

twice a Year; viz. About the 10th of *March*, and the 12th of *September*; the first of which is the *Vernal*, and the second the *Autumnal Equinox*.

As the Sun's Motion is unequal, that is, sometimes swifter, and sometimes slower; (from the Causes already explain'd under the Article EQUATION) it comes to pass, that there are about Eight Days more from the *Vernal*, to the *Autumnal Equinox*, than from the *Autumnal* to the *Vernal*: The Sun spending more Time in travelling thro' the Northern, than the Southern Signs.

According to the Observations of M. *Cassini*, the Sun is 186 d. 14 h. 53'. in the Northern Signs; and only 178 d. 14 h. 56'. in the Southern. The Difference of which is 7 d. 23 h. 57'.

The Sun being continually advancing forwards in the *Ecliptic*, and gaining a Degree every Day; he makes no Stay in the *Equinoctial* Points, but the Moment he arrives in 'em, leaves 'em.

Of Course, therefore, tho' the Day the Sun enters the *Equinoctial* Point, is call'd the *Equinox*, as being reputed equal to the Night; yet is not it precisely so, unless the Sun enter the *Equator* at Mid-day. For if the rising Sun should enter the *Vernal Equinox*, at setting, he will have departed from it, and have got Northwards about 12': Consequently, that Day will be somewhat longer than 12 Hours, and the Night proportionably shorter.

The Time of the *Equinoxes*, i. e. the Moment in which the Sun enters the *Equator*, is found by Observation; the Latitude of the Place of the Observer being given.

Thus, in the *Equinoctial* Day, or near it, take the just Meridian Altitude of the Sun; if this be equal to the Altitude of the *Equator*, or the Complement of the Latitude, the Sun is that very Moment in the *Equator*. If it be not equal, the Difference is the Sun's Declination. The next Day observe the Meridian Altitude as before, and find his Declination: If the Declination be of different Kinds, viz. the one North, and the other South, the *Equinox* has happen'd in the Interval of Time between 'em. Otherwise, the Sun has either not enter'd the *Equinoctial*, or had pass'd it at first. From these two Observations, a Trigonometrical *Calculus* gives the Time of the *Equinox*.

It is found by Observation, that the *Equinoctial* Points, and all the other Points of the *Ecliptic*, are continually moving backward, or in *Antecedentia*, that is, Westward. This retrograde Motion of the *Equinoctial* Points, is that famous and difficult Phenomenon, call'd the *Precession of the Equinoxes*. See PRECESSION of the *Equinox*.

EQUIPAGE, a Ship's Crew; or the Officers, Soldiers, Sailors, and other Persons, that man and manage the same; with the Arms, Provisions, Merchandizes, &c. where-with it is loaded. See SHIP, &c.

The Sailors that are to work and manage a Ship, are regulated by the Number of Lasts it may carry; each Last making two Tun.

The *Equipage* of a *Dutch* Ship, from 40 to 50 Lasts, is 7 Sailors and a Swabber; from 50 to 60 Lasts, the *Equipage* consists of 8 Men and a Swabber; and thus increases at the Rate of one Man for every 10 Lasts; so that a Ship of 100 Lasts has 12 Men, &c.

English and *French* Crews, are usually stronger than *Dutch*; but always about the same Proportion.

EQUIPPE, in Heraldry, expresses a Knight equipp'd, i. e. arm'd at all Points.

EQUIPOLLENCE, in Logic, is when there is an Equivalence between two or more Terms, or Propositions; i. e. when they signify one and the same Thing, tho' they express it differently. Such Propositions, &c. are said to be *Equipollent*. See EQUIVALENT.

EQUITY, is Justice, or Right, mitigated and temper'd by the Consideration of particular Circumstances; or a Correction, or Moderation of the Severity of some Law; or a Temperament, which, without being unjust, abates the Rigour of some just Law. See LAW.

This is what the *Greeks* call *ἐπιείκεια*. The utmost Severity of a good Law, is frequently contrary to Justice; it should always have *Equity* for its Rule and Guide. *Summum jus, sepe summa injuria*.

The Foundation of *Equity*, is not that there is any Mistake in the Law; but that the Law was laid down universally; when as all Circumstances cou'd. not be consider'd, or taken in under one Law.

Equity, therefore, is not so much a Correction of a Law, as an Amendment; nor yet so properly an Amendment of the Law it self, as of the Opinion arising from its being ill understood, or ill applied.

In this it is distinguished from a *Dispensation*, which takes away the Obligation of the Law in some particular Case; whereas a Correction does not take away any Thing of the Obligation, but only shews in what Sense it is to

be taken, lest there should be imagin'd any Obligation, where there is none.

For an Instance, suppose it an express Law, that the *City* being now beset with an *Enemy*, the *Gates* be all shut; and suppose it fall out, that the *Enemy* is then in pursuit after some of the *Citizens* by whom it is defended; so that it would be highly prejudicial thereto, not to open 'em the *Gates*: *Equity* here decrees the *Gates* to be open'd, contrary to the express Word of the Law.

Thom. Aquin. proposes another Instance: Suppose it Law, that whoever refuses to restore what had been committed in Trust to him, shall pay a grievous Mulct; and suppose some Person refuse to restore a Sword left with him, to a Mad-man. This Case is comprehended in the Sense and Intendment of the Law, tho' not in the Words thereof. And the Legislator himself, if he were present, would except it. *Equity*, therefore, must here step in, to correct or supply the Defects of the Judge, and acquit the Man of the Mulct.

In this View, *Equity* is of two Kinds, and those of contrary Effects: The one abridges, and takes from the Letter of the Law; and the other enlarges, and adds thereto.

The first is defined, the Correction of a Law, made generally in that Part wherein it fails: As, suppose an Act made, That whosoever does such a Thing, shall be a Felon, or suffer Death; yet if a Madman, or an Infant, who hath no Discretion, do the same, he shall neither be a Felon, nor suffer Death.

The other is defined an Extension of the Words of the Law, to Cases unexpress'd, which yet have the same Reason; so that, when one Thing is enacted, all other Things, which are of the like Degree, are so too.

Thus in the Statute which ordains, That in Action of Debt against Executors, he that doth appear by Distress shall answer; doth extend, by *Equity*, to Administrators; for such of them as shall appear first by Distress, shall answer by the *Equity* of the said Act: *Quia sunt in equali genere*.

EQUITY is also used for the Virtue of Justice. See JUSTICE.

EQUITY, in our Laws, &c. is frequently used for the Court of Chancery, where Controversies are supposed to be determined, according to the exact Rules of *Equity* and Conscience, by mitigating the Rigour of the Common Law. See CHANCERY.

Equitas sequitur Legem, is an old Maxim in Law, but from the great Increase of Suits in Chancery, some have thought fit to give it this Construction, That in all Causes after a Man has been at Law, he must go into *Equity*.

EQUIVALENT, is understood of something that is equal in Value, Force, or Effect to another. See EQUALITY.

Equivalence is of various Kinds, in Propositions, in Terms, and in Things.

Equivalent Terms are, where several Words that differ in Sound, have yet but one and the same Signification; as *Every Body was there*, and *no Body was absent*; *Nihil non* and *omne*.

Equivalence in Things, is either moral, physical, or statical. *Moral*, as when we say, that the commanding or advising a Murderer, is a Guilt *Equivalent* to that of the Murderer: *Physical*, as when a Man, who has the Strength of two Men, is said to be *Equivalent* to two: And *Statical*, whereby a less Weight becomes of equal Force with a greater, by having its Distance, or the like, increas'd.

EQUIVOCAL, EQUIVOQUE, is applied to an Expression that is dubious and ambiguous; or that may have several Senses, one true, and another false. See EQUIVOCATION.

EQUIVOCAL, EQUIVOCUM, EQUIVOQUE, in Logic, by the *Greeks* call'd *Homonymum*, is any Word which under one Sense exhibits several Idea's, or is adapted to different Conceptions.

As the Word *Emperor*, which is both the Name of a Dignity, the proper Name of a Person, and the Name of a Plant. So also the Latin *Gallus*, which stands indifferently for a Cock, and a *Frenchman*.

In which Cases one Word denotes divers Conceptions, one Word divers Things. Whence that common Definition of *Equivocal* in the School, *quorum nomen est commune, Ratio vero Essentia secundum illud Nomen diversa*.

The Philosophers have distinguished *Equivocals*, into *Active* and *Passive*; or into *Equivoca*, *Equivocantia*, and *Equivocata*.

Equivoca Equivocantia, or those that denominate and signify Things, are Words common to several Things in a very different Signification, i. e. to several Things which have a similar Essence, correspondent to the similar Denomina-
tion.

tion. *E. gr.* The Word *Taurus*, which stands for a Sign, a Mountain, and an Animal; and in one signifies a lowing Animal; in another, a Heap of Stones and Earth; and in the third, a Constellation, or System of Stars.

Equivoca Equivocata, or those that are called, or denominated; are the Things signified by ambiguous Names, *e. gr.* a Sign, a Mountain, and an Animal. Which last Species of *Equivocals* alone, *Aristotle* seems to have had in View in his Definition, which agrees to these, and these only.

EQUIVOCATION, the using a Term, or Expression, that has a double Signification. See **EQUIVOCAL**.

Equivocations are Expedients to save telling the Truth, and yet without telling a Lye for the Matter. The Fathers are great Patrons of *Equivocations*, and mental Reservations; holding, that the Use of such Shifts, and Ambiguities, is in many Cases allowable.

St. *Augustin*, particularly, is reproach'd with endeavouring to vindicate *Isaac* for saving his Wife from a Crime, by an *Equivocation*: *Tacuit aliquid veri, & non dixit aliquid falsi*. To advance a dubious Proposition, knowing it will be understood in a Sense different from that you give it in your Mind, is an *Equivocation*, in Breach of good Faith and Sincerity. See **TRUTH, FALSHOOD, &c.**

EQUIVOCATION, or **EQUIVOCAL**, in Moral Theology, is strictly understood of a Term, or Phrase, with two different Significations; the one common, and obvious; the other more unusual, and remote; the latter of which being understood by the Speaker, but the former by the Hearers, they conceive something different from one another.

Of this we have an Instance in St. *John*, Chap. 11. where our Saviour is represented as saying, *Lazarus sleepeth*: For the Disciples taking the Word *Sleeping* in the usual Signification, concluded that *Lazarus*, whom they had been told was sick, began to take Rest, and would soon recover; but *Jesus*, taking the Words in a less, direct, and usual Signification, meant that *Lazarus* was dead.

When the *Equivoque* consists of several Words, 'tis properly call'd an *Amphibology*: Of which we have an Instance in St. *John*, Chap. 2. *Destroy this Temple*, says *Jesus Christ*, speaking to the Jews, *and I will raise it again in three Days*.

The Use of *Equivoques* has been greatly disputed among the modern Casuists: Many grave Authors deny that it is allowable to use them on any Occasion whatever. Their Reason is, that an *Equivoque* is to all Intents and Purposes the same with a Lye. See **FALSHOOD**.

Others, on the contrary, particularly *Cabussot*, a Divine famous among the Priests of the Oratory, hold a World of Difference between an *Equivocation* and a Lye; maintaining that it is ever criminal to use a Lye; but that there are some Occasions where an *Equivocation* may be used innocently: And such, in Effect, is the Sentiment of St. *Thomas*, St. *Antonin*, St. *Raymond*, and especially St. *Augustin*, as *Fa. Cabussot* seems to have demonstrated. *Lib. IV. Theor. de Prax. Jur. Can. Edit. Lugd. 1685. Cap. 4.*

EQUIVOCAL Generation, is a Method of producing Animals and Plants, not by the usual Way of Coition between Male and Female, but I know not what plastic Power, or Virtue in the Sun, &c. See **GENERATION**.

Thus Insects, Maggots, Flies, Spiders, Frogs, &c. have usually been supposed to be produced by *Equivocal Generation*, i. e. by the Heat of the Sun warming, agitating and impregnating the Dust, Earth, Mud, and putrified Parts of Animals.

This Method of Generation, which we also call *spontaneous*, was commonly asserted and believed among the ancient Philosophers: But the Moderns, from more and better Observations, unanimously reject it, and hold that all Animals, nay and Vegetables too, are *Univocally* produced, that is, by Parent Animals, and Vegetables of the same Species and Denomination. See **UNIVOCAL Generation**.

'Twere a Thing one would imagine sufficient to discredit the *Aristotelian*, or rather the *Egyptian Doctrine of Equivocal Generation*, to see Flies, Frogs, Lice, &c. to be Male and Female; and accordingly to engender, lay Eggs, &c.

To imagine that any of those Creatures could be spontaneously produced, especially in so romantic a Manner, as in the Clouds, as they particularly thought the Frogs were, and that they dropp'd down in Showers of Rain, were, certainly, highly unphilosophical.

Yet some, even to this Day, credit the raining of Frogs; and, among the rest, the very curious and learned Dr. *Lifter*, seems inclined to the Opinion: Instancing in Frogs, found on the Leads of the Lord *Aston's* Gatehouse at *Tixal* in *Staffordshire*, which he imagines came there by some such Means. But we may make a Judgment of this, and a hundred the like Reports to be met with

in considerable Authors, from some other the like Relations that have been better inquired into. Such are several Reports of the raining of *Millet-seed, Wheat, Whitings, &c.* An Account of which, with the Grounds of the Deceit, see under **RAIN** and **SHOWER**.

The Doctrine of *Equivocal Generation* we call an *Egyptian Doctrine*, as having, in all Probability, had its Rise in *Egypt*, to save the Hypothesis of the Original Production of Men, and other Animals, out of the Earth, by Help of the Sun's Heat. To prove which, the *Egyptians*, as *Diodorus Siculus* observes, produce this Observation; that about *Thebes*, when the Earth is moisten'd by the *Nile*, and afterwards impregnated by the intense Heat of the Solar Rays, an innumerable Swarm of Mice do come forth: Whence he infers, that all Kinds of Animals might equally have arose out of the Earth at the Beginning of Things. And from these, Bishop *Stillingfleet* takes the other Writers and Adherents, to the Doctrine of *Equivocal Generation*, *Mela, Pliny, Ovid, &c.* to have borrow'd the Hypothesis, without enquiring into its Truth. *Derham's Phys. Theol. Lib. IV. C. 15.*

EQUULEUS, among the Antients, was an Instrument of Torture, or Punishment; being a Kind of *Wooden-Horse*, made with very sharp Ridge, or Back, widening much in its Descent. See **PUNISHMENT**.

The Criminal being seated on the Ridge, Weights were hung to his Feet, to make his Seat more painful.

This Punishment is still retain'd in Cittadels and Armies; where the Soldiers of the Garrison, &c. are condemn'd to the *Wooden-Horse*, for divers Offences.

Hieronymus Magius, when a Prisoner among the *Turks*, wrote an express Treatise *de Equuleo*; and another of Bells; merely, as 'tis said, from his Memory, without any Assistance of Book. *Sigonius* has another Treatise on the same Subject.

EQUULEUS, in Astronomy, a Constellation of the Northern Hemisphere. See **CONSTELLATION**.

The Stars in the Constellation *Equuleus*, in *Ptolomy's* Catalogue are 4; in *Tycho's* 4; in Mr. *Flamsteed* Catalogue 10.

The Longitudes, Latitudes, Magnitudes, &c. whereof are as follows.

Stars in the Constellation EQUULEUS.

Names and Situations of the Stars.	Sign.	Longit.	Latitude North.	Magnit.
	♈	14 12 57	20 32 56	5
		15 59 37	23 02 36	6
		16 02 30	21 16 01	6
		16 25 37	21 38 31	6
Preced. of two in the Mouth.		19 06 24	25 13 12	4
5				
		19 07 07	25 06 52	6
Subseq. of the same.		20 07 30	24 46 57	4
Preced. of two in the Head.		18 47 48	20 09 09	4
		20 51 05	21 42 53	6
Subseq. in the same.	♈	21 07 02	21 03 06	4

EQUULEUS, in the Arts and Manufactures. See **HORSE**.

ERADICATIVE, in Medicine. An *Eradicative Cure* is that which takes away the Cause, or Root of the Distemper; in which Sense it stands opposed to *palliative*; which relieves for a Time, but not going to the Cause of the Disorder, does not prevent its Return. See **CURE**.

The Word is a Compound of *e* out, and *radix* Root.

ERANARCHA, a publick Officer among the ancient *Greeks*, whose Business was to preside over, and direct the Alms and Provisions made for the Poor.

The *Eranarcha* was properly the Administrator, or Commissioner of the Poor: When any Person was reduced to Poverty, taken Captive, or had a Daughter to marry, which he could not effect for Want of Money, &c. this Officer call'd an Assembly of Friends and Neighbours, and taxed each according to his Means and Estate, to contribute towards his Relief. This is what we learn from *Corn. Nepos*, in his Life of *Epaminondas*.

The Word is form'd of the Greek *εργος*, Alms, Contribution, and *αρχη*, Command.

ERASED, in Heraldry, expresses any Thing violently torn off from its proper Place.

It is used in Contra-distinction to *Couped*, which signifies a Thing clean cut off. The Family of *Card* bears *Ermine*, a *demy Lion rampant erased*, *Azure*, &c.

ERASTIANS, a religious Sect, or Faction, that arose in *England* during the Time of the Civil Wars.

They were thus call'd from their Leader *Tho. Erastus*; whose distinguishing Doctrine it was, that the Church had no Right to discipline, that is, no regular Power to excommunicate, exclude, censure, absolve, decree, or the like.

ERECT Flowers, are such as grow upright, without hanging or reclining the Head. See FLOWER.

ERECT Vision. See VISION.

ERECT { *Direct*
 { *Declining, &c.* } *Dials*. See DIAL.

ERECTION, the Act of raising, or elevating a Thing, in a right Line. See ELEVATION.

The *Erecting* a Perpendicular on a Line given, is a popular Problem in Geometry. See PERPENDICULAR.

The Term is also used figuratively: As, the *Erection* of a Marquisate into a Dutchy; Bishopricks can only be *Erected* by the King. It was antiently the Practice to *erect* Statues to great Men. See STATUE.

Cato, the Cenfor, being ask'd why a Statue was not *Erected* him? I had rather, says he, hear the Question made, than hear it ask'd why a Statue was *Erected* me.

ERECTION, is particularly used in Medicine, for the State of the Penis, when swell'd, and distended by the Action of the Muscles, call'd *Erectors*, or *Erectores*. See PENIS and ERECTOR.

There is also an *Erection* of the Clitoris, perform'd by Muscles provided for that Purpose. See CLITORIS, &c.

An Alternation of *Erection*, and Flaccidity in the Penis, Dr. Drake observes, is of absolute Necessity: The first to the Performance of its Office; the second for the Security of the Part. Without an *Erection* it were impossible to emit and lodge the Seed where it ought to be; and with a constant one, almost as impossible to secure the Part from external Injuries. — To say nothing of the Loss of Infatigation, which must be a necessary Consequence of constant *Erection*. See PRIASPISMUS.

The *Erection* of the Penis, consists in a Distention of its *Corpora Caverosa*, by an extraordinary Quantity of Blood pent up therein. See CAVERNOSA.

That the Blood is the Matter which distends the Penis in *Erection*, is evident from Abundance of Experiments; tho' the most convincing is that of firmly tying the Penis of an Animal (as has been frequently done to a Dog) in *Coitu*; wherein, nothing has been found but Blood to distend it. Hence, in the Bodies of Criminals, that hang long after Death, the Penis becomes erected; the Blood, in that Position, falling to the inferior Parts, and stopping there.

By blowing into the Blood Vessels after Death, the Penis becomes *Erected*. This was first discover'd by Mr. Cowper, upon viewing its Veins, after he had distended 'em with Wind; whence it plainly appear'd, that the external Trunks pass'd, some under its Skin only, and some over the *Ossa pubis*: Beside, that a vast Number of other Veins on the *Dorsum penis*, unite and empty themselves into one Trunk, call'd *Vena penis*, which passes immediately under a transverse Ligament of the *Ossa pubis*, which is compress'd by the Approximation of the *Dorsum penis*, to the Ligament of the *Pubis*. This Application of the *Dorsum penis* is effected by its *Musculi Directores*, pulling down the *Crura* of the *Corpora Caverosa Penis*, which are tied up at their Juncture in the Body of the *Penis*, to the *Os pubis*, by the *Ligamentum Suspensorium*. Now, this cannot happen to the cavernous Body of the *Urethra*, by Reason there is no Bone, whose Position can give Rise to a Ligament, which can have that Effect on its Veins: Wherefore, the *Musculi Accelatores*, embracing the Veins of the Bulb do that Office, tho' not so effectually as in the *Penis* it self.

Accordingly, the Glans is not always perfectly distended with the *Penis*, and soonest becomes flaccid on an *Erection*. See GLANS.

The Blood, by such Means, being precluded from its Return, the *Corpora Caverosa* must of Necessity become distended, if we consider their Structure above-mentioned, with Respect to the Veins. The Arteries, which before were flaccid, have now their Trunks also distended, and do more plentifully import Blood into the *Corpora Caverosa*.

But since it is absolutely necessary some Part of the detain'd Blood should be still passing off, lest it become grumous, and unfit for a Reflux; the *Vena preputii* communicate with those of the *Penis* it self; whereby Part of the Blood may be return'd from the *Penis* during its *Erection*, and give Way to a fresh Supply from the Arteries, and preserve the Circulation uninterrupted. See CIRCULATION.

ERECTOR Clitoridis, in Anatomy, a Pair of Muscles arising from the Protuberances of the *Ischium*, and inserted into the spongy Bodies of the *Clitoris*; which they serve to erect in Coition. See CLITORIS.

