Title: A New Catalogue of Vulgar Errors

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Release date: November 3, 2012 [EBook #41274]

Language: English

Credits: Produced by Steven Gibbs, Keith Edkins and the Online Distributed Proofreading Team at http://www.pgdp.net

A NEW

CATALOGUE

OF

VULGAR ERRORS.

BY

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In many Cases one with Amazement hears the Arguings, and is astonished at the Obstinacy, of a worthy Man, who yields not to the Evidence of Reason, tho' laid before him as clear as Day-light. Locke.

Sunt delicta tamen, quibus ignovisse velimus. Hor.

CAMBRIDGE,
Printed for the AUTHOR:

Sold by Fletcher & Hodson in Cambridge; S. Crowder in Pater-noster-Row, J. Dodsley in Pall-Mall, M. Hingeston near Temple-Bar, and G. Kearsly in Ludgate-street, London; J. Fletcher at Oxford; and the Booksellers at Norwich, Lynn, York, and Newcastle. 1767.

(Price HALF A CROWN.)

PREFACE.

{i}

To explain the Use of Education, no Method can be more effectual, than to shew what dull Mistakes and silly Notions Men are apt to be led into for Want of it. These Mistakes are so numerous, that if we were to undertake to divulge all the Errors that Men of no Knowledge in the Sciences labour under, the shortest Way would be to publish a compleat System of Natural Philosophy, which Learning, as it may be acquired by reading the different Books, which have already been wrote upon that Subject, in this Æra of the Sciences, such an Undertaking would be quite needless at this Time, even supposing the Author capable of that laborious Work.

{ii}

If the following Sheets do but serve to divest Men of some of those unreasonable Obstinacies with which they and their Forefathers have long been prepossessed, the Time will be well laid out, both of the Writer and Reader.

Be not affronted, gentle Reader, at my taxing thee with Error, with Obstinacy, or the like; thou mayest not be one of that Stamp; for any Thing I know you may have studied the Sciences, you may be well versed in Mechanics, Optics, Hydrostatics, and Astronomy; you may have made the Tour of Europe, if not, you may soon do it in Post-Chaises, and be almost as wise as you was when you went out; or you may be one of those whom bountiful Nature has blessed with a most excellent Understanding, a quick Apprehension, and a discerning Judgment, and yet not have

been so fortunate, or unfortunate, which you think proper to term it, as to have been brought up a Scholar. {iii}

Scoff not when we dwell so much upon Scholarship; for I would have thee know, whether thou thinkest proper to believe me or not, that had it not been for the four Branches of Learning abovementioned, thou wouldest not have been smoaking that Pipe of right Virginia, which in all Probability (whether thou art a Farmer in the Country, or a Mechanic in London) thou art now most pompously blowing to Ashes: Neither would that charming Bowl of Rum and Brandy Punch mixed, have waited at thy Elbow to inspire thee with generous Sentiments (which Punch, let me tell thee, if thou drinkest in Moderation, may keep thee from the Ague, if thou livest in the Hundreds of Essex.)—Nay, thou wouldest not even have known what it was to have tasted a {iv} Plumb-Pudding, which, tho' now, thy Palate being vitiated with salt Pork and Mustard, and bottled Beer, thou hast no Relish for, yet thou mayest remember the Time when thou didst think it most delicious Food. To Philosophy art thou beholden for all these Dainties and Comforts of Life, which if thou dost contradict, and dost still obstinately persist in thy own Opinion, and wilt not be convinced of thy Errors, know, Dust and Ashes, that thou art not sensible whether thou movest or standest still; and dost imagine, that the glorious Sun is an extempore Whirligig.

Wonder not, Reader, if thou art a Man of Sense, that thou shouldest be mistaken in many Things: For what Mortal can pretend to such Knowledge as never to be mistaken? Truth is more difficult {v} to be found out than is generally imagined: Error is easily fallen into; by so much the easier as the Odds are against us: For in the Disquisition of any Point, there are numberless Wrongs, but there is only one Right. Numberless Falshoods and Errors may be raised about any Thing, but Truth is invariable, and remains the same to all Eternity.

The following Sheets will not contain many philosophical Terms; we shall rather avoid such a Step as would hinder a great Part of our Readers from understanding us, and shall endeavour to explain ourselves by such Methods as the meanest Capacity will be able to comprehend. Moreover, all such Subjects will be avoided as may interfere with any religious Tenets, it not being the Intention of this Pamphlet to deprive Men of their Rest, by tearing from their Consciences those fixed Protestant Principles of Religion (let them be what they will) which they {vi} and their Ancestors have long and peaceably enjoyed. But our Disquisitions will be chiefly confined to natural Objects, and the Phænomena which daily present themselves to our View. We shall likewise endeavour to rectify some of those Mistakes in the common Arts of Life, whether of Business or Pleasure, which Men by an accustomed Tradition are apt most obstinately to persevere in.

INTRODUCTION. {vii}

The third Error is one which Sir Thomas Brown has taken Notice of; and it must be acknowledged, that the inserting of it here was a Mistake. However, we hope that it will be excused, since it is seven Years since the Author of this little Pamphlet had the Pleasure of reading *a Part* of Dr. Brown's Vulgar Errors, and then he did not see that Error; it being not regularly placed among the others, but in a separate Detachment from the main Body. Notwithstanding the general Perspicuity of this Author, we are apt to think that he never heard a Bittern himself, but only went by Hearsay with respect to the Noise which is made by that Bird, however skilled he shews himself in the Anatomy of it. He says, that it differs but little from the croaking of a Raven. We can assure the Reader, that neither the Noise it makes when it draws in the Air, nor the Sound it gives when it throws it out again, have the least Resemblance to the Croaking of a Raven, as he calls it. {viii}

A Raven makes a much shriller Noise than any of the Crow Kind, notwithstanding it is a larger Bird. I make no Doubt but the Voice of a Raven is twelve or thirteen Notes higher than the Voice of a Rook; besides, he makes his Notes quick and sharp one after another; whereas a Bittern takes near five Seconds between every Sound, and (as will be affirmed) in as deep a Note as the fourth String of a double Bass.

ERROR I. {9}

That the more Ammunition is put into a Fowling Piece, the farther it will do Execution.

This Error is often of very dangerous and dreadful Consequence; I have known People so obstinate in it, that even ocular Demonstration would not convince them of their Mistake.

It proceeds from a Notion, that the more a Gun recoils, the better and stronger will be the Force with which the Shot fly out. {10}

There is nothing which requires more Nicety and Exactness than the finding out the proper Charge of a Gun; it is something similar to finding out the Tone of a musical Instrument; of which more in its Place.

It will be sufficient here to say, that every Gun has a certain fixed Quantity of Ammunition, with which it does the most Execution. I have seen Lectures in the Art of Gunnery, which come under the Science of Mechanics, and even the Author himself, though a Man of Learning and Abilities, seems to have been ignorant of the Art of charging a Gun, when he says, "If you put in a Gun, a Ball upon a Quantity of Powder as (1), it will throw the Ball to such a Distance; if you put in a

Quantity as (2), it will throw it as far again." This seems to be a Mistake; because, if that was the Case, a Person would have nothing to do but to put Powder enough into his Gun, and have the Barrel made strong enough, and he need not fear killing at any Distance. As to the Recoil it would {11} give, if the Gunner was a strong Country Gentleman, and a keen Sportsman, and an Englishman, it would be the least of his Thoughts whether it struck him a great Blow or a small one.

But to the Point: There is no better Way of finding out the proper Charge of a Gun, than by the Report it gives. If there is too much Powder and too little Shot, the Report will be a kind of a deep Roar; if too little Powder and too much Shot, it will be an insignificant, short, narrow Smack; but if it is charged properly, the Report will be a smart, shrill Clap, something resembling Thunder.

This is the Reason why the Report of a Sportsman's Gun is so different from that of a Field-Keeper's. The Field-Keeper has, or ought to have, no Shot in his Piece; the Sportsman's is properly loaded. {12}

In short, there is a Tone in the Barrel of a Gun, and the better the Temper of the Metal is, the more shrill will be the Report, and the farther it will do Execution.

I have dwelt the longer upon this Subject, because a Gun is an ugly Weapon in the Hands of those who are either ignorant or careless, or both.

II.

That the Heron makes a Hole in the Bottom of her Nest, through which her Feet hang, when she sits upon her Eggs.

What seems to have led People into this Error, is, the Appearance which a Heron makes upon her Nest: You may sometimes see her Feet when she is sitting. {13}

Now it seems unaccountable, how a Bird should sit upon her Eggs on a Tree, and yet her Feet appear to a Spectator below. For any Person who takes Notice of a Bird sitting upon her Eggs, will find that she doubles them up under her, and that they are hid among her Feathers and the Eggs; so that if this is the Case, there can be no other Way of seeing her Feet, but by a Hole through the Bottom of the Nest.

But this is not the Case with the Heron, nor the Bittern, another Bird resembling the Heron. When these Birds sit upon their Nests, their Legs lie straight out behind them, in a Line parallel to the Plain of the Horizon, in the same Posture as when they fly. This accounts for the Phœnomenon of the Feet appearing on the outside of the Nest.

These Birds have Legs of a remarkable Length, as every one must know, for they are a very common Bird; and when they sit, or rather lie, upon their Eggs in the abovesaid Posture, the Nest {14} is unable to contain these long Legs, and by that Means they hang over the Side of it, and are seen by those who are under the Trees on which they build.

With regard to any Thing of a Hole through the Bottom of the Nest, nothing can be more fabulous: I once had the Sight of a large Tree, which had been blown down in a high Wind, and was full of Heron's Nests. They are built exactly in the Form of a Crow's Nest, and of the same Materials, only as the Nests were larger than those of Crows, so there were some larger Pieces of Sticks than Crows generally make Use of; and so far are they from having a Hole at the Bottom, that it was impossible to find a Passage through any Part of the Nest, with a stout walking Stick, so firm was the Texture of them.

If any one doubts of this, if he will take the Trouble to climb any Tree in a Heronry, he will be {15} convinced of the Truth of what has been said, by ocular Demonstration. But I would not advise him to do it when there are young ones.

As the Bittern has been mentioned in this Section, it will not be amiss to put in a Word or two concerning an Error, which passes very current in Countries where this Bird is found, and which we may venture to assert is equally fabulous with the former. It is,

III.

That the Bittern puts his Bill or Beak into a Reed, and that the Reed gives, by the Breath and Motion of the Beak of the Bird, that deep and loud Note which we so frequently hear him make as he lies in a Fenn.

This Bird, on Account of the Noise he makes, which is much such a one as if a Person was to express the Word Bump in a deep Note, is in many Countries called a Butter-Bump: Nevertheless {16} the true Name of him is Bittern, as may be seen in several Books.

One particular Proof that Bittern is the true and ancient Name, may be seen in Stephens's Monasticon. The Author is giving us an Account of some Expenses which the Abbey of Peterborough was at, and among others there is a Bill made of the Expences for the Supper at the Funeral of one of the Abbots of that Convent, in which, among a great Number of other costly Dishes, and a Hogshead or two of Wine, which were drank, and an incredible Quantity of other Things too tedious to mention, there is a Sum set down for a great Number of Bitterns; from which we may venture to conclude, that they were esteemed very delicate eating amongst those Connoisseurs.

I hope the Reader will pardon this Digression from the Point in Hand, when I take Occasion to observe, that here is another vulgar Error, which supposes, that the present Times are more {17} luxurious than the past. For to convince us of this Mistake, we need go no farther than the aforesaid Book, and there we shall find, that as much Money was laid out, (in Proportion to the Scarcity of Coin in those Times) upon the Funeral of one of those Abbots, as in the present Age will pay the Expences of a whole College for a Twelvemonth.

But to return to our Bitterns: That they were esteemed very delicate eating at that Time, is plain, by their being served up at so splendid an Entertainment; and we think it may be called another vulgar Error, in a Farmer to suffer so fine a Bird to lie upon his Dunghill, while he and his Wife and Family are regaling upon restie Bacon; which, as great an Error as it is, I have known done, and a Person who knew the Value of the Bird, has taken the Bittern from off the Dunghill, and dressed it, and made a delicious Meal. {18}

But it is now Time to say something concerning the Error about the Noise it makes.

It is very absurd to suppose it possible, that this deep Note can proceed from the Bird's putting his Beak into a Reed, even if it's Beak was formed for the Purpose. Every one who knows of what vast Dimensions an Organ-Pipe must be, to give such a loud, deep, bass Note as the Noise of a Bittern, knows also, that a Reed is incapable of making such a Noise as that. It must be something with a hollow Tube of a much larger Diameter than a Reed, and the Wind must be thrown in with the greatest Exactness, both in regard to the Quantity of the Wind, and the Manner in which it is let in; and moreover the Tube must have a proper Aperture made towards the End of it, of an exact Dimension according to the Size of the Tube, before it will give any thing like a Tone at all. But here is a Sound as deep as the fourth String of a double Bass, given {19} by an Animal, that may be heard four or five Miles off, in a still Evening.

The most probable Conjecture is, that the Noise is made by the Animal itself, with the Assistance of Nature alone; and we shall have the more Reason to be of that Opinion, if we examine the Throat of the Bird, which is of so uncommon a Size, that a moderate Hand would go down it.

Now a Sound given from the Windpipe into such a Cavern as this, may very probably be the Cause of this deep Tone. It acts upon the same Principle as when a Person closes his Lips, and sounds a deep Note with his Voice. Perhaps after the Reader has made the Experiment, (as in all Probability he will do) he may be convinced that it is a vulgar Error, to suppose that a Bittern puts his Beak into a Reed, when he makes that remarkable Noise Which is heard in a Fenn. {20}

It may not appear foreign to the Purpose, when I say that I have heard a Bittern make the Noise abovementioned, and that I have gone to the Spot, which was coarse Grass or Flags, just mowed, where there were no Reeds; and the Bird rose up before me.

Here I must beg Leave to put in a Word or two, by way of corroborating what has been said about the Heron and the Bittern lying flat upon their Nests, with their Legs parallel to the Plain of the Horizon.

When the aforesaid Bittern rose up, I shot, and wounded him slightly, and marked him down again in the same Kind of Grass or short mowed Flags. As the Grass was not higher than one's Shoes, and it was wounded, I was in Hopes of having the Pleasure of seeing him lie on the Ground very plain. However I let my Pointer go first, knowing that he would stand at the Place. Accordingly made a dead Point at it. I came up as silent as possible, to take a View of it, but to {21} my great Surprize, nothing was to be seen.

There was indeed something which appeared long, like two green Weeds lying among the Grass, and there was something like a large Spot of dryed Grass or Flags a little before them.

While I was looking at the Place, the Dog, being out of Patience, seized Hold of this Phœnomenon, which proved to be no other than the Bittern itself. Those Things which seemed to be green Weeds, were it's Legs extended at the full Length, behind the Bird, as it lay quite flat upon it's Belly; and that broad Spot of brown or dried Grass was the Body, with the Wings extended to their full Stretch, quite flat upon the Ground, which, I believe, formed as compleat a Deceptio Visus as any Thing in Nature. {22}

Thus we see how wonderfully these Animals are formed for their Self-Preservation; so wonderfully, that though they are near as large as a Heron, and much of the same Shape, it must be a keen Eye that distinguishes their long green Legs from Weeds, and their brown Backs from dried Grass; but this Deceptio Visus is so notorious in Partridge, and many other Species of Game, that there is no Occasion to dwell any longer upon that; only what has been said may serve to convince the Reader of the Truth of what has been observed in the foregoing Section, concerning the Posture of a Heron and a Bittern on their Nests.

IV.

That the Tone of a Violin is to be brought out, by laying on like a Blacksmith.

Before we can convince such of our Readers as have no Knowledge in that Part of Pneumatics {23} which is called Harmonics, of this Mistake, it will be necessary just to give a short Account of the Cause of Sound in stringed Instruments.

In the first Place, all Sound proceeds from Undulations in the Air, which is an elastic Fluid; and

with regard to these Undulations, is much of the same Nature as Water, which is another Fluid, but differs from Air in many Respects. Now when a Person throws a Stone into Water, these Undulations or Waves are raised in the Fluid for some Distance, by the Force and Action of one Wave upon another. This is the Case with regard to Sound; only the Air being an elastic Fluid, these Undulations are more quick and brisk in their Motions than in Water. So much for Sound itself. Now for the Cause of this Sound, or of these Undulations.

