, INVESTITURE, &c.

ANNULETS, in Architecture, are small square Members, in the Doric Capital; under the Quarter-round. See

DORIC and CAPITAL.

They are also called Fillets, Listels, &c. See FILLETS,

Ec.

Annulet is also a narrow flat Moulding, common to other Parts of a Column, viz. the Bases, &c. as well as the Capital; fo called, because it encompasses the Column round.— In this Sense Annuler is frequently used for a Baguette or little Aftragal. See BAGUETTE, and ASTRAGAL.

ANNULLING, the abolishing of an Act, Proceedure,

Sentence, or the like. See ABOLITION.

The Word is compounded of ad and nullus, none; q. d.

ANNUNCIATE, ANNUNTIADA, or ANNUNTIATE, a Denomination common to feveral Orders, both Religious and Military; instituted with a View to the Annunciation. See ORDER and ANNUNCIATION.

The first Religious Order of this kind, was instituted in 1232, by seven Florentine Merchants.—These are also

call'd Servites, q. d. Servants. See SERVITES.

The fecond was a Nunnery at Bourges, founded by Joan Queen of France, after her Divorce from Lewis XII

The third, was also a Nunnery, founded by a Genoese Lady in 16co.—The fourth, a Friary, founded by Cardinal Torrecremata, at Rome; which last are grown so very rich, that they give Fortunes of fixty Roman Crowns to above 400 Girls, on the Anniversary of the Annunciation.

Knights of the Annunciate, was a military Order, instituted in 1350, by Amadeus, Duke of Savoy. See

It was at first call'd the Order of the True Lovers Knots; in memory of a Bracelet of Hair presented to the Founder by a Lady: but upon the Election of Amadeus VIII. to the Pontificate, it changed its Name for that of the Annium-

ANNUNCIATION, the Tidings which the Angel Gabriel brought to the Holy Virgin, of the Mystery of the

Incarnation. See INCARNATION.

Annunciation is also the Name of a Feast, celebrated annually on the 25th of March, popularly call'd Lady. day, in Commemoration of that wonderful Event. See

This Feast appears to be of great Antiquity in the Latin Church. Among the Sermons of St. Augustin, who died in 430, we have two on the Annunciation, viz. the 17th and 18th de Sanctis: And yet there are much earlier Testimonies of its use in the Greek Church. Proclus, who died in 446; Chrysostom, in 407; and even Gregory Thaumaturgus, in 295; have all of them Discourses on the Annunciation, Rivet, Perkins, and fome other Protestant Writers after 'em, have indeed question'd the Authentickness of the two Homilies of Gregory Thaumaturgus, on the Annunciation; but Voffius acknowledges'em the genuine Productions of that

Add, that some Authors are of opinion, that the Feast was originally folemnized in Honour of our Saviour; and that the holding it in the Name and Honour of the Virgin,

is of a much later standing.

Several of the Eastern Churches celebrate the Annunciation at a different Season from those of the West. The Syrians call it Bascarach, q. d. Search, Inquiry; and mark it in their Calendar for the first Day of December. The Armenians hold it on the 5th of January; thus anticipating the Time, to prevent its falling in Lent: But the Greeks make no scruple of celebrating the Festival even in Lent. See LENT.

The Word is compounded of the Latin ad and nuntio, I tell, I declare; of Nuntius, Messenger. The Greeks call it Ευαγγελισμο, Good tidings; and χαιρεθισμός,

Salutation.

The Jewsalfo give the Title Annunciation to part of the Ceremony of their Passover, viz. that, wherein they explain the Origin, and Occasion of the Solemnity——This Explanation they call TITL, Haggada, q. d. Annuncia-

ANNULUS, a Ring. See RING.

ANODYNE, in Physick, is understood of such Remedies, as by their gentle Heat and temperate Moisture, calm and assuage Pain. See Pain.

These are also called *Paregoricks*. See Parego-

There are others, which bear the same Name, but improperly, viz. fuch as occasion a Stupor, Drousiness, and Sleep, properly called Narcoticks, Hypnoticks, or Opiates. See NARCOTICK, OPIATE, &c.

The true Anodynes are applied externally, to the patt affected—Such among the Class of Simples are the Onion, Lilly, Root of Mallows, Leaves of Violet, Elder, &c.

The Word is derived from the privative Particle a and

Siva, doleo, to be in pain.

We have also certain compound Medicines in the Shops, prepared with this Intention; and called by this Name-Such is the Anodyne Balfam, made of Castile Soap, Camphir, Saffron, and Spirit of Wine; digested in a Sandheat. It is recommended not only for procuring Ease in the most racking extremities of pain, but for assisting in

discharging the peccant matter that occasion'd it.

ANOMALOUS, q. d. Irregular; something that deviates from the ordinary Rule and Method of other things

of the same kind. See RULE, &c.

The Word is not compounded of the privative a, and νομος, Law, as is usually imagined: for whence, on such supposition, should the last Syllable al, arise? But it comes from the Greek avapanos, uneven, rough, irregular, form'd of the Privative a, and spands, plain, even.

Anomalous Verbs, in Grammar, are fuch as are irregular in their Conjugations; deviating from the Rules or Formula's observ'd by others. See VERB and Conju-

There are Anomalous Verbs, irregular Inflexions of -In the English all the Irre-Words, in all Languagesgularity in our Anomalous Verbs, lies in the formation of the Preter Tense, and passive Participle; tho' this only holds of the Native Teutonic or Saxon Words, and not of the foreign Words, borrow'd from the Latin, Welsh, French,

The principal Irregularity arises from the quickness of our Pronunciation, whereby we change the Confonant

into t, cutting off the regular ending ed.

Thus for mixed, we write mixt or mix'd; for dwelled dwelt or dwell'd; for snatched, snatcht, &c.—But this is rather of the nature of a Contraction than an Irregularity

and is complained of by some of our Politer Writers as an Abuse much to the disadvantage of our Language, tending to disfigure it, and turn a tenth part of our smoothest Words into Clusters of Confonants: which is the more inexcufable, in that the want of Vowels has been the general Complaint of the best Writers.

Another Irregularity relates to the preter Tense, and pasfive Participle—Thus give, if it were regular, or formed according to the Rule, would make gived in the preter Tenfe, and the passive Participle: whereas it makes gave in the preter Tense, and given in the passive Participle.