ERECTOR Penis, a Pair of Muscles arising fleshy from the Protuberances of the *Ischium*, below the Beginning of the cavernous Bodies of the Yard, into whose thick Membranes they are inserted.

Their Use is to pull the Yard towards the *Os pubis*, whereby its greatest Vein is compress'd, and the reflux Blood denied its Passage under those Bones; which makes it swell. See ERECTION.

EREMITE. See HERMIT.

ERICHTONIUS, in Astronomy; a Constellation, the same as *Auriga*. See AURIGA.

ERIDANUS, in Astronomy, a Constellation of the Southern Hemisphere. See CONSTELLATION.

The Stars in the Constellation *Eridanus*, in *Ptolomy's* Catalogue are 30: In *Tycho's* 19: In Mr. *Flamsteed's* 68: The Longitudes, Latitudes, Magnitudes, &c. whereof are as follow.

Stars in the Constellation ERIDANUS.

Names and Situations of the Stars.	Sign.	Longit.		Latitude.		Magnit.
		°	'	°	'	
First from the Turn of the River to the Brest of Cetus.) A Second.	γ	27	43 50	32	46 03	4
First in the River before the Brest of Cetus.)	α	28	17 41	35	32 44	4
	β	4	24 50	24	33 38	3
	γ	28	40 53	38	43 48	6
	δ	7	23 04	18	42 23	6
5						
	γ	28	59 23	38	33 16	6 7
	δ	7	31 58	19	10 52	6
Preced. Middle.		6	02 44	23	45 20	5 6
Second before the Brest of Cetus.		6	26 39	23	54 37	6
		6	52 09	23	57 16	5
10						
Third of those following Turn of Riv. Inform. within the last Sinus.		0	25 00	39	00 01	3 4
Third before the Brest of Cetus.		0	11 14	44	45 01	3
		9	29 25	25	57 22	3
		9	35 13	26	19 46	6
		5	06 42	39	09 28	6
15						
Fourth behind the Turn of the River.		5	45 03	38	32 17	4
		14	30 20	23	22 27	4 5
Fourth before the Brest of Cetus.		13	35 20	27	46 30	3
Fifth behind the Turn.		9	51 32	39	28 14	4
Preced. of two Informes over the Riv.		17	39 24	18	26 20	5
20						
		12	08 57	35	40 15	5 6
		17	06 37	24	08 18	5
Fifth before the Brest of Cetus.		16	30 56	28	46 16	3
		19	11 36	20	27 17	5
		19	30 50	19	38 34	6
25						
Subseq. and more South. Sixth behind the Turn.		16	37 28	31	09 15	4
More South. but contiguous to this.		13	04 15	41	53 09	4
		13	00 52	42	34 32	6
		20	18 16	24	42 25	7
		20	16 20	25	00 38	5 6
30						
Subseq. Inform. over the River. Eighth behind the Turn.		21	17 38	22	45 43	4 5
In the second Bend of the River.	γ	14	31 20	43	40 50	5
		19	31 34	33	13 35	3
		21	32 24	21	47 28	5
Ninth beyond the Turn.		16	38 37	43	30 44	4
35						
North. of two beyond the first Bend. Next before the second Bend.		24	40 24	27	29 56	6
South. beyond the first Bend.		25	05 51	27	30 00	3 4
Preced. of two beyond the 2 d Bend.		25	00 50	30	57 28	5
		26	07 45	28	13 03	4
		18	07 00	53	58 54	5
40						
Preced. in the first Bend. Subseq. beyond the second Bend.		28	59 47	25	01 01	5
		20	06 13	54	33 15	5 6
	II	1	15 15	20	11 27	5 6
		1	53 24	21	43 53	5 6
		1	12 38	28	24 50	5
45						
Subseq. in the first Bend.		1	00 31	29	53 52	4
		2	29 15	25	08 39	4
		3	35 35	20	54 06	5 6
North. in the 2 d Bend toward the West. Small one contiguous to the Subseq.	γ	25	08 20	50	56 43	4
(in the 1 st Bend.	II	2	59 03	24	20 37	6
50						
South. in the second Bend.	γ	25	32 21	51	51 01	3
	II	0	56 10	36	01 48	3 4
		0	23 41	41	25 03	3 4
		3	33 10	30	49 18	6
		3	45 58	30	28 21	6
55						
Preced. before the first Bend.		5	00 53	25	24 13	4
		3	11 25	30	01 49	5 6
		3	36 38	38	27 13	6
		4	07 47	38	24 20	6
Middle before the first Bend.		6	43 03	27	50 40	5
60						
Small one contiguous to it.		7	43 46	27	30 49	6
		7	59 51	32	49 13	6
		7	41 00	35	04 52	6
Subseq. before the first Bend. That next the Rise of the River.		8	53 02	29	48 30	5
		10	41 18	27	16 56	6
65						
North. in the Rise of the River towards Orion's Leg.)		10	57 20	27	53 48	3
South in the Rise of the River.	II	11	15 23	27	17 50	6
		10	52 55	31	34 10	4

ERIGENS *Penis*. See *ERECTOR Penis*.



ERMINE, in Heraldry, a white Field, or Fur, powder'd, or interspersed with black Spots. See *FUR*.

It is supposed to represent the Skin of an Animal, of the same Denomination; which some will have a *Water Rat*, others a *Mustela*, or Sort of *Weazle*, and others an *Armenian Mouse*. In Effect, there is no

Animal whose Skin naturally corresponds to the Herald's *Ermine*.

The Animal is Milk white; and so far is it from Spots, that the Tradition has it, he will rather die, or be taken, than fully its Whiteness. Whence its symbolical Use.

But white Skins having for many Ages been used for the Linings of the Robes of Magistrates, and great Men; the Furriers, at length, to add to their Beauty, used to sew Bits of the black Tails of those Creatures upon the white Skins; to render them the more conspicuous. Which Alteration was introduced into Armoury.

The Sable Spots in *Ermine* are not of any determinate Number, but may be more or less, at the Pleasure of the Painter or Furrier.



ERMINEES, is used by some *English* Writers for the Reverse of *Ermine*, i. e. for white Spots on a black Field; but on what Foundation no body can tell; for the *French*, from whom we have our Heraldry, have no such Term; but call this black powder'd with white, *Contre Ermine*; as denoting the Counter, or Reverse of *Ermine*; which is

white powder'd with black.



ERMINEE. A Cross ERMINEE, is a Cross composed of four *Ermine* Spots, placed in that Figure. See *CROSS*.

It must be observ'd, that the Colours in such Arms are not to be express'd; by reason, neither the Cross, nor the Arms, can be of any Colour but white and black.

Colombiere blazons it *quatre queues de Hermine en Croix*. The Editor of *Guillin* describes it thus: A Cross of four *Ermines*; or, as I think more properly, of four *Ermine* Spots in Cross. 'Tis the Coat of *Hurston* in *Cheshire*.

ERMINITES, shou'd seem a diminutive of *Ermines*, and naturally to signify little *Ermines*; but 'tis otherwise. *Erminites* expresses a white Field powder'd with black; only every Spot has a little red Hair therein.

Some Authors use the Word *Erminites*, for a yellow Field powder'd with black; which the *French* expresses much better by *or semée d'Ermines de Sable*.

EROSION, in Medicine, the Act of sharp, acid Fluids, or Humors, gnawing and tearing off Parts from the Flesh, and other Substances. Arsenic, and other Poisons, make *Erosions* in the Intestines. See *CORROSION*.

EROTIC, is applied to any Thing which has a Relation to the Passion of Love. See *PASSION*.

In Medicine, we particularly use the Phrase *Delirium Eroticum*, for a Kind of Melancholy contracted thro' Excess of Love. See *MELANCHOLY*.

Tho', among the several Species of Pulses, there be no amorous Pulse, that is, no Pulse peculiar to that Passion; yet we can certainly discover where the Disorder is *Erotic*, by the beating of the Pulse, which, in that Case, is changeable, unequal, turbulent and irregular. Speak to the Patient of the Person he loves, and his Pulse instantly changes, becoming higher and quicker: And the Minute you change the Conversation, the Pulse is lost again, and is disturb'd a-new. See *PULSE*.

The Word is derived from the *Greek*, *ἔρως*, *Love*; whence *ἔρωδος*.

ERRANT, in Law, the same with *Itinerant*, attributed to Judges that go the Circuit: To Bayliffs at large, &c. See *JUSTICE*, *BAILIFF*, &c.

ERRATA, a List at the Beginning or End of a Book, containing the Faults that have escap'd in the Impression, and, sometimes, even in the Composition, of the Work. See *PRINTING*.

Lindenberg has an express Dissertation on Typographical *Errata*, de *Erroribus Typographicis*; wherein he observes, that there is no Book exempt from 'em, not even the Sacred Books. He sets himself to enquire into all the Causes thereof; and proposes Means to prevent 'em. But he advances nothing on that Article, but what is either common or impracticable. The Authors, Composers, and Correctors of the Press, he says, must do their Duty; who disputes it? Each Author must have his own Printing-Press at Home, as *Calixtus* and *Opitius* had; who can do it?

Fa. *Hardouin's* Book on Medals, might be entitled the *Errata of the Antiquaries*; and the Critiques on History by *Perizonius*, the *Errata of the ancient Historians*.

In the same Sense, *M. Bayle's* Dictionary might be call'd the *Errata of Moreri*.

ERRATIC, in Astronomy, an Epithet applied to the Planets, which are call'd *Erratic*, or wandering Stars, in Contra-distinction to the fix'd Stars. See *PLANET*.

There is also a Kind of Fever call'd *Erratic*. See *FEVER*.

ERRHINA, ERRHINES, in Medicine, are Remedies taken by the Nose, to enliven the Spirits, stop Bleeding, &c. but principally to purge the Humidities of the Head.

Of these, some are taken in *Powders*, as *Betony*, *Tobacco*, *Marjoram*, *Iris*, white *Hellebore*, *Euphorbium*, &c.

Others in a *liquid* Form, made of the Juice of *Marjoram*, *Sage*, *Beet*, *Cyclamen*, *Iris*, &c.

Others in Form of *Liniments*, incorporated with *Unguent. Rosat*.

Others, *solid*, form'd like *Pyramids*, to stop Bleeding at the Nose; composed of *Armenian Bole*, *Terra sigillata*, *Mastic*, human or Hogs-Blood dried, &c.

Such *Errhina* as are dry, and made up in *Powders*, are properly call'd *Sternutatories*. The Moderns sometimes call 'em *Caput purgia*. See *STERNUTATORY*.

The Word is derived from *ἔρως*, *in*, and *ἔρως*, *Nose*.

ERROUR, or ERROR, a Mistake of the Mind, in giving Assent to a Thing or Proposition which is not true. See *FALLACY*.

Some Philosophers define *Error* an Act of the Mind, whereby Things that should be joyn'd, are separated; or, Things that should be separated, are joyn'd: Or a wrong Judgment, disagreeing with the Things whereon it is pass'd. See *JUDGMENT*.

Error stands in Opposition to *Truth*, which consists in an Agreement between the Proposition, and the Thing whereof it is affirmed or derived. See *TRUTH*.

However, a bare Failure, or Non-attainment of Truth, does not constitute *Error*; that being common both to *Ignorance* and *Doubling*. See *IGNORANCE* and *DOUBTING*.

Error only stands distinguished from *Falsehood*, in that the former is in the Mind, and the latter in the Proposition. See *FALSEHOOD*.

The great Origin of all *Error*, i. e. of believing that to be true, which is false, is a *Liberty*, or Power in the human Mind, of giving its Assent to *Idea's* or Propositions, that are obscure, as if they were perspicuous and plain. See *LIBERTY*.

Particular Causes of *Error* are, 1°. An *Inadvertency*, or *Negligence*, in passing Judgment, without using or attending to the Means proper to assist the Judgment. As if a Person should attempt to judge of the Height of the Pole, without proper Instruments, or Observations: Or determine about Nations without knowing their History.

2°. *Ignorance*, in not having informed the Understanding by Study and Application; or furnish'd it with the *Idea's* that have an immediate Relation to the Matter in hand.

3°. *Impatience* of the Labour and Fatigue, of going thro' a long Chain of Reasons and Arguments; or of waiting for a necessary Number of Experiments: with a Fondness for the Opinion of being *knowing*; and a Prejudice for, or against, some particular Person, Sect, &c.

4°. The fallacious Rules of Probability, and Opinion. See *PROBABILITY* and *OPINION*.

5°. *Interest*, which makes us incline to believe those Things true, from which we are like to derive Advantage.

6. Authority: Education: and vulgarly receiv'd Opinions, imbibed ere we were qualified for judging. See *FAITH*.

Against all which, there is this one general Rule or Caution laid down, by Fa. *Mallebranch* and others, viz. Never to give our full Assent to any Proposition, unless the Evidence for it be so strong, as that we can no longer withhold it, without incurring the secret Reproaches of our own Reason.

Mr. *Lock* reduces the Causes of all our *Errors* to these four, viz. 1°. Want of Proofs. 2°. Want of Ability to use 'em. 3°. Want of Will to use 'em. And, 4°. Wrong Measures of Probability.

F. *Mallebranch* considers five Occasional Causes of *Error*, or rather five different Kinds of *Errors*, accommodated to the different Manners we have of perceiving Things. 1°. *Errors of Sense*. 2°. Of the *Imagination*. 3°. Of the *Understanding*. 4°. Of our *Inclinations*. And 5°. Of the *Passions*. See *SENSE*, *IMAGINATION*, *UNDERSTANDING*, *INCLINATION*, and *PASSION*.

ERROUR, in Law, is generally understood of a Fault, or Oversight, either in Pleading, or in Process: Upon either of which is brought a Writ, by way of Remedy; call'd a *Writ of Error*; and in Latin, *de Errore Corrigendo*. See *WRIT*.

Fitzherbert defines a Writ of *Error* to be, that which lies to redress false Judgment given in any Court of Record,

cord, having Power by Charter, or Prescription to hold Plea of Debt or Trespafs of above xx *Sb.*

There is also a *Writ of Error* for reverfing a Fine, &c.
ERUCTATION, *Belching*, the fame as Ructation. See RUCTATION.

ERUDITION, Learning, or Knowledge; and chiefly that of Antiquity. See LEARNING.

The *Scaligers* were Men of deep *Erudition*: The Writings of Mon. *Launoy*, a Prieft of the Oratory, are full of *Erudition*.

Mr. *Lock* fays, 'tis of more Ufe to fill the Head with Reflections, than with Remarks of *Erudition*. If the Mind be not juft and right, Ignorance is better than *Erudition*, which only produces Confufion and Obscurity: St. *Evremond*. M. *Balzac* calls a Heap of *Erudition* ill-chufen, the Luggage of Antiquity.

ERUGINOUS, or ÆRUGINOUS, fome Thing partaking of, or like to the Ruff of Brafs, or Copper. See RUST and ÆRUGO.

ERUPTION, a burfting forth, or Exclusion of fomething before cover'd, or conceal'd.

The *Eruption of Puffles* in the Small-Pox, ordinarily begins on the 4th Day. See *Small Pox*.

In the Inoculated Kind, the *Eruption* does not begin till the 9th Day. See INOCULATION.

The *Eruption* of *Vulcano's*, or Burning Mountains, is frequently the Effect, and Ifue, of Earthquakes. See VULCANO and EARTHQUAKE.

The *Eruptions* of Mount *Etna*, and *Vefuvius*, are obferved to be fomewhat periodical: They are of two Kinds; the one lefs violent, happening once in 2 or 3 Months, and lafting ufually three or four Days, without much Damage to the adjacent Country.

The other more furious, and of longer Continuance, happening to Mount *Vefuvius* about once in 80 Years. The laft, in 1632, was fo violent, that, by the beft of his [*S. Peccacio's*] Obfervations, it caft the Rocks three Miles into the Air. Mr. *Hartop* in *Philofoph. Tranfact.* N^o. 202.

M. *Oldenbourg* gives us an Historical Account of the feveral *Eruptions* of Mount *Etna*, recorded in Authors. The firft whereof we have any credible Account, was at the Time of the Expedition of *Aeneas*, defcribed by *Virgil*, *Aeneid. Lib. III.* The 2d, defcribed by *Thucydides*, was 476 Years before *Chrift*: In the Time of *Roman* Confuls there were 4: Another in *Cæfar's* Time, fo fierce, that *Diodorus* affures us, the Ships near the Ifland of *Lipara* were burnt with the extreme Heat of the Water: Another under *Caligula*: Another at the Time of the Martyrdom of St. *Agatha*, faid to have been flopp'd at her Interceffion: Another in the Year 812: Several between the Years 1160 and 1169: Others in 1284, 1329, 1408, 1444, 1536, 1633, 1650. *Phil. Tranfact.* N^o. 48.

Another extraordinary *Eruption* happen'd in 1669, particularly defcribed in the fame *Tranfactions*, N^o. 51. It was preceded for the Space of 18 Days, with a dark thick Sky, Thunder, Lightning, and frequent Concuffions of the Earth: The Place of the *Eruption* was 20 Miles from the old Mouth.

The Matter here yielded, was a Stream, or River of Metals and Minerals, render'd liquid by the Fiercenefs of the Fire, and boiling up, and guffing forth, as Water does at the Head of fome great River; till, having run in a full Body for a Stone's Caft, or more, the Extremitie thereof began to cruft and curdle, and turn'd, when cold, into hard, porous Stones, call'd *Sciarri*, as refembling huge Cakes of Sea-Coal, full of a fierce Fire. Thefe came rolling and tumbling over one another, and where they met a Bank, Wall, Building, &c. would fill up, and fwell over; by their Weight bearing down any common Building, and burning up what was combuftible. The Progreff of this Inundation was at the Rate of a Furlong a Day; which it continued for 15 or 20 Days; running, at firft, into the Sea, but afterwards into the City of *Catania*; in its Courfe, it overwhelm'd 14 Towns and Villages, containing three or four thoufand Inhabitants. The Noife of the *Eruption* at the Mouth was heard 60 Miles.

Dr. *St. Clair*, in the *Philofop. Tranfact.* gives an Account of a conftant *Eruption* of Fire, on one Side of one of the *Appenines*, between *Bologna* and *Florence*: A Spot of Ground 3 or 4 Miles in Diameter, he obferves, inceffantly fends up a Flame, rifing very high, without Noife, Smoak, or Smell; tho' it gives a very great Heat. In great Rains it fometimes intermits, but re-kindles with greater Vigour and Heat. Within 3 or 4 Yards of it, he adds, there grows Corn. The Flame he conjectures to arife from a Vein of Bitumen, or Naphtha. There are three other fuch Fires on the fame Hills.

ERYSIPELAS, in Medicine, call'd alfo *Sacer Ignis*, and St. *Anthony's Fire*, a Difefe of the Skin.

Its Seat is any Part of the Body, but principally the Face: It fhews it felf in a ruddy Inflammation of the Part, with

a little Swelling of the fame; an intense Pain, and a Croud of little Puffles, which, as the Inflammation increafes, grow into *Veficulæ*. See SKIN.

The Difefe fpreads it felf a-pace; shifting from one Place to another, with a Fever attending it. It attacks the Patient all at once, and chiefly when out in the Air; whence the Country People call it *blasting*, *Sideratio*.

Dr. *Quincy* accounts for the *Eryfipelas*, from a too fizy Blood, which obftructing the Capillaries, occafions Inflammations: Others, from a too fharp and bilious Blood, which, on Account of its great Subtilty, occafions no fenfible Tumor; but fpreads, or diffufes it felf in Length and Breadth. Its Colour, tho' red, generally inclines towards a yellow, on Account of the Mixture of Bile; and always the more of the Bile, the more dangerous the Difefe.

There is another Species of *Eryfipelas*, tho' lefs ufual than the former; moft commonly arifing from a too copious drinking of fpirituos Liquors. It begins with a Fever, after which there is an univerfal Eruption of Puffles, almoft over the whole Body, much like thofe after the ftinging of Nettles, and fometimes rifing into *Veficulæ*. At going off, they leave an intolerable Itching, and as often as scratch'd return again.

Etmuller gives it as the diftinguifhing Character of an *Eryfipelas*, that when prefs'd very lightly by the Finger, there follows a white Spot, which prefently after becomes red again; which does not happen in an ordinary Inflammation, unlefs when violently prefs'd. Scorbutic People are moft fubject to this Difefe.

'Tis difputed, whether Purging be good in the *Eryfipelas*: *Sydenham* recommends it the next Day after Bleeding. *Etmuller* cautions us againft 'em both; and recommends Diaphoreticks. Dr. *Friend* obferves, that in the laft Stage of an *Eryfipelas* of the Head, attended with a Coma, Delirium, &c. unlefs Catharticks will do good, the Cafe is desperate. All unctuous, aftringent, and cold Applications, externally, are dangerous, and fometimes make the *Eryfipelas* degenerate into a Gangrene.

The Word is form'd of the *Greek*, ἐρύειν, *trahere*, to draw; and πῶς, *prope*, by reafon it withdraws it felf towards the Skin: Whence *Galen* calls it the *Passio Cutis*.

The *Eryfipelas* is either fimple, or attended with an Ulcer.

ERYTHROIDES, in Anatomy, the firft of the proper Membranes that inclofe the Tefticles. See TESTICLE.

It is interfperfed with flefhy Fibres, derived to it from the Cremaster Mufcle, which make it appear reddifh.

And whence its Name from the *Greek*, ἐρυθρός, *red*, and εἶδος, *form*.

ESCALADE, or SCALADE, a furious Attack upon a Wall, or a Rampart; carried on with Ladders, to mount by; without proceeding in Form, breaking Ground, or carrying on Works to fecure the Men. See SCALADE.