These Undulations are caused by the Vibration of some elastic Body, which is put into Motion by a Stroke of another Body against it. It must be an elastic Body (take notice) for upon that Word {24} depends the Truth of what is going to be alledged. To convince the Reader of the Truth of this, he has nothing to do but to take a Rolling Pin, and strike it against a Pound of Butter, and he will find very little or no Sound at all, because Butter has very little Elasticity or Spring in it; but if he strikes the aforesaid Implement against the Table, he will find Sound enough, because most Tables are made of Wood, which is a very elastic Body. If there is no Butter in the House, Wax will do as well or better, for it will prove that a Body may be hard without being elastic, and which will be very much to the Purpose. It will be necessary, before we can get any further, to explain what Vibration is, a Word very commonly made Use of among Musical Men, tho' but little understood.

To be as short as possible; a Piece of Lead hung upon the End of a String, which moves backwards and forwards of itself after being first put into Motion, is called a Pendulum, and that {25} Motion backwards and forwards is called its Vibration; it is upon this Principle that elastic Bodies are the Cause of Sound. It will be best illustrated in a Musical Instrument, besides that is the Point in Hand; and to be more to the Point still, we will suppose it a Violin, though any other stringed Instrument would answer the same End.

Here we have four Strings stretched out upon a Bridge, or thin Piece of Wood, which communicates to the Belly of the Instrument, from which Belly the greatest Part of the Tone proceeds. Now a String drawn tight at both Ends, when it is struck, will have a Vibration or tremulous Motion, which Vibration, or tremulous Motion, acts upon the same Principle as a Pendulum does in a Cycloid, or, to speak as plain as possible, as a Pendulum does when it is put into it's proper Motion.

It is upon this Principle of Vibration then, or tremulous Motion, that the String of a Violin, being {26} moved by the Bow, is to act: The String immediately communicates it's tremulous Motion to the Bridge, and the Bridge to the Belly of the Instrument, which Belly being made of a very elastic Wood, by it's Vibration and free Motion, acts upon the Air in the Manner abovementioned.

As it is the great Elasticity of the Wood which is to cause the Tone, it ought to have as little Confinement in it's Vibrations as is possible; the Weight of the Strings must indeed press against it, otherwise they could not communicate their Motion to it. We should therefore be careful not to over-string the Instrument, since it so plainly contradicts the Principles of Pneumatics.

It is easy to hear when an Instrument is over-strung; and sometimes an Octave in a Harpsichord, by it's additional Number of Strings, shall render the Tone of the Instrument so dead, that, though it gives a Sprightliness peculiar to an Octave, yet it sometimes hardly compensates for {27} the Loss of Tone which it causes in the Unisons, by it's too great Pressure upon the Belly of the Instrument.

And yet notwithstanding all this, what is more common than to see a Performer, with his Waistcoat unbuttoned, laying Strokes on a Violin, heavy enough to fell an Ox.

The Truth is, managing the Bow is slight, and we must make Use of Art more than Strength in our Performance: moreover, it is an Art which cannot be wrote down upon Paper, nor explained in Words, but must be learned by the Example and Direction of some assiduous Master. However what has been said may serve to shew, from Philosophical Principles, the Error of leaning too hard upon the Instrument, which was the Thing intended to be done. {28}

V.

That the farther you go South, the hotter is the Climate.

Gentle Reader, as thou art a Person of Understanding, thou wilt pardon the Want of Connection and Form which thou findest in the different Subjects which are here started for thy Entertainment: It would be very easy, in the fair Copy which will be wrote over, to range them, in an Order, suitable to the different Branches to which they belong; but why should I pester thee with Form, when there is nothing so agreeable to a Man of Taste as an easy Variety? Therefore, though it is ten to one that, before I have done with thee, I shall have some more Discourse with thee about Musical Instruments, yet I shall not humour thee as a Critic so much as to give thee it now; well knowing, that if thou art determined to *Review* me, thou mayest find Abundance of other Opportunities for it in this Book: And likewise, that if thou dost approve of what is here {29} discussed, thou wilt, if thou art a good-natured honest Fellow, pass by a little Incorrectness; for what else can a Man hope for in a Book which treats of nothing but Blunders? However the two following Sections may afford thee some Entertainment, if thou art a Man of Learning, and if thou art not a Man of Learning, they will give thee some Instruction; and to tell thee the Truth, the Subject of them is so Philosophical, that if we were not fully convinced of the Truth of what will be alledged, we should be afraid to undertake it.

For in this little Pamphlet, Philosophy will be avoided as much as possible, that is, it never will be introduced at all, unless it is absolutely necessary to call in it's Aid, in order to prove the Truth of any Thing which shall be asserted. But to the Point; which is, to rectify the vulgar Error, which supposes, that the farther a Person goes South, the hotter will be the Climate. {30}

This is so well known to be an Error, by all Men of Science, and by all Navigators, that it is needless to say much about it, only just to relate the Truth, that those who are mistaken in their Way may be set in the right Road. But to proceed.

The two Poles of the Earth, that is, the two North and South Extremities of the Globe, are in such a Position, or are so inclined to the Sun, or to the Plain of the Ecliptic, as never to have any Rays fall directly over their Heads, or they never have him any higher than a little above their Horizon, or the Surface of the Earth; for which Reason it is always cold at the North and South Poles, which will naturally be the Case, as any one may experience by the different Position of the Sun, in Summer and Winter, in our own Climates.

The Case is exactly contrary at the Æquator, or on the Middle of the Globe, which is farthest from {31} the two Poles, for there they have the Sun over their Heads at Noon all the Year round; for which Reason it is always hot under the Line, yet not always the hottest of any Part of the Globe, as has been sometimes philosophically supposed, and which shall be the Subject of the next Chapter, to introduce which this was principally intended.

VI.

That exactly under the Æquator is always the hottest Climate on the Globe.

This Error by no Means ought to be called a vulgar one; because it is a Course of Philosophical Study, joined to a Want of Experience, which gives Occasion to it. It is the Result of a Knowledge of the general Cause of Heat and Cold, in different Degrees of Latitude upon the Surface of the Earth; which Knowledge is apt to apply the Rules of Astronomy, that explain the Phœnomena of Nature in general, to every Purpose that offers itself, in all Cases, without being able to search {32} into the individual Parts of a System, on Account of the Distance of the Objects which are the Subjects of Enquiry. For though, as has been said before, for a just Astronomical Reason, the Position will hold good, that those Inhabitants who are under the Line, live in the hottest Climate in general, yet it is proved by the Experience of Navigators, that in several Parts under the Æquator there is a fine, mild, soft Climate, even excelling any of those in the temperate Zones; so happily are Things disposed for the Purposes of Animal Life, by the Author of Nature.

This is a Truth which we are constrained to believe, as we have so many living Witnesses in our own Country, who are ready to assert it.

We have one accurate Account in Anson's Voyage, where the Author reasons very Philosophically upon the Subject. This Author tells us, that the Crew of the Centurion were in some Uneasiness {33} about the Heat of the Climate, which they expected they were to undergo, when they came to that Part of the Æquator which is near the American Coast, upon the South Sea; but that when they came under the Line, instead of those scalding Winds which sometimes blow in immensely hot Climates, they were agreeably surprized with the softest Zephyrs imaginable; and that, instead of being scorched by the perpendicular Rays of the Sun, they had a fine Covering of thin grey Clouds over their Heads, and just enough of them to serve for a Screen, without looking dark and disagreeable. Many other Beauties of the Climate the Author describes, which need not be mentioned here, as it is easy to see the Book.

He accounts for the extraordinary Mildness of the Climate in Words to this Purpose: {34}

"There are Mountains on the Sea Coast of this Latitude, of an enormous Height and great Extent, called the Andes, the Tops and Sides of which are covered with everlasting Snow. These Mountains cast a Shade and Coolness round them, for several Leagues, and by their Influence it is, that the Climate is so temperate under that Part of the Line. But, says the Author, when we had sailed beyond the Æquator, into four or five Degrees of North Latitude, and were got out of the Influence of those Mountains covered with Snow, we then began to feel that we were near the Line, and the Climate was as hot as we could have expected to have found it at the Æquator itself."

There can be no Doubt of the Truth of this Account: No Man would have made such Assertions as these, if they had not been true, when there were so many living Witnesses to have contradicted such an idle, needless Falshood as this would have been. And indeed the Appearance of wise {35} Design in the Author of Nature is no where more conspicuous than in these Instances of his Care for the Preservation of the animal System. What could we have expected more than Mountains of Snow in Greenland? And even in those frozen Regions we have as great Instances of the same Providence: When the Springs are all frozen up, in that severe Climate, they have sometimes, even in the middle of Winter, such mild South Winds as serve to thaw the Snow, so as to cause Water to settle in the Valleys, and to run under the Ice in Quantities large enough to serve the Purposes of animal Life; not to mention the great Quantities of Timber which the Surf of the Sea brings upon that Coast, from other Countries; without which the Inhabitants would have no Firing, nor Timber for their Huts, nor Shafts for their Arrows, as there are no Trees in that Country.

And now I hope it will not be thought too bold an Analogy if we presume to say, that as, contrary to all Expectation, at the Æquator (where intolerable Heat might be expected) the Inhabitants are {36} provided with Mountains covered with Snow, to qualify their Atmosphere; why may not we suppose, that at the very Poles themselves there may be some Cause, unknown to us, which may render the Climate serene and mild, even in that supposed uninhabitable Part of the Globe? Why may there not be hot, burning Minerals in the Earth at the Poles, as well as snowy Mountains at the Æquator?

We have Reason to think that the Composition of the Earth, at that Part of the Globe, is of an extraordinary Nature; as the magnetic Quality of it is to be apprehended, from it's immediate Attraction of the Needle. We are entirely ignorant of the Soil, of the Place, and of the Constitution of the Inhabitants, if there are any. We are certain that, near Greenland, there are Sands of so extraordinary a Nature, that the Wind will carry great Clouds of them several Leagues to Sea, and they will fall into the Eyes and Mouths of Navigators, who are sailing past the Coast, at a {37} great Distance. This Instance only serves to shew, that we may be quite ignorant of the Nature of the Soil which is under the Pole; we cannot tell whether it consists of Mountains or Caverns, fiery Volcanos or craggy Rocks, of Ice, Land, or Water, cultivated Fields or barren Desarts.

What has been laid will seem less strange, if we look back into the Notions which the Ancients had of the Torrid Zone. It is not long since it was thought, that only the Temperate Zone on this Side the Æquator was habitable; so far were they from attempting to find out another Temperate Zone beyond the Æquator, that nobody dare approach near the Line, for Fear of being roasted alive. This is the true State of the Case; and if it be so that the Ancients were, for such a vast Number of Years, under a mistaken Notion, concerning the Possibility of living under or near the Line, why may not we, who are neither more daring nor more ingenious than the old Romans, be {38} likewise mistaken, or rather totally ignorant of the Climates at the Pole?

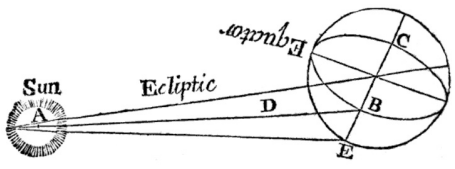
And here I beg Leave to offer a Philosophical Reason, why it should not, according to the Nature of Things, be any colder at the Poles themselves, than ten Degrees on this Side of them. Not that I by any Means insist upon the Truth of what I am going to say; I only just offer it as a Subject to be discussed by those who are more learned, and are able to take more exact Mensurations of the Phœnomena of Nature than myself.

What I would offer is, that there is no Reason to apprehend more Cold at the Extremities of the Poles than ten Degrees on this Side of them, on Account of the Figure of the Earth. The Figure of the Earth is found, by Observations which have been made, upon the Difference of the Vibrations of Pendulums at the Æquator and near the Poles, and by other Experiments, to be not a Sphere, but a Spheroid; it is not exactly round, neither is it oval, but (if I may make Use of the {39} Comparison) more in the Shape of a Turnip.

Now the Climate is hotter at the Æquator than in high Latitudes, on Account of the Inclination of the Poles to the Sun, as has been said before: What I would urge is, that the Surface of the Earth, at ten Degrees on this Side of the Poles, is as much or nearly as much inclined to the Plain of the Ecliptic as the Poles themselves.

If that is the Case, no Reason can be given why the Poles should be colder than Greenland, where, if we may believe the Accounts of Navigators, though in the Winter the Cold is so intense as to freeze Brandy, yet, in the middle of Summer it is sometimes so hot, that People have been glad to strip off their Cloaths, for an Hour or two in a Day, in order to go through their Work. But to return to the Surmise, that the Poles are no colder than ten Degrees on this Side of them, on {40} Account of the Spheroidical Figure of the Earth.

I must trouble the Reader with a very plain Figure, in order to illustrate the Meaning of this.



By this Figure we may observe, that any Rays of the Sun A, which fall upon a Place situated ten Degrees on our Side of the Pole B, and Rays which fall on the Pole itself, do not make so large an Angle, as they would if the Form of the Earth was a Sphere; for if we extend the two Points B and C so far as to make a compleat Sphere, we must be obliged likewise to move the Line D along {41} with it to the Point E, which would make a larger Angle, and in that Case the Surface of the Earth at the Pole B would be more inclined to the Plain of the Ecliptic than it is, and consequently it would be colder, as the Cause of Heat and Cold in different Parts of the Globe is owing to the Inclination of the Poles to the Plain of the Ecliptic, and not to the Distance of the Sun from the Earth at the different Seasons of the Year; for if that was the Case, we should have colder Weather in July than we have in December, the Sun being rather nearer to us in Winter than in Summer.

I hope that this little Philosophical Effort, which has been made here, will not be looked upon as unseasonably introduced in this Place; and I likewise hope, that while I gaze with Wonder on the stupendous Frame of the Universe, I shall not be thought presumptuous in having taken a little Survey of one of the Wheels which duly performs it's Revolutions in that glorious Machine, the {42} Solar System; the exact and regular Movements of which inspire the curious Beholder with a more awful Idea of the Greatness of the Fabricator, than it is possible for any one to conceive,

who is entirely ignorant of the Accuracy of the Construction.

VII.

That the more Hay is dried in the Sun, the better it will be.

As Hay is an Herb which is dried in order to lay up all the Winter, when it cannot be found in the Fields, and as it is intended for the Food and Nourishment of Animals, that Nourishment must consist of such of the Juices as are left behind in the Herb.

It is very possible, by the Art of Chemistry, to extract from Hay all the separate Salts, Spirits, &c. of which it is composed. Now in a Chymical Preparation, there is always something left behind in {43}
the Still, out of which it is impossible to extract any more Juices; that the Chymists call Caput Mortuum. This Caput Mortuum is of no Service, and is entirely void of all those Salts and Spirits with which every other Substance on the Surface of the Earth abounds more or less.

The Sun acts upon Bodies much in the Nature of a Still. He, by his Heat, causes the Vapours of all Kinds, which any Substance contains, to ascend out of their Residences into the Atmosphere, to some little Height, from whence either the Wind carries them, if there is any, or if there is no Wind, they fall down again Upon the Earth by their own Weight, at Sun-set, and are what is called Dew.

Since this is the Case, and the Sun acts upon Bodies in the same Manner as a Still, we should take Care not to make Caput Mortuum of our Hay, by exposing it too long to his Rays; for by that Means we shall extract from it most of those Salts Spirits of which Food must consist, and of {44}
which all Animal Substance is composed.

The Botanists are sensible of this: When they dry their Herbs, they lay them in a Place where no Sun can come to them, well knowing that too much Sun would take off their Flavour, and render them unfit for their different Physical Uses. Not that Hay would be made so well without Sun, on Account of the Largeness of the Quantity, and at the same Time it ought to be dryed enough, and no more than enough; for it is as easy to roast Hay too much as a Piece of Meat.

VIII.

That the Violin is a wanton Instrument, and not proper for Psalms; and that the Organ is not proper for Country-Dances, and brisk Airs.

This Error is entirely owing to Prejudice. The Violin being a light, small Instrument, easy of Conveyance, and withal much played upon in England, and at the same Time being powerful and {45}
capable of any Expression which the Performer pleases to give it, is commonly made Use of at Balls and Assemblies; by which Means it has annexed the Idea of Merriment and Jollity to itself, in the Minds of those, who have been so happy as to be Caperers to those sprightly English Airs, called Country Dances.