ANOMALISTICAL Year, in Aftronomy, called also Periodical Year, is the space of time wherein the Earth

paffes thro' her Orbit. See YEAR.

The Anomalifical, or common Year, is somewhat greater than the Tropical Year; by reason of the pracession of the Equinox. See TROPICAL.

ANOMALY, in Grammar, the Irregularity of Formation

or Conjugation, observed in several Verbs. See Anamalous.

Anomaly, in Astronomy, is the Distance of a Planet from the Aphelion or Apogee; or an irregularity in the Motion of a Planet, whereby it deviates from the Aphelion or Apogee. See PLANET, APHELION and APOGEE.

Kepler distinguishes three kinds of Anomalies; Mean,
Eccentric and True.

Mean or Simple Anomaly in the antient Astronomy, is the Distance of a Planer's mean place from the Apogee.

In the modern Astronomy, it is the Time wherein the Planet moves from its Aphelion A, to the mean Place or Point of

its Orbit I. (Tab. ASTRONOMY, fig. 1.)

Hence, as the Arch, or the Angle, or the Elliptic Area
A S I, is proportional to the Time wherein the Planet describes the Arch AI; that Area may represent the mean Anomaly.—Or thus: The Area SK A found by drawing a Line LK, thro' the Planet's place, perpendicular to the Line of the Apfides PA, till it cuts the Circle DA, and drawing the Line SK; may represent the mean Anomaly; for this Area is every where proportional to the former Area SIA, as is demonstrated by Dr. Gregory, lib. 3. Elem. Astrom. Physic. Math.

Anomaly of the Eccentric, or of the Centre, in the new Astronomy, is an Arch of the Eccentric Circle A K, fig. 1. included between the Aphelium A, and a right Line K L, drawn thro' the Centre of the Planet K, perpendicularly to the Line of the Apfides A P. See ECCENTRIC.

In the antient Aftronomy, it is an Arch of the Zodiac, terminated by the Line of the Apfides, and the Line of

the mean Motion of the Centre.

True or Equated Anomaly, is the Angle at the Sun, ASI, which a Planet's distance from the Aphelium, AI, appears under; or it is the Angle or Area, taken proportional to the time in which the Planet moves from the mean Place I, to its Aphelion A.

And hence, in the Sun's Motion, it will be the distance

of his true place, from the Apogee-

The true Anomaly being given, the mean one is eafily found: but it is difficult to find the true Anomaly from the

mean one given-

The Geometrical Method of Wallis and Newton, by the protracted Cycloid, are not fit for Calculation; nor yet the Methods of Series, as being too laborious. Hence Astronomers are forced to have recourse to Approximation. Ward, in his Astronomia Geometrica takes the Angle ASI, at the Focus where the Sun is not, for the mean Anomaly; which will nearly represent it, if the Orbit of the Planet be not very Eccentric; and thus easily folves the Problem. But this Method does not hold of the Orbit of Mars, as being more Eccentric than those of the other Planets.

Sir Isaac Newton shews how to effect even this; and when his Correction is made, and the Problem folved, according to Ward's Hypothesis, Sir Isaac affirms, that even in the Orbit of Mars, there will scarce ever be an Error of

above a Second.

ANOMEANS, Anomoeans, or Anomians, Anomoei, or Anomiani, a Greek Word, composed of the privative a and ¿uoios, similar, resembling; q.d. different,

diffimilar.

In the fourth Century, this was the Name by which the pure Arians were distinguish'd; in regard they not only denied the Confubstantiality of the Word, but even afferted, that he was of a Nature different from that of the Father: In Contradistinction to the Semi-Arians, who indeed denied the Confubstantiality of the Word, but own'd at the fame time, that he was like the Father. See ARIAN, and SEMI ARIAN.

The Semi-Arians condemned the Anomeans in the Council of Seleucia, and the Anomeans condemned the Semi-Arians in their Turn, in the Councils of Constantinople and Antioch; erafing the Word bucios out of the Formula of Rimini, and that of Constantinople, and protesting that the Word had not only a different Substance, but also a Will

different from that of the Father. Whence they were to be call'd Avousios. See Homoousia, &c.
ANONYMOUS, fomething that is nameless; or to which no Name is affixed. See Name.

The Term is chiefly applied to Books which do not express their Author's Name. It is derived from the Greek ανόνυμος, without Name, of the privative a and ανομα, κεmen, Name.

Decker, Advocate of the Imperial Chamber of Spires; and Placeius of Hambourg, have given a Treatife of Anony-mous Books—Burcard Gotthelfus Struvius, treats of learned Men who have endeavoured to divine the Authors. of Anonymous Books.

ANOREXY, ANOREXIA, in Medicine, an Inappeten-

cy, or Loss of Appetite. See APPETITE.

Anorexia is properly a longer continuance than is natural, without a defire to eat. See Food, FASTING, DISTASTE, &C.

If the Thought, or the Sight of proper Food, create a Sickness in the Stomach, or a Tendency to vomit ; it is

called a Nausea. See NAUSEA.

Anorexia, is chiefly confidered as a Symptom of some other Disorder, from which the curative Indications are to be taken, and afterwards Stomachics used. See STOMA-

The Word is compounded of the privative Participle a

and description, Cupio, I defire—ANSES, or Ansæ, in Aftronomy, those apparently prominent Parts of the Planet Saturn's Ring, discovered in its opening, and appearing like Handles to the Body of that Plant. See SATURN and RING.

The Word is Latin; and literally fignifies Handles or

Arms of divers Utenfils.-

ANSCOTE, in our antient Law Books, the fame with Angild. See Scor and Lor.

ANSEL Weight. See Aunsel Weight.
ANSPESSADES, a kind of Inferior Officers in the French Foot, below the Corporals, and yet above the common Centinels. See CORPORAL, &c.

There are usually four or five in each Company-Word is formed of the Italian lansa spezzada, q. d. broken Lance; which was occasioned hence, that they were originally disbanded Gendarmes, who for want of other Subfistence sued for a Place of some distinction in the Infantry.

ANSWER. See RESPONSE, RESPONSAL, BILL, PLEAD-

ING, REPLICATION, &c.