ESCALOP-*Shells*, a frequent bearing in Coat Armour; proper, fay our Heralds, for fuch as have diftinguifh'd themfelves by Naval Exploits. Azure, three *Efcalop*-Shells Or, by the Name of *Mallet*.

ESCAMBIO, was anciently a License granted any one for the making over a Bill of Exchange to another beyond Sea. See EXCHANGE.

For, by Stat. 5 *Rich. II.* no Perfon might exchange, or return *MONEY* beyond Sea, without the King's License.

ESCAPE, in Law, is either *voluntary*, or *negligent*.

Voluntary, is when one arrefts another for Felony, or other Crime, and afterwards lets him go; in which *Efcape*, the Party that permits it, is by Law guilty of the Fault, committed by the Perfon who *Efcapes*; be it Felony, Treafon, or Trespafs.

Negligent *Efcape* is, when one is arrefted, and afterwards *Efcapes* againft his Will that arrefted him; and is not purfued by fresh Suit, and taken again, before the Party purfued hath loft Sight of him.

ESCARTELE', in Heraldry, *Quarter'd*, or *Quarterly*. See QUARTER'D, &c.

ESCHAR, in Chirurgery, a hard Cruft, or Scab, form'd on the Flefh, by means of a hot Iron, or a Cauftic Medicine, or fome fharp, corrofive Humour within.

The Cauftic Stone, or *Lapis Infernalis*, produces a round *Efchar* in the Place where it has burnt. See ESCHAROTIC, CAUSTIC, and CAUTERY.

The Word is derived from the *Greek*, ἐσχάρα, *Cruft*, or *Scab*. Some Authors derive it from ἐς and αἶμα, *I burn*; but this comes with fome Difficulty, by reafon αἶμα is wrote with a α; and ἐσχάρα with a χ.

ESCHAROTICKS, Medicines, which being applied externally, produce *Efchars*, or Scabs, by burning the Flefh. See ESCHAR.

Such are the *Lapis Infernalis*, red precipitate, &c. thefe are alfo call'd *Caufticks*. See CAUSTIC.

The Word is derived from the *Greek* ἐσχάρα. See ESCHAR. ESCHEAT,

ESCHEAT, in Law, signifies any Lands, or other Profits, that fall to a Landlord within his Mannor, by way of Forfeiture, or the Death of his Tenant dying without Heir general or special, or leaving his Heir within Age, and unmarried.

The Civilians call such Forfeitures *Bona Caduca*; and in the same Sense as we say the Fee is *Escheared*, they say *feudum aperitur*.

The Word *Escheata* sometimes also signifies a lawful Inheritance descending on the Heir. But then, it is usually distinguished by the Addition of *Recta*, as *Recta Escheata*.

ESCHEAT, is also used for the Place or Circuit within which the King, or other Lord, hath *Escheats* of his Tenants.

And sometimes for a Writ, lying where the Tenant having Estate of Fee Simple, in any Lands or Tenements holden of a superiour Lord, dies seiz'd, without Heir general, or special: In which Case, the Lord brings this Writ against him that possesses the Lands, after the Death of his Tenant; and thereby recovers the same in lieu of his Services.

ESCHEATOR, an Officer, who anciently took Care of the King's *Escheats* in the County, and certified them into the Exchequer, or Chancery. See ESHEAT.

He was appointed by the Lord Treasurer; held his Office only for one Year; nor cou'd any Person be *Escheator* above once in three Years. But this Office having its chief Dependence on the Court of Wards, is now out of Date.

ESCHEQUER. See EXCHEQUER.

ESCHEVIN, or ECHEVIN, in the *French* and *Dutch* Polity; a Magistrate, elected by the Inhabitants of a City, to take Care of their common Concerns, the good Order, Conveniency, and Decoration of the City.

At *Paris*, there is a *Prevot*, and four *Eschevins*; in most other Cities, a *Maire*, or Mayor, and *Eschevins*.

In *Languedoc*, *Provence*, and *Dauphine*, they are call'd *Consuls*: At *Toulouse*, *Capitoul*: And *Jurats* at *Bordeaux*.

Anciently, the *Eschevins* were Assessors, and Counsellors, of the *Comites*, or Judges of Cities: On which Account they were call'd in some Places, *Pairs*, *Pares*: They even took Cognizance of petty Causes themselves.

Du Cange observes, that the Judges, and their Assessors, who were chose by the Inhabitants, were call'd *Scabini*, *Echevins*, and their College, *Scabinagium*, or *Eschevinage*. He adds, that some Authors call 'em *Paciurii*, by reason their Office and Jurisdiction extended to the securing Peace in their City and *Banlieue*, call'd *Pax Ville*.

The *Eschevins* are also frequently what the *Ediles* were at *Rome*, the *Sheriffs* at *London*, and the Magistrate call'd *Potestas*, in the petty Cities of *Italy*. The *Greeks* call him *ἀσπυβου*, &c.

In *Holland*, the *Eschevins* judges of all Civil Affairs at first Hand. They also take Cognizance of criminal Affairs, and if the Criminal confess himself guilty, they can see their Sentence executed without Appeal. They can even give the Torture.

The Number is not the same in all Cities: At *Amsterdam* there are Nine, at *Rotterdam* Seven, &c.

ESCHRAKITES, or ESRAKITES, a Sect of Philosophers among the *Mahometans*, who adhere to the Doctrines and Opinions of *Plato*.

The *Eschrakites*, or *Mahometan Platonists*, place their highest Good and Happiness in the Contemplation of the Divine Majesty; despising the gross Imaginations of the *Alcoran* touching Paradise.

They are very careful in avoiding Vice, preserve an equal and easy Temper, love Music, and divert themselves with composing little Poems, or spiritual Songs.

The *Scheies*, or Priests, and the chief among the Preachers of the *Imperial Mosques*, are *Eschrakites*.

The Word is derived from the *Arabic* שָׁרָקָה *Scharaka*, which in the Fourth Conjugation אֶשְׂרָקָה *Aschraka*, signifies to shine, glitter like the Sun: So that *Eschrakite* seems to import *Illumined*.

ESCHYNOMENOUS Plants, are the sensitive Plants; that is, such as upon approaching 'em shrink back, and contract their Leaves. See SENSITIVE Plant.

ESCLAIRCISSEMENT, a *French* Term, which we see retain'd in some late *English* Writers.

The Word properly signifies the Act, or Effect of clearing a Thing, or rendering it more bright and transparent; being form'd from the Verb *Esclaircir*, to clear, &c.

But it is chiefly used in a figurative Sense, for an Explication of an Obscurity, or Difficulty. *Esclaircissement* of the Dialogues of the Gods: The *Esclaircissement* of difficult Passages in the Bible, is only had from similar Passages, or Passages of the like Kind occurring in other Places.

ESCLATTE', in Heraldry, is applied to a Thing violently broke.

Thus a Bend, or other Partition, *Esclatte*, is represented torn, or broke off like a Piece of a ruin'd Wall; or rather, a Shield broke and shatter'd with the Stroke of a Battle Ax, &c.

ESCORT, a *French* Term, sometimes used in *English* Authors.

An *Escort* is a Convoy, or Company of armed Men, attending some Person or Thing, in a Journey or Voyage, to defend or secure it from Insults. See CONVOY.

A Supply was sent to the Camp before *Arras*, with an *Escort* of 1200 Men. In Times of War, Merchant Vessels seldom stir much abroad without an *Escort* of Men of War. People that travel in *Turky*, generally take Janissaries to *Escort* them.

After the Victory, the General sent the Prisoners under a strong *Escort* into the neighbouring Towns. See CONVOY.

Some derive the Word from the Latin *Cohors*.

ESCOUADE, is usually the third Part of a Company of Foot. See COMPANY.

It is divided so for mounting of Guards, and for the more convenient relieving one another: It is equivalent to a *Brigade* of a Troop of Horse. See BRIGADE.

ESCRITOIRE. See SCRITOIRE.

ESCROL, or SCROLL, in Heraldry, a long Slip, as it were, of Parchment, or Paper, whereon a Motto is placed. See MOTTO.

Leigh observes, that no Person, under the Degree of a Knight, might, long after King *Henry V*, place his Crest on a Wreath, as is now usually done, but only on an *Escrol*.

ESCU, or ECU, the *French* Crown, of 60 *Sols*, or 3 *Livres*. See CROWN, LIVRE, &c. See also COIN.

The *Escu* was thus called by Reason the Escutcheon, or Arms of *France*, which they call *Escu*, was struck thereon. See SHIELD, HELMET, ESCUTCHEON.

ESCUAGE, or SCUTAGE, an antient Kind of Knight's Service, call'd also *Service of the Shield*; the Tenant holding by which, was obliged to follow his Lord to the *Scottish*, or *Welsh* Wars, at his own Expence. See CAPITE.

He who held a whole Knight's Fee, was bound to serve with Horse and Arms for 40 Days: And he who held half a Knight's Fee, 20 Days. See SERVICE.

The same Term *Escuage*, is also used for a Sum of Money, paid by such as held by this Tenure, when they neither attended the Wars, nor provided another in their Room.

ESCUAGE, was also a reasonable Aid, demanded by the Lord of his Tenants, who held of him in Knight's Service.

Concesserunt Domino Regi ad Maritandam filiam suam de omnibus qui tenent de Domino Rege in Capite de singlis Scutis 20 solidos solvendos, Matth. Paris, Anno 1242.

ESCULENTS, are Plants for Food, as Artichokes, Carrots, Turnips, Parsnips, Cabbages, Colliflowers, &c. See PLANT, SALADE, &c.

ESCURIAL, by the *Spaniards* wrote ESCORIAL, a Term that occurs pretty frequently in our Gazettes, and Journals of News.

Escurial, is originally a little Village in *Spain*, situate in the Kingdom of *Toledo*, seven Leagues to the West of *Madrid*, and nine to the East of *Avila*; on the Side of a Chain of Mountains, call'd by some the *Carpentain*, or *Carpentanian* Mountains, and by others the *Pyreneans*; as being a Branch of the *Pyrenean* Ridge.

Here, King *Philip II*. built a stately Monastery of the Order of *St. Jerom*; held by the *Spaniards* for one of the Wonders of the World; and call'd the *Escurial*.

Fa. *Francisco de los Padros*, in a Description thereof, entituled, *Description breve del Monasteria de S. Lorenzo el real del Escorial*, &c. assures us it was built by that Prince in Memory of the Battle of *S. Quintin*, gain'd on the Day of *S. Lawrence*, *Lorenzo*, a famous *Spanish* Saint, and at his Intercession.

The King and Queen have their Appartments therein; the rest being possess'd by the Monks. Whence, many of the great Transactions of that Court, are dated from the *Escurial*.

It has a very fine Church, to which *Philip IV*. built a beautiful Chappel, call'd the *Pantheon*, wherein the Kings and Queens of *Spain*, who leave any Posterity, are Enterr'd. The rest being laid in another Vault of the same Church, together with the Infanta's and other Princes. See PANTHEON.

ESCUTCHEON, or SCUTCHEON, in Heraldry, the Shield, Coat, or Field, whereon the Bearing, or Arms of any Person is represented. See SHIELD, COAT of Arms, &c.

The Word *Escutcheon* is form'd of the *French* *Escuison*, and that from the Latin *Scutum*, Shield; which was what Arms were originally bore on, ere ever they came

on Banners; and still, wherever they are placed, 'tis on something representing the Form of a Shield.

The Latin *Scutum*, no doubt, came originally from the Greek *Scutos*, Leather, wherewith the Shields were usually cover'd. See SHIELD.

On these Shields was always some particular Mark, Badge or Symbol painted: Which was the Original of Armoury. See ARMS.

The *Escutcheon* is of a Square Figure, excepting for the Bottom Part, which is usually a little rounded, ending with a Point in the middle.

Till within a few Hundred Years, the *Escutcheons* of the *French* and *English* were triangular: Those of the *Spaniards*, are still quite round at Bottom without any Point: Those of the *Italians*, are Oval: And those of the *Germans*, in Form of Cartouches.

The antient *Escutcheons* were generally couch'd, or inclined; and they only began to place them upright, when Crowns, &c. were put over them by Way of Crest.

In *France*, Escuffon, *Escutcheon*, was formerly restrain'd to a Shield, or Coat, pointed at Bottom; by which it was distinguish'd from the *Escu*, which was quite Square, and was only allowed to be bore by the Counts and Viscounts. Those of inferior Quality were confined to the *Escuffon*, or pointed *Escu*.



The several Parts, and Points of the *Escutcheon*, have their several Names: The Point D, for Instance, is the *Dexter chief Point*; C the *middle Chief*; and S the *sinister Chief Point*: H is the *Honour Point*; F the *Fesse Point*; N the *Nombril Point*; d the *Dexter Base*, B the *Middle*, and s the *Sinister Base Point*.

The *Escutcheon* is diversely denominated, according to its Divisions. It is call'd *dexter'd*, when the perpendicular Line that divides it, is to the right of a third Part of the *Escutcheon*: *Sinister'd*, when on the left: *Tierced in Pal*, when it is double, and divides the whole *Escutcheon* into three equal Parts: *Paled*, when increas'd to the Number of six, eight, or ten. A Horizontal Line makes the *Chief*, when at one third Part from the Top: The *Plein*, when at a third from the Bottom: And when double, in the middle, at an equal Distance from both Extremes, it makes the *Fess*, and the *Tierced in Fess*: When 'tis multiplied, it denominates it *fessed*: When there are 8, or 10 equal Spaces, *Burrelle*: A Diagonal from the Dexter of the Chief to the Sinister of the Point makes it *tranche*; the contrary, *double*. If it be doubled at equal Distances, the first makes *bande*, and the *tierce* in Bend; and the other *barre*, or *tierce* in Bar: Increasing the Number of the first makes *bande* and *cottice*; and increasing that of the second, *barre* and *traverse*.



ESCUTCHEON of Pretence, is an *Escutcheon*, or little *Escutcheon*, which a Man, who hath married an Heiress, and hath Issue by her, may bear over his own Coat of Arms; and in it the Arms of his Wife: and the surviving Issue will bear both Coats Quarterly. See PRETENSE.

ESCUTCHEON, and ESCUTCHEON-GRAFTING, in Gardening. See ENGRAFTING.

ESPALIER, in the *French Gardening*, a *Wall-Tree*; or a Fruit-Tree which is not left to grow at Liberty in full Air, but has its Branches nail'd or fasten'd to a Wall, near which it is planted; and thus growing, it is made to conform it self to the flat, tho' unnatural, Figure thereof. See WALL Tree.

ESPALIERS, in our Gardening, are Rows of Trees, planted in a curious Order round the Outside of a Garden, or Plantation, for the general Security thereof, from the Violence and Injury of the Winds; or else only round some Part of a Garden, for the particular Security of a Plantation of Orange Trees, Lemon Trees, Myrtles, and other tender Plants; or, lastly, for the bounding of Borders, Walks, Avenues, &c. See GARDEN, &c.

Espaliers are now come into mighty Use, with Respect to the first of these Intentions: In Effect, 'tis found by Experience, that the best Brick, or Stone Walls, are not of themselves sufficient Security to Fruit-Trees, from the Ravages of blighting Winds. See WALL.

The Reason may be, that being built close and compact, they repel the Winds, and by that Means damage the tender Plants, that lie within the Reach of the Repulsion. But these *Espaliers* serve to deaden the Violence of the Winds, so as the tender Greens, or Plants, encompassed by them, rest serene and quiet.

Thus, if the *Espaliers*, for Instance, be of Spruce Holly or Yew, they give Way to the Force of tempestuous Winds, beating against them, without occasioning any Resilition thereof.

Mess. *London*, and *Wife*, direct them to be planted at some Distance, without the outmost Bounds, or Walls of Gardens, &c. Two, or three Rows of Trees, they think sufficient, from 18 or 20 to 25 Foot a-part. And as to the Method, or Order, of disposing the Trees, the most commodious is where the middle Row makes every where Equilateral Triangles with the extreme Rows, in the following Manner.



The Trees recommended for making, or planting, these *Espalier* Fences, are the Elm, Lime, Beech, *Scorck* Fir, Oak, Pine and Sycamores; but particularly the two first. For the Method of Planting 'em. See PLANTING, TRANSPLANTING, &c.

As for *Espalier Hedges*, or Hedge Rows, for Defence of tender Greens, and Plants from destructive Winds in the Summer Season: If there be Occasion to use them the first or second Year after they are planted; a substantial Frame of Wood must be made, seven or eight Foot high, with Posts and Rails. And to this *Espalier* Frame, must the side Boughs of the young Trees be tied, to cause the *Espalier* to thicken the sooner.

As to the Form of such an *Espalier*, it must be oblong, running North and South.

These *Espaliers* may be planted of Apples, Pears, Holly, Laurel, Lime, Maple, white-Thorn, Yew, &c.

To prevent the Disorders that might befall *Espalier* Fruit Trees when in Blossom, Mr. *Bradley* mentions a nursery Man at *Brentford*, who having most Sorts of Fruit in *Espaliers*, has portable Hedges made of Reeds in Frames, which he sets both at the Back, and Front of his *Espaliers*, as he sees Occasion.

ESPAULE, ESPAULEMENT, &c. in Fortification. See EPAULE, EPAULEMENT, &c.

ESPLANADE, in Fortification, call'd also *Glacis*, a Part serving the Counterscarp, or cover'd Way, for a Parapet; being a Declivity, or Slope of Earth, commencing from the Top of the Counterscarp, and losing it self insensibly in the Level of the Campaign. See GLACIS.

ESPLANADE, also signifies the Ground which has been levell'd from the *Glacis* of the Counterscarp, to the first Houses; or the vacant Space between the Works and the Houses of the Town.

The Term is also applied in the general for any Piece of Ground render'd flat or level, which before had some Eminence that incommoded the Place. See TALUT.

ESPOUSALS. See MARRIAGE.

ESQUADRILLE, } See { QUADRIL.
ESQUADRON, } See { SQUADRON.

ESQUINANCY, in Medicine, a Disease call'd also *Angina*, *Squinancy*, and popularly *Quinzy*. See ANGINA, SQUINANCY, &c.

ESQUIRE, a Title of Nobility, next below that of *Knight*, and above that of a simple *Gentleman*. See NOBILITY, KNIGHT, and GENTLEMAN.

The Origin, both of the Name and the Thing, *Esquire*, is very dark and intricate: The *English* Denomination is confessedly borrowed from the *French Escuyer*; and that from the Latin *Scutum*, Shield, as some will have it; or as others, from *Scutarius*, or *Scutiger*, Shield-Bearer, or from *Scuria*, Stable, or *Equiso*, Groom.

So many different Ideas of the Formation of the Word, have given rise to as many about their Office; unless, perhaps, the latter have given Occasion to the former.

Pasquier in his *Recherches*, L. II. C. 15. maintains the Title of *Esquire*, *Escuyer*, *Scutarius*, to be very antient. From the Time of the Declension of the *Roman Empire*, he observes, there were two extraordinary Kinds of *Soldiery*, in the *Roman Army*; the one call'd *Gentiles*, and the other *Scutarii*.

Ammian. Marcellin L. XIV. C. 7. and L. XVI. C. 4. speaks of these *Scutarii* as Men of redoubted Prowess; and even deem'd invincible. 'Tis added, that *Julian* the Apostate set a mighty Value on those Troops, when he was in the *Gauls*: And hence, probably, it was, that the *Gauls*, or perhaps, only the *Franks*, finding the bravest among the *Roman Forces* were call'd *Gentiles*, and *Scutarii*, gave the like Names to the boldest and bravest among themselves; such, according to that curious Antiquary, is the Origin of *Esquires*.

ESQUIRE, however, afterwards came to be used in a somewhat different Sense; viz. for a *Gentleman* who attended a Knight in the Wars, and on other military Occasions; bearing the Shield, *Scutum*, before him: Whence *Scutarius*, *Scutiger*, or *Scutifer*; as also his Launce, and other Weapons: Whence his other Latin Appellation, usual among us, *Armiger*, q. d. Armour-Bearer.

And hence it is, that in all our antient Romances, the Hero is constantly attended by a gentle, and trusty *Squire*.

After all, the most probable Derivation of *Escuyer*, is not from *Escu*, *Scutum*, as is the common Opinion, but from *Equus*; and these *Esquires* were originally what the *Latins* call *Equisones*, and had the Care and Intendance of the *Equeries*, or *Stables* only. See *EQUERY*.

Be this as it will, the Title *Esquire*, *Armiger*, as now establish'd among us, is the next below that of *Knight*, *Eques*. They who bear this Title, are all younger Sons of Noblemen, and the eldest Sons of such younger Sons; the eldest Sons of Knights, and their eldest Sons successively; the four *Esquires* of the King's Body; and *Esquires* created by the King, by putting about their Necks a Collar of S.S's, and bestowing on them a Pair of Silver Spurs. Lastly, divers others in the superior public Offices, are reputed *Esquires*, or equal to *Esquires*; as Sheriffs of Counties, Serjeants at Law, Justices of Peace, Mayors of Towns, Councillors at Law, Batchellors of Divinity, Law, Phytic, &c. tho' none of them are really so: Lastly, the Chiefs of some antient Families are likewise *Esquires* by Prescription.

ESQUISSE, in the *French* Painting, a Term signifying the first slight sketch, or draught of a Picture; the first Thought of a Design drawn hastily with a Crayon, or in Colours on Paper, Canvas, or the like; in Order to be finish'd, and painted or engraven afterwards. See *DESIGN*.

He had not the Trouble of making a finish'd, and correct Design; but went to work upon the *Esquisse*.

The Word is form'd of the Italian *Schizzo*, a Splash; by Reason an *Esquisse* of a Painting only represents, as it were, Splashes, or Dabs of Colours.

ESSART, or *ASSART*. See *ASSART*.