The Organ, on the other Hand, being not easily moved on Account of it's Size, and expensive on Account of the complicated Machinery which is necessary to the Construction of it, is not convenient for Country Dances; and at the same Time being loud, capable of playing full Pieces of Music, Choruses, Services, &c. is made Use of in most Churches where the Inhabitants can afford to purchase this fine Instrument.

Nevertheless, notwithstanding these great Advantages, two or three Violins and a Bass, are more capable of performing any solemn Hymn or Anthem than an Organ; for the Violin, as has been {46}
before observed, is capable of great Expression, but especially it is most exquisitely happy in that grave and resigned Air, which the common Singing-Psalms ought to be played with. When the Bow is properly made Use of, there is a Solemnity in the Strokes of it, which is peculiar to itself. And on the other Hand, on Account of the Convenience of Keys for the Readiness of Execution, nothing can be more adapted to the Performance of a Country-Dance, than an Organ. For the Truth of which Assertion I appeal to those who have been so often agreeably surprized with those sprightly Allegros, in the Country-Dance Style, with which many Organists think fit to entertain the Ladies, in the middle of Divine Service.

If Jack Latten is played at all, it is Jack Latten still, whether it be played in Church or in an Assembly Room; and I am only surprized, that People can so obstinately persist in the Denial of a {47}
Thing, concerning the Truth of which it lies in their Power to be convinced every Sunday.

IX.

That the Organ and Harpsichord are the two Principal Instruments, and that other Instruments are inferior to them in a Concert.

Notwithstanding the great Advantage which these Instruments have of playing several Parts together, there is nevertheless one Imperfection which they have, or rather they want one, or more properly a thousand Beauties contained in one Word; which is no less material an Article than that of Expression.

There is no Word more frequently in the Mouths of all Sorts of Performers, than this of Expression; and we may venture to affirm, that it is as little understood as any one Term which is made Use of, in the Science of Music. {48}

Above three Parts in four make Use of it, without having any Meaning of their own, only having heard some one else observe, that such or such a Person plays with great Expression, they take a Fancy to this new adopted Child, and become as fond of it, as if it was the legitimate Offspring of their own Brain. Some who are more considerate, think that the Meaning of it entirely consists in playing Staccato; and indeed these People come nearer the Mark than the others, but they have not picked up all the Meaning of the Word.

One who plays with Expression, is he who, in his Performance, gives the Air or Piece of Music (let it be what it will) such a Turn, as conveys that Passion into the Hearts of the Audience, which the Composer intended to excite by it. Dryden, in that masterly Poem, his Ode in Honour of St. Cecilia's Day, has given us a true Idea of the Meaning of the Word; the Beauties of which Poem, {49} though they are enough to hurry any Man away from his Subject, shall not be discussed at present, not being to the Point in Hand. We shall only make Use of an Instance or two out of it, to illustrate what has been said.

Handel was so sensible of it's being capable, by the Help of Musical Sounds, of raising those very Passions in the Hearts of the Audience, which Dryden fables Alexander to have felt by the masterly Hand of Timotheus, that, by setting it to Music, he has himself boldly stepped into the Place of Timotheus.

In this Performance called Alexander's Feast, it may easily be discerned, that Expression does not consist in the Staccato only, or in any one Power or Manner of playing. For Instance this Air,

Softly sweet in Lydian Measures, &c.

would be quite ruined by playing it Staccato; and again, {50}

Revenge, Revenge, Timotheus cries, &c.

requires to be played in a very different Style from the foregoing Air.

Passions are to be expressed in Music, as well as in the other Sister Arts, Poetry and Painting.

Having thus explained what is meant by Expression in Music, we will return to the Point, viz. that the Organ and Harpsichord, though they have many other Advantages, yet want that great Excellence of Music, Expression. Surely it may not be thought a Straining of the Meaning of St. Paul's Words too far, when I surmise, that he, who had a fine Education, and in all Probability knew Music well, might have an Eye to the Want of Meaning or Expression of the ancient Cymbal, when he says, "Tho' I speak with the Tongues of Men and of Angels, and have not Charity, I am become as a sounding Brass, and a tinkling Cymbal." That is, though I have ever so much Skill in Languages, and the Arts and Sciences, my Knowledge is vain if I am without the {51} Virtue of Charity, and my Works will have no Force, and will in that Respect resemble the Cymbal, which, though it makes a tinkling, and plays the Notes, yet is destitute of the main Article Expression. For we must not suppose, that so refined a Scholar as St. Paul was, could have such a settled Contempt for the Science of Music, as to make Use of it even as a Simile for what is trifling. We may venture to think, that the Apostle alluded to that Want of Power in the Cymbal to move the Passions, which other Instruments have.

This is the very Case with the modern Harpsichord; it is very pretty, notwithstanding it's Imperfections, with Regard to the Change of Keys, (of which more in it's Place.) But no one can say, that it speaks to his Passions like those Instruments which have so immediate a Connection with the Finger of the Performer, as to sound just in the Manner which he directs. {52}

In that Case the Powers are great; you have the Numbers of Graces which have Names to them, and the still greater Number which have none; you have the Staccato and the Slur, the Swell and the Smotzato, and the Sostenuto, and a great Variety of other Embellishments, which are as necessary as Light and Shade in Painting.

To convince the Reader of this, let him hear any Master play Handel's Song, *Pious Orgies, pious Airs*, upon the Organ or Harpsichord, and he will find, that, though it will appear to be Harmony, yet it will want that Meaning, and (not to make Use of the Word too often) Expression, which it is intended to have given it by the Word Sostenuto, which Mr. Handel has placed at the Beginning of the Symphony.

Now a fine Performer upon the Violin or Hautboy, with a Bass to accompany him, will give it that Sostenuto, even with greater Strength than the human Voice itself, if possible. {53}

I by no Means intend to debase that noble and solemn Instrument the Organ, nor the Wonders that are done upon it, nor the great Merit of the Performers who execute them, by what has been here said; only to discuss a little upon the Perfections and Imperfections of different Instruments, as the more the Imperfections of an Instrument are looked into, the more likely is the Ingenuity of Mechanics one Day or other to rectify them.

That every different Key in Music ought to have a different Effect or Sound.

This is an Error which belongs chiefly to those who play a little upon the Harpsichord; it arises from the Imperfection of their Instrument. As a greater Number of Keys would be inconvenient to the Performer, they are obliged to make one Note serve for another, such as B flat for A sharp, {54} and many others, which necessarily renders some of the Keys imperfect. But we are not to take Notice of the Imperfection of any one Instrument, and regulate our Ear by that alone; we are to consider what is the real Scheme of Music, and what was the Intent of having different Keys introduced into Harmony.

It was intended for the Sake of Variety. When the Ear begins to be surfeited with too much of the *Cantilenam eandem Canis*, as Terence expresses it, then Contrivances are made, without infringing upon the Laws of Harmony, to have the Burthen of the Song upon a different Note; not that this Key is to differ from the former in it's Mensurations from one Note to another, unless it changes from a flat third Key to a sharp third, or vice versa. For notwithstanding all the different Sounds which an imperfect Instrument will give, in different Keys, there are in Reality but two Keys, viz. a flat third Key, and a sharp third Key; and however the different Keys upon any {55} particular Instrument may sound, we will venture to affirm, that any Piece of Music, let it be set in what Key it will, either is not true Composition, or is performed badly, if it does not sound smooth and harmonious.

For though we do agree, that Variety is grateful in this Case as well as in others, yet that Variety ought to be introduced with as little Inconvenience as possible. When we shift our Scenes, we should order the Carpenters to make as little Noise in the Execution of it as they can help, and take Care that the Pullies are all well oiled. For shall any Man entertain me, by making a most hideous jarring Discord before he begins what he intends to be Harmony? It is as absurd as for a Lady to take you half a dozen Boxes on the Ear, before she permits you to salute her, and then to tell you she only did it, that you might have a more lively Apprehension of the exquisite Happiness which her unparallelled Charms should very soon make you sensible of. {56}

We may apprehend the Difference of perfect and imperfect Instruments, by listening to a Harpsichord, when any Music, where the Key changes often, is played, and to a fine Band, such as the Playhouse or the Opera. We shall find, in the latter, that the Composer has taken Care to make every Transition quite smooth and harmonious; and that tho' the Music be ever so cromatic, yet it never departs from it's melodious Effect. Whereas in an Organ or Harpsichord, even the greatest Performers cannot avoid a disagreeable Roughness in complicated Harmony. Nevertheless, as has been before observed, we must acknowledge the Organ to have Powers which other Instruments have not.

XI.

That a Piece of Music which has Flats set before it, is in a Flat Key on that Account, and vice versa with Sharps.

This is so well known to be an Error, by all those who have arrived at any Proficiency in Music, {57} that very little need be said about it; however, it is a very common Error.

A Key is not constituted flat or sharp, by having Flats or Sharps at the Beginning of the Piece of Music; but it depends upon the third Note upwards from that Note in which the Music is composed. For Instance, if the Piece is composed in D, and we find that F is natural, or only half a Note from E, then it is in a flat, or flat third, Key; if F is sharp, or a whole Note above E, then the Piece of Music is composed in a sharp third Key. But as there are so many Books extant about Thorough Bass, which give a full Account of this, it will be needless to say any more about it, only to mention it as an Error, among other Errors. The Reader shall not be tired any more with Music at present, but for Variety we will shift the Scene a little while. {58}

XII.

That apparitions or Spectres do exist; or that the Ghosts of Men do appear at, before, or after their Deaths.

We would not be thought, in the following Discourse, to call in Question that great Miracle of our Saviour's rising again the third Day, and appearing to the Twelve: What shall be here said, will rather prove the Miracle to be the greater, and therefore more worthy the interfering Hand of Omnipotence.

But we must not suppose that the Supreme Being will condescend to pervert the Order of Nature for Individuals. The ancient Heathens had a true Notion of the Greatness of him, *qui Templa Cœli summa sonitu concutit*. Ter. Eun. And Horace observes,

Nec Deus intersit, nisi dignus vindice nodus.
Art. Poet.

Since it must be no less than a Miracle which causes an Apparition, I shall proceed, without any {59} Scruple, to prove that there is no such Thing in Nature really existing.

Of all the Errors with which the Brains of Mankind have been troubled, there is none of such ancient Standing as this. We have Ghosts and Hobgoblins even in Homer; not that there is Reason to suspect that Homer ever believed in them himself; he seemed too well versed in the real Phœnomena of Nature, to entertain any such chimerical Dreams as Truth; for Dreams they are, and no better: the true *Somnia Vatum* of the Ancients, handed down to Posterity, even to these enlightened Times. How many horrible Nights have been passed in cold Sweats, by otherwise very sensible People, owing to nothing else but the Apprehensions which they have had of these no-existing Gentry! How was even the Metropolis itself terrified the other Day, by the Scratching Ghost at Cock Lane! I think enough has been said, even in this little Book, to prove {60}
that no Noise can be made, unless by the Vibration of some elastic Body. If a Noise is made by a Voice, it must be from an Animal, which has Lungs and Breath to do it; if a Scratching is made, it must be done by something which has Hands, and Sinews to move those Hands; and it must have Nails, or some other bodily Substance, to scratch with, before it can cause a Sound to proceed from an elastic Body. So much for Scratching, and dismal Yellings, and Groanings of all Sorts, which have been fabled of Ghosts.

It will require a little Dissertation upon Optics, in order to explain the Cause of Light and Colours, before we can confute the Possibility of seeing an Apparition.

Light is found to be a real Substance; it is swift beyond Comprehension; if I mistake not, it is calculated by Sir Isaac Newton, to be only eight Minutes in passing from the Sun to the Earth; it is very subtle, passing through the hardest transparent Bodies; it is capable of Refraction and {61}
Reflection, that is, either of passing through a transparent Body, as a Window, or of being reflected from an even Surface, as a Looking-Glass, or a Piece of polished Steel; so that if we see any Object at my Time, the Cause of our seeing it, if there is no Window between, is by Reflection, or by the Rays of Light being reflected from the Object to the Eye of the Beholder, which is formed for the Reception of the Rays which come from the Object, in the same Manner as a Camera obscura.

When the Rays have found a Passage into the Pupil of the Eye, they fall upon a thin Membrane which is called the Retina, upon which Retina the exact Picture of the Object is represented, as may be seen by the Eye of an Ox, properly prepared and placed in the Hole of a Window-Shutter. This Retina is an Elongation from the Brain; and by this Means it is, that we receive those various agreeable or disagreeable Sensations with which we find ourselves affected, by the Sight of {62}
external Objects. So that we may observe, that it must be not only real Substance which must reflect Rays to the Eye, in order to cause Vision, but the Rays themselves, likewise, which come from that Object, are Substance.

If this is the Case, the Apparition of a Person must be a Substance, which is reflected from a Substance, which belongs to the Body of him who is dead, or is going to die. With regard to him who is dead and buried, one would think, that he and his Substance are so safe under Ground, that no Part of him can reflect any Rays; but a Person who is above Ground, either dead or dying, may reflect Rays to the Eye of a Beholder, and if it happens to be a Friend or Relation, such Rays will make so strong an Impression upon the Retina, that they shall in such a Manner imprint themselves upon that pliable Spot, as will cause the Brain and Nerves of the Beholder to have the Sensation of seeing the dead or dying Person some Time after the real Action of seeing him. {63}

This will account for most of those positive Assertions, which we may hear in any Village, of the seeing the Apparitions of People after they are dead, or just before they die, 'tis all one. We very seldom hear of any such Thing in Town, which corresponds with what has been said; for in Town it is so common to have Deaths and Funerals, &c. that People are no more affected with the Sight of a dead Man than a living one. But the Case is quite different in Villages. A Village with fifty Houses in it, situated in a wholesome Country, shall not have above one Person die in a Year; this makes such a Stir, that all the old Women in the Town must have a Peep at the deceased, as he lies in his Coffin, with his Shroud on; which Alteration of Appearance in the dead Person, from what they remember him, a little while since, leaves such an Impression upon the Retinas of these old Women, that 'tis ten to one but some of them think they see him, as soon as the dark {64}
Hour comes on. And, very likely, a Person who thinks he sees an Apparition may not be altogether wrong; there may be some of the Picture of the dead Person still faintly remaining upon his Retina; and if so, it certainly will give the same Sensation as if he faintly saw the Person. If this is the Case, it is not the deceased come back again to bully us, as is generally imagined, if we do apprehend we see him; but the Remembrance of him strong in that Organ the Eye, by which we formed the Idea of him in our Minds, when we really did behold him.

Homer seems to allude to this, when he makes Patroclus's Ghost appear to Achilles. When Patroclus was slain by Hector before Troy, the Body, after a long Dispute for it, between the Greeks and Trojans, was brought to Achilles's Tent, where Achilles is described by the Poet, as making bitter Lamentations over the Body of his deceased Friend. At Night he lays himself down upon the Sea Shore, and falls asleep, when the Ghost of Patroclus comes to demand the funeral {65}
Obsequies.

> Ἦλθε δ' ἐπὶ ψυχὴ Πατροκλῆος δειλοῖο,
> Πάντ' αὐτῳ μέγεθός τε καὶ ὄμματα κάλ' ἐικῦια,
> Καὶ φωνήν· καὶ τοῖα περὶ χροῒ εἵματα ἕστο·
> Hom. Iliad. Lib. 23.

Homer never introduces an Incredulus Odi into his Works; he has an Eye upon Probability in all

his Fictions. It seems probable, that Achilles, after he had been hanging over the Body of Patroclus, either quite asleep, or between sleeping and waking, should imagine that he saw his Friend's Apparition. And though Homer might not have heard of such a Thing as the Retina in the Eye, (though it is not at all impossible he should, for he shews himself a great Anatomist) yet he very well knew the Impression which the Sight of a departed Friend is sure to make upon the Mind of the Beholder. By this Propriety of Introduction, he keeps up the Appearance of Probability, so necessary even in Poetry itself, which is generally Fiction. {66}

By this it should seem, that Homer was tacitly of Opinion, that there is really no such Thing in Nature as an Apparition, and that it has no other Existence than in the Imaginations of Men. And we have the more Reason to believe that this was his Opinion, as we find that he did not choose to introduce the Ghost of Patroclus to Achilles, when he was broad awake; but, as he thought it might seem to want the Air of Probability, if he made Patroclus appear to Achilles when awake, he takes Care to compose Achilles into a Nap first, and by that means leaves the Reader to his own Opinion, whether the Ghost did really come, or whether Achilles only thought so. This is one of those Touches of Art with which Homer abounds.