ANTA, or ANTE, in the ancient Architecture, a square Column, or Pilaster, placed at the Corners of the Walls of their Temples and other Edifices. See PILASTER, TEM-PLE, &c.

The Anta flood out of the Wall, with a Projecture equal to one eighth of their Face, provided there were no Ornament that had a greater Projecture; but it was a Rule that the Projecture of the Ante should always equal that of the Ornaments.

They took their Name, according to Mr. Perrault, from the Preposition Ante before; because placed before the Walls and Coins of Buildings to fecure 'em.

ANTAGONIST, an Adversary; or a Party opposite

to another in any Combat or Dispute. See ADVERSARY, &c. The Word is formed from the Greek ann, contra, against, and agavila, oppono, I oppose.

ANTAGONIST Muscles, in Anatomy, are those which

have opposite Functions. See Muscie.
Such are the Flexor and Extensor of any Limb, the one whereof contracts ir, and the other stretches it out. See FLEXOR and EXTENSOR.

We have some solitary Muscles, without any Antagonists; as the Heart, &c. See HEART, &c.
ANTANACLASIS, a Figure in Rhetorick; being a repetition of the same Word, but in a different Signification. See REPETITION.

The Word comes from the Greek arn, and avantae, re-

percutio, I strike again.

ANTANAGOGE, aνταναγωγή, a Figure in Rhetoric, when not being able to answer the Accusation of the Adverfary, we return the Charge, by loading him with the same Crimes. See RECRIMINATION.

ANTARES, in Aftronomy, the Scorpion's Heart; a fix'd Star of the first Magnitude, in the Constellation Scorpio— Its Longitude, Latitude, &c. see among the rest of the

Constellation Scorpio.

ANTARCTIC, or ANTARTIC, Pole, the Southern Pole, or End of the Earth's Axis; so called because it is opposite to the Arctic or North Pole. See Pole, South, ARCTIC, &c.

The Stars near the Antarctic Pole never appear above

our Horizon. See STAR, HORIZON, &c.

The Word is composed of arn contra, and aprens, Urfa,

ANTARCTIC, or ANTARTIC Circle, is one of the lesser Circles of the Sphere, parallel to the Equator, at

the distance of 29 deg. 30. min. from the South Pole. See

It takes its Name from its being opposite to another Circle, parallel likewise to the Equator, and at the same distance from the North Pole; called the Arttic Circle. See ARCTIC Circle.

ANTECEDENT, in the Schools, something that precedes, or goes before another, in respect of time; from the Latin Preposition ante, before, and cedens of cedere, to go-In this Sense the Word stands opposed to Subsequent.

An Antecedent Decree, is a Decree preceding some other Decree, or some Action of the Creature, or the Previ-

sion of that Action. See DECREE.

'Tis a Point much controverted, whether Predeffination be a Decree antecedent to Faith, or subsequent thereto. See

PREDESTINATION. So, an Antecedent Will, or Defire, is that which precedes fome other Will or Defire, or fome Knowledge or Prevision-Thus we fay, God by a fincere, but Antecedent Defire, wills all Men to be faved: That is, this fincere Defire of God precedes, and does not suppose, the Knowledge of

their Faith and Repentance.

By the way it must be noted that the Term Antecedent is only applied to God in respect of the Order of Nature, not of an Order of Succession; for that God, by reason of his infinite Perfections, fees and foresees both at the same Time: after the same manner he also wills, and not successively, one thing after another—Yet does not this hinder, but that God may will one thing on occasion of another, or have fuch a defire on occasion of such a Prevision; which Divines call the Order of Nature, in contradistinction to that of Time.

ANTECEDENT, Antecedens, in Logick, is the first Proposition of an Enthymeme, or of an Argument which only confifts of two Members. See Enthymeme, Proposition,

In Opposition hereto, the latter is called the Confequent.

See Consequent.

Thus in the Syllogism cogito, ergo sum, I think, and therefore exist; cogito is the Antecedent; being thus called because it precedes the ergo, or the copula of the Argument.

ANTECEDENT, in Mathematicks, is the former of the two Terms of a Ratio; or that which is compared with the other. See RATIO and TERM.

Thus, if the Ratio be of a to b; a is faid to be the An-

tecedent.

ANTECEDENT Signs, are fuch Symptoms of Diforder as appear before a Distemper is so formed, as to be reducible to any particular Class, or proper Denomination. See SIGN and SYMPTOM.

ANTECEDENT in Grammar, the Word which a Relative

refers to. See RELATIVE.

ANTECEDENCE, ANTECEDENCY. See ANTECE-

DENT and ANTECEDENTIA.

ANTECEDENTIA among Aftronomers— Planet appears to move Westward, contrary to the Order or Course of the Signs; as, from Taurus towards Aries: it is faid to move, in Antecedentia. See PLANET, ORDER, SIGN, &c.

On the contrary, when it goes Eastward or forwards, from Aries towards Taurus; it is said to move in Consequentia.

See Consequentia, &c.

ANTECESSOR, one that goes before, or leads another.

See PRECURSOR, PREDECESSOR, &c.
The Term is particularly used in some Universities for a

Professor, who teaches, or lectures the Civil Law.

ANTECHAMBER, or ANTICHAMBER, an outer Chamber, before the principal Chamber of an Apartment; where the Servants wait, and Strangers stay, till the Person to be spoken with al is at leisure, &c. See APARTMENT.

The Word is formed of the Latin Ante Camera. See

ANTECHRIST, or ANTICHRIST, Antichriftus, among Divines, &c. a Tyrant who is to reign on Earth, toward the end of the World; for the ultimate Proof of the Elect; and to give a shining Instance of the Divine Vengeance, before the last Judgment.

The Word is compounded of the Greek arts, contra, a gainst, and xgisos, Christ—In Scripture he is also called Man of Sin, Son of Perdition, &c. 'Tis added that he shall

fet up his Throne at Babylon.

The Bible and the Fathers all speak of Antichrist as a fingle Man; tho' they affure withal, that he is to have divers Precuriors or Fore-runners--Yet many Protestant Writers apply to the Romish Church, and the Pope who is at the Head of it, the feveral Marks and Signatures of Antichrist, enumerated in the Apocalypse; which would rather imply Antichrist to be a corrupt Society, or a long Series of persecuting Pontiffs, than a fingle Person.