To *Essart*, is to grub up, or extirpate Bushes, Trees, old Roots, Stumps, or the like; in Order to fit the Ground for Tillage.

Du Cange derives the Word from some of the barbarous *Latin* Words, *Exartus*, *Exartum*, *Exartes*, *Essartum*, *Assarium*, *Sartum*, and *Sartus*; which all signifie a Forest cut down or dug up: Tho' *Spelman* derives it from the *Latin* *Exertum*, torn up, or unrooted. Others, from *farrire*, to weed. And others, lastly, from *exaro*, to plow, whence *exarare* and, by Contraction, *Exartum*.

In our antient Law Books, *Exartum facere in Sylva*, is to *Essart* a Place in a Forest.

ESSAY, a Trial, or Experiment, to prove whether a Thing be of the requisite Quality, or Goodness. See *SPECIMEN*.

The Word is also used for an Attempt, or Tentative, to learn whether or no a Thing will succeed. *Essays* of Machines should be made in large; 'tis not enough they succeed in little. See *MACHINE*.

In Monasteries, *Essay* is particularly used for a Trial which a Person makes of the Monastic Life, in a secular Habit. This *Essay* is of one, two, and in some Monasteries, of three Months. The *Essay* is not reckon'd in the Noviciate. See *PROBATION*.

Some Authors derive the Word from the *Latin* *Examen*.

ESSAY, or *ASSAY*, or simply *SAY*, in Coinage, &c. is a Proof, or Trial, made by the Coppel, or Test, of the Fineness, or Purity of the Gold or Silver to be used in the Coining of Mony, &c. or that have been used therein. See *COINING*.

There are two Kinds of *Essaying*; the one before Metals are melted, in Order to bring them to their proper Fineness; the other after they are struck, to see that the Species be Standard.

For the first *Essay*; the *Essayers* use to take fourteen or fifteen Grains of Gold, and half a Drachm for Silver; if it be for Mony: and eighteen Grains of the one, and a Drachm of the other, if for other Occasions.

As to the second *Essay*, 'tis made of one of the Pieces of Mony already coin'd, which they cut in four Parts.

Method of ESSAYING Gold.

The *Essayer* having weigh'd the Gold he intends to make the Trial in, very exactly, and noted down the Weight; adds twice as much fine Silver thereto; tho' this should be in Proportion to the Fineness the Gold seems to be of; the basest Gold requiring the least Silver. The Gold and Silver thus weigh'd, and mix'd, are wrapp'd up in a Piece of Paper, to prevent their losing any Thing of their Weight, which would disturb the Accuracy of the *Essay*.

While the *Essayer* is weighing his Matters, a reverberatory Fire is lighted in a Furnace, furnish'd with a Muffler, and a Coppel, or Test, set therein to heat. This done, a little Bullet of Lead is put in the Coppel, of a Weight proportionable to the Quantity and Quality of the Gold to be *Essay'd*. When the Lead is well melted, and appears very clear and bright; they put in the Gold and

Silver, and let it fuse and seeth till it appear of an Opal Colour, and have fix'd it self, in a little Lump, to the Bottom of the Coppel.

This done, the Coppel is left to cool in the Furnace it self; after which the Lump is separated very exactly from the Place where it stuck to the Vessel; and stretch'd, or hammer'd on the Anvil; heating it again and again, on the Coals, to promote the stretching.

When sufficiently hammer'd, they roll it up in Form of a Cornet, or Coffin, and thus put it in a Glafs Matrass, capable of containing four Spoonfuls of Water; and having added to it a Quantity of *Aqua fortis*, well corrected, that is, mix'd with near one third of the Quantity of River Water, they boil it over a Wood Fire, till such Time as the *Aqua fortis* yields no more red Fumes.

This first Water being pour'd off, and the Cornet left alone at the Bottom of the Matrass, they fill the Matrass again, but with pure *Aqua fortis*; which, after boiling, is pour'd off in its Turn, at such Time as the Fumes are become white. This done, they fill up the Matrass with River Water, to wash the Cornet.

When wash'd, they put it dry in a Crucible, with a Cover over it, and heat it till it become of a Cherry Colour.

This done, the *Essay* is finish'd; and there remains nothing but to weigh it against the same Weight of fine Gold, as was used at first, before the *Essay*. For by Comparing the first Weight of the Gold, ere it was put in the Fire, and the *Aqua fortis*, with what it retain'd after it had thus undergone the Test; they judge, from the greater, or less Loss it has sustain'd, of the Quantity of Alloy mix'd with it.

Method of ESSAYING Silver.

The Process is much the same as in Gold; only less difficult, and shorter. The Silver is weigh'd, as before; and the same Furnace, and Muffler, the same Fire, the same Coppel used. Add, that Lead is likewise put in the Coppel, proportioned to the Quantity and Quality of the Silver to be *Essay'd*.

The Lead being well melted, and clear, the Silver is put in; and after it is brought to an Opal Colour, and fix'd in a Lump at the Bottom of the Coppel, which happens in about half an Hour: They let it cool, and cleanse it, and lastly, weigh it again, as in Gold: And from its Diminution, estimate the Quantity of Alloy.

ESSAYING of Lead.

The *Essay* of Gold and Silver being perform'd by Means of Lead; 'tis of the utmost Importance, the Lead be free of any Mixture of either of the two Metals: Otherwise the *Essay* will be false; by reason the Gold and Silver mix'd with the Lead, will not evaporate like other Kinds of Alloy, but unite with the Metal under *Essay*.

To prevent this Disorder, and assure the Operation, there is no way but to *Essay* the Lead it self.

This *Essay* is performed in the same Furnace, and with the same Coppels, as those of Gold and Silver: But the Process is incomparably more simple. All here required, when the Coppel is heated, being, to put in the Piece of Lead to be *Essay'd*. If this Lead evaporate entirely, 'tis fit for the Purpose. On the contrary, if there remain any little Grain of Silver, &c. at the Bottom, it must be set aside. See *LEAD*.

ESSAY, in Matters of Learning, is a peculiar Kind of Composition; whose Character is to be free, easy, and natural; not tied to strict Order, or Method, nor work'd up and finish'd, like a formal System.

The Matter of an *Essay* is supposed to consist principally of sudden, occasional Reflexions, which are to be wrote much at the Rate, and in the Manner a Man thinks; sometimes leaving the Subject, and then returning again, as the Thoughts happen to arise in the Mind.

At least, this has hitherto been the Practice; and *Montague*, who has got no small Reputation by this Way of Writing, seldom keeps many Lines to the Subject he proposes: Tho' it is our Opinion, that my Lord *Bacon* is a better Pattern in the *Essay* Kind.

Mr. *Lock*, however, and a few other Authors use *Essay* in a severer Sense: The *Essay* of human Understanding, every Body knows is a regular, artful, labour'd Work.

ESSAY-Master. See *MINT*.

ESSE, in the School Philosophy, is used in the same Sense with *Essence*; principally for that which is actual, or actually existing. See *ESSENCE*.

From *Esse* arises *Essatum*, a barbarous Term now almost obsolete, signifying that which is endued with *Essence*, or Nature; or effected with the Virtue or Efficacy of another. Some distinguish *Esse* into *real* and *intentional*; and again into *Essatum* and *Volitum*. See *ESSENCE*.

The Word is pure *Latin*, being the Infinitive of the Verb *Sum*, I am; whence *Esse*, to be.

ESSENCE, that which constitutes, or determines the Nature of a Thing; or which is absolutely necessary for its being what it is. See NATURE.

In Philosophy, the *Essence* of a Thing is defined to be that whereby a Thing is distinguished from every other Thing.

The *Cartesians* hold the *Essence of Matter* to consist in Extension; and on that Principle, deny that there is any such Thing as Mere Space, or Vacuity: But the *Hypothesis* is false, as is shewn under the Articles MATTER, SPACE, VACUITY, PLENUM, &c.

Gassendus, and most of the Corpuscular Philosophers, hold the *Essence of Matter* to consist in Solidity, or Impenetrability, or Resistance, or, more adequately, in a solid Impenetrability resisting the Touch; which, it must be allow'd, of all the Properties of Matter, seems to have the fairest Title. See EXTENSION, BODY, SOLIDITY, IMPENETRABILITY, &c.

The School Philosophers give us two Significations of the Word *Essence*; the first denotes the whole *Essential* Perfection of a Being, and consequently its Entity, with all its intrinsic, or *Essential*, and necessary Attributes taken together. In which Sense, *Essence* may be defined to be *all that whereby a Thing is, and is what it is*. In which Case, the *Essence* of a Thing, is to the Thing it self, what Humanity, *e. gr.* is to Man.

The second Signification of *Essence*, is that whereby it denotes the principal, and most intimate of all the Attributes of a Thing; or that which agrees to every such Thing, and such alone, and that always, and in such manner, as that the Mind, with all its Attention, cannot perceive any Thing prior thereto. By which, *Essence* is distinguish'd from the *Essential Attributes*, *i. e.* from such as flow from its *Essence*, or first Attribute. Thus, the *Essence* of the human Mind is commonly supposed to consist in the Power of Thinking; by reason all its other Perfections seem to pre-suppose this; but this pre-supposes none. And thus, the Powers of understanding, doubting, assenting, willing, &c. do all flow from the Power of Thinking; and cannot exist without it, tho' this may without any of them.

It must be allow'd, however, that the *Essential* Properties of a Thing do so closely cohere, nay, and inhere in the *Essence* it self, that 'tis scarce possible to distinguish the one from the other. Hence, what some urge, that setting aside all the Attributes and Properties of a Thing, and what remains is its *Essence*; is a mere Chimera. For set aside, *e. gr.* from the Mind, the Powers of understanding and willing, with the rest of its Attributes: and what will there remain to call its *Essence*?

'Tis greatly disputed in the Schools, whether the *Essences* of created Things be Eternal: Or, whether the *Essences*, as well as the Existences, had their Origin in Time? The *Cartesians* hold, that the *Essences* of Things depend absolutely on the free concurring Will of God.

ESSENCE, in Medicine and Chymistry, is the purest and most subtle Part of a Body, extracted from the same, by means of Fire. See EXTRACT.

Of these there are a great Variety, drawn from Flowers, Fruits, &c. used on Account of their agreeable Smells, Tastes, &c. by the Apothecaries, Perfumers, &c.

The principal are *Essence of Rosemary*: *Of Turpentine*: *Of Anis*: *Of Cloves*: *Of Cinnamon*; and of *Citron*.

The *Essences* commonly sold by the Perfumers, are only the Oils of Ben, and of bitter Almonds; to which they give the Smell of certain Flowers, or Spices, as Violets, Jassemin, Cinnamon, &c.

The *Essences* to be drunk, or mix'd with Liquors, are of a more elaborate Composition: The most usual and best, is prepared with the Spirit of Wine, Cloves, Cinnamon, Mace, Long Pepper, and Coriander: The whole being put up in a very close Vessel, is expos'd to the Sun for six Weeks, or two Months, during the Day-time, and in the Night set on the Fire.

In Winter they use the Fire alone: This *Essence* being exceedingly strong; 'tis frequently used only to give a Strength to other weaker Liquors. After the same manner may the *Essences* of Amber, Musc, &c. be drawn.

The *Essences* of odoriferous Flowers, to give a fine Smell to Liquors, are drawn by laying *Strata*, or Lays of the Flowers, and of Sugar, alternately, in a proper Vessel, and leaving 'em to infuse in a Cellar for 24 Hours; and after that as long by the Sun; and lastly, straining or percolating the whole thro' a Sieve, without squeezing the Flowers.

ESSENI, or ESSENES, or ESSÆANS, an ancient Sect among the *Jews*. See SECT.

Josephus making mention of the several Sects among his Countrymen; distinguishes three; *viz.* the Pharisees, Sadducees, and *Esseni*: Which last he prefers to the

two former, as to their manner of Life. He assures us, further, that they were *Jews* by Original; from which it should appear, that S. *Epiphanius* was mistaken, in ranking 'em among the *Samaritans*.

In Effect, the *Esseni* appear to have been true Pythagorean Philosophers, in every Thing that related to their manner of Living. For they greatly affected Solitude and Retirement, and all Conversation with Women, to devote themselves more entirely to the contemplative Life.

The *Esseni* seem to have been among the *Jews*, what the most retired and austere Monks are, or were, among the Christians; which was what gave them their Denomination of *Ἰουδαῖοι ἀσκηταί*, *Ascetic Jews*. See ASCETIC.

Many Catholic Writers have even deduced the Origin of Monks from 'em: Building, principally, on what *Philo* relates of 'em, who divides 'em into two Branches or Sects: The one who married, and the other who lived in Celibate. See MONK and CELIBATE.

Josephus seems likewise to have had an Eye to these two Sorts of *Esseni*. *Serrarius*, who has wrote very amply on the Subject, follows *Philo*, in making two Classes of *Esseni*: The first, are those whom he calls *Practici*, and who lived in Community: The second, those call'd *Theoretici*, who lived in Solitude, and led a Life of pure Contemplation. He adds, that *Josephus* only makes mention of the first; passing, untouched, over the contemplative Kind, whom *Philo* calls *Therapeutes*, and who were principally found in *Egypt*. See THERAPEUTE.

Grotius will have the *Esseni* the same with the ancient *חסידים* *Hasidim*, or *Hasidæi*, thus call'd, according to *Philo*, from their singular Piety, Humility, and Devotion. Among these, *Gale* observes, it was, that the *Hebrew* Philosophy chiefly flourish'd. *Porphyry*, *de Abstinent*. is very prolix in his Praises of the *Esseni*; *Εἰς τὸν νόμον οἱ Ἐσσηνοὶ, Ἰουδαῖοι μὴν τὸ γυνῆ, φιλαλληλοὶ, &c.* He represents 'em as Despisers of Pleasure, Riches, Glory, and Delicacy, &c. and strenuous Retainers to Continency, Austerity, Study, &c. They decline Marriage; and adopt and educate other Peoples Children in Religion and Philosophy. They are all on a Level, hold every Thing in common, neither buy nor sell, &c. By long Habits, they arrived at such a Degree of Patience, that *Porphyry* assures us, Flames and Tortures had not the least Effect on 'em. They scorn'd to intreat their Torturers; nor ever shed a Tear; but would smile under all their Agonies, &c. As to their Learning, *Philo Judæus*, in his Treatise, *That every good Man is free*, tells us, that they despised Logic, as useless to the acquiring of Virtue: Physics, they left to the Sophists and Disputers, as judging it to transcend the human Faculties; and apply'd themselves wholly to Morality. *Gale*, *Essenor*, *Char. ap. Philos. Gener.* p. 29.

Eusebius holds, that the *Esseni*, call'd *Therapeutæ*, were real Christians, or *Jews* converted by St. Mark, who had embraced this Kind of Life. *Scaliger*, on the contrary, maintains, that these *Therapeutæ* were no Christians, but real *Esseni*; who made Profession of *Judaism*. However, he allows the two Kinds of *Esseni* abovementioned. But *Valesius*, in his Notes on *Eusebius*, absolutely rejects any such Distinction: He denies, that the *Therapeutæ* were any real *Esseni*; and that, chiefly, on the Authority of *Philo* himself, who never calls 'em *Esseni*, and who places the *Esseni* in *Judæa* and *Palestine*; whereas the *Therapeutæ* were spread throughout *Greece*, *Egypt*, and other Countries.

ESSENTIAL, something that is necessary to constitute a Thing, or that has such a Connexion with the Nature and Reason of a Thing, that it is found, or supposed, wherever the Thing it self is. See ESSENCE.

Thus, it is essential to God to be just. Mr. *Lock* has overturn'd that great Principle of the *Cartesians*, that *Thinking is essential to the Soul*. See THINKING.

The Heart, Brain, and Spinal Marrow, are Parts ordinarily supposed *Essential* to Life, or without which Life cannot be; yet we have Instances in Natural History, of Childrens being found, and alive, without almost any of those Parts. See BRAIN, &c.

ESSENTIAL Properties, are such as necessarily depend on, and are connected with, the Nature and *Essence* of any Thing, so as to be inseparable from it: in Distinction from accidental. See PROPERTY.

ESSENTIAL Oils, are such as are really in a Plant, and drawn from it by Distillation, in an Alembic, with Water; in Contra-distinction to those made by Infolation. See OIL.

ESSENTIAL Salts, are such as will crystallize in the Juice or Infusion of a Plant; in Distinction from those made by Incineration. See SALT.

ESSOIN, in Law, an Excuse for him that is summon'd to appear and answer to an Action real, or to perform Suit

Suit to a Court Baron. It is equivalent to *Excusatio* among the Civilians.

The Causes that serve to *Effoin*, are divers; yet may be reduced to five Heads: The first is, *Effoin de ultra mare*, when the Party is beyond Sea: The second, *De terra sancta*, when on an Expedition in the Holy Land: The third, *de malo venendi*, when he is infirm of Body, and cannot come; which is also call'd, the *Common Effoin*: The fourth, *Effoin de malo lecti*, when the Defendant is sick a-bed: The fifth, *de servitio Regis*, when he is in the King's Service. Horn mentions several other *Effoins* touching the Service of the King Celestial.

The Word is form'd of the French, *Effoinie*, i. e. *Causarius miles*, he that has his Preference forborn upon any just Cause, as Sickness, or other Impediment.

ESSOINS and PROFFERS. See PROFFER.

ESSORANT, in Heraldry, a Term used to express a Bird standing on the Ground with the Wings expanded, as if it had been wet, and were drying it self.

ESTANDARD. See STANDARD.

ESTATE, in Law, the Title, or Interest a Man hath in Lands or Tenements.

Estate is either simple or conditional: *Estate simple*, call'd also *Fee simple*, is where a Man by Deed Indented, enfeoffs another in Fee, reserving to him and his Heirs a Yearly Rent; with this Proviso, that if the Rent be behind, &c. it shall be lawful for the Feoffer and his Heirs, to enter. See FEE.

Estate Conditional, or upon Condition at Law, is such, as hath a Condition annexed to it, tho' it be not specified in Writing. e. gr. If a Man grant to another, by his Deed, the Office of Park-Keeper for Life: this *Estate* is upon *Condition in Law*, viz. If the Park-Keeper shall so long well and truly keep the Park.

ESTATE, or simply STATE, the Empire, Kingdom, Provinces, or Extent of Lands under any one Government or Dominion.

The *Estates* of the Grand Seignior, of the King of Spain, &c. are very extensive: Those of the King of France are compact, and well peopled. Italy is canton'd out into a great Number of petty *Estates*.

Ministers of *Estate*, Secretaries of *Estate*, &c. See MINISTER, SECRETARY, &c.

ESTATE is particularly applied to the several Ranks, or Classes, of a People assembled together, for the concerting of Measures, reforming Abuses, or composing the Disturbances of a State.

In England, the Three *Estates*, viz. King, Lords, and Commons, meet ordinarily in Parliament.

In France, the *Estates* consist of the Churchmen, the Noblesse, and the Third *Estate*.

Some will have these Assemblies of *Estates* to be a very ancient Constitution: All we know is, that there were general Assemblies held in the Gauls, before *Caesar's* Conquest. But then the People, or third *Estate*, had no Share in 'em. Under the 1st and 2d Race of the French Kings, there were also solemn Convocations, call'd *Parliaments*; but it was only the great Lords of the Realm that were call'd to 'em. See PARLIAMENT.

ESTATES General.

ESTATES of Holland. { See { STATES General, &c.

ESTERLING, or EASTERLING. See STERLING.

ESTETE, in Heraldry, is used by the French to signify a Beast whose Head has been, as it were, torn off by Force; and consequently the Neck left rough and rugged: In Contra-distinction to *deffait*, or *decapite*, where the Neck is left smooth; as if the Head had been cut off. See DEFFAIT.

ESTHER, a Canonical Book of the Old Testament.

The Book of *Esther*, is denominat'd from a celebrated Jewish Captive of that Name, in Persia, whose Beauty prefer'd her to the Bed of *Abasuerus*, and the Throne of Persia; And who, in that Quality, sav'd her Compatriots the Jews, from the Death, to which *Abasuerus* had doom'd 'em, by the Councils of his Favourite *Haman*: The History of which Transaction makes the Subject of the Book of *Esther*.

The Criticks are divided about the Author of this Book: *S. Epiphanius*, *S. Augustin*, and *Isidore*, attribute it to *Ezra*; But *Eusebius* will have it of a later Date. Some ascribe it to *Joachim*, High-Priest of the Jews, and Grand-son of *Josedek*. Others will have it compos'd by an Assembly, or Synagogue of the Jews, to whom *Mordecai* wrote Letters, informing 'em of what had happen'd, *Esth.* IX. 29.

But the Generality of Interpreters, both Hebrew, Greek, Latin, &c. ascribe the Book to *Mordecai* himself: *Elias Levita*, in his *Mafs. hamum*. Praef. 3. mentions this Sentiment as unquestionable.

'Tis chiefly founded on the Passage, Ch. IX. Ver. 20. where it is said, *That Mordecai wrote these Things, and*

sent Letters unto all the Jews, that were in all the Provinces, &c. 'Tis also supposed, that *Queen Esther* her self, might have some Share therein; it being express'd in the same Chapter, Ver. 29. that *Esther* and *Mordecai* wrote a second Letter with the King's Authority, to ordain the solemnizing a Yearly Feast, call'd *Purim*, that is, Days of Lots, in Commemoration of the Jews being deliver'd from the Lots, or Sortes, whereby they had been condemn'd.

Some will have this Book to be only Deuterocanonical. Others contend for its being Canonical, as far as Chap. X. Ver. 3. inclusive; and all the rest Deuterocanonical. Of this Sentiment are *S. Jerom*, *De Lyra*, *Dionysius the Carthusian*, *Cajetan*, and others. The Council of *Trent* turn'd the Scale for its being Canonical throughout: so that the Matter is determin'd for the Catholic Countries.