But there is another Reason why we have so many of these Stories told us of Apparitions by our Grandmothers; and that is, the Tricks which the Priests of the Roman Catholic Times found it {67} necessary to put upon their Flock, in order to keep up their Credit.

Chymistry was the Study of those Times, and Lectures were given in them at the Universities, as frequently as they are in Philosophy at present. It is for this Reason, I apprehend, that Shakespeare introduces Friar Lawrence, a Student in a Convent or Roman Catholic College, with several Kinds of Herbs in a Basket, the particular Virtues of which he seems perfectly to understand, and which he is going to extract from them, for physical Uses: Had Shakespeare lived in these Times, most likely he would have introduced him with a Quadrant, a Globe, or a Prism, or some other Philosophical Instrument. Now those who have not seen some little of Chymistry, have no Notion of the Wonders that are to be done by it; and these crafty Priests knew so well how to make Use of their Art to the best Advantage, that they could frighten a whole Village, whenever they had an Inclination to play their Pranks. Friar Bacon, who was {68} perhaps the greatest Chymist in Europe, used to play so many Tricks, that he was thought by the whole Country, to deal with the Devil; and many Stories of him are now extant, to that Effect. One of the most common Pranks amongst these Gentry was this: They used to get one who could draw well, to take some Phosphorus (which is a Chymical Preparation from Urine) in his Pocket; having thus armed themselves, they perhaps would step into the first Alehouse where they saw a Light, and mix with the Company. He who was in Possession of the Phosphorus would get up and go to the Wall, under some Pretence or other, upon which he would draw what Picture came first into his Head, very likely the Picture of the Devil. Nothing is to be seen by Candle-Light, and it must be dark, before the Marks made by Phosphorus upon a Wall will appear like Fire. After sitting a little while, one of them would either introduce some Discourse about the Wickedness of {69} the Times, or would tell some Story about Apparitions; in the middle of which another would run against the Candle, as if by Accident, and put it out. As soon as the Candle is out, another of them pretends to have found out this Figure upon the Wall, which will appear like Fire. You may guess the Surprize of the poor Country People, at seeing the Old Gentleman upon the Wall.—They all take to their Heels. In the mean Time, to improve their Ideas, another of the Confederates sets Fire to Brimstone, or some other stinking Combustible, and pops it against all their Noses, as they run out of Doors; and after these two powerful Sensations of seeing and smelling, it would be quite impossible, by any Arguments, to persuade any of the Company, that they had not actually seen the Prince of Darkness. By these and such like Arts, the Roman Catholic Priests so long kept this now well-delivered Country under their Subjection. {70}

Though this Account appears ridiculous enough, the Effect which such Sort of Pranks have upon the weak Minds of Women and Children, are very serious; and the Ideas which are received at this Time of Life, make such an Impression upon some People, that they are unable to get the better of their Apprehensions, even when they grow up.

I know a Person of the first Sense, and a great Scholar, who retains these Stories so strong in his Memory, that he dare as well put his Fingers into the Old Lion's Mouth at the Tower, as go up to a Monument, which stands in a certain Chapel in this University, after it is dark; not that he really believes any Thing would hurt him there; nevertheless he declares he cannot get the better of it. And I make no Doubt, that not only this Gentleman, but Thousands more of his Majesty's good and bold Subjects, are in the same Way. {71}

I look upon our Sailors, to care as little what becomes of themselves, as any Set of People under the Sun; and yet no People are so much terrified at the Thoughts of an Apparition. Their Sea Songs are full of them; they firmly believe their Existence; and honest Jack Tar shall be more frightened at a glimmering of the Moon upon the Tackling of the Ship, than he would be if a Frenchman was to clap a Blunderbuss to his Head.

I was told a Story by an Officer in the Navy, which may not be foreign to the Purpose.

About half a Dozen of the Sailors on board a Man of War, took it into their Heads, that there was a Ghost in the Ship; and being asked by the Captain, what Reason they had to apprehend any such Thing, they told him, that they were sure there was a Ghost, for they smelt him. The Captain at first laughed at them, and called them a Parcel of Lubbers, and advised them not to entertain {72} any such silly Notions as these, but mind their Work. It passed on very well for a Day or two; but one Night, being in another Ghost-smelling Humour, they all came to the Captain, and told him,

that they were quite certain, there was a Ghost, and he was somewhere behind the Small-beer Barrels: The Captain, quite enraged at their Folly, was determined, they should have something to be frightened at in earnest; and so ordered the Boatswain's Mate to give them all a Dozen of Lashes, with a Cat 'o nine Tails; by which means, the Ship was entirely cleared of Ghosts, during the remainder of the Voyage. However, when the Barrels were removed, some Time after, they found a dead Rat, or some such Thing, which was concluded, by the rest of the Crew, to be the Ghost, which had been smelt a little before. Thus we see, that the bravest Men of the Universe, may be terrified, if they give way to their own chimerical Ideas; and that it is only for want of searching into the Causes of the Phœnomena of Nature, that People disturb themselves in this {73} Manner, with such groundless and unphilosophical Apprehensions. However, a great deal may be said in Favour of Men, troubled with the Scurvy, the Concomitants of which Disorder, are generally Faintings and the Hip, and Horrors without any Ground for them; which leads me to say something upon an Error, relative to that Sea Disorder, the Scurvy.

XIII.

That Bleeding is proper for a Patient, who is apt to be sick in a Morning.

The first Person I heard remark this Error, was an old Physician, who, though he had but little Practice, on Account of his travelling Disposition, was nevertheless a Man of great Speculation. He had been three Times over the Alps on Foot; and was in many Respects, a curious Man.

The Company did not seem to take much Notice of his Remark, because he certainly was an {74} Oddity; however, if we may believe the Accounts of those Physicians who have lately wrote upon the Scurvy, the Old Gentleman was in the right.

It seems, that among all the dreadful Symtoms, which accompany the Scurvy, a fainting Sickness in a Morning, is the most certain Indication of it. Many, upon Application for Relief, in that Case, have been treated as Consumptive; when, upon a more strict Enquiry, they have been found to have a violent Scurvy, and have been restored to Health by Mineral Waters. If that is the Case, and fainting Sickness in a Morning, is a Sympton of the Scurvy, Bleeding cannot be proper, as nothing is more likely to encrease the Fainting, than Phlebotomy.

I met with an Author somewhere, who reasoned upon the Subject, in this Manner. He alledged, that the Cause of Fainting in the Scurvy, was owing to such a Relaxation in the Blood Vessels, that they had not Power to perform their Operations; and by that Means, were unable to give {75} their Contents, that quick, spirited Motion, which is required, to keep them in the upper Parts of the Body; and that, by the Blood being suffered to fall down to the lower Parts of the Body, the Head, Heart, and other Vital Parts, were left destitute of that Fluid, which is so necessary for the Preservation of Life. This he proves, by the sudden Change which is caused in Patients, afflicted with the Scurvy, on altering their Position. If, says he, you cause a Patient to be raised up in his Hammock, though before he was in very good Spirits (a Thing peculiar to the Sea Scurvy, even in the last Stages of it, at Times) he will faint immediately; if you lay him in an inclined Posture, he will recover again. And he gives this Reason for it, viz. that the Blood settles downwards, in the same Manner, as Humours do in a Dropsy, when the Patient is erect; and that it returns again, when he is supine; and by that Means, it re-invigorates those Parts, which were distressed by its Absence. If this is the Case, and the learned Doctor's Position is true, to take away that little {76} Blood, which is left behind, in the upper Parts of the Body, on a Scorbutic Patient's getting into an erect Posture, or rising in a Morning, is to deprive him of all the Nourishment which his Vital Parts contain for their Preservation, and seems to be a ready way to dispatch him.

It would be prudent therefore, in an Apothecary, before he lets his Patient blood, when he is taken sick in a Morning, to examine him well all over, in order to find out those Eruptions, which denote a Scorbutic Habit of Body. For if he is ignorant of the Patient's Disorder, and lets him blood, though he may survive this Operation, he will most likely have such a Fainting, as to amount to a Fit next Morning; upon which, in his Fright and Hurry, he will let him blood again, thinking it an Apoplexy.

I hope the Physical Gentlemen, will not take it amiss that I interfere thus with their Profession; {77} only, as I have known some Accidents happen in this Case, by not regular-bred Practioners, I hope they will pardon the Liberty, which is here taken.

If any Person should here object, that I have confounded the Land Scurvy with the Sea Scurvy, without making any Distinction between the two Disorders; I answer, that though they may be different in some Respects, yet they are very near related; and moreover, that with Respect to the Faintings in a Morning, they are the same, and the Faintings proceed from the same Cause in both. Their Causes may be different, and yet their Effects be very similar; or, 'till all the Causes of the Sea Scurvy are clearly found out, it is not possible to say, that they do not both proceed from the same Cause. For I suppose it will be allowed, that the Land Scurvy generally proceeds from too high Living, from salt Diet, from too much animal Food, from too little Exercise, &c. Now let us examine into the Sea Scurvy. They are subject to these Inconveniences in a greater {78} Degree at Sea than they are at Land: In the first Place, in long Voyages they have nothing but salt Provisions; then they have no Greens; all animal Diet, except a little dried Biscuit; and then though it must be allowed, that in a Gale of Wind they have Trouble enough to work the Ship, and by that Means receive proper Exercise, yet at other Times, when they have fallen in with the Trade Winds, they sometimes have no Employ for Months together; and (by the bye) any one,

who takes Notice of Voyages, will find that it is at those Times, when the Scurvy does the most Mischief. It is then that the Ship becomes almost a Prison. For when they go up aloft, the Air, by it's Friction, braces their Nerves, clears away the bad Vapours, creates an Appetite, and strengthens their Joints; but when a Ship is going before a fine Gale of Wind, so steady as the Trade Winds are, the Men have no Employ, and having no Occasion to go aloft, either loll upon Deck in the Day-Time, or sleep in their Hammocks at Night. {79}

We do not insist here, that there is no Difference between the Land and Sea Scurvy, or that there are no other Reasons for the Sea Scurvy than are here mentioned. We know that some other Causes are assigned, as the being so long absent from Land, and thereby receiving none of those Vapours, which, coming out of the Earth, may be necessary for the Preservation of a Land Animal, &c. and these Causes likewise may correspond with the former, here mentioned.

We shall now beg Leave to offer a little Scheme, for hindering the Progress of the Sea Scurvy, which however we do not insist upon, having no great Opinion of any Proposition, which we start new of our own.

What I would propose is, some Help or Relief to a Ship, when she is on a long Voyage, and sailing before a Trade Wind, and finds the Scurvy begin to attack her. In order to which, it will be {80} necessary to say something concerning the Nature of that Element called the Air.

Air is an elastic Fluid, as has been observed before, and is subject to an easy Motion of it's Parts amongst themselves, as all Fluids are. It is subject to Currents and Eddies, in the same Manner as Water. A Current of Air is commonly known by the Name of Wind; and the greater Quantity of this Air or Wind, an Animal who has Organs for the Reception of it, and who cannot live without it a Moment; the more free Passage (I say) a Current of Air has, by such an Animal, in Health and Motion, the more wholesome it is for him. Now, I will endeavour to prove, that a Ship under Sail, before a Trade Wind, has but little Change of Situation in this Current, notwithstanding her Motion is so swift, with regard to her Change of Place upon the Surface of the Earth. {81}

We will endeavour to explain our Meaning, by a Cork swimming down a current of Water.

If any one throws a Cork into a Stream of Water, he will find that the Cork will be attended, during its Progress down the Stream, by the same Particles of the Fluid, which it happened to fall upon, when it first set off; notwithstanding, it changes its Position, with regard to the Surface of the Earth. This is the Case with a Ship, sailing before the Wind; she receives nothing near the Quantity of Air, upon her Sides and between her Decks, in a full Wind, that she does when the Wind is upon her Beam, or on one Side of her; which may be demonstrated by a second Experiment upon the Cork in the Water.

If any one takes a Cork and ties a long Thread to it, and throws it into a Stream, he will find, that the Cork, when he draws it sideways along the Stream, changes its Place in the Water every Inch he draws it. This is so plain, that there is no Occasion to say any more about it; and we humbly {82} apprehend, that the Case would be the same, with regard to a Ship which is sailing before the Wind, or going down a Current of Air. We do alledge, that the fresh Air running between the Decks of a Ship, would sweeten and clear away the bad Vapours and Filth from the Men in her, as much more in the Position of a Side-Wind, as a Stream of Water would wash more Dirt off a Cork, if it was drawn sideways along it by a Thread, than if it was suffered to swim down by itself. For the Motion of a good Ship, when she has all her Sails up in a moderate Gale before the Wind, is very near, if not quite as swift as the Wind itself.

Therefore, what I would advance here is, that as the Sea Scurvy in long Voyages proceeds as much from the Confinement of a Ship, as from any other Cause, may it not be deemed reasonable, that any Scheme, which serves to make a more free Current of Air through a Ship, may be a great Hindrance to the Progress of the Scurvy? {83}

The Scheme is only this plain and easy one, viz. that when a Ship is upon a long Voyage, before a Trade Wind, the Captain once a Day should give Orders, to lay her upon a Side-Wind, or a Quarters Wind, if he thinks it more safe, for about a League or two, during which Tack, he may open the Port-holes of her Windward Side; and after going a League or two in that Manner, she might be tacked about and laid upon her other Side; and by doing this, he would sweeten every Corner of the Ship, and at the same Time exercise his Men. Now, though this Practice would retard him a little in his Voyage, would it not be better to lose a little Time, and bring a Ship's Crew Home in tolerable good Plight, than to have half of them dead, before they get to the End of their Voyage? I am far from insisting, that this Scheme would answer the End; all that I know is, that if I was Captain of a Ship, I would try; and if it answered no End, it would but be leaving it {84} off afterwards. And I hope the Sea Gentlemen will not be angry at this little Essay, as it is wrote for the Sake of their Health and Constitutions.

They know very well, that Wind travels much slower than is imagined by the Generality of Landmen; which brings me to another Error, (viz.)

XIV.

That nothing which moves upon the Surface of the Earth, is so swift as the Wind.

Though, in a Storm, Wind moves with a great Velocity, yet in a moderate Gale, it is nothing near so swift as is generally apprehended.

The Ancients were so wrapped up in their Opinion of the Swiftness of Wind, that they were sure to introduce it as a Simile, when they intended to describe any Thing that was rapid in it's Motion. {85}

Horace, for one, was so fond of it, that he has introduced it into his elegant Ode, *Otium Divos*, &c.

Scandit æratas vitiosa Naves,
Cura; nec Turmas Equitum relinquit
Ocyor Cervis et agente Nymbos
Ocyor Euro.

However, one would think, that if he was determined to compare Wind to an Idea or Sensation in the human Mind, he might have thought of one more swift in it's Motions. For though the East Wind is a heavy Wind, and lays very keen Hold of a Sail, as being cold, and therefore more condensed, and moving with greater Moment, on Account of it's Weight; yet I am very much mistaken if we have any East Winds, that travel near so fast as the South-West Winds which we have in March; nay, so far is it from being swift, that when it is set in, we may feel it blow against our Bodies, with a more steady, slow Motion than any other; and it is reasonable to suppose, that {86} it ought to move slower according to the Rules of Philosophy: For the Barometer shews, that the colder the Air is, the more it weighs; and a heavy Body takes more Time in changing it's Place, by a Force or Cause, than a light one.

However, we will not tax Horace with Impropriety, in so fine an Ode; as we do not know, what the East Winds may be in Italy. They had not the German Ocean to pass over, before they came to Horace, and may be warm, light, and soft, in that Country.