However, the Point having been maturely debated at the Council of Gap, held in 1603, a Resolution was taken thereupon, to infert an Article in the Confession of Faith,

whereby the Pope is formally declared to be Antichrift-Pope Clement VIII, we read, was stung to the Life with this decision; and even King Henry IV. of France was not a little mortified, to be thus declared, as he term'd it, an Imp of Antichrift.

The learned Grotius maintains that Caligula was Anti. christ; but neither does this quadrate with his Appearance

at the end of the World.

Father Malvenda, a Spanish Jesuit, has published a large and learned Work, de Antichristo, in XIII Booksthe first he relates all the Opinions of the Fathers with regard to Antichrist. In the second he speaks of the Time when he shall appear; and shews that all the Fathers who supposed Antichrist to be near at hand, judged the World was near its Period. In the third he discourses of his Origin and Nation; and shews that he is to be a Jew, of the Tribe of Dan: This he founds on the Authority of the Fathers; on the Passage in Genesis XLIX. Dan is a Serpent in the Way, &c. On that of Jeremy, VIII. 16. where it is said the Armies of Dan shall devour the Earth; and on the Apocalypse, cap. VII. where St. John enumerating all the Tribes of Israel, makes no mention of that of Dan. In the fourth and fifth Books, he treats of the Signs of Antichrift. In the fixth of his Reign and Wars. In the feventh of his Vices. In the eighth of his Doctrine and Miracles. In the ninth of his Persecutions: And in the rest, of the coming of Enoch and Elias, the Conversion of the Jews, the Reign of Jesus Christ, and the Death of Antichrist, after having reigned three Years and a half.

ANTECURSOR. See PRECURSOR.
ANTEDILUVIUN. See ANTIDILUVIAN.

ANTEJURAMENTUM, and PREJURAMENTUM, by our Ancestors also called Juramentum Calumniæ; an Oath which both the Accuser and Accused were obliged to make before any Trial or Purgation. See OATH and Purgation—The Accuser was to swear that he would profecute the Criminal; and the Accused was to make Oath on the very Day that he was to undergo the Ordeal, &c. that he was innocent of the Fact of which he was charged. See ORDEAL.

If the Accuser failed, the Criminal was discharged; if

the Accused, he was intended to be guilty, and was not to be admitted to purge himself by the Ordeal. See Combat, Duel, &c.

ANTEPAGMENTA, or ANTIPAGMENTA, in the antient Architecture, the Jaumbs of a Door, or Lintels of a Window. See Door and WINDOW.

The Word is also used for the entire Chambranle, i. e. the

Door-Case, or Window-Frame. See CHAMBRANLE.
ANTEPENULTIMA, or ANTEPENULTIMATE, in Grammar, the third Syllable of a Word, reckoning from the latter End; or the last Syllable but two. See WORD and SYLLABLE.

'Twas upon this Syllable, that the Greeks placed their a--The Antepenultimate cute Accents. See Accentof a Dactyl is long. See DACTYL.

The Word is compounded of the Preposition Ante, before;

and Penultimate, last but one. See PENULTIMATE.
ANTEPREDICAMENTS, ANTEPREDICAMENTA, in Logick, certain previous Matters, requisite to a more easy and clear apprehension of the Doctrine of Predicaments or Categories. See PREDICAMENT.

Such are Definitions of Common Terms; as Equivocals, Univocals, &c. with Divisions of Things, their Differences,

Ec. See Definition, Division, &c.

They are thus called because treated by Aristotle before the Predicaments; that the Thread of the Discourse might not afterwards be interrupted.

ANTERIOR, or ANTERIOUR, fomething before another, chiefly in respect of Place—In this Sense the Term stands opposed to Posterior. See Posterior.

The Word is Latin; formed of the Preposition, Ante,

before.

ANTESTATURE, in Fortification, a small Retrenchment, made of Pallisadoes, or Sacks of Earth, set up in haste, to dispute with the Enemy the Remainder of a Piece of Ground, part whereof hath been already gain'd. See RETRENCHMENT.

ANTHELIX, in Anatomy, the inner Circuit of the Aucle; thus call'd from its opposition to the outer Circuit,

call'd the Helix. See Auricle and Helix.

ANTHELMINTICKS, Medicines good to destroy
Worms. See WORM and VERMIFUGOUS.

The Word is compounded of arts, contra, against, and

ANTHEM, Antiphona, a Church-Song, performed in Cathedral, and other Service, by the Choristers, divided for that purpose into two Chorus's, who fing alternately. See Song, Choir, Chorister, &c.

The Word was originally used both for Psalms, and Hymns, when thus perform'd. See Psalm and Hymn.

way of finging among the Greeks; and St. Ambrose among -Theodoret attributes it to Diodorus and the Latins-Flavian. Amalarius Fortunatus has wrote expressy of the Order of Anthems, de Antiphonarum Ordine.

At present the Term is used in a somewhat narrower

Sense; being applied to certain Passages taken our of the Pfalms, &c. and accommodated to the particular Solem-

nity in hand.

ANTHERA, in Pharmacy, a Term used by some Writers for the Yellow part in the Middle of a Rose. See -It is reputed more aftringent than the rest.

ANTHERÆ, among Botanists, those little Tusts, or Knobs which grow on the Tops of the Stamina of Flowers; more usually called Apices. See APICES.

ANTHESPHORIA, in Antiquity, a Feast celebrated in Sicily, in Honour of Proserpine. See Feast.

The Word is deriv'd from the Greek 2,00, Flower, and oʻse, I carry, in regard that Goddess was forc'd away by Pluto, when she was gathering Flowers in the Fields. Yet Festus does not ascribe the Feast to Proserpine; but says it was thus call'd, by reason Ears of Corn were carried on this Day to the Temples.

Anthesporia seem to be the same thing with the Flori-

fertum of the Latins.

ANTHESTERIA, in Antiquity, was a Feast celebrated by the Athenians, in Honour of Bacchus. See FEAST.

Some are of opinion it took its Name foom the Month Anthesterion, wherein it was celebrated—Others pretend, that it was not the Name of any particular Feast, but that all the Feafts of Bacchus were call'd Anthesteria.