But as to the Protestants, they retain to the old Opinion, and only admit it as far as the 3^d Verse of the Xth Chapter. See DEUTEROCANONICAL.

ESTIVAL, or AESTIVAL Solstice. See SOLSTICE.

ESTOILEE'. A Cross *Estoilee*, is a Star with only four long Rays, in manner of a Cross; and accordingly broad in the Centre, and terminating in sharp Points. See CROSS.

ESTOPPEL, in Law, an Impediment, or Bar of Action growing from a Man's own Act, who hath, or otherwise might have had his Action. See BAR.

Goddard defines an *Estoppel* to be a Bar, or Hindrance, to one to plead the Truth; and extends it not to the Impediment given by his own Act only, but anothers also.

There are three Kinds of *Estoppel*, viz. by *Matter of Record*; by *Matter in Writing*; and by *Matter in pais*.

The Word is form'd of the French, *Estouper, oppilare, obstipare*.

ESTOVERS, in Law, is used by *Bracton*, for that Sustenance, which a Man committed for Felony, is to have out of his Lands, or Goods, for himself and his Family, during Imprisonment.

In Stat. 6. Edu. I. it is used for an Allowance in Meat or Clothes. In Stat. West. it is also used for certain Allowances of Wood, to be taken out of another Man's Woods.

In this last Sense *Estovers* comprehends *House-bote*, *Hay-bote*, and *Plow-bote*: So that if a Man hath in his Grant these general Words, *de Rationabili Estoverio in Boscis*, &c. he may thereby claim all three.

In some Mannors, the Tenants have Common of *Estovers*; that is, necessary Botes out of the Lord's Wood. See ALIMONY.

ESTRADE, a French Term, literally signifying a public Road, or High-way. Hence the Military Phrase, *Battre l'Estrade*, to *Beat the Estrade*, that is, to send Scouts, or Horsemen, to get Intelligence, to learn the Dispositions of the Enemy, and inform the General of every Thing like to fall in the Way. An Army never marches, without sending *Batteurs d'Estrade* on every Side.

The Word is form'd of the Italian *Strada*, Street, or Road, which is derived from the Latin *Strata*, a paved Street. Some derive it from *Estradiots*, who were Cavaliers anciently employ'd in *beating the Estrade*.

ESTRADE is also us'd, for a little Elevation in the Floor of a Room, frequently encompass'd with an Alcove, or Rail, for the placing a Bed in; and sometimes, as in Turkey, only cover'd with fine Carpets, to receive Visitors of Distinction in. See ALCOVE.

ESTRANGEL, in the Syriac Grammar. The *Estrangel*, or *Estrangelus Character*, is a particular Species, or Form of Syriac Letters; serving as the Majuscule Letters of the Syriac Language.

Abraham Ecchellensis takes the *Estrangel* Character, for the true, ancient, *Chaldee* Character. And 'tis certain, the *Abyssinians*, who call themselves *Chaldeans*, still occasionally use the *Estrangel* Character; if we may credit *Hottinger* in his *Thesaur. Philol.* p. 286. *Bishop Walton*, in his *Prolegomena*, gives us an *Estrangel Alphabet*.

ESTRAY, signifies any tame Beast found within any Lordship, and not owned by any Man; in which Case, being cri'd, according to Law, in the Market adjoining, if it be not claimed by the Owner in a Year and a Day, it is then the Lord's of the Soil where found.

ESTREAT, in Law, is used for the true Copy, or Duplicate, of an original Writing: For Example, of Amerciaments, or Penalties, set down in the Rolls of a Court, to be levied by the Bailiff, or other Officer, of every Man for his Offence.

Clerk of the ESTREATS. See CLERK.

ESTREPEMENT, in Law, an impoverishing, or making of Land barren, by continual Plowing and Sowing; without due Manuring, Rest, and other Husbandry.

The Word is also used, for any Spoil made by the Tenant for Life, upon any Lands, or Woods, to the Prejudice of him in Reversion; as the cutting down of Trees,

or lopping them further than the Law allows, &c. Stat. Edu. VI.

The Word is derived from the French, *Estopier*, to maim; or the Latin, *extirpare*.

ESTREPEMENT, is also a Writ which lies in two Cases; the one, when a Man having an Action depending, (wherein the Demandant is not to recover Damages as a Writ of Right, *dum fuit infra etatem*, &c.) sues, to inhibit the Tenant from making Waste during the Suit.

The other is for the Demandant who is adjudged to recover Seisin of the Land in Question, and before Execution, for fear of Waste to be made ere he can get Possession, sues out this Writ.

ESULA, a medicinal Root. The *Esula*, is properly the Bark of a little reddish Root, which produces green, narrow, milky Leaves. It grows chiefly in France. 'Ere they use it, 'tis infused in Vinegar: After which, they draw Extracts from it, used in the Dropsy.

ESURINE Salts, are such as are of a fretting, eating, or corroding Nature; which chiefly abound in Places near the Sea-side, and where great Quantity of Coal is burnt: As appears from the speedy rusting of Iron in such Places. See SALT.

ETAPPE, in War, the Allowance of Provisions and Forage made to the Soldiers, upon March thro' a Kingdom or Province, to or from Winter Quarters.

Hence, he that contracts with the Country, or Territory, for furnishing the Troops in their March, is called ETAPPIER.

ETCHING, a Method of Engraving on Copper; wherein the Lines, or Strokes, instead of being cut with a Tool, or Graver, are eat with Aqua fortis. See ENGRAVING.

Etching was invented much about the same Time with *Engraving* on Copper, properly so call'd; by *Alb. Durer*, and *Lucas*. It has several Advantages over that Art; as, that it is done with more Ease and Expedition; that it requires fewer Instruments; and even, that it represents divers Kinds of Subjects better, and more agreeably to Nature, as Landscips, Ruins, Grounds, and all small, faint, loose, remote Objects, Buildings, &c.

The Method of *Etching* is thus: The Plate being well polish'd, is heated over the Fire; and when hot, cover'd over with a peculiar Ground, or Varnish. When cold again, the Ground is blacken'd with the Smoak of a Candle; and on this Ground, thus blacken'd, the Back of the Design, or Draught, is laid.

This done, the Design remains to be calk'd, or transfer'd upon the Plate; which is more easily effected, than in the common Graving; for the Back of the Design having been before rubb'd over with red Chalk, nothing remains but to trace over all the Lines and Strokes of the Draught with a Needle or Point; which pressing the Paper close down to the Ground, occasions the Wax therein to lay hold of the Chalk, and so bring off the Marks of the several Lines: So as at length, to shew a Copy of the whole Design in all its Correctness.

The Draught thus calk'd, the Artift proceeds to draw the several Lines, and Contours with a Point, thro' the Ground, upon the Copper.

To finish his Work, he makes use of Points of divers Sizes, or Bignesses; and presses on them sometimes more strongly, and sometimes more lightly, according as the several Parts of the Figures, &c. require more or less Strength or Boldness: Some of the Points being as fine as Needles, for the tender, Hair strokes, and the remoter, fainter Objects; and others again, as big as Bodkins, made oval-wise, for the deeper Shadows, and the Figures in the Front of the Work.

Things thus prepared, a Rim, or Border of Wax, is rais'd round the Circumference of the Plate, and *Aqua fortis* pour'd on; which, by the said Border, is kept from running off at the Edges.

The Ground being impenetrable to that corrosive Water, the Plate is defended from it every where but in Lines, or Hatches, cut thro' it with the Points; which, lying open, the Water passes thro' them to the Copper, and eats into the same, to the Depth required: Which done, it is pour'd off again.

Of *Etching* Grounds, it must be observed, there are two Kinds; the one *soft*, and the other *hard*. There are also two Kinds of *Aqua fortis*: The one *White*, which is only used with the soft Ground, and is applied as above directed: The other *Green*, made of Vinegar, Common Salt, *Sal Ammoniac* and Verdegrease. This is used indifferently with either Kind of Ground: Its Application is somewhat different from that of the *White*.

Without making any Border, they pour it on the Plate, which is placed for that Purpose a little inclined; and as the Water runs off, it is received in a Vessel placed under-

neath. This they repeat, pouring it again and again, till it has eaten deep enough.

Add, that the *Aqua fortis*, of which Kind soever it be, must not continue equally long, or be pour'd equally often, on all the Parts of the Design. The remote Parts must be bitten more slightly, than those nearer to the View.

To manage this, they have a Composition of Oil and Grease, wherewith they cover the Parts that are to be bitten no further. Or else they lay the Composition on as a defensive at first, and take it off again when they find proper. In Effect, they are every now and then covering and uncovering this or that Part of the Design, as Occasion requires; the Conduct of the *Aqua fortis* being one of the principal Concerns in the whole Art, and that on which the Effect of the whole very much depends. The Operator is also to be very attentive to the Ground, that it don't fail, or give Way, in any Part, to the Water; and where it does, to stop up the Place with the Composition aforesaid.

Lastly, it is to be remember'd, that a fresh Dip of *Aqua fortis* be never given, without first washing out the Plate in fair Water, and drying it at the Fire.

The *Aqua fortis* having done its Part, the Ground is taken off, and the Plate wash'd and dried; after which nothing remains but for the Artift to examine it with his Graver in his Hand, to touch it up, and heighten it, where the *Aqua fortis*, &c. has mis'd.

ETERNITY, an Attribute of God, whereby the Duration of his Existence is conceiv'd incommensurable with Time, and exclusive of Beginning, Progress, Ending, &c. See GOD, TIME, &c.

Authors are terribly straighten'd for a proper and just Definition of *Eternity*. That of *Boethius de Consol. Philos. L. V. Pr. 6. viz. Interminabilis vita, tota simul & perfecta possessio*, i. e. a perfect Possession of a whole endless Existence all together, or at once, tho' retain'd by *S. Thomas*, and others, is faulty in divers Respects.

Censorinus, de Die Natal. defines *Eternity*, by *Infinite Duration*; that is, Duration which has always been, and always will be. — Others, more fully describe it by a Duration that exists all together, without any Flux, or Succession of Parts, prior, or posterior to each other: Where, the Word *Duration*, taken abstractedly, imports no more than the Perseverance of a Thing in Existence; the π *durare*, being here oppos'd to the π *cessare*, in Existendó.

But soften the Word *Duration* how you will, it is scarce conceivable, but by conceiving a Quantity thereof; nor a Quantity, without conceiving a Succession. — Others, therefore, define *Eternity* by a *perpetuum nunc*, a perpetual now; or a *nunc semper stans*, an ever-standing now: But neither are these unexceptionable; the Words *perpetuum*, and *semper-stans*, importing an obscure Sort of Duration. See DURATION.

ETESIAN Winds. See WINDS.

ETHER. See ÆTHER.

ETHERIAL Oil, a Name the Chymists give to high rectified Oils, which differ little from inflammable Spirits; such are Oil of Turpentine, &c. See OIL, SPIRIT, &c.

ETHICKS, ETHICA, a Term originally Greek, $\eta\theta\iota\kappa\alpha$, applied to the Doctrine of Morality, or Moral Philosophy. See PHILOSOPHY.

Gale makes *Ethicks* only the first Part, or Branch of Moral Philosophy, viz. that which regards private Persons, or in a private Capacity. See MORAL.

The Word is form'd from $\eta\theta\omicron\varsigma$, $\eta\theta\eta$, Mores, Manners; by Reason the Scope, or Object thereof, is to form the Manners. See MANNERS.

Now, by *Manners*, is here meant a Way, or Manner of Living, confirm'd by Custom, or Habit; or certain Habitudes of doing; or Actions which are often repeated: Which, if they be according to right Reason, the *Morals*, or *Manners*, are said to be *Good*; otherwise *Evil* and vitious. See GOOD and EVIL.

Hence, the Object of *Ethicks*, is the Exercise of right Reason, in all our Affairs, Actions and Circumstances; or it is Man himself consider'd as dirigible, and to be conducted according to Reason: And the End of *Ethicks*, is to make him good and happy. For that if a Man conduct himself, according to right Reason, in all the Circumstances of his Actions, Affairs and Relations, he will arrive at the highest Pitch of Moral Perfection and Beatitude.

Whence, *Ethicks* may be defined a right Manner of thinking, in order to attain human Felicity; or a Discipline whereby Man is directed to conduct his Will, and the Actions thereof, so as to live well and happily. See WILL.

The principal, nay, the only Topicks thereof, are Happiness and Manners; whence arise two Parts, or Branches of *Ethicks*; the first on moral Happiness, consider'd as the End; and the second on Moral Virtues, or good

Manners, as the Means to arrive thereat. See HAPPINESS, VIRTUE, &c.

ETHICOPROSCOPTES, in Antiquity, the Name of a Sect.

Damascenus, in his Treatise of *Hereses*, tells us, that the Denomination *Ethioproscoptes* was given to such as err'd in Matters of Morality, and Things relating to Practice, that were to be done, or be avoided, &c. who blamed Things laudable, and good in themselves, or recommended or practised Things Evil. Which shews, that they were no particular Sect.

The Word is form'd of the Greek, ἠθῶν, *Manners*, and προσώπτω, *offendo*, I offend.

ETHMOIDAL, ETHMOIDALIS, in Anatomy, one of the *Sutures* of the Human Cranium. See SUTURE.

The common Sutures are those which separate the Bone of the Cranium from those of the Cheeks; and are four: The Transversal, *Ethmoidal*, Sphenoidal, and Zygomatical. See CRANIUM.

The *Ethmoidal* takes its Denomination from its turning round the *Os Ethmoides*. See ETHMOIDES.

ETHMOIDES, in Anatomy, a Bone situate in the middle of the Basis of the Fore-head, or *Os frontis*, and at the Top of the Root of the Nose; filling almost the whole Cavity of the Nostrils. See NOSTRILS.

It has its Name from ἠθμός, *Cribrum*, Sieve, and εἶδος, *Form*; because all spongy and cribrous.

By its cribrous Part it is join'd to the Head; by the spongy Part, to the Cavity of the Nostrils; and by the plain and broad Part, to the Orbits of the Eyes.

In the cribrous Part is an Apophysis, which jets out, in a Point, into the Cavity of the Skull; call'd, from its Figure, *Crista Galli*, or Cock's Comb. From its under Side, there goes a thin Bone, which divides the Cavity of the Nostrils into two, call'd the *Vomer*. It is perforated by a Number of small Holes, thro' which the Fibres of the olfactory Nerves pass to the *Processus Mamillares*.

J. Philip Ingrassias, a *Sicilian*, who flourish'd about the Year 1546, was the first who gave a just Account of the Structure of the *Os Ethmoides* or *Cribriform*. See NOSE.

ETHNARCHA, ETHNARCH, a Governour, or Commander of a Nation. See TETRARCH.

There are some Medals of *Herod I.* surnamed the *Great*, on one Side whereof is found ΗΡΩΔΟΥ, and on the other ΕΘΝΑΡΧΟΥ, q. d. *Herod the Ethnarch*: Now, after the Battel of *Philippi*, we read that *Anthony* passing over into *Syria*, constituted *Herod* and *Phasael* his Brother, Tetrarchs, and in that Quality committed to them the Administration of the Affairs of *Judea*. *Jos. Ant. L. XIV. C. 23.* *Herod* therefore had the Government of the Province before ever the *Parthians* enter'd *Syria*, or before *Antigonus's* Invasion, which did not happen till six or seven Years after *Herod* was Commander in *Galilee*. *Jos. L. XIV. C. 24, 25.*

Consequently, *Herod* was then truly *Ethnarch*; for he can be no otherwise denominated: So that it must have been in that Space of Time that the Medals were struck which only give him this Title. Which Medals are a Confirmation of what we read in History of the Government that Prince was intrusted withal e're he was rais'd to the Royalty.

Josephus gives *Herod* the Appellation of Tetrarch, in lieu of that of *Ethnarch*; but the two Terms came so near to each other, that it was very easy to confound them together. See TETRARCH.

Tho' *Herod* the *Great* left by Will, to *Archelaus*, all *Judea*, *Samaria*, and *Idumea*; yet, *Josephus* tells us, he was then only call'd *Ethnarch*.

The Word is Greek, form'd of εθνῶν, *Nation*, and ἀρχή, *Command*.

ETHNOPHRONES, in Antiquity, the Name of a Sect. See SECT.

The *Ethnophrones*, or *Paganizers*, were Hereticks of the VIIth Century, who made a Profession of Christianity, but join'd thereto all the Ceremonies and Follies of Paganism, as Judiciary Astrology, Sortileges, Auguries; and other Divinations.

And hence their Denomination; from εθνῶν, *Nation*, and φρονέω, *Thought*, *Sentiment*, q. d. whose Thoughts, or Sentiments were still Heathen or Gentile.

They practised all the Expiations of the Gentiles, held all their Feasts, observed all their Days, Months, Times, and Seasons. See *Damascenus*, *L. Heres. N. 94.*

ETHOPOEIA, or ETHOPEA, in Rhetoric, call'd also ETHOLOGY, and vulgarly *Picture*, or *Portrait*; is a Draught, or Description, expressing the Manners, Passions, Genius, Temper, Aims, &c. of another Person.

Such is that beautiful Passage in *Salust*, in his *Bellum Catilinarium*, wherein he gives us a Picture of *Catiline*: *Fuit magna vi & animi & Corporis sed Ingenio malo pravoque huic*, &c. 'He had an uncommon Strength both of Body and Mind; but an ill turn'd, and wicked Disposition. When a very Boy, his great Pleasure was in intestine Broils, Rapine, Slaughter, and civil Discord. His Body was form'd to undergo Fasting, Cold, and Watching, beyond all Belief. His Mind was daring, deceitful and various; and could imitate, or accommodate it self to any Body: He was extremely covetous of other People's Goods, and profuse of his own withal. His Lusts and Desires were very high; his Stock of Eloquence considerable; but his Discretion scarce any.'

The *Ethopœia* is divided into *Prosographia*, and *Ethopœia*, properly so call'd; the former of which is a Picture of the Body, Countenance, Make, Dress, Gait, &c. and the latter of the Mind.

The Word is of Greek original, being form'd of ἠθῶν, *mos*, *consuetudo*, and ποιεῖν, *facio*, *tingo*, *describo*. *Quintilian*, *L. IX. C. 2.* calls this Figure *Imitatio morum alienorum*; and in Greek, μίμνσις, *Imitation*.

ETYMOLOGY, that Part of Grammar, which considers, deduces, and explains the Origin and Derivation of Words; in order to arrive at their first and primary Signification. See GRAMMAR.

The Word is form'd of the Greek, ἔτυμον, *verus*, *true*, and λέγω, *dico*, I speak; whence λόγια, *Discourse*, &c. and thence *Cicero* calls the Etymology, *Notatio*, and *Veriloquium*: Tho' *Quintilian* chuses rather to call it *Originatio*.

In all Ages there have been People curious in *Etymologies*: *Varro* has wrote on the *Etymology* of the *Latin* Words; and we have a Greek *Etymologicon*, under the Name of *Nicas*.

The *Etymologies* of our *English* Words have been deduced from the *Saxon*, *Welsh*, *Walloon*, *Danish*, *Latin*, *Greek*, &c. by *Somner*, *Cambden*, *Verstegan*, *Spelman*, *Casaubon*, *Henshaw*, *Skinner*, *Junius*, &c. See ENGLISH.

Those of the *French* and *Italian* Words, by *Menage*, in what he calls his *Origines*: *Henry Stephens*, *Tripot*, *Borel*, &c. have also laboured on the *French Etymologies*. *Guichard*, and *Fa. Thomassin*, have carried the *Etymologies* of Abundance of *French* Words as high as the *Hebrew*. *Postel* had the same Design before them.

We have a *Latin Etymologicon* of *Gerard Vossius*, another of *Martinius*, &c. *Octavio Ferrari*, has an *Etymology* of the *Italian* Tongue: And *Bernard d'Aldretta*, another of the *Spanish*.

Fa. Dom. Pezron, Abbot of *Charmoye*, and Priest of the *Sorbonne*, has traced up to the *Celtic* Language the *Etymologies* of Abundance of *Greek*, *Latin*, *German*, *French*, and other Words, used by *Plato*, *Servius*, *Donatus*, and other *Latin* Authors without knowing their true Origin, and *Etymology*, for Want of being acquainted with the Roots of the *Celtic* Tongue, from which Abundance of *Greek*, *Latin*, &c. Words are derived. But it must be added, that his *Etymologies* are frequently so far fetch'd, that one can scarce see any Resemblance, or Correspondence at all.

A strict, and solicitous Enquiry into *Etymologies*, is no frivolous, and impertinent Design; but has considerable Uses. Nations, who value themselves on their Antiquity, have always look'd on the Antiquity of their Language as one of the best Titles they could plead. For the *Etymologist*, by seeking the true, and original Reason of the Notions and Ideas attach'd to each Word, and Expression, may often furnish an Argument of Antiquity from the Vestigia, or traces remaining thereof; and from the Indices still subsisting in the present Use of the Words, compared with the ancient Uses.

Add, that *Etymologies* are necessary for the thorough Understanding of a Language: For, to explain a Term precisely, there seems a Necessity of recurring to its first Imposition, in Order to speak justly and satisfactorily thereof. The Force and Extent of a Word is generally better conceiv'd, and enter'd into, when a Person knows its Origin and *Etymology*.

'Tis objected, however, that the Art is arbitrary, and built altogether on Conjectures and Appearances; and the *Etymologists* are charged with deriving their Words from where they please. But the Science is certainly real, and as regular as divers others; having its proper Principles, and Method.