But to return: There are many Things upon the Surface of the Earth, (without being obliged to have Recourse to the extraordinary Velocity of Light) which move faster than the Wind. We have no Occasion to go any further than the Flight of a Pigeon, or a Swallow, even for a Storm; which we may observe, by the Motion of light Bodies, such as Feathers and Straws, which have no {87} Power to resist it's Force, and must be hurried away with the same Velocity as the Wind itself. We may easily try the Experiment, by throwing Feathers from off a Church Steeple, or any high Place; and we shall find, that though they will be hurried off at a great Rate, yet not so swift as a Pigeon upon her full Stretch. Those who are at Sea have a much better Opportunity of observing it's Motions than Landmen: Nothing is more common, than to see that the Wind has chopped about, by it's Action upon the Sails of a Ship at great Distance off; and it is a long Time before it reaches the Sails of the Ship from whence it is first discovered; and even when a Storm is seen coming at a Distance, they have Time enough to reeve the Sails, and lie in a Posture to receive it. It would be very easy at Land, to take an exact Measure of the Velocity of any Wind, by watching it when it first comes. It might be done in this Manner, viz. by taking the exact Distance of all the Churches in the Neighbourhood from each other, and setting Flags upon the Steeples of those {88} which stand easy to be seen, and which are in different Directions; after which, a Person might go up to the Top of one which stood in the middle of them, with a Telescope, and as soon as he saw the Flags upon any of the Steeples at a Distance move from the Directions which they stood in when he first ascended the Steeple, he might be certain of a fresh Gale being come, and that it had just then reached that Steeple. Upon seeing this, all that he would have to do would be, to look at his Watch and by that Means he would know how fast the Gale of Wind had travelled, by observing how many Miles it had gone in such a Time. For by observing the Flag on the Steeple at a Distance, he might know when it had reached that Place, and by the Flag upon the Steeple where the Observer himself stood, he might see when it reached him, and by his Watch he might know how long it had been coming. {89}

XV.

That there is now, or ever was, such a Science as Astrology.

Reader, when thou dost peruse this Book, I would have thee sensible of the intrinsic Value of Truth; one single Page of this inestimable Commodity, is worth a Thousand Volumes of Lies. I do not intend to impose upon thee, and lead thee astray, and laugh at thee afterwards; even as the Egyptian Priests of old did deceive their Flock, and at the same Time did laugh at them, for worshiping the monstrous Idols, which were the Compositions of their own Craft. Thou wouldest hardly believe that these Idolaters were so grossly imposed upon, as to be induced to worship Garlick and Onions; and yet, we have Accounts, that if the Priests of those Times did fix their Eyes upon a good Crop of those Vegetables, they could very easily rank them amongst the Number of their Gods; and, by that Means, render them unlawful to be handled by any one, {90} except themselves. What might be their Intent, in such a Case, we will not presume to determine, but leave it to thy own superior Judgment.

Indeed, thou mayest think thyself happy, in being a Native of a Country, where the exact Boundary is fixed to every one's Property; and where, though when thou dost endeavour to defend thy Right, thou wilt find some who are ready to go Halves with thee, yet, thou mayest in Time hinder thy Adversary from enjoying what is thy Due.

And moreover, thou mayest think thyself very comfortable, that thou dost breathe in so free an Air, where thou hast the refreshing Liberty of hearkening to Reason, and of thinking as thou dost

like best; for if thou didst live in some Countries, thou wouldest find, that thou must either think as others please to dictate to thee, or else keep thy Thoughts to thyself; otherwise, it had been better for thee, if thou hadst never been able to come at the Knowledge of Truth, and had been as {91} ignorant as those Idolatrous Egyptians before mentioned; who, while their Priests were studying the real Science of Astronomy, kept the Laity in the dark, and amused them with the false Science of Astrology; making them believe that they could foretell all Things which should happen to them and their Families, by their Knowledge of the Stars; and persuading them, that the Stars had an Influence upon the Lives and Fortunes of Individuals; introducing the Jargon of being born under particular Planets, and the like. To all which their Impositions they gained the greater Credit, by being able to calculate, and therefore to foretell the Eclipses of the Sun and Moon; which Phenomena of Nature they used to explain so as to answer their own sinister Views; construing the common Motions and Appearances of the Heavenly Bodies, into Prodigies and Wonders; fortelling the Deaths of those they hated, and taking the Opportunity of that Time of Consternation, to dispatch them, in order to make their Words prove true. I tell thee, Reader, {92} thou art happy in being a Native of a Country where thou art not deceived by the false Science of Astrology; and where any one who understands it, whether Priest or Layman, will shew thee as much of the real Science of Astronomy, as thou desirest to learn, for a Bottle or two of Wine, with all his Heart; well knowing, that it will be a Means to give thee a more sublime Notion of the Supreme Being: For the more thou dost contemplate the vast Machinery of the Heavenly Bodies, and the exact Time which they keep in their Revolutions, the more thou wilt be convinced of the immense Contrivance of Him who laid the Foundation of the Heavens.

XVI.

Most Londoners are mistaken when they think that they have Wit enough to impose upon Countrymen.

This Error chiefly proceeds from the outward Appearance of Countrymen, when they arrive at the {93} Metropolis. They are struck with the Grandeur of the Place, and on that Account keep their Heads up in the Air, as if they were contemplating some Phœnomenon in the Heavens. Then their Cloaths, being calculated for Strength and Wear, are spun thick, which gives them a stiff, awkward Gait, and this is not a little augmented by the robust Labour which they daily undergo, and the great Burthens, of different Sorts, which they are continually obliged to bear, through the Course of their Farming Business. This Aukwardness, joined to an Absence, which the Contemplation of any Thing fine is sure to beget, makes high Diversion for the Londoners, and they are apt to put many Tricks upon them, as Clowns, which the Countrymen (being Strangers to the Place) easily fall into; upon which Account, those Urban Mobility, are apt to tax them with Want of Quickness of Apprehension. {94}

But, O *Cives!* let us first examine into the real State of the Case, and make a little Allowance for Robin's Parallax, before we are too hard upon his Abilities. I tell thee, your right Clown is the sharpest Fellow in the World; and if thou hadst any Dealings with him in his own Way, thou wouldest soon find him so, to thy Cost. If he came from *Yerkshire*, thou wouldest have no Chance with him, And we humbly conceive, that it is upon this Account that Countrymen have the Name of Clowns given them: For we take the Original Meaning of a Clown to be, one who is a quick, bright, witty Fellow, who puts on the Appearance of Folly, while his Head is at Work to deceive you. Such as these were Shakespeare's Clowns, who knew the Meaning of the Word too well to make Fools of them. These were the Fellows that he has employed, when there was any Business to dispatch, which required more than ordinary Address and Secresy in the Management of it, and who were to make Diversion to crowned Heads by the Sprightliness of their Wit. So that we {95} apprehend the Word Clown, in it's original Meaning, does not signify an aukward Lout, but a bright, quick Fellow, who does more by his natural Parts, than by the Help of Education. From hence it was that Countrymen came to be called Clowns. They were found, upon Examination, to be much brighter and sharper than they appeared to be at first Sight.

We have a true Specimen of one of these Kind of Geniuses, in *The Journey to London*, in the Character of John Moody; who, though he was bewildered in the Hurry and Bustle of London, and broke his Coach, and lost his Monkey, yet we find John has Sense enough to make just Observations upon his Master's Conduct, as well as his Mistress's; and, no Doubt, had John been a real Character, instead of a fictitious one, he would have wished in his Heart, that he had had the Offender, who broke his Coach, before his Master as a Justice of the Peace, at his own Quarter Sessions in the Borough of Guzzledown; for if he had once got him there, whether the {96} Accident which befel the Carriage, was occasioned by his own aukward driving on the wrong Side of the Street, or whether the Fellow did it on Purpose, would have been all one in the Borough of Guzzledown. The Breaking his Worship's Coach, would have been sufficient to have had him sent to Limbo.

XVII.

That a Pointer, if he lifts up his Foot, when he comes upon Game, does it in order to shew his Master the Spot where the Birds lie.

This is so well known to be an Error, that no Person, who is a Sportsman, need be informed of the Mistake, with any other Design, than by Way of Ridicule. It truly deserves the Name of a Vulgar

Error: However, we shall put in a Word or two concerning the Nature of Pointers, and explain by what Means they arrive at such Perfection, as to point at a Partridge for two Hours together; as it will be necessary, in order to confute the Error. {97}

There are different Kinds of Pointers, some are of Spanish Extraction, some Portuguese, some French, and I have lately heard of a rough Breed from Germany; in the West of England, and in Wales, they make them of English Spaniels, but as that is done by meer Dint of Correction, we shall pass them over in Silence; though they are esteemed excellent when they are well broke.

What we shall endeavour to explain is, how it comes to pass, that a real true bred Pointer, shall point or stand at his Game, for a short Time, without having any Instructions given him at all by any Person.

I apprehend, that a Pointer, if he was in a State of Nature, wild in the Woods and Fields, would procure his Sustenance in this Manner: He would beat about, till he came upon the Scent of something which struck him considerably, and seemed worth his Attention; after which he would, {98} by the Direction of the Scent, creep a little nearer, till he found himself quite certain that he was very near some Game; upon which, such is the vast Pleasure which this Animal receives from the Sensation of Smelling, his Limbs are seized with a Sort of Convulsion, which causes him to make a full Stop, for a short Time, not only in order to contemplate his agreeable Situation, but likewise to consider, how he may best make such a sure Leap as to seize on his Prey.

Reader, when thou art hungry, and art going about thy Business in Haste thro' the City, did the savoury Effluvia which arises from roast Beef never strike thy olfactory Nerves? Yes, no Doubt, thou hast been so agreeably accosted; thou hast made a full Stop; thou hast been so captivated with the Odour thereof, that thou hast begun to consider, even like a Pointer, how to seize upon this thy Game. If thou hast ever had such an Accident, thou mayest easily know the Situation of a {99} Pointer, by consulting thy own Breast. It will be objected, that a Pointer wild in the Woods, could not support himself, at all Times of the Year, by catching Game. In answer to which, I say, that it is the Cold which hinders the Game from breeding continually. Now in Portugal, and those other warm Countries, of which these Dogs are Natives, the Objection of Cold is removed, and for that Reason there always will be, either young Partridges, or Young Pheasants, or Leverets, &c. upon which a Pointer might live all the Year round, though the old ones would prove too quick for him. It will be no Objection, neither, to say, that a true bred Pointer will not break or tear his Game; for that is owing to the Care which is taken, not to let him play with a Bird too long, after it is shot, when he is first entered; for if once a Dog has a Taste of the Blood, and gets a Habit of breaking his Game, it will be almost impossible to cure him of it again. {100}

It is the Nature of most Animals of Prey, to play with their Game before they devour it. Every one must have observed how a Cat plays with a Mouse, before she dispatches it: It is a Kind of a Suspension of the Pleasure, which they promise themselves, in the devouring so delicious a Morsel. And though Human Nature is apt to reflect upon the other Parts of the Creation for Cruelty, he is not a bit better himself; for what Angler is not sensible of the high Pleasure of having a Trout at his Line? which he suffers to flounce and spring in the Water much longer than he has Occasion, to which violent Pain and Fright of the Fish he gives the Name of fine Sport. Not to mention hunting an Animal to Death by Inches, with Hounds, when he might take a Gun, and dispatch it in a Second. The Truth is, no Animal can be taxed with Cruelty, so long as he pursues the Dictates of his Nature. {101}

Since then it is the Nature of most Animals to play with their Game before they dispatch it, we may conclude, that if a young Pointer does not devour his Game when it is shot to him, it is only because we do not give him Time enough, and that, like other Animals of Prey, it is not his Manner to do it immediately.

Having shewn that a Pointer is an Animal whose Prey is Game, we may conclude, that a young Dog makes that sudden Stop when he comes upon Game, for the same Reason that a Cat stops before she leaps upon a Sparrow; viz. that he may dart the surer upon them when he does leap.

As to the Article of holding up his Foot, it entirely depends upon what Position his Legs happen to be in, when his Nose first catches the full Scent of the Birds; he stands in a convulsed Situation; and whatever Posture a Leg is in, at the Time of his first being sure of the Scent, in that Attitude {102} he remains, whether his Leg happens to be lifted up or on the Ground. So that if he does lift up his Leg, when he points at the Game, it is not in order to shew his Master the Spot where they lie, as some have imagined, but is entirely accidental.

XVIII.

That the Way to make Boys learn their Books, is to keep them in School all Day, and whip them.

Though the Examples which we have of the Behaviour of the Ancient Worthies and Heroes, shew, that neither Bonds nor Imprisonment can abate the Intrepidity of a Man of true Courage; Yet, to Mankind in general, and especially to those who are but of tender Years, Imprisonment and Scourging together, are most likely to blunt the Understanding, and take off the Edge of the Genius. And indeed, the Mistake of imprisoning Boys in a School, for whole Days together, is practised only in Country Schools, where the Masters of them know no better. At Eaton and {103} Westminster, that foolish Custom has been abolished for some Time; at Eaton especially, they

perfect themselves in their Lessons out of School, and only come into School to repeat them. And, not to mention, how greatly the fresh Air contributes towards clearing the Head, as all Students must have observed; the very Thoughts of Liberty, and the knowing that after they have done with their Lessons, they can follow their Amusements, is enough to make them apply with double Diligence to what they are about: It is a Kind of Fighting for Liberty in that Case. Whereas, when a Boy is confined to School for a whole Day together, he has no Encouragement to exert himself in the Cause of Liberty; for when he has fought his Battle bravely, and gone through all the Dangers of his Campaign, he is no nearer to his wished-for Mark, Liberty, than the dullest Boy at the lower End of School. But this leads me to another Error, (viz.) {104}

XIX.

That clogging their Parts with long Grammar Rules, will make them bright Scholars.

This Practice too begins to be left off in the great Schools. I remember, when I was a Boy, though I was exceedingly well grounded, and had the whole Scheme of the Grammar quite clear in my Head; yet they thought proper to torment me a long Time, with Rules at the End of the Syntax.

There was licet, and there was decet, and tædet, and oportet, and nocet, and Abundance more, Verbs Impersonal, that ought to be tied upon a String, like the Roman-Catholic Beads, before they are given to Boys to get by Heart, without any Connection between them. I was in Phædrus's Fables, and should have known any of these independent Gentry, if I had met them singly in any Country in Europe, without being tormented with them alltogether. {105}

Such Methods as these, are apt to make a Boy apprehend, that the Intention of Grammar is meerly to give Trouble, and perplex; without any View of Advantage, which may hereafter arise from such an intense Application.

And indeed, whatever the Intent of them may be, a Lad of such a Persuasion, would not be much mistaken, with regard to the Effect they have.

It must be a very different Kind of Genius, which can attain to the Repetition of dull Grammar Rules, from one, who has Fire enough to digest the Beauty of such Lines as these:

Consedere Duces, et Volgi stante Coronâ,
Surgit ad hos Clypei Dominus septemplicis Ajax;
Utque erat impatiens iræ, Sigeia torvo
Littora respexit, Classemque in Littora Vultu, &c.
Ovid Metam.

By letting him taste a little of the Kernel, without keeping him too long in the disagreeable Part of {106}
getting off the Outside of the Walnut, he would make a much quicker Progress; as he would find, that the Trouble he had underwent would be rewarded with such Pleasure, as nothing but the Idea of Business, or Force, which accompanies it, could render tiresome. It will be objected here, that nothing can be done without these Grammar Rules, and that however disagreeable they may be, they are what must be gone through, in order to make good Scholars. To which I answer, First, that common Grammar not only may be, but is, contracted into a much less Compass than is generally made use of. Nay, I will go farther: A certain Clergyman, whose Name it is needless to mention here, was determined to try if he could not teach a Boy Latin and Greek, without any Grammar at all; and he chose to try the Experiment first upon his own Son, who seems to be about twelve Years of Age. The Boy can now construe any Latin or Greek, that is tolerably easy, very readily. And I make no Doubt, but as the World grows wiser, they will reduce Grammar into {107}
a shorter Compass still than ever has been done yet. The Grounds of Musick, are to the full as dry as the Rules of Latin Grammar; and it was formerly a great Work to teach Youth the Rules of Composition; Nevertheless, they have lately found out a much shorter Way of going to Work, and every one now begins to have a little Smattering of Composition; which they attain to by reading those little Pamphlets, which have been wrote lately upon that Subject.

I heard a Gentleman say, that he learned more of Composition, by reading a little short Thing of Pasquali's, than he could acquire by having a Master, who taught by the old Method, in a couple of Years: It is the very same in Grammar, and indeed, it is the same in all Sciences. There is an easy Way of doing every Thing, if we could but find it out; and if any Thing appears difficult, it is, because we are in a wrong Method. {108}

XX.

That teaching Boys Bawdy Books, will make them religious Men and good Clergymen.

Though most of the greatest Geniusses among the Ancients, have touched upon that String; and though, reading the Works of the great Poets, who have wrote in that Style, does ripen the Genius, and teach Lads an elegant Expression, as well as set them forward in the Languages; yet, I cannot come into the Opinion, that Youth, especially those who are intended for the Church, should be suffered to read the Composition of such a Master of Intrigue, as Ovid; or some of the Odes of such a Libertine, as Horace.