The most natural Derivation of the Word is from and Flos, a Flower; it being the Custom at this Feast to offer

Garlands of Flowers to Bacchus.

The Anthesieria lasted three Days, the eleventh, twelsth, and thirteenth of the Month; each of which Days had a Name suited to the proper Office of the Day—The first Name fuited to the proper Office of the Day-Day of the Feast was called willoria, i. e. Opening of the Veffels, in regard on this Day they open'd the Veffels, and -The second they called yoss, Congii, tafted the Winethe Name of a Meafure, containing the Weight of about ten Pounds: on this Day they drank the Wine prepar'd the Day before—The third Day they called χύτεοι, Kettles: on this Day they boil'd all forts of Pulse in Kettles; which however they were not allow'd to taste, as being offer'd to

ANTHOLOGION, ANTHOLOGUE, a Church Book in use among the Greeks. See GREEK.

The Anthologion is a fort of Breviary or Mass-Book, containing the daily Offices address'd to our Saviour, the Virgin, and the principal Saints; with other Common Offices of Prophets, Apostles, Martyrs, Pontiffs, and Confessors, according to the Greek Rive. See BREVIARY, MASS, OF-FICE, &c.

It is called arθολογιον, q. d. florilegium, or a Collection

of Flowers.

ANTHOLOGY, ANTHOLOGIA, a discourse or Treatise of Flowers; thus call'd from arsoc, Flos, a Flower, and Acres, Sermo, Discourse. Others chuse rather to derive anthology from ar Sos, Flos, a Flower, and Asya I gather; and use it to fignify a Collection of Flowers. See Flower.

ANTHOLOGY is particularly used for a Collection of Epi-

grams of divers Greek Poets. See EPIGRAM. St. ANTHONY, gives the Name to an Order of Knighthood, establishi'd in 1382. by Albert of Bavaria, &c. who had then taken a Refolution to make War against the Turks. See ORDER and KNIGHT.

The Knights of this Order wore a Collar of Gold, with a Hermit's Girdle, to which hung a Crutch and a little Bell. Some Authors mention another Order of St. Anthony in

Ethiopia, instituted in 370.

St. ANTHONY's Fire. See ERYSTPELAS.

ANTHORA, or Healing Wolfs-bane, a Species of Aconite, whose Root is neful in Physick; being reputed a good Antidote, and a certain Counterpoison to the Thora,

whence its Denomination Anthora. See Aconite.

The Root contains a great deal of volatile Salt and effen--It is alexipharmick, cardiack, stomachick, and

good against the Wind-Cholick-

ANTHOS, "Arbos, in its original Greek, fignifies Flower; but by way of Excellency is appropriated to Rosemary, fo as to express only Flowers of Rosemary. See Rose-

ANTHRACOSIS, a Disease of the Eyes, occasion'd by a corrofive Ulcer, cover'd with Skin, and attended with a general Swelling; especially of the Parts about the Eye. See EYE and ULCER.

The Word is Greek ar Pranwois, and denotes an Inflammation refembling a Coal; arbsat fignifying a Coal. See

ANTHRAX, andgat, firially fignifies a live Coal; and figuratively, a Scab or Blotch, made by a corrofive Hu-

Socrates represents St. Ignatius as the Author of this mour, which, as it were, burns the Skin, and occasions Sharp pricking Pains.

The Anthrax is also called Carbo and Carbunculus. See

CARBUNCLE.

The Cure is attempted with Cataplasms of Theriac. Lond. Allium, Cepæ co Et. Sapo Nig. &c.

ANTHROPOLOGY, ANTHROPOLOGIA, a Discourse or Treatise upon Man, or Human Nature.

Anthropology includes the Confideration both of the Human Body and Soul, with the Laws of their Union, and the Effects thereof, as Sensation, Motion, &c. See Body, Soul, SENSATION, MOTION, &c.

Yet Dr. Drake entitles his Anatomy of the Human Bo-

dy, Anthropologia. See ANATOMY.

The Word is compounded of *ανθεωπος, Man, and λόγος, Discourse.

ANTHROPOLOGY, is particularly used in Theology, for a way of speaking of God, after the manner of Men; by attributing Human Parts to him; as Eyes, Hands, Ears, Anger, Joy, &c.-

We have frequent Instances of Anthropology in Holy Scripture ; by which we are only to understand the Effect, or the Thing which God does, as if he had Hands, &c. See

ANTHROPOPATHY.

ANTHROPOMANCY, or ANTHROPOMANTIA, Method of Divination, performed by inspecting the Viscera of a Person deceased. See DIVINATION.

The Word is compounded of and portes Man, and martera,

ANTHROPOMORPHITE, one who attributes to God,

the Figure of a Man. See God, &c.

ANTHROPOMORPHITES were a Sect of antient Hereticks, who, out of a too great Simplicity, taking every thing spoken of God in the Scriptures in a literal Sense; imagin'd he had real Hands, Feet, &c.—The Passage they chiefly infifted on, was that in Genesis, where it is said that God made Man after his own Image.

The Word comes from the Greek av Prom G, Man, and

μόρφη, Shape.
ANTHROPOPATHY, a Figure, Expression or Discourse, whereby something is attributed to God, which properly belongs only to Man.

Anthropopathy is frequently used promiscuously with Anthropology; yet in strictness they ought to be distinguished as the Genus from the Species——Anthropology may be understood of any thing Human attributed to God; but Anthropopathy, only of Human Affections, Passions, Sensations, Sec. tions, &c. See ANTHROPOLOGY.

The Word is compounded of av spwnos, Man, and rasos

Paffion.

ANTHROPOPHAGI, Cannibals; or fuch as feed on

Human Flesh. See CANNIBAL.

The Word is compounded of the Greek av 3 gw705, Man, and paya, Edo, I eat ___ The primitive Christians were accused by the Heathens of being Anthropophagi; as appears from Tatian, Tertullian in his Apologeticks, Cap. VII. and Salvian de Provid. Lib. IV. They affirmed that the Christians, in the Mysteries of their Religion, killed a Child, and seasted on its Flesh. This Calumny was grounded on what they had heard of the Eucharist, and the Communion. See Eucharist, Communion, Altar, &c.

ANTHROPOPHAGY, the Act of eating human Flesh.

See ANTHROPOPHAGI.