It must be own'd, indeed, that it is no easy Matter to return into the ancient *British*, and *Gaulish* Ages; to follow, as it were by the Track, the divers imperceptible Alterations a Language has undergone from Age to Age. A sober *Etymologist* has need of all the Lights he can come at, to conduct and bring down Words variously disguis'd

guis'd in their Passage, and remark all the Changes that have befallen them. And as those Alterations have sometimes been owing to Caprice, or Hazard, 'tis easy to take a mere Imagination, or Conjecture, for a regular Analogy; so that 'tis nothing strange the Public should be prejudiced against a Science which seems to stand on so precarious a Footing.

EVACUANTS, in Medicine, Remedies proper to expel, or carry off any ill, peccant, or redundant Humor in the animal Body; by the proper Ways or Emunctories. See **EVACUATION**.

Of *Evacuants*, there are divers Kinds, distinguish'd according to their various Humours and Emunctories. See **HUMOR** and **EMUNCTORY**.

Some, *e. gr.* carry off their Matters by *Stool*, call'd *Purgatives*, or *Catharticks*. See **PURGATIVES**, &c. Others by *Urine*, call'd *Diureticks*. See **DIURETICKS**. Others by *Perspiration*, call'd *Diaphoreticks*. See **DIAPHORETICKS**. Others by *Sweat*, call'd **SUDORIFICKS**. Others by the Mouth, call'd *Vomitories*, or **EMETICKS**. Others by the salival Glands, as **SIALIGOGUES**: And others, lastly, by the *Menses*, as **MENAGOGUES** and **ARISTOLOCHICKS**.

EVAUATION, in Medicine, a Diminution of the animal Fluids, in Order to a Discharge of some morbid, or redundant Matters therein; or, only, for the Sake of thinning, attenuating, and promoting the Motion and Circulation thereof. See **EVACUANTS**.

The Matter of a Disease, or what is prescribed by Art to remove or ease it, is *Evacuated* two Ways.

1°. By the natural Emunctories, or Out-lets of the Skin; the Noftrils, Mouth, Fauces, Oesophagus, Ventricle, Intestines, Bladder, and Urethra.

And 2°. By artificial Outlets, made either in the Blood Vessels; as by *Phlebotomy*, *Arteriotomy*, *Scarifications*, and *Leaches*. See **PHLEBOTOMY** and **SCARIFICATION**, &c. Or, in the Lymphatic Vessels; as by **CAUSTICKS** and **VESICATORIES**. Or, lastly, in both, as by *Issues*, *Setons*, *Ulcers*, *Fistula's*, &c. See **ISSUE**, **SETON**, **FISTULA**, &c.

Hence, the first Distinction of *Evacuants* is derived from the different *Emunctories*; and the 2d, from the Diversity of Matter *evacuated* thro' them.

Most of the Chronical Diseases, the Infirmities of old Age, and the short Periods of the Lives of *Englishmen*, Dr. *Cheyne* observes, are owing to Repletion. This is evident from hence; that *Evacuation* of one Kind or another, is nine Parts in ten of their Remedy: For not only Cupping, Bleeding, Blistering, Issues, Purging, Vomiting and Sweating, are manifest *Evacuations*, or Drains, to draw out what has been superfluously taken down; but even Abstinence, Exercise, Alteratives, Cordials, Bitters, &c. are but several Means to dispose the gross Humours, to be more readily *evacuated* by insensible Perspiration. *Essay on Health*.

For the Periodical *Evacuations* of Women. See **MENSES**.

For the *Evacuations* of Women after Delivery. See **LOCHIA**.

The Term is likewise used in the Art of War: To *Evacuate a Place*, is to make the Garrison quit, or march out of it, in order for another Power to take Possession of it, or to make Room for another Garrison.

EVANGELISTS, the inspired Authors of the Gospels. See **GOSPEL**.

The Name *Evangelists* was likewise given, in the antient Church, to such as preach'd the Gospel here and there; without being attach'd to any particular Church. In which Sense, some Interpreters think it is, that St. *Philip*, who was one of the seven Deacons, is call'd the *Evangelist*, in 21st Chapter of the *Acts of the Apostles*, Ver. 8.

Again, St. *Paul* writing to *Timothy*, Ep. 2. C. IV. v. 5. bids him do the Work of an *Evangelist*. The same Apostle, *Eph. IV. II.* ranks the *Evangelists* after the Apostles and Prophets.

Hence, Monf. *Tillemont* takes the Liberty to use the Word in the same Sense. 'Most of those who then embraced the Faith, being fill'd with the Love of a holy Philosophy, began to distribute their Goods to the Poor, and after that went into divers Countries to do the Office of *Evangelists*, to preach Christ to such as had not yet heard of him, and to furnish them with the sacred Writings of the Gospel.'

The Word is derived from the *Greek*, *ευαγγελιον*, form'd of *eu*, *bene*, well, and *αγγελος*, *Angel*, *Messenger*.

O suaves Epistolas tuas uno tempore mihi datas duas! quibus Evangelia quæ reddam nescio; deberi quidem plane fateor. Cic. *ad Attic.*

EVANID. A Name some Authors give to those Colours which are not of very long Duration; as those in the Rain-bow, in Clouds before and after Sun-set, &c. See **COLOUR**, &c.

Evavid are the same with those otherwise call'd *Fantastical*, and *Emphatical Colours*: See **FANTASTICAL**, &c.

EVANTES, in Antiquity, the Priestesses of *Bacchus*; thus call'd, by Reason, in celebrating the *Orgia*, they ran about as if distracted, crying *Evan, Evan, Ohe Evan!* See **BACCHANTES**.

EVAPORATION, in Philosophy, the Act of exhaling the Humidity of a Body; or of dissipating it in Fumes or Vapour. See **VAPOUR**.

Common Salt is form'd, by evaporating all the Humidity in the Salt-Water, or Brine; which *Evaporation* is either perform'd by the Heat of the Sun, as in the Salt-Works by the Sea-Coast, &c. or by Means of Fire, as in the Salt Springs, &c. See **SALT**.

By the Observations of Monf. *Sedileau* it appears, that what is rais'd in Vapour, exceeds that which falls in Rain. See **RAIN**.

Tho' the *Evaporation* of Liquids is generally look'd on as an Effect of the Heat, and the Motion of the Air; yet Monf. *Gauteron*, in the *Memoirs de l'Academ des Scien.* An. 1705. shews, that a quite opposite Cause may have the same Effect; and that Liquids lose a deal more of their Parts in the severest Frost, than when the Air is moderately warm. In the great Frost of the Year 1708, he found, that the greater the Cold, still the more considerable the *Evaporation*; and that Ice it self lost full as much as the warmer Liquors that did not freeze. See **FROST**.

Dr. *Halley* furnishes us with some Experiments of the Quantity, or Measure of the *Evaporation* of Water. -- The Result is contain'd in the following Articles:

1°. That Water salted to about the same Degree as Salt Water, and expos'd to a Heat equal to that of a Summer's Day, did, from a circular Surface of about Eight Inches Diameter, *Evaporate* at the Rate of 6 Ounces in 24 Hours. Whence, by a Calculus, he finds, that the Thickness of the Pellicle, or Skin of Water *Evaporated* in two Hours, was the 53d Part of an Inch: But, for a round Number, he supposes it only a 60th Part; and argues thence, that if Water as warm as the Air in Summer, evaporates the Thickness of one 60th Part of an Inch in two Hours, from its whole Surface; in twelve Hours it will exhale one tenth of an Inch. Which Quantity, he observes, will be found abundantly sufficient to furnish all the Rains, Springs, Dews, &c. See **SPRING**, &c.

In Effect, on this Principle, every 10 Square Inches of the Surface of the Water, yields in Vapour, *per diem*, a Cubic Inch of Water; and each Square Foot half a Wine Pint; every Space of 4 Foot Square, a Gallon; a Mile Square, 6914 Tons; and a Square Degree, suppose of 69 *English Miles*, will *Evaporate* 33 Millions of Tons. See **RIVER**, &c.

2°. A Surface of Eight Square Inches, *Evaporated*, purely by the natural Warmth of the Water without either Wind or Sun, in the Course of a whole Year, 16292 Grains of Water, or 64 Cubic Inches; consequently, the Depth of Water thus *Evaporated* in one Year amounts to 8 Inches. But this being much too little to answer the Experiments of the *French*, who found, that it rain'd 19 Inches of Water in one Year at *Paris*; or those of Mr. *Townley*, who found the Annual Quantity of Rain in *Lancashire*, above 40 Inches: He concludes, that the Sun and Wind contribute more to *Evaporation*, than any internal Heat, or Agitation of the Water. See **RAIN**.

3°. The Effect of the Wind is very considerable, on a double Account. For the same Observations shew a very odd Quality in the Vapours of Water, *viz.* that of adhering and hanging to the Surface that exhale'd 'em, which they clothe, as it were, with a Fleece of vaporous Air; which once investing the Vapour, it thenceforwards rises in much less Quantity. Whence, the Quantity of Water lost in 24 Hours, when the Air was very still from Winds, was very small; in proportion to what went away when there was a strong Gale of Wind Abroad to dissipate the Fleece, and make Room for the Emission of Vapour: And this, even tho' the Experiment was made in a Place as close from the Wind as could be contrived.

Add, that this Fleece of Water hanging on the Surface of Waters in still Weather, is the Occasion of very strange Appearances, by the Refraction of the Vapour's differing from, and exceeding that of common Air. Whence every Thing appears rais'd, as Houses like Steeples, Ships as on Land above the Water, the Land rais'd, and as it were lifted from the Sea, &c.

4°. The same Experiments shew, that the *Evaporations* in *May*, *June*, *July*, and *August*, which are nearly equal, are about three Times as great as those in the Months of *November*, *December*, *January*, and *February*.

EVAPORATION, in Pharmacy, an Operation by which the more aqueous and volatile Parts of Liquids are spent, or drove away in Steam; so as to leave the remaining Part stronger, or of a higher Consistence than before.

Evaporation is properly the setting a Liquor over a gentle Heat, to carry off the most fluid and volatile Parts, without lessening the Quantity of the other Matter the Liquor is impregnated withal.

Evaporation differs from *Exhalation*, in that the former is practis'd on moist Things, and the latter on dry. See *EXHALATION*.

To *Evaporate ad Cuticulam*, to a *Pellicle*. See *CUTICULA* and *PELLICLE*.

EVATES, a Branch, or Division of our old Philosophers the Druids. See *DRUID*.

Strabo distributes the Philosophers among the *Britains* and *Gauls*, into three Sects. *Bards*, *Ovates*, *Evates*, and *Druids*. He adds, that the *Bardi* were Poets and Musicians; the *Evates*, Priests and Naturalists; and the *Druids*, Moralists as well as Naturalists.

But *Marcellinus*, Lib. 15. *Vossius* Philos. Lect. 1. 2. and *Hornius* Hist. Philosoph. 1. 2. c. 12. reduce 'em all to two Sects, viz. *Bardi* and *Druides*.

And, lastly, *Cesar*, lib. 6. comprehends 'em all under the Name of *Druids*.

The *Evates*, or *Vates*, of *Strabo*, might probably be what other Authors, and particularly *Ammian*. *Marcellin*. calls *Eubages*. But *M. Bouche*, in his *Hist. de Provence*, L. II. c. 2. distinguishes between 'em. The *Vates*, he says, were such as took Care of the Sacrifices, and other Ceremonies of Religion; and the *Eubages*, those who spent their Time in the Search and Contemplation of the great Mysteries of Nature. See *EUBAGES*.

EUBAGES, an Order of Priests, or Philosophers, among the ancient *Celtæ* or *Gauls*.

Chorier takes the *Eubages* to be the same with the *Druids*, and *Saronide* of *Diodorus*: Others take the *Eubages* to be those whom *Strabo* L. IV. p. 197. calls *Ovates*, *Evates*, or *Vates*: On which Principle there were Room to conjecture, that the Word should be wrote *Ovases*; it being easy to mistake a T for a V. See *EVATES*.

Be this as it will, the *Eubages* appear to have been different from the *Druids*. See what has been shewn under the Article *DRUID*.

EUCCHARIST, *Eucharistia*, the Sacrament of the Supper; or a Communication of the Body and Blood of *Christ*, under the Species, or Figures of Bread and Wine. See *COMMUNION*, *SACRAMENT*, *SPECIES*, *TRANSUBSTANTIATION*, *CONSUBSTANTIATION*, &c.

The Word in its Original *Greek*, *Εὐχαριστία*, literally imports *Thanksgiving*; being form'd of *ευ*, *bene*, well, and *χαρις*, *gratia*, Thanks.

EUCHITES, or *EUCHETES*, a Sect of ancient Hereticks, thus call'd, by reason they pray'd without ceasing; imagining that Prayer alone was sufficient to save 'em. See *PRAYER*.

Their great Foundation, were those Words of *St. Paul*, *Epist. I. to the Thessalon. C. 5. V. 17. Pray without ceasing*.

The Word is form'd of the *Greek*, *Εὐχὴ*, *Prayer*; whence *Εὐχεται*, the same with the Latin *Precores*, *Prayers*. They were also call'd *Enthusiasts* and *Messalians*. See *ENTHUSIAST*.

St. Cyril of *Alexandria*, in one of his Letters, takes Occasion to censure certain Monks in *Egypt*, who, under Pretence of resigning 'emselves wholly to Prayer, led a lazy, scandalous Life. The Orientals, however, lay a further Charge on the *Euchites*, or *Messalians*. See *MESSALIANS*.

EUCHOLOGUS, *EUCHOLOGUE*, a *Greek* Term, signifying, literally, a *Discourse on Prayers*; being form'd of *εὐχὴ*, *Prayers*, and *λόγος*, *Discourse*.

The *Euchologus* is properly the *Greek* Ritual, wherein is prescribed the Order and Manner of every Thing relating to the Order and Administration of their Ceremonies, Sacraments, Ordinations, &c.

Fa. Goar has given us an Edition of the *Greek Euchologue* in *Greek* and *Latin*, with Notes, at *Paris*.

EUCHRASYS, from *ευ*, *bene*, good, and *χρῆσις*, *Temperamentum*, Constitution, is an agreeable, well proportion'd Mixture of Qualities; whereby a Body is said to be in good Order, that is, in a good State of Health. See *TEMPERAMENT*.

EUDOXIANS, a Party, or Sect of Hereticks, of the IVth Century; denominated from their Leader *Eudoxius*, Patriarch of *Alexandria* and *Constantinople*, a great Defender of the *Arian* Doctrine.

The *Eudoxians*, then, adhered to the Errors of the *Arians* and *Eunomians*; maintaining, that the Son was created out of Nothing; that he had a Will distinct and different from that of the Father, &c. See *ARIANS* and *EUNOMIANS*.

EVECTION, is used by some Astronomers for the *Libration* of the Moon. See *LIBRATION*.

EVEN Number, is that which may be divided into two equal Parts, or *Moieties*. See *NUMBER*.

EVENLY even Number, is which is exactly divisible by an *Even Number* taken an *Even Number* of Times; such is 32; since divisible by eight, taken four Times.

EVENLY odd, is that which an *Even Number* measures by an *Odd* one; as 30, which is measured by 6, taken five Times.

EVERGETES, a *Greek* Term, signifying *Benefactor*; being form'd of *εὖ*, *bene*, well, and *ἔργον*, *opus*, Work.

It is still retain'd in our Language, by Way of Addition, or Epithet, given to several Princes, or Kings of *Syria* and *Egypt*, who succeeded *Alexander*. Thus we say, *Protomy Evergetes* King of *Egypt*; *Antiochus Evergetes* King of *Syria* ascended the Throne 139 Years before *Christ*.

EVER-GREENS, or *Perennials*, such Plants as continue their Verdure, Leaves, &c. all the Year. See *PLANT*, &c.

Of these, our Gardeners reckon twelve, fit for *English* Air, viz. the *Alaternus*, *Arbutus*, *Bay-Tree*, *Box-Tree*, *Holley*, *Juniper*, *Laurus tinus*, *Phyllirea*, *Pyracantha*, or *Ever-green Thorn*, *Italian green Privet*, and the *Yew-Tree*.

EVIDENCE, a Quality in Things whereby they become visible and apparent to the Eyes, either of the Body, or the Mind. See *KNOWLEDGE*.

The Schoolmen distinguish *Evidence*, into *formal* and *objective*.

Formal Evidence, is the Act of the Intellect, consider'd as clear and distinct.

Objective Evidence, consists in the Clearness and Perfection of the Object; or it is the Object it self, so constituted, as that it may be clearly and distinctly known.

Others divide *Evidence* into *Moral*, *Physical*, and *Metaphysical*.

A Thing is said to be *morally Evident*, so far as I have a distinct Notion, or Knowledge thereof, by unexceptionable Witnesses. *Physically*, so far as natural Sense and Reason pointing out any Thing, convinces one thereof. *Metaphysically*, when I enter so fully and clearly into the Essence of any Thing, that nothing can be clearer.

Evidence, is the essential and infallible Character, or Criterion of Truth; and is that, in Effect, which with us constitutes Truth. See *TRUTH*.

If *Evidence* should be found in Propositions that are false, we shou'd be compell'd into Error; since the Assent we give to *Evidence* is necessary. Whence wou'd follow this impious Position, that God who made us, is the Author of our Errors, as he has constituted us so, as to put us under a Necessity of falling into 'em. See *ERROR*.

It may be added, that as we necessarily love Truth, and hate Error, it seems inconsistent with the Nature of a beneficent Being, to form us with a Love of what we could not obtain, or not know whether we did obtain it or not: Beside that, if we should err in Things that are *Evident*, as well as in those that are not so, we should sometimes find Contradictions in *Evident* Propositions, as we commonly do in Things that are obscure.

Evidence therefore must be allow'd the Mark of Truth; and those Things must be allow'd true, which carry with 'em such a Degree of *Evidence*, as obliges us to assent to 'em. Whatever we see *Evidently* agreeable to the Things whereof we speak, that we must acknowledge to be true. See *FAITH*, *OPINION*, *VERISIMILITUDE*, &c.

The *Epicureans* allow of no other *Evidence* but that of Sense; or that arising from Sense, (it being a fundamental with them, that Sense is the first and primary Criterion of all Truth) See *FALSHOOD* and *FALLACY*.

By *Evidence* of Sense, they mean that Species, or Image, exhibited by the Sense, or Phantasia; which, when all Impediments to a just judging, as Distance, Motion, Medium, &c. being removed, cannot be contradicted, or gain-say'd. Wherefore, the Question being put, whether or no a Thing be such as it appears; the Answer is not to be given, till it have been tried and examined all the Ways, and by all the Senses that it can be an Object of. See *SENSE*, *CRITERION*, *EPICUREANS*, &c.

EVIDENCE, in Law, is any Proof, be it Testimony of Men, Records, or Writings: It is thus call'd, because the Point in Issue is hereby made *Evident* to the Jury. See *TESTIMONY*, *WITNESS*, &c.

Sir Tho. Smith restrains *Evidence* to authentic Writings of Contracts, written, seal'd, and deliver'd. *De Rep. Angl. Lib. II.*

EVIL, *Malum*, in Ethicks, a Privation, or Absence of some proper, or necessary Good; or some due Measure, or Degree thereof. See *GOOD*.

The Schoolmen deny, that any thing is every way *Evil*; and restrain all *Evil*, to be only so, *quoad hoc*;

as the Thing wants this, or that Degree of a certain Quality, necessary to constitute it, in that respect, good. There is nothing *Evil*, say they, without some Good in it wherein the *Evil* resides as in its Subject; for, as it is a Being, and as every Being depends on the Supreme Being, it cannot but be good, as flowing from the Supreme Good.

Evil is either Natural or Moral; between which there is this Relation, that Moral *Evil* produces Natural.

Moral *EVIL*, is defined a Deviation from right Reason, and consequently from the Will and Intendment of the Great Legislator, who gave us that as a Rule: This the Philosophers call *Inbonestum* and *turpe*, as staining the Image of God, and fullying our original Beauty; likewise *malum culpæ*.

Natural *EVIL*, is a Want of something necessary to the *bene esse*, or Perfection of a Thing, or to its answering all its Purposes. Such are Defects of the Body, Blindness, Lameness, Hunger, Diseases, Death.

This Species of *Evil* is denominated *triste*, *injucundum*, *noxium*; and *malum pœnæ*.

Again, *Evil* is either such *in it self*, as Envy, Impiety, &c. or, *to another*; as Measles, which in it self is good, may be *Evil* to a Man on Account of some Disease; as Wine to a Feverish Person, &c.

Thus far the Schools have gone in the Nature and Reason of Moral and Natural *Evil*: A late excellent Author sets the Thing in another Light, and furnishes a much finer, more adequate Theory of Moral Good and *Evil*. Inquir. into the Origin of our Ideas of Beauty and Virtue.

Moral *EVIL*, according to this Philosopher, denotes our Idea of a Quality apprehended in Actions which excite Aversion and Dislike towards the Actor, even from Persons who receive no Disadvantage thereby: As Moral Goodness denotes our Idea of a contrary Quality which procures Approbation and Love towards the Actor, even in Persons unconcern'd in its natural Tendency.

This Notion supposes an universally acknowledged Difference of Moral Good and *Evil*, from Natural. Moral Good, we all know, procures Love towards those we apprehend possess'd of it: Whereas Natural Good does not. How differently, for instance, are we affect'd towards those we suppose possess'd of Honesty, Faith, Generosity, &c. when we expect no Benefit from those Qualities: And those possess'd of the natural Goods, as Houses, Lands, Gardens, Health, Strength, &c. So, whatever Quality we apprehend morally *Evil*, raises our Hatred towards the Person in whom we observe it; as Treachery, Cruelty, Ingratitude, &c. Whereas we love and pity many expos'd to natural *Evils*, as Pain, Hunger, Sickness, &c.