An English Reader will understand my Meaning, when I tell him, that some of the common School-books, which Boys learn at the Age of Sixteen, are more lewd than any Thing in

For though this Lord was pretty plain in his Expressions, and his Composition is quite *Spiritoso*, yet his Works may rather be said to instruct a Person in the Science of Wickedness, than to stir him up to it.

The Case is very different with regard to such a Writer as Ovid. He had the great Advantage of calling in the Religion of the Times to his Assistance, when he had a mind to be more wicked than ordinary: He could make the most lewd and profligate Scenes appear sacred Mysteries, by giving them the pious Title of the Rites of Venus. Then there is a Softness through all his Works, which attacks the Heart with a seeming harmless Familiarity, and differs very much from the Air of Rochester; whose Strokes may be compared to the smutty ones which Hogarth has given us, in some of his Paintings; while those of Ovid have the alluring Attitude of a Venus de Medicis. {110}

Pardon, Reader, if I transgress a little, by owning, that I have seen such a Book as Rochester's Poems long ago; and you will the more easily excuse me, when I tell you, that I was taught such a Book as Ovid at School. What has been said about these Books, is intended to shew the Impropriety of using such Authors in a School: And a Clergyman need not be ashamed of owning, that he has read even an Atheistical Book: For how should any Person be able to confute an Author, unless he first peruses his Work, in order to know the Fallacy of the Arguments, which are made use of in it? After that, he may fairly endeavour to say something against it, but not before.

What I would here urge is, that Boys might have many entertaining, useful Books put into their Hands, which may be very elegant, and yet very innocent; without stirring up their Passions to a higher Pitch, than Nature has intended, by letting them into the History of the Amours which were carried on among the ancient Romans, who were, if possible, more lascivious than the {111} modern; as Rome was at that Time of a larger Extent, and more wealthy, and consequently more able to carry on the Schemes of Vice, than at present.

When Ovid wrote, the Romans might be said to be at the Height of their Luxury, in which they were not a little improved by their Eastern Expeditions. And tho' Ovid's Epistles, which are more usually taught at School, than his other Works, are modest enough in themselves, and would be proper enough for grown up People to read, being nothing but a polite Correspondence between Lovers of Distinction; yet there is something so tender in the Style of them, that they are apt to give Youth a Turn for Love Affairs, rather sooner than they would have, if Nature was left to itself.

For tho' the Soil of England is fertile, and it may be called a fine, flourishing Country; yet, the Weather we have here is rough most Part of the Year, and in many Parts of it, the Air is chill, and {112} unwholesome; and on that Account, nothing but the hardy Diversions, which are generally followed by Youth, such as Hunting, and the like, can ever keep them in Health. Excess of Venery would agree much better with any Constitution, in the soft Atmospere of Italy, than amongst the rough Blasts of Old England; so that if we give way so their Vices, we shall soon find that our Constitutions will not endure any such Excess of Pleasure, as the Italians are able to sustain more easily on Account of the Mildness of their Climate, and the Frame of their Constitutions. Not that I would be thought to justify Lewdness and Debauchery in Italy, any more than in England. I only endeavour to shew the double Impropriety of suffering English Youth, to be acquainted with the Vices of the Italians.

I am for having an Edition of Horace printed, which shall contain only such of his Odes as do not touch upon the Affair of Love. It is in vain to say that Boys need only be taught the modest Part of {113} his Works; for if they are taught only the modest Odes by their Masters, they will be sure to read the bawdy ones by themselves.

But if I was to offer ever so many just Reasons, for the Confirmation of what has been here said, I am afraid it would be exceeding difficult to persuade any one to leave a Track, which they have long been used to.

XXI.

That the present Age is a duller Age, and less ingenious, than those which are past.

This Error is owing to those Harangues, which the old People entertain their Posterity with, over the Fire in the Winter, about what was done in their Time, and what clever Fellows they themselves were in their Youth, and how much the Age declines, &c. In short, an old Man, as Horace describes him, is *Laudator Temporis acti se Puero*. But we must beg Leave to tell these {114} venerable Declaimers, that however they may be wrapped up in the Greatness of their own Exploits, England never could boast a brighter Age, nor perhaps so bright a one, as she can at present; and we challenge any one who contradicts it, to tell us, if the Ancients were greater Geniusses than the Moderns, in what Art or Science it was, that they did so greatly outstrip us. Perhaps such a Person might begin first, and say, that they excelled us greatly in Carving and Painting. With regard to these I acquiesce, and do acknowledge, that the Art of Carving is not in such Perfection as in former Ages, because it is not practised, and is not the present fashionable Ornament of Houses; and we do likewise acknowledge, that the Art of Painting on Glass is very near lost, and is not likely to be revived whilst the Window-tax continues.

We agree, I say, that the Arts of Carving, and Painting upon Glass, are almost extinct; and allowing that former Ages excelled the present in Painting in general, yet, What are these few Polite Arts? They are quite insignificant, when compared to the vast Improvements, which have been made in many other really useful Branches: In Agriculture, in Navigation, in War, in gaining Settlements in foreign Countries, in Trading to those Settlements, in Printing, in carrying on Correspondence by Posts, in Roads, in Carriages, in the Breed of Horses, in Manufactures, and in numberless other Articles, too tedious to mention. {115}

It must be acknowledged, that for all these Improvements, we are obliged to the Arts and Sciences. They are as it were the first moving Force of Power in any Country; and if we take a Survey of all the Nations of the Earth, we shall find, that those Monarchs, who encourage Learning, and support Academies, are able to extend their Dominions farther than those, who, by a total Attention to Military Discipline, (though even that too depends upon the Sciences) neglect {116} the Cultivation of that Learning, upon the Support of which, the Extension of their Dominions to foreign Parts depends. It is to the Invention of Astronomers, Mechanics, and Opticians, that we owe the principal Instruments, which are made Use of in Navigation; to their Ingenuity we owe the Quadrant, without which we should never know our Latitude; to these we are indebted for the Telescope, by which we discover Jupiter's Satellites, and find out our Longitude; to these we owe the Explanation of the Compass; to these the Contrivances of Pullies, by which we hale up our Tackling. In short, all the Inventions, which we find in the different Machines made Use of, either by Land or Water, though by long Use they are become familiar in the Hands of illiterate Persons, were no doubt originally contrived by the Study and Ingenuity of Men of Science at Home. And if Nature should shew her dislike to a Stagnation, and express her wonted Approbation of a Vicissitude in Human Affairs; who knows, but when the Sciences are forgot in this Kingdom, and {117} we, by that Means, lose the Art of exerting that Force, which must keep up the Dignity of England over her Colonies; who knows (which Heaven avert!) but America may see herself the Mistress of the World, and the Seat of Empire, whilst we are reduced once more to the State of unletter'd Savages; and shall in vain discharge our feeble Arrows, and cast our ill-directed Javelins, against the Sides of their perhaps Five Hundred Gun Ships of War: Or the great Mogul, with his prodigious Armies, for Want of these Arts and Sciences abovementioned, and for no other Reason, may one Day or other find himself dethroned by a Prince, who will be able to reach him, though his Dominions do lie on the other Side of an unfathomable Sea.

And if these Vicissitudes should in Process of Time happen, they will be no other than what have been before. What is become of Palmyra? Where is Troy? The stately Palaces of Troy are removed into the peaceful Habitation of the once Arcadian Shepherds. And if the Disposer of all Things {118} should so order it, Daphnis and Menalcas, may again sing their rural Songs on the very Spot, where now the Seraglio of the Grand Signior seems to bid Defiance to a whole Continent.

Though there is a large Scope for Dissertation, on the various Improvements of different Kinds, which have been made in almost all Branches, both of Science and Commerce, it cannot be expected, (even supposing the Author capable of such a Task) that they should all be brought into a Work of this Nature, as we have already enlarged more upon this Subject, than was at first intended. However, as it is a disputed Point, whether the Science of Music is improved or not, we shall beg Leave to say a little upon that Subject. And as Music is a Science, which, though it is not equal to some others in Utility, falls short of none, for the innocent Entertainment which it affords to those, who are so happy as to be formed by Nature, with Organs for the Enjoyment of it; we will venture to make it the Subject of the next Chapter. And we think it is an Error to {119} affirm,

XXII.

That the Musical Composition of this present Age is inferior to that of the last.

Though we are very sensible that we shall have a Multitude of Mouths open against us, for being so hardy as to assert what will be the Contents of this Chapter, and shall be exclaimed against by many, who never yet came to the Knowledge of any other Music than Corelli's Sonatas, which must indeed be allowed to be almost the Foundation of Music; and though all those Performers who live in the Country, and either through Business at Home, or other Reasons, have not had the Opportunity of hearing the best modern Music performed in Town, and having tried some of the worst of it over by themselves, upon their Instruments, and finding the Execution of it too {120} difficult for their Performance, on Account of their being unacquainted with the modern Manner of bowing and fingering, together with a total Mistake of the Air and Manner, in which the Composition set before them ought to be played: All these Obstacles put together, I say, are apt to induce such, as are not very ready at Sight, and labour under the aforesaid Inconveniences, to pronounce all Modern Music, of what Kind soever, (taking it all in the Lump, as one would do Soap or Tallow) to be exceeding bad and foolish, and therefore not worth a Gentleman's Attention.

Now begging Pardon first, for the ill Manners of Contradiction, I shall take the liberty to offer a few reasonable Arguments, to shew, that tho' there has lately been a great deal of very bad Music performed, yet there has likewise been published a great Variety of exceeding fine Composition. {121}

Without mentioning the Names of the Composers, or the Names of their Music, we shall endeavour to give some substantial Reasons, why the present Composition, should excel that of those, who wrote in those Times when Masters were but newly become acquainted with the Laws of Harmony.

The Case is the same in Music as it is in all other Matters; we find that all Arts have the greater Improvements made in them, the longer they have been introduced into any Country, and the more they are followed. This is natural; because the more Hands a Science has to go through, the greater Chance it has to meet with Men of Ingenuity in its Progress, who may forward it towards Perfection. What a sorry Appearance would an ancient Galley make against one of our First-rate Men of War, either in Sailing or Fighting? Or if it had been possible for Julius Cæsar, with all his Romans, when they invaded Britain, to have met with a Forty Gun Ship, they would have been all sunk by a few Broad Sides. This is a Truth that every one will acknowledge; and it is as true, that {122} the present Musicians do very much excel those who lived some Time ago.

Masters of Music, by Practice, have lately found out a better, easier, and stronger Way of Performing upon their several Instruments, than was formerly known; and to this new and better Method of Performance they have composed suitable Music, which admits of greater Execution, greater Variety of Expression, and a better Tone, than could be brought out of Instruments before such Improvements were made. And we find that Geminiani, who was a close Follower of Corelli, has thought proper to make Concertos of what Corelli intended for Solos; well knowing, that though the Ground of them was exceeding fine, yet they were very capable of being improved by adding Parts to them, and adorning them with what might be called, at that Time, modern Embellishments and Graces. {123}

And if one of so small Judgment as myself, may say any Thing about the Composition of so great a Genius as Geminiani, I will venture to think, that we have Masters now living, who are capable of taking some of the ancient Stiffness of Style from that great Composer, and giving him a more easy, free, and flowing Air; without taking from the Greatness of the Subject, or varying from the Groundwork of the Harmony, in the least.

For the Intent of Music is not to puzzle People's Heads, by consisting of intricate Harmony, and stiff Mathematical Transitions from one Key to another; by that Means, it would become the most dry and insipid of all Sciences, and fit for none but Pedants. No, the sole Intent of Music is to give Pleasure, which it is more likely to do, by the Freedom and Ease of its Transitions, and the Softness of its flowing Numbers, than by a stiff, starched, and over formal Composition. {124}

The present Musicians excel the ancient ones, as much as the modern Ladies do those of former Times in Dress; and their Compositions differ as much from those which were played some Time ago, as the elegant Ease of a modern Lady's Shape, excels the stiff Stays and monstrous Hoop Petticoats of those who had the Honour to be the Grand-mothers of the present Age; and which are apt to give us the Idea of an Engagement of a different Nature from one where Cupid is supposed to preside: It rather puts us in Mind of something Martial, and makes us almost ready to apprehend we are going to exchange Hardiment, as Shakespeare calls it, instead of railing our Expectations into a Duel of another Nature.

Having now shewn our utter Aversion to Stays, we will return to our Subject. And we hope the Reader will pardon the Digression, as this is not the first Time that a Pair of Stays have made a Man turn out of his Road. {125}

But there is another Reason why the modern Music should excel the ancient; and that is, the Difference in the Make and and Length of the Bow with which a Violin is struck. Violins are the Sinews of a Concert; they are, as it were, the main Body of a Band of Music; they are the Roman Legions of the Army; while the other Instruments are Slingers, Archers, and Light-horse. Now in the Time of Corelli, who must be allowed to be the Father of Harmony, the Bows were not above half so long as they are at present, neither were they so well shaped, either at the Heel or Point, nor had they the Spring which the Bows now made have. So that a Piece of Music which is calculated for the modern Manner of Bowing, could not have gone off so well in former Times: They had not the Power of swelling a Note out, in Imitation of the Human Voice, which may be done with a modern Bow; and the old Bows were so aukwardly made, that they could not be held at the End, but were obliged to be kept in a Kind of Ballance towards the Middle; and we may {126} guess what spudding Work it must be, when there were not above a Couple of Inches in a Bow which could be conveniently used. However, these little short Bows suited very well for even Semiquavers and Quavers, of which we find the old Music chiefly to consist. So that we by no Means call in Question the Abilities of the Composers who lived at that Time; since it appears, that they composed their Music suitable to the Instruments which they had to perform it upon. No; we have a due Reverence for the Memory of those very great Geniusses; and are fully persuaded, that if it was possible for them to live again, with the Advantages which the Moderns enjoy the Benefit of, they would excel not only what they have done themselves, but likewise what any one else has done. {127}

XXIII.

That the Hearing of Musical Performances, is apt to soften Men too much, and by that Means, to give them an effeminate Manner.

Whether this Error proceeds from the Idea of that Facility with which Music is able to stir up a Variety of Passions in the Heart, annexed to the Idea of that Disposition which appears to be stronger in Women than in Man, and is called the Weakness of the Sex; or whether it proceeds from a Notion that Pity and Sorrow, and the like, are Passions which are not worthy the Breast of a Man, and are only fit for the timorous Constitution of Women, it favours equally of Absurdity

and Barbarity in both Cases.

For so far is Pity from denoting any Cowardice or Effeminacy, that it is a certain Indication of a great Soul; we find it frequently mentioned among the most conspicuous Virtues, with which the {128} Heroes among the Ancients were said to be endued. And with regard to the Passions, which are raised by Music in the Heart it depends upon the Nicety of the Feelings in the Nerves of the Hearer; and we cannot help observing, that Men of the greatest Sensibility are generally Persons of the strictest Honour and the most exalted Courage.

As for those who are so unfortunate as not to be formed by Nature for the Reception of harmonious Sounds, we do not entirely give them up: But we refer the Reader to a Passage, which he will find in the Merchant of Venice, and which, tho' the Observation may hold good in some Cases, yet, we must beg to be excused inserting the Words here, as we think the Remark is rather too severe and too general, and was introduced by the Poet chiefly with an Intent to set his malicious Jew off in the most odious Light, who had been declaring, that he detested the vile Squeaking of the Wry-neck'd Fife, and ordered his [1]Windows to be shut up, that the Sound of {129} them might not be heard in his House. And if the old Poet is a little severe in this Place, he does it principally with an Intention to divest the Audience of any Compassion, which might otherwise be stirred up in their Minds by the Misfortunes which will attend Shylock in the following Scenes; and by that Means the Plot turns out according to the Wish of the Spectators. This is one of those Preparations of the ensuing Scene for which Shakespeare is so notorious, and which may be observed in all his Plays. But to return to our Subject; it seems that those People who have Organs for the Reception of Musical Sounds, are affected with such Passions as the Composer of good Music intends to excite in them. And we believe that the Constitution of a Hearer may be moulded and formed into various Shapes by the different Airs which he hears; and moreover, if a {130} Person was always to be accustomed to soft, effeminate Music, we agree that it might render his Constitution effeminate likewise; but as there are such great Variety of different Movements, which are adapted to different Songs, all which raise different Passions in the Mind, it is very absurd to tax all Music in the Lump with Softness and Effeminacy.