Some Authors trace the Original of this barbarous Cuflom, as high as the Deluge; and attribute it to the Giants-Pliny mentions Scythians and Sauromatans; and Juvenal, Egyptians, who accustom'd themselves to this horrible Repast—Livy tells us, that Hannibal made his Souldiers eat human Flesh, to render them more fierce and daring in

In the fouthern Parts of Africa, and in some Parts of America; this horrid Practice still obtains. See CAN-

The Physicians think they have discover'd the Principle of Anthropophagy, and that it confifts in a black acrimonious Humour, which being lodg'd in the Coats of the Ventricle, produces this Voracity. And they give feveral Instances of this inhuman Hunger, even among their own Patients-M. Petit has disputed the Question, whether or

no Anthropophagy be contrary to Nature?

ANTI, a Greek Preposition, added to several English Words, in two different Senses—Sometimes it signifies before; asin Anti-Chamber, a place before the Chamber; in which case it has the same Meaning with the Latin, ante, before: fometimes again it fignifies contrary, or opposite, and is then derived from the Greek arti, contra, against; as in Antipodes, those who have their Feet opposite to ours.

In this latter Sense, the Word makes part of the Names of various Medicines : as Antivenereals, those used against the Pox; Antiarthriticks, those against the Gout; Anti-asthmaticks, against the Asthma; Antielminticks, against Worms ; Antaphroditicks, against Lust ; Anti-epilepticks, against the Falling Sickness, &c.

ANTI, in matters of Literature, are Pieces written by way of Answer, to others, whose Names are usually annex'd to the Anti.

See the Anti of M. Baillet; and the Anti-Baillet of M.

Menage. There are also Anti-Menagiana, &c.

Cafar the Dictator wrote two Books by way of Answer to what had been objected to him by Cato; which he call'd Anti-Catones; mentioned by Juvenal, Cicero, &c.

Vives affures us, he had feen Cafar's Anti-catones in an antient Library.

ANTIADES, a Term used by some Writers for the Glandules, and Kernels, more commonly called Tonsils and Almonds of the Ears. See Tonsil, Almond, and Amagdala, &c.

ANTIADIAPHORISTS, Antiadiaphorist, those opposite to the Adiaphorists. See Adiaphorist.

This Name was given, in the XVIth Century, to the rigid Lutherans, who disavow'd the Espiscopal Jurisdiction, and many of the Church Ceremonies, retain'd by the Moderate

many of the Church Ceremonies, retain'd by the Moderate Lutherans. See LUTHERAN.

The Word is compounded of the Greek avn contra, a-

gainst, and adiacopos, indifferent.
ANTIBACCHIC, ANTIBACCHIUS, in the antient Poetry, a Foot, confishing of three Syllables; the two first whereof are long, and the third short. See Foor. are the Words cantare, virtute.

It is so called as being contrary to the Bacchic, the first Syllable whereof is short, and the two last long; as egestas.

See BACCHIC.

ANTICARDIUM, in Anatomy, &c. that Part of the Breast just against the Heart, commonly called the Pit of the Stomach

The Word is compounded of avn, contra against, and

Cor, Heart.

ANTICHRESIS in the Civil Law, a Covenant or Convention, whereby a Person borrowing Money of another, engages, or makes over his Lands to the Creditor, with the Use and Occupation thereof, for the Interest of the Money

This Covenant was allowed of by the Romans; among whom Usury was prohibited: It was afterwards call'd Mortgage, to distinguish it from a simple Engagement, where the Fruits of the Ground were not alienated, which was call'd Vif gage. See MORTGAGE.
ANTICHTHONES, in Geography, are those People

who inhabit Countries opposite to each other.

The Word is Compounded of and, contra, and x.9w,

Terra.
The Term Antichthones is now used in the same Sense with Antipodes; but the Antients used it in a different one. They confider'd the Earth as divided by the Equator into two Hemispheres, the Northern and Southern; and all those who inhabited one of these Hemispheres were reputed Antichthones to those of the other. In this Sense the Word is used by Mela and other antient Authors. See

ANTICKS, ANTICE WORK. See ANTIQUE. ANTICIPATION, the Act of doing a Thing before the time. - Such a Debt was not yet become due; He Anticipated the time of Payment.

ANTICIPATION, in Philosophy. See PRENOTION. ANTICOR, ANTICOEUR OF ANTOCOEUR, OF Avant Cour, among Farriers, is usually described as a preternatural Swelling, of the Size and Figure of an Apple, occasioned by a fanguine and bilious Humour; and appearing in the Horfe's

Breast opposite to his Heart. A late Author affirms, that the generality of Writers on that Subject have been mistaken as to this Disease; attributing it to the Heart, whence it is by Solleyfell, called the Swelling of the Pericardium; whereas it is really an Inflammation in the Gullet, and Throat; and the same that in human Bodies, is called the Angina, or Squinancy.

ANTIDACTYLUS in Poetry, a Foot in Verse, con-

trary to a Dactyl; confifting of three Syllables, whereof the first two are short, and the last long. See DACTYL.

ANTIDATE, a spurious Date, prior to the true Date of a Writing Instrument, Act, Deed, or the like. See

ANTIDICOMARIANITES, or ANTIDIACOMARI-DATE. ANISTES, antient Hereticks, who pretended that the Holy Virgin had not preserved her Virginity, but that she had

feveral Children by Joseph. See VIRGIN. Their Opinion was grounded on some Expressions of our Saviour, wherein he mentioned his Brothers, and his Sisters.

-The Antidicomarianites, were the Disciples of Helvidius and Jovinian, who appeared in Rame toward the close of the IVth Century.

· ANTIDILUVIAN, fomething before the Deluge. See

DELUGE.

In this Sense, those Generations from Adam, till Noahls Flood, are called Antidiluvians; and those since descended from Noah, to the present time, are called Postdiluvians. See AGE, PATRIARCH, &c.

Dr. Burnet, and Dr. Woodward differ very widely about the Antidiluvian World; the former imagines its Face and Appearance to have been smcoth, equable, and in all re-

fpects different from what we now find them to be.