The Origin of these different Ideas of Actions, has greatly puzzled the Moralists: The Generality make Self-Interest, or Self-Love, the Source of 'em all: We approve the Virtue of others, as it has some small Tendency to our Happiness, either from its own Nature, or from this general Consideration, that a Conformity to Nature and Reason is in the general advantageous to the whole, and to us in particular: And, on the contrary, disapprove the Vice of others, as tending at the long Run to our particular Detriment.

Others suppose an *immediate natural Evil*, in the Actions call'd *Vicious*; that is, that we are determin'd to perceive some Deformity or Displeasure from such Actions, without reflecting on any Disadvantage that may any way redound to us from the Action; and that we have a secret Sense of Pleasure accompanying such of our own Actions as are call'd virtuous, when we expect no further Advantage from 'em: But then they add, that we are excited to perform those Actions, even as we pursue or purchase Pictures, Statues, Landscips, &c. from Self-Interest, to obtain the Pleasure which accompanies the Action.

But the Author just mention'd has shewn the Mistake: Some Actions, he proves, have to Men an immediate Goodness, and others an *immediate Evil*, i. e. We perceive Pleasure in some, and Pain in others, and are determin'd to love, or hate the Doers, without any View of natural Advantage, without any View to future Rewards or Punishments, or even without any Intention to obtain the sensible Pleasure of the Good; but from a very different Principle, *viz.* an internal moral Sense, or a natural Determination of the Mind, to receive amiable, or disagreeable Ideas of Actions, when they shall occur to our Observation, antecedently to any Opinions of Advantage or Loss to redound to our selves from 'em; even as we are pleas'd with a regular Form, or an harmonious Composition, without any Knowledge of Mathematicks, or seeing any Advantage in that Form or Composition, different from the immediate Pleasure. See SENSE, GOOD, VIRTUE and VICE, BENEVOLENCE.

EVIL, or *Kings-EVIL*, in Medicine, a Disease by the Physicians call'd *Strumæ*, and *Scrophulæ*, consisting of

scirrhous Tumours, arising most commonly about the Neck, but sometimes also on the other glandulous Parts, as the Breasts, Arm-pits, Groin, &c. See STRUMÆ and SCROPHULÆ.

The Kings of *England* and *France*, have, of a long Time, pretended to the Privilege of Curing the *Kings-Evil* by *Touching*. See TOUCHING.

The Right, or Faculty, 'tis said by some, was originally inherent in the *French Kings*; and those of *England* only claim'd it, as an Appendage, or Appurtenant to that Crown, to which they laid a Claim. Tho' some of our own Monkish Writers set the Thing on a different Footing; and will have it to have been practis'd by our Kings, as early as *Edward the Confessor*; which Opinion the ingenious Mr. *Becket* has abundantly overthrow'n.

Raout de Pruelles, addressing his Translation of St. *Augustin*, de *Civitate Dei*, to *Charles V.* of *France*, says expressly, *Vos Devanciers, & vous avez telle Vertu & Puissance que vous est donnee & attribuee de Dieu que vous faites Miracles en votre Vie, telles, si grandes & si apertes que vous Gariffes d'une tres horrible Maladie que's appelle les Escrouelles [i. e. the Kings-Evil] de laquelle nul autre Prince terrien ne peut garir hors vous.*

Steven de Conti, a Religious of *Corbie*, who lived in the Year 1400, and wrote a History of *France* still preserved in MS. in the Library of *St. Germain des prez*, describes the Practice of *Touching* for the *Evil*. After the King had heard Mass, a Vessel of Water was brought him, and his Majesty having put up his Prayers before the Altar, touch'd the diseas'd Part with his right Hand, and wash'd it with the Water.

Matthew Paris will have *S. Louis* the first who practis'd it: Others contend, that King *Robert* was the first who was gifted this Way. 'Tis certain, we find no mention of any such Prerogative, before the Kings of the 11th Century, when that Prince reign'd. Fa. *Daniel*, Hist. de *France*, T. I. p. 1032.

Polydore Virgil strains hard to prove the same Virtue in the Kings of *England*; but to little Purpose. *Favyn* Hist. de *Navarre*, 1062.

The Continuer of *Monstrelet*, observes, that *Charles VIII.* touch'd several Sick Persons at *Rome*, and cured 'em, dont ceux des *Italies*, says he, voyant ce Mystere ne furent onques si émerveillés.

The same Virtue, we know not on what Grounds, is commonly attributed to a Seventh Son, born without any Daughter between: As also to the Chiefs of certain particular Families; particularly, the Eldest Person of the House of *Aumont* in *Burgundy*.

EULOGY, *EULOGIA*, in Church-History. --- When the *Greeks* have cut a Loaf, or Piece of Bread, to consecrate it, they break the rest into little Bits, and distribute it among the Persons who have not yet communicated, or send it to Persons that are absent; and these Pieces of Bread are what they call *Eulogies*.

The *Latin Church* has had something of the like Kind, of a great many Ages; and 'twas thence arose the Use of their Holy Bread.

The Name *Eulogy*, was likewise given to Loaves, or Cakes, brought to Church by the Faithful, to have them bless'd.

Lastly, the Use of the Term, pass'd hence to mere Presents made a Person, without any Benediction. See the Jesuit *Gretser*, in his Treatise de *Benedictionibus & Maledictionibus*, L. II. C. 24, 25, &c. where he treats of *Eulogies* thoroughly.

From a Passage in *Bollandus*, on the Life of *S. Melaine*, C. 4. it appears, that *Eulogies* were not only of Bread, but any Kinds of Meats bless'd and hallowed for that Purpose. Add, that almost every body bless'd and distributed *Eulogies*: Not only Bishops and Priests, but even Hermits, tho' Laymen, made a Practice of it. Women also would sometimes send *Eulogies*, as appears from the Life of *S. Waulry*, C. III. n. 14. in the *Bollandists. Acta Sanct. Jan.* T. I. p. 20.

The Wine sent as a Present, was also held an *Eulogy*. *Bollandus* remarks further, that the Eucharist it self was call'd *Eulogy*. *Act. Sanct. Jan.* T. II. p. 199.

The Word is *Greek*, *Ευλογία*, form'd of *ευ*, *bene*, well; and *λέγω*, *dico*, I say, speak, q. d. *Benedictum*.

EUNOMIANS, a Sect of Hereticks, denominated from *Eunomius*, Bishop of *Cyzicus*, who, in the IVth Century, maintain'd most of the Errors of *Arius*, and added others to 'em; as, particularly, that he knew God, as well as God knew himself. See *ARIANS*.

He re-baptized such as had already been baptized in the Name of the Trinity: He had dissembled his Errors for some Time, but having at length made a Discovery, he was expell'd his See.

The *Arians* endeavour'd to have put him into that of *Samofata*, but could not effect it: In lieu thereof, the Emperor *Valens* restored him to *Cyzicus*.

EUNOMIOEUPSYCHIANS, a Sect of Hereticks of the IVth Century. See HERESY.

The *Eunomioeuppsychians*, mention'd by *Nicephorus*, L. XII. C. 30. are the same with those call'd *Eutyrians* by *Sozomen*, L. VII. C. 17. The Author whereof, according to *Sozomen*, was an *Eunomian*, named *Eutyrius*, and not *Euppsychius*, as *Nicephorus* has it: And yet this latter Writer only copies *Sozomen* in this Passage; so that it is past doubt, they both speak of the same Sect. But on whose Side the Error lies, is not easy to decide: *Valesius* durst not undertake to shew it; but contented himself to mark the Difference in his Notes on *Sozomen*, as *Fa. Fron-ton* has done on *Nicephorus*.

EUNUCH, **EUNUCHUS**, a Term applied, in the general, to all who have not the Faculty of Generating, either thro' Imbecility, or Frigidity; but particularly to such as have been castrated, or have lost the Parts necessary thereto. See CASTRATION.

In *England*, *France*, &c. *Eunuchs* are never made but on Occasion of some Diseases, which render such an Operation necessary; but in *Italy*, they make *Eunuchs*, for the Sake of preserving the Voice; and, in the *East*, they make *Eunuchs* to be Guards, or Attendants on their Women.

Great Numbers of Children, from one to three Years of Age, are yearly castrated in *Italy*, to supply the Opera's and Theaters, not only of *Italy*, but other Parts of *Europe*, with Singers: Tho' 'tis not one in three, that after having lost their Virility, have a good Voice for a Recompence.

Tavernier assures us, that in the Kingdom of *Boutan* in the *East-Indies*, there are every Year made Twenty Thousand *Eunuchs*, and sold thence into other Countries.

The Seraglio's of the *Eastern* Emperors, are chiefly serv'd, and guarded by *Eunuchs*. And yet we have very good Testimonies, that the rich *Eunuchs* in *Persia* and other Countries, keep Seraglio's for their own Use.

By an Arret of the grand Chamber of *Paris* in 1665, it is adjudg'd, that an *Eunuch* could not marry, not even with the Consent of the Woman and all the Parties on both Sides.

Claudian has a very severe Satyr against the *Eunuch Eutropius*, who had been Elected Consul of *Rome*. He represents him as an old Woman, dress'd up in the Honours of the Consulate.

The Story of *Origen* is notorious: That learned and pious Father, upon a too literal Interpretation of that Passage in *St. Matthew*, C. XIX. ver. 12. where mention is made of, *Eunuchs so born from their Mothers Womb*; --- *Eunuchs who were made so of Men*; --- *And Eunuchs who made themselves Eunuchs for the Kingdom of Heaven*: Castrated himself.

In the Council of *Nice*, those were condemn'd, who, out of an indiscreet Zeal and to guard themselves from sensual Pleasures, should make 'emselves *Eunuchs*: Such as thus mutilated their Bodies, were excluded from Holy Orders; witness *Leontius* Bishop of *Antioch*, who was deposed for having practis'd this Cruelty on himself. And the Bishop of *Alexandria* excommunicated two Monks, who had follow'd his Example on Pretence of securing 'emselves from the impetuous Motions of Concupiscence. Several of the Emperors made very severe Prohibitions against the making of *Eunuchs*, or castrating one's self.

The Word is derived from the *Greek*, $\epsilon\upsilon\nu\chi\omicron\varsigma$, *Eunuch*; form'd of $\epsilon\upsilon\nu\chi\omicron\varsigma$, *lecti curam habet*, q. d. *Guardian*, or *Keeper of the Bed*.

In the III^d Century, there was even a Sect of Hereticks form'd, call'd *Eunuchs*, *Eunuchi*; as having the Folly or Madness, to castrate not only those of their own Persuasion, but even all they could lay Hands on. They took their Rise from the Example of *Origen*, who, upon a Misunderstanding of our Saviour's Words in *St. Matthew*, made himself an *Eunuch*, by cutting off the Part, as some say; or, as others, particularly *S. Epiphanius*, Hæres. 58. by the Use of certain Medicines. These Hereticks were also call'd *Valesians*. See VALESIAN.

EVOLVENT, in Geometry, a Term some Writers use for the Curve resulting from the Evolution of a Curve; in Contra-distinction to the *Evolute*, which is the first Curve supposed to be open'd, or *Evolwed*. See EVOLUTE.

The *Evolute* always both touches and cuts the *Evolvent* at the same Time: The Reason is, that it has two of its infinitely small Sides in common with the *Evolvent*, or rather exactly placed on two equal Sides thereof. One of 'em withinside that of the *Evolvent*, i. e. on the concave Side thereof; and the other, on the convex Side of its correspondent Side: So that the *Evolute* touches

the *Evolvent* in two Points; whence, instead of being a Tangent, it is said to *Osculate* the *Evolvent*, and hence it is also call'd *Osculator*, and *Circulus Osculator*. See OSCULUM.

There is one, and but one *Osculator*, to each Point of the *Evolvent*; but to the same Point there are an Infinity of other Circles, which only touch, and don't *Osculate*. The *Osculator* and the *Evolute* make no Angle in the Place where they touch and cut: Nor can any Curve Line be drawn between; as there may betwixt a Tangent and a Curve. See Angle of CONTACT.

EVOLUTE, **EVOLUTA**, in the higher Geometry, a Curve, first propos'd by *Mr. Huygens*; and since, much studied by the later Mathematicians. See CURVE.

The *Evolute* is a Curve, supposed to be *evolved*, or open'd; and which in opening, describes other Curves.

To conceive its Origin and Formation the better; suppose a flexible Thread, wound exactly over the Convexity of any Curve, as *ABC G*, (*Tab. Geometry Fig. 20.*) and suppose the Thread fix'd in *G*, and every where else at Liberty, to *A*. Now, beginning to unwind the Thread from the Point, and continuing it to *G*, and throughout keeping it tight on the Curve Surface *ABC G*; when the Thread is become quite straight, and is only a Tangent, *FG*, to the Curve in the Point *G*; 'tis evident the Extremity *A*, in its Progress to *G*, has describ'd another Curve Line *ADEF*.

Here, the first Curve *ABC G* is call'd the *Evolute*: Each of its Tangents *BD*, *CE*, &c. comprehended between it, and the Curve *ADEF*, is call'd a *Radius of the Evolute*; or *Radius Osculi*, or *Radius Osculator* of the Curve *ADEF*, in each Point *D*, *E*, &c. And the Circles whereof the *Osculators* *BD*, *CE*, &c. are *Radii*, are call'd *Circuli Osculatores* of the Curve *ADEF*, in *D*, *E*, &c. And lastly, the new Curve, resulting from the Evolution of the first Curve, begun in *A*, is call'd the *Curve of Evolution*, or *Curve described by the Evolution*.

The *Radius of the EVOLUTE*, then, is the Part of the Thread comprized between any Point where it is a Tangent to the *Evolute*, and the correspondent Point, where it terminates on the new Curve. Which Appellation *Radius* is the more proper, as one may actually consider this Part of the Thread in every Step it takes, as if it describ'd an Arch of an infinitely small Circle, making a Part of the new Curve, which thus consists of an infinite Number of such Arches, all describ'd from different Centres and different *Radii*.

Every Curve, therefore, may be conceiv'd as form'd by the Evolution of another. And we are to find that whose Evolution that form'd it, which amounts to the finding of the *Radius of the Evoluta* in any Point. For, as it is always a Tangent to the generating Curve, it is properly no more than one of its infinitely small Parts, or Sides prolonged; and all its Sides, whose Position is determined of Course, is no more than the generating Curve it self.

The same Thread is also called *Radius Curvedinis*, or *Radius Osculi*, by Reason a Circle describ'd hereby, from the Centre *C*, is said to *Osculate* or kiss it; as both touching and cutting at the same Time, i. e. touching both the inside and the out. See OSCULATION.

Hence, 1°. The *Evolute* *BCF*, (*Fig. 21.*) is the Place of all the Centres of the Circle that *Osculate* the Curve describ'd by the Evolution *AMI*. 2°. When the Point *B*, falls on *A*, the *Radius of the Evolute* *MC*, is equal to the Arch *BC*; or to the Aggregate of *AB*, and the Arch *BC*. 3°. Since the Element of the Arch *Mm*, in the Curve describ'd by Evolution, is an Arch of a Circle describ'd by the *Radius* *CM*; the *Radius of the Evolute* *CM* is perpendicular to the Curve *AI*. 4°. Since the *Radius of the Evolute* *MC*, is always a Tangent to the *Evolute* *BCF*; Curves of Evolution may be describ'd thro' innumerable Points, if only Tangents be produced in the several Points of the *Evolute*, till they become equal to their correspondent Arches.

The finding of the *Radii of Evolutes*, is a Thing of great Importance in the higher Speculations of Geometry; and even, sometimes, is of Use in Practice, as the Inventor of the whole Theory, *Huygens*, has shewn in applying it to the Pendulum. *Horol. Oscill.* Part III. — The Doctrine of the *Oscula of Evolutes*, is owing to *M. Leibnitz*; who first shew'd the Use of *Evolutes* in the measuring of Curves.

To find the *Radius of the Evolute* in the divers Kinds of Curves, with Equations to the *Evolutes*. See *Wolf. Elem. Math.* Tom. I. p. 524, &c. sequent. Or the *Infim. Petites of Mons. le Marquis de l'Hôpital*.

Since, the *Radius of an Evolute* is equal to an Arch of an *Evolute*, or exceeds it by some given Quantity; all the Arches of *Evolutes* may be rectified geometrically, whose *Radii* may be exhibited by geometrical Constructions; whence we see why an Arch of a Cycloid is double

double its Chord: The Radius of the *Evolvute* being double the same; and the *Evolvute* of a Cycloid, being it self a Cycloid. See RECTIFICATION, CYCLOID, &c.

Monf. *Varignon* has applied the Doctrine of the Radius of the *Evolvute* to that of Central Forces; so that having the Radius of the *Evolvute* of any Curve; one may have the Value of the Central Force of a Body which moving in that Curve, is found in the same Point where that Ray terminates: Or reciprocally, having the Central Force given, the Radius of the *Evolvute* may be determined. *Hist. de l'Acad. Roy. des Sciences. An. 1706.*

Imperfect EVOLVUTE. Monf. *Reaumur* has given a new Kind of *Evolvute* under this Denomination. Hitherto, the Mathematicians had only consider'd the Perpendiculars let fall on the Points of the Convex Side of the Curve: If other Lines, not perpendicular, were drawn upon the same Points, provided they were all drawn under the same Angle, the Effect would be the same; that is, the oblique Lines would all intersect within the Curve, and by their Intersections, form the infinitely small Sides of a new Curve, whereof they would be so many Tangents.

This Curve would be a Sort of *Epicycloid*, and would have its Radii; but, an *imperfect* one, since the Radii are not perpendicular to the first Curve. *Hist. de l'Acad. &c. An. 1709.*

EVOLUTION, in Geometry, the unfolding, or opening, of a Curve, and making it describe an *Evolvute*.

For the Nature of *Evolution*. See EVOLUTA.

The Equable *Evolution* of the Periphery of a Circle, or other Curve, is such a gradual Approach of the Circumference to Rectitude, as that all its Parts do meet together, and equally evolve, or unbend; so that the same Line becomes successively a less Arc, of a reciprocally greater Circle, till at last they change into a straight Line. In *Philos. Transact. N^o. 260.* a new Quadratrix to the Circle, is found by this Means, being the Curve described by the equable *Evolution* of its Periphery.

EVOLUTION is also used for the Extraction of Roots out of Powers, in which Sense it is directly contrary to *Involution*. See EXTRACTION.

EVOLUTION, in the Art of War, is a Term applied to the divers Figures, Turns, and Motions, made by a Body of Soldiers, in ranging them in Form of Battle, or in changing their Form; either in the Way of Exercise, or when in actual Engagement.

'Tis by the *Evolutions*, that the Form, and Posture of a Battallion, Squadron, &c. are changed; either to make good the Ground they are upon, or to possess themselves of another, that they may attack the Enemy, or receive an Onset more advantageously.

The *Military Evolutions*, are *Conversions*, *Counter-marches*, or *Wheelings*, *Doublings* of Rank or File, &c. See CONVERSION, &c.

Fa. *Hofte*, a Jesuite in 1697, printed a Treatise of *Naval Evolutions*, in Folio:—By *Naval Evolutions*, he means the Motions made by a Fleet, Squadron, or Naval Armament, in order to put themselves into a proper Arrangement, or Situation, for attacking the Enemy, or defending themselves with the most Advantage.

The Word is Latin, *Evolutio*, form'd of the Preposition *e*, out, and *volvo*, I roll or wind, *q. d.* an *unwinding*, or *unrolling*.

EUPHONY, EUPHONIA, in Grammar, an easiness, Smoothness, and Elegancy of Pronunciation. See PRONUNCIATION.

The Word is Greek, form'd of εὖ, *bene*, well; and φωνή, *Vox*, Voice.

Quintilian calls the *Euphonia*, *Vocalitas*; *Scaliger*, *facilis pronuntiatio*.

The *Euphonia* is properly a Kind of Figure, whereby we suppress a too harsh Letter, or convert it into a smoother, contrary to the ordinary Rules. There are Examples enough in all Languages.

EUPHORBIVM, or EUPHORBIA, in Pharmacy, a Kind of Gum, brought from *Africa*, in little roundish Pieces, whitish when new, and yellowish when old, very sharp to the Taste, but void of Smell. See GUM.

The principal Use of *Euphorbium*, is external; being a great Ingredient in divers resolute Plasters, as well as in Tincture, and Powder for stopping of Gangrenes, cleansing of foul Ulcers, and exfoliating carious Bones.

Internally used, 'tis a Purgative, but so violent a one, that 'tis almost out of Doors, as tearing off the necessary Mucus or Covering of the Stomach and Bowels, and occasioning Dysenteries. Yet we are told the *Africans* use it very commonly; tho' they first quench its Fire in Purslain Water.

Its Powder is a violent Sternutatory, and to be used very cautiously, and never alone, but mix'd with a small Quantity of some other Powder, to guard against its intolerable Heat.

The Gum we call *Euphorbium*, is form'd of the Juice of a Tree, or rather Plant, of the same Name, pretty frequent in *Mauritania*; tho' the Species of the Tree, or Plant, has been greatly controverted. The Generality of our latest Botanists, make it a ferulaceous Plant; and Mr. Professor *Hermannus* calls it the *Tithymalus Mauritanius Aphystos Angulosus & Spinofus*. *Hort. Acad. Lug. Batav. 598.*

It has no Leaves; but in Lieu thereof puts forth along its Stem a Kind of long prickly Eyes, or Buds. Which Buds, it is, that yield that gummy Juice, call'd *Euphorbium Officinarum*.