Any one may perceive the Difference of these two Songs, both of which have their Effect when they are well sung.

Gently touch the warbling Lyre,
Cloe seems inclin'd to rest;
Fill her Soul with fond Desire,
Softest Notes will please her best.

These Words, which are sung to an Air of Geminiani's, cause a very different Sensation, from these which follow, and are set to a suitable Air:

Come cheer up my Lads, 'tis to Glory we steer &c.

Whatever the first Song may do, this last is not likely to make any Body effeminate. I mention {131} these two common Songs, because they are what every Reader is capable of digesting, and on that Account are more proper for the Purpose than any of those Songs out of Operas, which are not generally known.

But we beg Leave here to make a necessary Distinction between two Ideas, which are sometimes confounded together, and which is apt to lead People into this Error as much as any Thing.

It would be very proper in us, before we prejudice ourselves against any Art or Science, to be quite clear in the Objections which we raise against it; we should be certain that they are just, and founded upon good Grounds. Some People are apt to confound the Idea of raising the softer Passions, which have their Residence in our Nature, with the Idea of Effeminacy, which, as I said before, are quite distinct. We have an Instance of the Passion of Pity in the well known Picture of Bellisarius. The Hero, who stands in the dejected Attitude, appears to be very much softened by {132} the Misfortunes and Distress to which he sees Bellisarius reduced; and yet no one will say that he is an effeminate Fellow for it; on the contrary, it will be allowed that he shews a Greatness of Soul; he is struck with a contemplative Sorrow at the Misfortunes of a General, whose invincible Courage and great Worth he himself had been Witness of. And Bravery in Distress is not only the Subject of Painting, but it is the constant Theme of Music: The Operas and Oratorios are full of it, and though the Misfortunes of the Heroes which are the Subject of them do soften, yet it is not such a Kind of Softness as to beget any Effeminacy, but of a contrary Nature, and is such a Sensation as an ordinary Hearer will perceive at the Beginning of this common Song, which is well enough in its Way.

How little do the Landmen know,
What we poor Sailors feel,
When Seas do roar, and Winds do blow;
But we have Hearts of Steel.

If we are to be moved by such a Song as this, what shall we feel at some of the masterly Strokes {133} of Handel in his Oratorio of Samson.

Total Eclipse, no Sun, no Moon,
All dark, amidst the Blaze of Noon.

One would think, by the resigned Solemnity of this following Movement,

Bring the Laurel, bring the Bays, &c.

that he had been reading Milton's Paradise Lost as well as the Samson Agonistes. This seems to be the very Music of the fallen Angels, where he says, they made Use of soft Airs, which inspired true Heroic Bravery, and which he prefers to the noisy, as it was the Cause of a lasting, fixed, and reserved Courage. Milton says, that as soon as the Colours were displayed, they marched to the Sound of Flutes and soft Recorders:

"*Anon they move*
In perfect Phalanx, to the Dorian Mood
Of Flutes and soft Recorders; such as rais'd
To Height of noblest Temper Heroes old
Arming to battle, and instead of Rage
Deliberate Valour breath'd firm and unmov'd {134}
With Dread of Death to Flight and foul Retreat."

In short, the March in Rinaldo might possibly make Soldiers seize hold of their Arms and March, but it must be such an Air as that in the Overture of Berenice which makes them face an Enemy.

XXIV.

That the Italian Operas consist of effeminate Musick.

Though it must be acknowledged that the Language of Italy is smooth and flowing, and therefore very much adapted to musical Sounds, and though those Songs which are picked out of Operas, and sung by Ladies at Home, are generally the Love Songs in the Opera, being such as best suit the Tastes and Geniussses of such amiable Performers; yet, it is equally an Error to say that Operas are effeminate, or that all the Songs in them are Love Songs. No one will say that Quilici {135} with his Bass Voice, in the Character of Athridates, acted an effeminate Part; he was one of the principal Characters, and acted the Part of a Tyrant, to which the Music was excellently adapted, which was greatly set off by his deep Voice and the proper Carriage of his Person: So when Mattei orders her General to be disarmed, the Majesty of a Queen is admirably supported. Operas are like other Performances of Entertainment; they consist of the sublime, the cruel, the tender, the distressed, the amorous; in short, they must have Variety of Scenes and Incidents in order to make them please the Audience, and are like other Dramatic Pieces, not to be taxed with any particular Style or Mode of Acting, but consist of such Scenes, Plots, Music, and Decorations, as are most likely to give Entertainment to an Audience.

We by no Means defend the Impropriety of a Squeaking Hero, and think that it is a Pity it cannot be altered; however, that Imperfection is generally palliated, by Propriety of Action, treading the {136} Stage well; Greatness of Performance, and many other Excellencies, which those who are much used to hear musical Entertainments will easily discern.

XXV.

That nothing is Poetry but what is wrote in Rhyme.

This may truly be called a vulgar Error, because it is a Mistake of which none but the Vulgar are guilty of. Though there is a Kind of harmonious Jingle in Rhyme, which makes the Composition have an agreeable Sound, yet it is looked upon by all Judges to be the lowest Kind of Poetry. And though Pope, and other great Writers, have succeeded to Admiration in the Improvement of it, yet it is in Reality nothing but the barbarous Remains of the wild Taste of our Ancestors; not to mention how it cramps the Genius of a Writer, after he has hit upon a favourite Thought, to be forced to look out for a Rhyme, which must, in Spite of every Thing that can be said in Favour of {137} it, be exceeding laborious.

And notwithstanding Poets endeavour to hide this Labour and Pains they have been at, and affect to have set down their first Thoughts, yet, as Horace observes, the foul Copy of a good Writer will always have a great Number of Blots and Alterations in it: This is true of all Poetical Composition; but a Poem which is wrote in Rhyme, must, according to the Nature of the Thing, be more laboured than one that is not. And even Prior himself, whose Works are allowed to be all Ease and Elegance, is said to have taken more Pains with his Composition, than any other Writer of Eminence. That very Ease and Elegance, which we perceive in the best Poets, is the Result of great Pains and Study, and is no other than a judicious Choice of Words and Phrases, till they have found some that will suit. And however a Poetical Author may boast of writing his first Thoughts, we cannot possibly have any Testimony of it but his own. {138}

Besides, when we have done all, Verses wrote in Rhyme are nothing near so musical as those which are without it. Where shall we find Verses, among even the best of our English Poets who wrote in Rhyme, which are equal in Smoothness and Harmony to these two Lines in Theocritus?

Αδιον, ὦ ποιμὰν, τὸ τεὸν μέλος, ἢ τὸ καταχὲς
Τῆν ἀπο τᾶς πέτρας καταλείξεται ὑψόθεν ὕδωρ.
Id. 1.

Or these of Ovid, which, though they are far from being the most smooth in the Book, are however more harmonious than any we can produce now.

Sic ubi Fata vocant udis abjectis in Herbis,
Ad vada Mæandri, concinit albus Olor.

Though the first of these Verses makes a Whistling like the Reeds in a River, the last runs so glib, that it is ready to slip from under one before one would have it. {139}

We acknowledge that the Latin Language is a great Help to the Running of a Verse, and if the Reader insists upon that to be the only pre-eminence which Latin Verses have over English, he is very welcome to think as he likes best. Moreover, if he is so fond of Rhyme, we can inform him of a Book which is wrote, in Latin Rhyme, and is very much at his Service: The Title of the Book is Drunken Barnaby; which, as it is wrote in a dead Language, will most likely remain an everlasting Burlesque upon the Barbarity of Rhyme.

But we may venture to go a little farther. It is not necessary for a Work to be wrote in Verse at all to entitle it to the Name of Poetry. Any Work of a fictitious Nature, and which is calculated meerly for Entertainment, has as just a Claim to be stiled Poetical Composition, as one that is wrote in the strictest and most confined Metre; Poetry taking its Name from the Matter of which it is composed, and not from the Length or Sound of its Words; and we may observe, that such {140} Poetry as consists of those Numbers which are least confined in their Metre, is generally the most spirited and sublime. We have an Instance of this in the Writings of Pindar, a Poet of whose Abilities, Horace gives an Account in his Ode,

Pindarum quisquis, &c.

And indeed we have no Occasion to go any farther for Examples of excellent Poetry wrote in Prose, than some of the Plays in our own Language; Ben Johnson, Congreve, and many more who wrote in Prose, are nevertheless ranked among the Poets.

Reader, when thou seest any Thing in this Book which thou didst know before, it is hoped thou wilt be so candid as to consider, that although thou art sensible of the Errors of other People, yet they themselves may not be sensible of them: Yes, even thou, O! profound Philosopher! mayest have some mistaken Notions of thy own; for what mortal Man can pretend to such Knowledge as never to be mistaken? And we ourselves, while we are endeavouring to rectify the Errors of {141} others in this Book, are as likely to be mistaken as any Body.

However, there is one Reason why a Work of this Nature is likely to give some Entertainment; it treats of such Variety of Subjects, that there is Matter for Argumentation in every Page. And it may be observed too perhaps, that it treats of more Subjects than the Author himself seems too understand; which we do very readily acknowledge: And if a Professor in any of the different Branches which are here treated of, who is better versed in the Nature of the Subject than the Author, thinks proper to rectify any Mistake which may be here made, and does it in a liberal Way, we shall not take it amiss, but perhaps may endeavour to answer him, if we should still differ from him in our Opinion.

On the other Hand, we shall be under no great Apprehensions from the Criticisms of such Readers who have not good Nature enough to be entertained with the Matter of a Book, and only {142} read for the Pleasure of Pointing out the Faults in Public; of which Sort we are very sorry to say that we know too many. These are such Kind of Geniusses as read more out of Parade than with a Design to be entertained; and *may* read.[2]——They seldom acquire any Knowledge, having generally bad Memories and confused Heads, devouring every Thing, but digesting Nothing. I tell thee, a Man of true Parts, and sound Memory, will acquire more by reading one Hour, than such Whippersnappers as these are able to attain to by lumbering over a Folio.

XXVI.

That kicking up the Heel behind, and twisting round upon one Leg, is fine Scating.

There are two Methods of Scating, one is made Use of for the Sake of Expedition and Conveyance from Place to Place, and is practised by the Boors or Peasants in Holland; the other is calculated {143} entirely for Amusement, and answers the End of *Shining* upon the Ice, and therefore is suited for Gentlemen near Towns upon Canals, and broad Pieces of Water. The first of these Methods is performed by throwing the Body into such an erect Posture inclining a little upon the Outside of the Scate, and drawing in the Hip gradually, as will describe small Curve upon the Ice; this Practice of Scating eases the Inside of the Thigh, and rests it in such a Manner as to allow it Time to regain Strength for the next Stroke, and therefore is very useful in long Journies; or else as to the Article of Swiftness, a straight Line will carry a Person on faster than a Curve, because while he is describing a Curve he has more Ground to run over.

The other Method of Scating, which is known in England by the Name of Rolling, is done upon the same Principle as the former, only as you have no Occasion for Expedition, you have an Opportunity of dweling longer upon your Strokes, and your Time; by which Means, instead of {144} describing a small Curve, you describe a large one.

It will be necessary to explain the Cause of this Motion, before we can make the Reader sensible

of what we intend to say.

All Bodies that are put into Motion upon the Surface of the Earth, are acted upon by two Forces; namely, a Projectile Force and a Centripetal Force. The Projectile Force is that which is given it by the Hand or Strength of any Person, and the Centripetal Force is that which causes all Bodies to seek the Center of the Earth. For Instance, when a Stone is cast into the Air to any Distance, the Reason why it does not move on to Eternity without stopping (as it ought to do by the Principles of Mechanics) is, because the Centripetal Force keeps continually acting upon it, till it has pulled it down to the Ground again: This serves to explain what is meant by a Centripetal Force. {145}

Now, when a Person scates, he is acted upon by these two Forces, as other Bodies in Motion are. It is the Projectile Force which throws him upon the Outside of the Scate, till he has got quite out of the Center of Gravity, by which Means he would be pulled to the Ground by the Centripetal Force, if he was not supported by the Projectile Force, which is strong enough to make Head against the Centripetal for a little while (in the same Manner as it is able to keep a Stone in the Air till it is spent) and by that Time the Person scating has recovered himself into an erect Posture. This Projectile Force is given by a Stroke of the Foot, inclined to the Plain of the Ice; by which Means, the *whole* Edge of the Scate takes hold, and is your moving Force; and the more of the Edge of the Scate a Person uses in his Stroke, the easier he will go to himself, and the greater Velocity he will move with: For if he dwells more upon the Heel of the Scate than the Toe, or vice versâ, he not only loses Part of his moving Force, by losing Part of the Edge of his Scate, which is {146} absolutely the moving Force, but he likewise encreases his Friction, which ought to be destroyed as much as possible; and at the same Time loses that Symmetry of Gesture, upon which the Gracefulness of his Attitude depends.

When a Person scates properly, he keeps the Foot that he strikes with in such a Posture upon the Ice, as to make the whole Scate take hold of it sideways, without destroying his progressive Motion; and instead of kicking up his Heel behind, just when he takes Leave of the Ice, with the Foot which has been striking, he gives his Toe a Turn outwards, which not only gives him a genteel Air, being according to the Rules of Dancing, but likewise sends him with twice the Force upon the Outside, as it adds to that Projectile Force which is to make Head against the Centripetal, and to keep him upon his Legs after he has got out of the Center of Gravity; and which uncommon Phœnomenon gives that Surprize and Pleasure to a Beholder, which he {147} perceives at the Sight of a fine Scater.

I mention this, because I have met with those who have obstinately persisted in it, that some Persons who kick up their Heels behind, and strike only with the Toe of their Scate, because they can go a Snail's Gallop upon the Outside, are fine Scaters; when they are making Use of a Method which is repugnant to the very Principles of Mechanics.

XXVII.

That using hard Words and long Sentences, in Discourse or in Writing, is an Indication of Scholarship.

It must be allowed, that good Language is a very great Embellishment, either to a Person's Conversation, or his Writing; but as it is intended only to set off what we have to say to the best Advantage, we should endeavour to use it with such Moderation, as will answer that End, and no {148} more; otherwise, we shall make ourselves appear very ridiculous in the Eyes of Men of Learning and Knowledge.

Good Language, in the Mouth of a Fine Gentleman, resembles the Elegance of his Dress; it becomes equally ridiculous when ill-judged, or over done: For as there is no Doubt but good Cloaths set off the Person to a great Advantage, when they are made with Judgement, and worn with a becoming Carriage, so an elegant Choice of Words and Sentences are a great Ornament to Conversation. But on the other Hand, a Suit of Cloaths, though made of the finest Materials and covered with Lace, will make but an aukward Appearance if it is ill-made, and worn by one who has not the Carriage of a Gentleman. So it is with Language. Fine Words, in the Mouths of the Ignorant, are as unbecoming as Gold Lace upon the Back of a Porter.—And not only the Ignorant are guilty of this Error, but even those who do know the Meaning of the Words they use, are apt, by affecting an elegant Diction, to run themselves into Obscurity; and while they are attending to {149} their Language, and studying hard Words, neglect the Matter of their Discourse; to explain which is the sole End of Speaking. The Use of Words being only to convey our Ideas to each other.

There is a Shew-board over a Watchmaker's Shop at Oxford, which may serve for a Burlesque upon the Folly of using hard Words: I cannot charge my Memory with all the Jargon wrote upon that Board; however, I remember that it was a long Account of what the Man in the Shop sold, and what he did; and among other Things it said that *Horologies* were *mundified* there; which Expression we think is enough to make any Man sick of the Languages, and abjure every Thing that belongs to Literature for the future.

I have met People in the Street, whose profound Ignorance I have been well assured of, who have immediately stunned me upon the first entering into Discourse with half a Dozen hard Words: {150} And it is not long since, a young Gentleman came to the Coffee-house, and ordered the Waiter, when he sent Coffee and Tea to his Chambers, to let him have an *additional* Muffin: The Man stared at him, and told him, that he did not know how to do one in that Manner, but he could

carbonade him one if he pleased.

A Lady would think it extraordinary language, upon a Gentleman's desiring to carry on an Intrigue with her, if he was to ask her, whether she would have an additional Husband, or not? However, as this is a prodigious fine Word, and as fine Words are always made use of in addressing the Ladies, we are of Opinion that it would be proper to adapt this as an Improvement in the Language of Lovers.