The latter on the contrary endeavours to prove, that the Face of the terraqueous Globe before the Deluge was the fame as it is now, viz. unequal, diffinguished into Mountains, and Dales, and having likewife a Sea, Lakes, and Rivers; that this Sea was falt as ours is; was subject to Tides, and posses'd nearly the same Space and Extent that it now does; and that the Antidituvian World was flock'd with Animals, Vegetables, Metals, Minerals, &c. that it had the same Position in respect of the Sun which ours new hath, its Axis not being parallel, but inclined, as at present, to the Plane of the Ecliptic; consequently that there were then the same Succession of Weather, and the same Vicissitudes of Seafons, as now. See TERRAQUEOUS, MOUNTAIN, &c. See also Fossit, &c.

ANTIDOTE, a Remedy taken either to prevent, or cure, Contagion. See PLAGUE, CONTAGION, PRESERVA-

Tive, &c.
The Word Antidote is also used to fignify a Medicine taken to prevent the ill Effects of some other, for instance, See Poison.

In this Senfe the Word has the same Signification with Alexipharmic, Alexiterial or Counterpoison. See ALEXI-PHARMIC, COUNTER-POISON, &C

The Word is borrow'd from the Greek and, against, and Nome, I give; as being fomething given against Poison, either by way of Medicine, or Preservative.

ANTIENT, or ANCIENT, usually stands opposed to

Modern. See Modern.

The Word comes from the French Ancien, of the Latin Antiquus. Thus we say the Antient Architecture, Antient Monuments, Antient Church. See ARCHITECTURE,

When we fay absolutely, the Antients, we mean the Greeks and Romans Thus, the Antients used to burn their Dead-The Learned have been greatly divided of late days, with regard to the Preference between the Antients and Moderns.

ANTIENT is fometimes opposed to young or new-We fay the antient Bishop of such a City, when he has resign'd his See, and a new one is put in his Place. The antient Bishop of Frejus, now Cardinal de Fleury.

ANTIENTS in Church-Discipline. See ELDERS.

The Society of Grays-Inn, confifts of Benchers, Antients, Barristers, and Students under the Bar: the Antients are the Elder, Barristers. See Inn, BARRISTER,

In the Inns of Chancery there are only, Antients and Students, or Clerks; and among the Ancients, one is yearly the Principal, or Treasurer—In the Middle Temple, Antients are such as are past their Reading, and never read. See TEMPLE.

ANTIENT is fometimes also used in a Military Sense for

an Enfign. See Ensign.

ANTIENTY, in some antient Statutes is used for Eldership or Seniority --- Thus the eldest Sister can demand no more than her other Sisters beside the Chief Mesne, by reafon of her Antienty.

ANTIENT, is also the Flag, or Streamer born in the Stern of a Ship. See FLAG, SIGNAL, &c.

ANTIENT Demessie, or Demain, is a Tenure, whereby all Manors belonging to the Crown in William the Conqueror's, and St. Edward's time, were held. See TENURE and DEMAIN.

The Numbers, Names, &c. hereof were enter'd by the Conqueror, in a Book call'd Doomsday-Book, yet remaining in the Exchequer; fo that such Lands as by that Book appear'd to have belonged to the Crown at that time, are called Antient Demesine. See Dooms-Day.

The Tenants in Antient Demessive are of two forts; one who hold their Lands frankly by Charter; the other by Copy of Court-Roll, or by the Verge at the Will of the Lord, according to the Custom of the Manor. See FREE-HOLD, COPY-HOLD, &C.

The Advantages of this Tenure, are, 1. That Tenants holding by Charter cannot be rightfully impleaded out of their Manor; and when they are, may abate the Writ by pleading the Tenure. 2. They are free from Toll for all things relating to their Livelihood and Husbandry; nor can be impanell'd on any Inquest.

These Tenants held originally by plowing the King's Land, plashing his Hedges, and the like Services, for the maintenance of his Houshold; and it was on this account fuch I iberties were given 'em, for which they may have

No Lands are to be accompted ancient Demesne, but such as are held in Soccage. See Monstraverunt.

ANTIHECTICKS, ANTIHECTICA, Remedies against

Hestical Disorders. See Hectic.
Antihecticum Poterii, in Pharmacy, a celebrated Chymical Preparation, made of equal quantities of Tin, and chalybeated Regulus of Antimony, by melting 'em in a large Crucible, and putting to them, by little and little, three times the quantity of Nitre: the Detonation being over, the whole is wash'd with warm Water till no saltness

It is a very penetrating Medicine, making way into the minutest Passages, and searching even the nervous Cells; whence its use in Hestic Disorders, from which it derives

the Name. See HECTIC.

It is applied to good purpose in Heavinesses of the Head, Giddiness, and Dimness of Sight, whence proceed Apo-plexies and Epilepsies; And in all Affections and Foul-nesses of the Viscera of the lower Belly is reckoned inferior to nothing. Thus it obtains in the Jaundice, Dropfies, and all kind of Cachexies. Dr. Quincy adds, that there is scarce a Preparation in the Chymical Pharmacy of greater efficacy in most obstinate chronick Distempers.

ANTILOGARITHM, is the Complement of the Logarithm of a Sine, Tangent or Secant; or the Difference of that Logarithm, from the Logarithm of ninety Degrees.

See LOGARITHM and COMPLEMENT.

ANTILOGY, ANTILOGIA, a Contradiction between two Expressions or Passages in an Author. See CONTRA-

Tirinus has published a large Index of the seeming Antilogies in the Bible; i. e. of Texts which apparently contradict each other, but which are explained and reconciled by him, in his Comments on the Bible ---- A Maltese of the Oratory in Italy, has attempted the like; but has done little more than rehearse what occurs of that kind in the principal Commentators.

The Word is Greek, antinopia, q. d. Contrary Saying. ANTIMENSIA, a kind of Confecrated Table-Cloth, occafionally used in the Greek Church, in lieu of a proper Al-

tar. See ALTAR.

F. Goar observes, that in regard the Greeks have but few confecrated Churches; and that confecrated Altars are not things eafy to be removed: That Church has for many Ages made use of certain consecrated Stuffs, or Linnens call'd

Antimensia, to serve the purposes thereof.

ANTIMONARCHICAL, something that opposes or stands against Monarchy, or Kingly Government. See Mo-

NARCHY.

Antimonarchical is frequently used in the Sense of Re-

publican. See REPUBLIC

ANTIMONIALS, in Medicine, Preparations of Antimony; or Remedies whereof Antimony is the Basis, or principal Ingredient. See ANTIMONY.