Some Authors will have it, that the Gum is drawn from the Plant by Incision; others, on the contrary, say it oozes spontaneously: The Juice, we are told, is so very subtle, and penetrating, that the Person who taps the Tree, is forced to stand at a good Distance, and make the Incision with a long Pike; otherways it gets to the Brain, and occasions dangerous Inflammations. It oozes out in great Abundance, and is gather'd in a Sheep's Skin, wrapp'd round the Tree.

Pliny tells us, that the first Discovery of *Euphorbium* is attributed to *Juba* King of *Lybia*, who denominated it from *Euphorbius* his Physician, Brother of *Musa*, Physician to *Augustus*.

Ermuller assures us, that the Plant, which yielded the *Euphorbium* of the Antients, is now unknown to us; but if we go by *Pliny's* Description, the Plant call'd *Schadida Calli* in the *Hortus Malabaricus*, must be the antient *Euphorbium*. This Discovery is owing to *Commelinus*, Bourguemaister of *Amsterdam*, and Professor of Botany.

EUPHORY, signifies the same as *Euchrasy*. See EUCHRASY.

EUPSYCHIANS. See EUNOMIOEUPSYCHIANS.

EURIPUS, in Hydrography: The Word, originally and properly, signifies a certain Streight of the Sea, between *Bœtia*, and the *Negropont*; where the Currents are so strong, that the Sea is said to Ebb and flow seven Times a Day; in which Place, as the Story commonly goes, *Aristotle* drown'd himself, out of Chagrin, for not being able to account for so unusual a Motion.

But *Euripus* has since become a general Name for all Streights, where the Water is in great Motion and Agitation.

The antient Circus's had their *Euripi*, which were no other than Pits, or Ditches, on each Side the Course; into which it was very dangerous falling with their Horses and Chariots, as they run their Races.

The Term was also applied by the *Romans*, in Particular, to three Canals, or Ditches, which encompassed the Circus on three Sides; and which were fill'd occasionally, to represent *Naumachia*, or Sea Battles.

The same People call'd their smallest Fountains, or *Jets d'Eau*, Canals in their Gardens, *Euripus's*; and their largest, as *Cascades*, &c. Niles.

The Word is derived from the Greek, *eu*, *facile*, easily, and *επιρρι*, *precipitari*.

EURUS,

EURO-Auster. } See WINDS.

EURO-Notus. }

EURYTHMY, EURYTHMIA, in Architecture, Painting, and Sculpture; a certain Majesty, Elegance, and easiness appearing in the Composition of divers Members, or Parts of a Body, Building, or Painting; and resulting from the fine Proportions thereof. See PROPORTION.

The Word is Greek, and signifies literally a Consonance, or fine Agreement, or as we may call it, a Harmony of all the Parts; being compounded of εὖ, *well*, and εὐρυθμία, *Rythmus*, a Cadence, or Agreement of Numbers, Sounds, or the like Things. See RYTHMUS.

Vitruvius ranks the *Eurythmia* among the essential Parts of Architecture: He describes it as consisting in the Beauty of the Construction, or Assemblage of the several Parts of the Work, which render its Aspect, or whole Appearance graceful: *E. gr.* when the Height corresponds to the Breadth, and the Breadth to the Length, &c.

'From these three Ideas, (or *Designs*, viz. *Orthography*, *Scenography*, and *Profile*) it is, that the same *Eurythmy*, *Majestica*, and *Venusta Species Edificii*, does Result; which creates that agreeable Harmony between the several Dimensions; so as nothing seems disproportionate, too long for this, or too broad for that, but corresponds in a just and regular Symmetry, and Consent of all the Parts with the whole.' *Evelyn's Account of Archit. &c.* See SYMMETRY.

EUSEBIANS, a Denomination given to the Sect of *Arians*, on Account of the Favour and Countenance, which *Eusebius* Bishop of *Cæsarea* shew'd, and procured for them at their first Rise. See ARIANS.

EUSTA-

EUSTATHIANS, a Name given to the Catholics of *Antioch*, in the IVth Century; on Occasion of their Refusal to acknowledge any other Bishop beside *S. Eustathius*, deposed by the *Arians*.

The Denomination was given them during the Regency of *Paulinus*, whom the *Arians* substituted to *S. Eustathius*, about the Year 330, when they began to hold their Assemblies apart.

About the Year 350, *Leontius* of *Phrygia*, call'd the *Eunuch*, who was an *Arian*, and was put in the See of *Antioch*, desired the *Eustathians* to perform their Service in that Church; which they accepting, the Church of *Antioch* serv'd indifferently both the *Arians* and *Catholics*.

This, we are told, gave Occasion to two Institutions, which have subsisted in the Church ever since: The first was Psalmody in two Choirs; but, *M. Baillet* thinks, that if they instituted an alternate Psalmody between two Choirs, 'twas between two *Catholic* Choirs; and not by Way of Response to an *Arian* Choir. The second was the Doxology, *Glory be to the Father, and the Son, and the Holy Ghost*. See DOXOLOGY.

This Conduct, which seem'd to imply a Kind of Communion with the *Arians*, gave great Offence to Abundance of Catholics, who began to hold separate Meetings; and thus form'd the Schism of *Antioch*. Upon this, the rest, who continu'd to meet in the Church, ceas'd to be call'd *Eustathians*, and that Appellation became restrain'd to the Dissenting Party.

S. Flavianus, Bishop of *Antioch* in 381, and one of his Successors, *Alexander* in 482, brought to pass a Coalition, or Re-union, between the *Eustathians* and the Body of the Church of *Antioch*, described with much Solemnity by *Theodoret*, Eccl. L. III. C. 2.

EUSTATHIANS, was also a Sect of Hereticks, in the IVth Century; denominated from their Author *Eustathius*, a Monk so foolishly fond of his own Profession, that he condemn'd all other Conditions of Life.

He excluded married People from Salvation; prohibited his Followers from praying in their Houses; and obliged them to quit all they had, as incompatible with the Hopes of Heaven.

He drew them out of the other Assemblies of the faithful, to hold secret ones with him; and made them wear a particular Habit: He appointed them to fast on *Sundays*; and taught them that the ordinary Fasts of the Church were needless, after they had attained to a certain Degree of Purity, which he pretended to. He shew'd a World of Horror for Chappels built in Honour of Martyrs, and the Assemblies held therein.

Several Women, seduced by his Reasons, forsook their Husbands, and Abundance of Slaves deserted their Masters Houses. He was condemn'd in the Year 342, at the Council of *Gangres*, in *Paphlagonia*.

EUSTYLE, in Architecture, a Kind of Edifice, where the Pillars are placed at a most convenient Distance one from another; the Intercolumniations being all just two Diameters and a Quarter of the Column; except those in the middle of the Face before and behind, which are three Diameters distant. See INTERCOLUMNIATION.

The *Eustyle* is a Medium between the *Pycnostyle* and *Areostyle*. See PYCNOSTYLE, &c.

The Word is *Greek*, being form'd of *εὖ*, *bene*, well, and *στήλη*, *Column*.

Viruvius, L. III. C. 2. observes, that the *Eustyle* is the most approved of all the Manners of Intercolumniation; and that it surpasses all the rest, in Conveniency, Beauty, and Strength.

EUTYCHIANS, ancient Hereticks, denominated from *Eutyches* the Archimandrite, or Abbot of a Monastery at *Constantinople*. See HERETIC.

The Aversion *Eutyches* bore to the Heresy of *Nestorius*, threw him into another Extreme, not less dangerous than that he so warmly oppos'd; tho' some Passages in *St. Cyril*, which rais'd the Unity of the Person of *Jesus Christ* very high, contributed, likewise, to his Delusion.

At first he held, that the *Logos*, Word, brought his Body down with him from Heaven: which was a near Approach to the Heresy of *Apollinarius*: And tho' he afterwards testified the contrary in a Synod at *Constantinople*, wherein he was condemn'd; yet he could not be brought to acknowledge, that the Body of *Jesus Christ* was consubstantial with ours.

In Effect, he did not seem quite steady, and consistent in his Sentiments; for he appear'd to allow of two Natures, even before the Union; which was apparently a Consequence he drew from the Principles of the Platonic Philosophy, which supposes a Pre-existence of Souls; accordingly, he believed that the Soul of *Jesus Christ* had been united to the Divinity before the Incarnation; but then he allow'd no Distinction of Nature in *Jesus Christ*, since his Incarnation.

See the Differtation of *Fa. Hardouin*, de Sacramento *Altaris*, wherein that Jesuit endeavours to unfold all the Sentiments of the *Eutychiens*.

This Heresy was at first condemn'd in a Synod held at *Constantinople*, by *Flavian* in 448: Was re-examined, and fulminated in the General Council of *Chalcedon* in 451. The Legates of Pope *Leo*, who assist'd thereat, maintain'd, that it was not enough to define that there were two Natures in *Jesus Christ*, but insist'd strenuously, that to remove all Equivocation, they must add these Terms, without *being changed, or confounded, or divided*.

But this Decree of the Council of *Chalcedon*, at which assist'd upwards of 630 Prelates, did not stop the Progress of *Eutybianism*: Some Bishops of *Egypt*, who had attended at the Council, upon their Return, proclaimed openly, that *St. Cyril* had been condemn'd, and *Nestorius* acquitted therein: Which occasion'd great Disorders; several Persons, under Pretence of contending for the Sentiments of *St. Cyril*, making no Scruple of weakening the Authority of the Council of *Chalcedon*.

The Heresy of the *Eutychiens*, which made a very great Progress throughout the *East*, at length became divided into several Branches. *Nicephorus* makes mention of no fewer than twelve: Some call'd *Schematici*, or *Apparentes*, as only attributing to *Jesus Christ*, a Phantom, or Appearance of Flesh, and no real Flesh: Others, *Theodosians*, from *Theodosius* Bishop of *Alexandria*: Others, *Jacobites*, from one *James*, *Jacobus*, of *Syria*; which Branch establish'd it self principally in *Armenia*, where it still subsists. See JACOBITES.

Others were call'd *Acephali*, q. d. without Head, and *Severians*, from a Monk call'd *Severus*, who seiz'd on the See of *Antioch* in 513. See ACEPHALI and SEVERIANS.

These last were subdivided into Five Factions, viz. *Agnoetes*, who attributed some Ignorance to *Jesus Christ*: Followers of *Paul*, *Μελανθ*, that is, *the Black*; *Angelites*, thus call'd from the Place where they assembled, *Adrites* and *Conovites*, with divers others.

EUTYCHIANS, were also a Sect half *Arian*, half *Eunomian*; which arose at *Constantinople*, in the IVth Century.

It being then a Matter of mighty Controversy among the *Eunomians* at *Constantinople*, whether or no the Son of God knew the last Day and Hour of the World; particularly with Regard to the Passage in the Gospel of *St. Matthew*, C. XXIV. Ver. 36. Or rather that in *St. Mark*, XIII. 31. where 'tis express'd, that *the Son did not know it, but the Father only*: *Eutychiens* made no Scruple to maintain, even in Writing, that the Son did know it: Which Sentiment displeasing the Leaders of the *Eunomian* Party, he separated from 'em, and made a Journey to *Eunomius*, who was then in Exile.

That Heretick acquiesced fully in *Eutychiens*'s Doctrine, that the Son was not ignorant of any Thing the Father knew, and admitted him to his Communion: *Eunomius* dying soon after, the chief of the *Eunomians* at *Constantinople*, refused to admit *Eutychiens*; who, upon this, form'd a particular Sect of such as adhered to him, call'd *Eutychiens*.

This same *Eutychiens*, with one *Theophronius*, as was said in *Sozomen's* Time, were the Occasions of all the Changes made by the *Eunomians* in the Administration of Baptism; which consist'd, according to *Nicephorus*, in only making one Immersion, and not doing it in the Name of the Trinity, but into the Death of *Jesus Christ*.

Nicephorus calls the chief of this Sect, not *Eutychiens*, but *Euphychiens*, and his Followers *EUNOMIOEUPSYCHIANS*.

EWRY, an Office in the King's Household, where they take Care of the Linen for the King's own Table; lay the Cloth, and serve up Water in Silver *Enwers* after Dinner; whence the Office hath its Name.

EXACERBATION, the same as *Paroxysm*. See PAROXYSM.

EXACTION, in Law, is a Wrong done by an Officer, or one pretending to have Authority, in taking a Reward or Fee, for that which the Law allows not.

The Difference between *Exaction* and *Extortion* consists in this, that *Extortion* is where the Officer takes more than his Due: And *Exaction*, where he wrests a Fee or Reward, when none is due. See EXTORTION.

EXAGGERATION, in Rhetoric, a Figure whereby we enlarge, or heighten Things; making them appear more than they really are, whether as to Goodness, Badness, or other Qualities.

The Word is form'd of the Latin, *Exaggero*, I exaggerate; which is a Compound of *ex*, and *agger*, a Mound, or Elevation of Earth.

EXAGGERATION, in Painting, is a Method of representing Things, wherein they are charged too much, or marked too strong; whether in respect of the Design, or the Colouring.

The *Exarch*, after having greatly enrich'd himself in his Post, frequently rises to the *Patriarchate* himself. See **PATRIARCH**.

EXARCH, is also used, in the *Eastern-Church* Antiquity, for a General, or Superior over several Monasteries: The same that we otherwise call *Archimandrite*; being exempted, by the Patriarch of *Constantinople*, from the Jurisdiction of the Bishops; as are now the Generals of the *Romish* Monastic Orders. See **GENERAL**, &c.

In 493, *Sebas* was establish'd *Exarch*, or Chief of all the *Anchorites* within the Territory of *Jerusalem*. *Du Bois*.

EXARCH was also a military Dignity. See *Du Cange*.

EXARTICULATION, a *Dislocation* of some of the jointed Bones; or a Breach of Articulation. See **DISLOCATION**.

EXCALCEATION, the Act of putting off the Shoes. See **SHOE**.

Among the *Hebrews*, there was a particular Law, whereby a Widow, whom her Husband's Brother refused to marry, had a Right to summons him into a Court of Justice; and upon his Refusal, might *discalceate* him, i. e. pull off one of his Shoes, and spit in his Face: Which were both Actions of great Ignominy among that People.

The House of the Person who had undergone them, was thenceforward call'd the House of the *Discalceated*.

EXCAVATION, the Act of hollowing, or digging a Cavity; particularly in the Ground.

The *Excavation* of the Foundations of a Building, by the *Italians* call'd *Cavazione*, is settled by *Palladio* at a sixth Part of the Height of the whole Building. Unless there be Cellars under Ground, in which Case he would have it somewhat more. See **FOUNDATION**.

The Word is Latin, *Excavatio*, form'd of *ex* and *cavus* hollow, or *Cavea*, a Pit, &c.

EXCELLENCY, a Quality, or Title of Honour, given to Ambassadors, and other Persons, who are not qualified for that of *Highness*; as not being Princes; and yet are to be elevated above the other inferior Dignities. See **QUALITY**.

In *England* and *France*, the Title is now peculiar to Ambassadors; but very common in *Germany* and *Italy*. Those it was first affected to, were the Princes of the Blood, of the several Royal Houses; but they quitted it for that of *Highness*, upon several great Lords assuming *Excellency*. See **HIGHNESS**.

The Ambassadors have only bore it since the Year 1593, when *Henry IV.* of *France* sent the Duke de *Nevers*, Ambassador to the Pope; where he was first complemented with *Excellency*. After that, the same Appellation was given to all the other Ambassadors residing at that Court: From whence the Practice spread thro' the other Courts. See **EMBASSADOR**.

The Ambassadors of *Venice* have only had it since the Year 1636, when the Emperor and King of *Spain* consented to allow it them.

The Ambassadors of Crown'd Heads, dispute the giving that Title to the Ambassadors from the Princes of *Italy*; where the Practice is not establish'd.

The Court of *Rome* never allow the Quality of *Excellency* to any Ambassador who is a Churchman; as judging it a secular Title.

The common Rules and Measures of *Excellency* are a little varied with Respect to the Court of *Rome*. — The Ambassadors of *France*, at *Rome*, antiently gave the Title *Excellency* to all the Relations of the Pope then reigning; to the Constable *Colonne*, to the Duke de *Bracciano*, and the eldest Sons of all those Lords; as also the Dukes *Savelli*, *Cesarini*, &c. But they are now more reserved in this Respect; tho' they still treat all the *Roman* Princesses with *Excellency*.

The Court of *Rome* in their Turn, and the *Roman* Princes, bestow the same Title on the Chancellor, Ministers, and Secretaries of State, and President of the Sovereign Courts in *France*; the Presidents of the Councils in *Spain*; the Chancellor of *Poland*; and those in the first Dignities of other States, if they be not Ecclesiasticks.

The Word *Excellency*, was antiently a Title of Kings and Emperors; accordingly, *Anastasius* the Library-Keeper, calls *Charlemain*, His *Excellency*. The same Title is still given to the Senate of *Venice*; where, after saluting the Doge under the Title of *Serenissimo*, the Senators are address'd to under *Your Excellencies*. The *Liber Diurnus Pontif. Rom.* gives the Title *Excellency* to the Exarchs and Patricians. See **TITLE**.

The *Italians* and *French* have improved on simple *Excellency*; and made *Excellentissimus*, *Excellentissimo*, which has been bestowed on certain Popes, Kings, &c.

EXCEPTION, a Reserve; or something set aside, and not included in the Rule. See **RULE**.

'Tis become proverbial, that there is no Rule, but has its *Exceptions*; intimating, that it is impossible to comprehend all the particular Cases under one and the same

Maxim. 'Tis dangerous following the *Exception*, preferably to the Rule.

EXCEPTION, in Law, is a Stop, or Stay to an Action. See **ACTION**.

The Term is used indifferently both in the Civil, and Common Law; and in each, *Exceptions* are divided into *Dilatory* and *Peremptory*. See **DILATORY** and **PEREMPTORY**.

Exception, in a general Sense, includes all the Kinds of Defence, or Vindication, which a Person, against whom a Process is brought, makes use of to prevent, or retard its Effect. See **PLEA**, &c.

The Civilians reckon three Kinds of *Exception*; viz. *Declinatory*, whereby the Authority of the Judge, or Court, is disallowed; *Dilatory*, intended to defer, or prevent the Thing from coming to an Issue; and *Peremptory*, which are proper and pertinent Allegations, founded on some Prescription that stands for the Defendant; as Want of Age, or other Quality in the Party; or other Matter, that may be decided without entering into a full Discussion of the Merits of the Cause.

EXCEPTIVE Propositions, are those wherein something is affirm'd of a whole Subject, abating some one of the Parts thereof, which is *excepted* by a Particle, thence call'd an *Exceptive Particle*, or Particle of *Exception*. See **PROPOSITION**.

Thus, all the Sects of the antient Philosophers, except the *Platonists*, held God to be Corporeal. Covetousness is inexcusable in Respect of every Thing, but Time.

EXCESS, is distinguish'd into *Natural* and *Moral*: The first, is a Part whereby one Quantity is greater than another. — Thus, we say, this Line is longer than that; but the *Excess* is inconsiderable.

The latter, is an Intemperance, or going beyond the just Bounds and Measures prescribed to any Thing: Thus, we say, *Excess* in Wine, Women, &c. is prejudicial to the Health.

EXCHANGE, a *Permutation*, or an Agreement; whereby one Thing is truck'd or given for another. See **PERMUTATION**.

The first Commerce carried on among Men, was by *Exchange*; People furnishing each other mutually with what Things they wanted: But such *Exchanges* were clogg'd with two considerable Difficulties. 1°. On Account of the unequal Values of Commodities: And, 2°. In that every Body had not just what might accommodate him he would *Exchange* withal. See **COMMERCE**.

To remove these Inconveniencies, Money was invented for a common Medium, and instead of *Exchanging*, *Buying* and *Selling*, was introduced. See **MONEY**.

Yet there are Nations among whom the Primitive Way of *Exchange* still obtains: And even among the most civilized People, there are frequent Occasions, wheron they have Recourse to this Method. — Such, for Instance, is the Trade of several Cities of the *North*, and *Baltic* Sea, where the French *exchange* their Wines and Brandies for Woods, Metals, Hemps and Furs.

The Commerce of Bills of *Exchange* is, it self, a pure trading by *Exchange*; a Truck of Money for Money; of Money, for Instance, which I have here at *London*, for what a Merchant, or Banker, has at *Venice*, *Rome*, *Amsterdam*, or *Constantinople*. In this Sense.

EXCHANGE properly denotes the Business, or Trade of Money, carried on between one Place and another, by Means of Bills of *Exchange*; i. e. by giving Money in one City, and receiving a Bill to entitle you to receive the Value in another City. See **BILL OF EXCHANGE**.

EXCHANGE, is also used for the Profit, which a Merchant, Negotiant, or Broker, receives for a Sum of Money paid, and for which a Bill of *Exchange* is drawn payable in some other Place, and by some other Person; for the Interest of his Money, or the Salary and Reward of his Negotiation.

This Profit is exceeding various; being sometimes 2, sometimes 3, 4, or even 10 and 15 *per Cent.* according as the Alloy of the Species differs, or as Money is more or less plentiful, or Bills of *Exchange* more or less scarce in the Places. This Kind of *Exchange* is ordinarily call'd *Real Exchange*, and sometimes *Mercantile* and mixt *Exchange*. See **PAR**.

The Price of *Exchange* is regulated according to the Course of the Place where the Bill is drawn, or that of the Place where the Remittance is to be made: Some pretend that 'tis the City of *Lyons* gives the Law, or Rule, for the Price of *Exchange* to most of the other Cities of *Europe*.

The Word *Exchange*, according to some, is derived from that perpetual Alteration observ'd in the Price of this *Exchange*, which is sometimes higher, and sometimes lower; there being sometimes somewhat to get, and sometimes to lose thereby; and sometimes nothing to be either got or lost: As is the Case when the *Exchange* is at **PAR**.