Antimonials are chiefly of an emetic tendency; tho' they may be fo qualified as to become either Cathartic, or Diaphoretic, or even only Alterative. See EMETIC, CA-

THARTIC, Ec.

Dr. Quincy affures, that there are no Medicines in Pharmacy to be compared with these in Maniacal Affections: for that there are no Emetics or Cathartics of any other Tribe that are strong enough for such Patients, unless in an Over-

dose, which might be dangerous. See MANIA.

An Antimonial Cup, made either of Glass of Antimony, or of Antimony prepared with Salt-petre, tho' a Substance indisfoluble by the Stomach, will give a strong Cathartic, or Emeric Quality to any Liquor poured into it; without any diminution of its own weight.

ANTIMONY, ANTIMONIUM, in Natural History, a Mineral Substance, of a Metalline Nature; having all the feeming Characters of a real Metal, excepting Malleability.

See MINERAL and METAL.

Antimony is what we properly call a Semi-Metal; being a Fossil Glebe, composed of some undetermined Metal, combined with a fulphurous and stony Substance. See SE-MI-METAL.

It is found in Mines of all Metals; but chiefly those of Silver and Lead: That in Gold Mines is usually held the best-It has also his own Mines; particularly in Hungary, Transylvania, and Germany, and several Provinces of France.

Antimony is found in Clods or Stones of several fizes, bearing a near refemblance to black Lead; only that it is lighter and harder: whence also it is called Marcaste of Lead; and its metalline part supposed to be of that Species. See LEAD.

Its Texture is fomewhat particular, being full of little shining Veins or Threads, like Needles; brittle as Glassfometimes there are Veins of a red or golden Colour inter-

Writs to fuch as take the Duties of Toll, &c. See SER-mixed, which is called Male Antimony; that without 'embeing denominated Female—It fuses in the Fire, tho'

with some difficulty; and diffolves more easily in Water.
When dug out of the Earth, it is put into large Cruc bles, fused by a violent Fire, and then poured into Cones, or Antimonial Horns; which makes the common or crude Antimony of the Shops, the Apex whereof is always the best and purest part, as the Basis or broadest part is the soulest.

Antimony is supposed by many of the Chymists to contain the seminal Principles of all kind of Bodies; and accordingly the Character whereby it is denoted in their Writings, is the fame with the Character of the Earth; to denote that Antimony is a kind of Microcofm. See CHARACTER and EARTH

The Uses of Antimony are very Numerous, and Impor--It is a common Ingredient in Specula, or burning Concaves, ferving to give them a finer Polish—It makes a Part in Bell-Metal; and renders the Sound more clear-It is mingled with Tin to make it more hard, white, and founding; and with Lead, in the casting of Printer's Letters, to render them more smooth and firm. It is a general

Help in the melting of Metals, and especially in casting of Cannon Balls. See Speculum, Foundern, &c.

Antimony is the Stibium of the Antients; by the Greeks called style.—The reason of its modern Denomination is usually referr'd to Basil Valentine, a German Monk, who having thrown some of it to the Hogs, observ'd, that after purging them violently, they immediately grew sat upon This made him think that by giving his Fellow-Monks a like Dose, they would be the better for it. The Experiment however succeeded so ill, that they all died of it; and the Medicine thenceforward was called Antimony, q. d. Anti-Monk.

Its fingular Properties and Effects have occasion'd it various other Denominations; as Proteus, by reason of its various forms and appearances, Lupus, Devorator, Saturn of the Philosophers, Balneum Solis, Lavacrum Leprorum, &c. all chiefly respecting its Faculty of destroying, and diffipating whatever Metals are sufed along with it, all except Gold; whence its great Use in refining and purifying. See REFINING, PURIFYING, GOLD, &c.

Antimony, is particularly used in Pharmacy, under various Forms, and with various Intentions——Its medicinal Virtue is supposed to arise from the sulphurous part in its Composition, which being dissolved by any proper Menstruum, sets at liberty an active volatile Salt, or other un-

known Principle, to which the Operation is chiefly owing. See Antimonials. See also Sulphur.

Before the XIVth Century, Antimony had no place in Medicine; otherwise than as an Ingredient in some Cosmeticks, but about that time Passi Valentina begins for the ticks: but about that time, Basil Valentine having found a method of preparing, and correcting the dangerous Qualities of its Sulphur, published a Book, entitled Currus Triumphalis Antimonii, wherein he maintained it a fure Remedy for all Difeafes—But, in spight of all he could fay in its behalf, tho' confirmed by Experience, Antimony remained in a general Neglect, upwards of 100 Years; till about the beginning of the XVIth Century, when it was brought into Vogue by Paracelfus—The Parliament of Paris. immediately upon this Refloration, condemned the use of it in form; and a Physician named Befnier, having been found delinquent herein, was excluded the Faculty. It seems, a deal of Mischief had been done by it, for war of knowing the proper ways of Application; for that the Arret of Parliament reprefents it as a mere Poifon—
Several learned Men complained of fo fevere and unjust

a Prohibition; and by a Course of happy Experiments brought it into Esteem again: whence in spight of all the Invectives made against Antimony, by divers Authors, it was at length replaced, in the Year 1637, by Public Authority, among the Number of Purgative Drugs; and was inferted accordingly in the Pharmacopæia, published by the Faculty the same Year.

Patin did all he could to decry Antimony: in his Letters we find an unusual Vehemence express'd against it-He had even compiled a large Register of Persons whom the Physicians had kill'd by it; which he called the Marty-

rology of Antimony.

Crude Antimony, or Antimony in Substance, is the Native Mineral Antimony, melted down and cast in Cones, as abovementioned—It is much used in Diet-drinks and Decoctions of the Woods, and Compositions against the Scurvy, as a Diaphoretic, and Deobstruent. See DIAPHORE-

Prepared ANTIMONY is that which has undergone some Chymical Process, whereby its Nature and Powers are altered or abated; and this differently, according to the Circumstances of the Preparation. See ANTIMONIALS.

Antimony, fays Mr. Boyle, alone, or affociated with one

or two other Ingredients, by a variety of Operations and Compositions, might be brought to furnish a whole Apo-Ff