Almost all Professions are stuffed so full of Terms of Art, that to understand the Meaning of all the Words which are made use in any one of them, is long enough for a Science of itself. The only End they answer, is to puzzle those who are not of the same Profession. Not long ago, a young {151} Man in the Country, who had weak Eyes, applied to a Surgeon for Relief in his Disorder. The Surgeon, upon examining his Patient, told him, that he would send him some Drops which would *refrigerate* his Eye.

The young Man came Home again, not very well satisfied, being not certain what he might have to undergo by this Refrigeration, having never heard the Word before. Surely he might with as much Propriety have been told, that what was in the Bottle would put him to no Pain, but was only intended to cool his Eyes.

It is incredible to think how cleverly some People, who have not had the Advantages of Education, will manage about Half a Dozen of these Words when they have got them. I have known some, who, for the Space of four or five Minutes, would deceive a Stranger, and induce him to think that he had met with a Person of great Learning. And however odd this may appear, {152} we think we ourselves can manage the few hard Words which have been mentioned here, in such a Manner as to make an extraordinary Sentence of them: For Instance, supposing a Person had no other fine Words but these in his Catalogue, and had an Occasion for them in addressing a Lady; we are of Opinion, that he might shine by ranging them all in this Order.

Madam, I presume your *Horologie* will never go right unless it is *mundified* by an *additional* Lover; therefore, let me have the Honour to *refrigerate* your Eye.

A Swain of a more happy Invention, might make a much finer Speech out of these Words; but as we have done our utmost in the Attempt, we shall take Leave of the Subject; having shewn, to a Demonstration, the singular Advantage of making Use of fine Words. {153}

XXVIII.

That the Way to get a Sailing Boat off the Shore, when she is fast by any Accident, is to let go both or all the Sails, and stand at her Head, and push with a Sprit.

This Error, though it may seem ridiculous to those who have been brought up at Sea, and understand Sailing, is nevertheless very common in Inland Rivers, where Sailing is but little understood. You may very frequently see fresh-water Sailors, as soon as they find that their Boat has struck, immediately let both their Main-sail and Fore-sail fly, after which they all run to the Head of the Boat with Sprits, and begin to endeavour to push her off; which Method is contrary to the Rules of Mechanics, and therefore of Sailing.

A Boat or Vessel of any Size (a 90 Gun Ship moving upon the same Principle as the smallest Cutter,) is acted upon by the Powers which are the Cause of her Motion as she swims in the {154} Water, in the same Manner as a Lever of the first Kind, whose Center or Prop is between the Power and the Weight. To explain this, let us suppose a Boat, instead of Swimming in the Water, to be upon dry Land, and to have her Mast run quite through her, and fastened into the Ground, upon which she might be turned at Pleasure, as upon an Axle-Tree: In this Case, as her Mast is rather nearer her Head than her Stern, it would be more easy to turn her Head round by laying hold of her Stern, because there would be a Mechanical Advantage, by the greater Length from the Stern to the Mast, than from the Head to the Mast. And in whatever Direction the Stern of the Vessel is turned, her Head must move the contrary Way, and vice versâ. Now, the same will happen to a Vessel in the Water; if you push her Head in one Direction, her Stern will move in the other, and vice versâ. So that a Vessel under Sail with a Side-wind, may be called a Lever of the first Kind, both whose Extremities are kept in a Ballance by the Sails and Rudder; Forces which {155} keep continually acting upon her. The Rudder may be considered as a Kind of Moderator, which is to interpose when the Sails which are before the Mast, or those which are behind the Mast, or abaft, overpower each other, and destroy that Ballance which a Vessel rightly trimmed very near preserves of herself. It must be observed, that the Sails before the Mast of a Vessel, and those behind it, act in contrary Directions. Those which are before the Mast turn her Head from the Wind, and those which are behind it turn her Head towards the Wind.

By this Time, we see the Impropriety of letting both the Main-sail and Fore-sail of a Vessel go, when she strikes upon Ground, and then running to her Head in order to push her off: For first, concerning the Article of going to her Head to push her off, if she is a small Vessel, the Weight of two or three People at her Head will press that Part, which generally happens to be the Part upon the Shore, still closer down; which is a Thing so well known to every Waterman, that we shall say {156} no more about that. Now, as to letting both the Sails go, they might with as much Propriety both be set, for as they act in contrary Directions, they destroy each other's Force, if the Vessel is well trimmed; so that a Vessel will come off the Ground no sooner for letting both the Sails go. The Method that I should take in a Case of that Kind, would be to set the Main-sail and let the Fore-

sail fly, and if that would not do alone, to assist the Main-sail by pushing at the Windward-side of her Stern with a Sprit, both which Forces acting together, namely the Main-sail and the Sprit, would in all Probability put her Head about so as to bring it beyond the Point from which the Wind blows, which Point after I had got her past, I would set the Fore-sail to the other Tack, and let the Main-sail go; and by that Means, the Fore-sail would put her Head almost round; then the Main-sail might be set, and after Sailing back so far as to get quite clear of the Place where the Vessel stuck fast before, she might be tacked about again, and pursue her intended Voyage. {157}

I don't presume to say, that this is the very best Method of getting a Vessel off the Shore; as those who have been used to the Sea may have a more ready Method still: But I do say, that it is a Method which is consonant to the Principles of Mechanics, for which Reason, it may very safely be put in Execution, either at Sea or in fresh Water.

XXIX.

That planting Aquatics upon Banks in the Fenns, will preserve and strengthen them, so as to render them more able to resist the Force of a Flood.

What will be asserted in this Chapter is not the Result of Surmise, but is what I have been an Eye Witness of. Be it known then unto all those, who think proper to do this Book so much Honour as to give it a Perusal, that the Author is a Fenman: Why should he be ashamed of his Native Country? A Country, where they have Inverted the following Lines of Horace: {158}

Omne cum Proteus pecus egit altos
Visere Montes:
Piscium & summâ genus hæsit Ulmo,
Nota quæ sedes fuerat columbis,
Et superjecto pavidæ natarunt
Æquore Dammæ.

For here, instead of those Places which were the Habitations of Doves, being visited by Fish, just the contrary has happened. By the Ingenuity of these People, barren Sands, over which Ships used to ride at Anchor, are changed into pleasant Meadows and rich Inclosures.

Having now shewn how much of a Fenman we are, it will be proper to return to the Subject.

There can be no Doubt, but that every Attempt which is made to promote the Improvement of Agriculture, is highly commendable; and on the other Hand, it is the Duty of every one, to endeavour to rectify such of those Attempts as he knows, as well from his own Experience, as from the Conversation of skilful Engineers, to be erroneous: And we are sorry to say, we are very clear that the Scheme of planting Aquatics upon Banks in the Fenns, notwithstanding what has been affirmed about it, is so far from being likely to strengthen such Banks, that it is a certain Way to destroy them. {159}

In order to make some of our Readers, who live in the high Country, sensible of the Truth of what will be here asserted, it will be necessary to explain the Nature of Fenn-Draining, which shall be done in as few Words as possible.

Water is a Fluid, as has been before observed; and it is the Nature of a Fluid to be always endeavouring to restore an Equilibrium in it's Parts, which we may observe by it's restless Motion after the Surface of it is made uneven. It is in order to restore this Equilibrium, that Water rushes down with such Rapidity, from the high Country into the Fenns; where, when it has got, the Surface of the whole Country being even, and in general no higher than the Bottom of the adjacent Seas, it remains quiet; Fenn-Draining, therefore, must be a Work of Art.—Now let us examine into the Principles of this Art. {160}

The first Thing to be done is, to scour out the Bottoms of the Rivers, which run through them, from Sand and Filth, and by that Means to make a good Outfall; then to make Banks of Earth on the Sides of those Rivers, to prevent, as much as possible, the Water which comes down in a Flood from overflowing the Country, as well as to retain such Water as shall be thrown into the Rivers by Engines. It will be needless here to describe the Machinery of a Water Engine; it will be sufficient to say, that Drains are cut which lead from these Engines to the Rivers, which Drains are banked likewise, and that these Engines, by the Help of the Wind, have a Power of Drawing the Water from the Lands which are drowned, into these Drains, till they are quite full, and till the Water has got to a Level which is higher than the Bottom of the adjacent Sea; and by the Principles of Hydrostatics is forced to run into the Sea to restore the Equilibrium: It is by the Strength of the Banks, the Force of the Engines, and the Goodness of the Outfall, that a Fenn must be drained. Now, I affirm that planting Aquatics upon Banks in the Fenn will not strengthen them, but destroy them. {161}

All Vermin in a Fenn are fond of a Bank; it is high Ground, and therefore dry and comfortable for them in the Winter, for which Reason they are always full of Moles, and particular Kinds of Rats and Mice, with long Noses, call'd Field Mice and Rats, and abundance more Animals, which breed incessantly; and make Holes and Burrows through the Banks in all Directions. One Kind of these Rats builds his House so commodious, that it is worth while to relate the Ingenuity of this little Free Mason: He begins by making a Hole in the Top of the Bank, and after a Labyrinth of many Windings and Turnings, he finishes all, by making another towards the Bottom of the Bank {162}

close to the Water's Edge; by that Means he extends his Territories from the Top of the Bank to the Bottom, and has a Supply of fresh Water, without being seen by the Enemy, who is continually upon the Watch for him. Owls, Buzzards, Kites, Ravens, Carrion Crows, and other Birds of Prey in the Fenn, always frequent the Banks in the Evening, and if the Grass is kept low by Cattle, they will destroy most of the Vermin upon them.

But then we must not plant Trees upon them, as they will be the finest Cover imaginable for those Rats; Trees will not only hide them from the Sight of the Birds of Prey, but will likewise hinder those Birds from darting down upon them when they have got a Sight of them. {163}

I remember, near eighteen Years ago, several Sorts of Aquatics were planted upon the Banks in the Fenns near Thorney-Abbey; the Consequence was, the Roots of the Trees served for Timber for the Houses of these Vermin, and the Branches were a Shelter from the Birds of Prey, by which Means they were full of Holes, thro' which the Water used to run back again to the Lands as fast as the Engines threw it out; for which Reason the Trees were ordered to be grubbed up, by the principal Engineer.

There is nothing which strengthens a Bank like a good Covering of Grass, close eat by Cattle; for if once Water penetrates through the outside Coat of a Bank, it is not in the Power of Aquatics to hinder it from tearing the Earth away with it. If Aquatics are planted any where, they ought to be at some Distance *before* the Bank, in order to keep the Lash of Water from wearing it away. {164}

XXX.

That those who lived Two Thousand Years ago, were larger than the present Race of Mankind.

We are obliged to the Poets for this Patagonian System. Their Fictions of Titan and Briareus, and the whole Fraternity of Giants, is a Fable which conveys a Moral: The Giants, upon attempting to scale the Walls of Heaven by heaping Mountains one upon another, are repelled by Jupiter's Thunder, made Prisoners, and bound under those Mountains upon which they made the Attempt. The Moral of the Fable is only this, that it is impossible for any Force to oppose the Omnipotent. Not to dispute whether the Ancients were of Opinion, that at the Creation of the World all the Animals were of a gigantic Size, or what might be their Sentiments about that Matter; it is certain that there has been an Opinion among Men, in all Ages, that the Time in which they themselves lived, produced Men of less Stature than those who lived some Time before them. {165} This is a Persuasion which the Poets all encouraged, as it suited their Purpose; nothing being so great an Enchantment, to the Mind of a poetical Reader, as to be struck with the Marvellous.

When Virgil makes Turnus throw a large Stone at Æneas, he tells us, that it was such a Stone as twelve Men of his degenerate Age could scarce have carried upon their Shoulders.

Nec plura effatus, saxum circumspicit ingens:
Saxum antiquum ingens, campo quod forte jacebat,
Limes agro positus litem ut discerneret arvis.
Vix illud lecti bis sex cervice subirent,
Qualia nunc hominum producit corpora tellus.

A Person who reads this Passage, and really believes that Men were larger in Æneas' Time than in Virgil's, reasons thus with himself: "The Works of Nature degenerate: Those who lived in {166} Æneas's Time, were larger than those who lived in Virgil's; and those who lived in the Time of Virgil, were larger than those who live now."

With regard to those who lived in Æneas's Time, we cannot indeed have any positive Proof to the contrary; but it is not impossible to prove, that the generality of those Romans who lived in Virgil's Time, were not so tall as the present Inhabitants of Great Britain are at this Day.

The English in general are a tall People; we are obliged to a Mixture of Saxons and Danes for our Stature. A curious Observer may discover a great deal of the Dane in many of the English, not only from their Names, but likewise from their Features and Complexions. Those People who have straight Hair between a white and a red, and have fine Skins, but withall a fierce Countenance, seem to be of Danish Extraction. It is not difficult, neither, to trace the Saxon in many of our Nation; such as are tall and lusty, and of a peaceable and quiet Demeanor till they {167} are provoked, and with nothing very brisk in their Countenances, seem to have had Saxon Ancestors. Not to dwell long upon this, as it is certain that England has been over-run by the Danes and Saxons (whom it would be prudent not to speak ill of, lest we should abuse some of our own Relations) we will return to our Subject.

There is no Cause to apprehend that the Works of Nature degenerate in the least, as it is a Supposition which is repugnant to all the Observations which may be made upon the Generation of Animals. Any one who has bred Horses, Dogs, or Poultry, must have observed, that instead of degenerating, they always improve upon his Hands, unless he opposes Nature, which seems to struggle hard against a Stagnation, by confining the Breed too long in the same Family.

We have two Reasons, then, to suppose that the present Inhabitants of Great Britain are larger in {168} Stature than the old Romans were, viz. because they are the Posterity of a taller People, and because the Breed is so much crossed.

But we beg Leave to offer a Reason why it may be apprehended that the Ancients were not larger in Stature than the Moderns, which seems to carry along with it something which has very much the Air of a Proof.

Whoever observes the Size of the Remains of those People who lived in the Time of the old Romans, or before that Time, will find, that they are no larger in their Dimensions than the Remains of those who died fifty Years ago. I have seen Abundance of Stone Coffins, which, as they are found in a Place which has all the manifest Signs of having been a Roman Camp, both in respect of it's advantageous Situation, the Name of the present Town, which is Caster, the Roman Coin which is constantly found there, the Urns in which the Coin is found, the Inscriptions cut in Cedar in the Coffins, the Stones of a Bridge, which may be felt with a Sprit, at the Bottom {169}
of the River, at the Back of an Enclosure, which is called the Castle Ground to this Day; all these are Indications of a Roman Camp, and may be seen near the great North Road between Stilton and Stamford; where the Curious, by a proper Application, may have a Pocket full of Roman Coin for a Shilling. Indeed, whether these Stone Coffins, which are found in this Camp, contained the Bodies of Romans, no one can positively determine, especially as the Romans generally burnt their Dead, if they had a convenient Opportunity: However, as they are found in a Roman Camp, upon the same Spot where the Coin is found, it is enough to make one think that they are Roman Coffins, and that the Romans did sometimes bury their Dead; nevertheless, we leave that to the Determination of the Curious.—Of whatever Nation their Contents were, the Marks of great Antiquity are strong upon them; and we can assure the Reader, that none of them were ever {170}
troubled with Remains of a Patagonian.

But these are not the only Reliques by which we may form our Judgments; numberless Libraries and Repositories in this Kingdom afford us Instances of the Size of the Ancients: We have several Egyptian Mummies which seem to be of very ancient Standing, and must have contained the Bodies of Men of less Stature than the present English.

Upon the whole, then, we have just Cause to conclude, that in all Ages of the World, the Egyptians and Romans were in general of the same Size with the present Inhabitants of those Countries.

It must nevertheless be allowed, that Luxury and Debauchery, which are the Concomitants of Wealth, do very much tend to decrease the Stature of the Inhabitants of those Cities which have long continued in that State. To which we may apply this Philosophical Maxim, *When any Thing is* {171}
so small as to be of no Consequence to the Point in Hand, it is considered as Nothing. Those Cities which have acquired so much Wealth as to be able to commit such Excesses, are inconsiderable when compared to the Inhabitants of the whole Earth, therefore they are to be considered as nothing.

Besides, so great is the Caprice of Fortune, that even the most powerful State in the Universe, cannot presume to declare how soon a Period may be put to its Grandeur. But having said something upon this Subject before, we shall proceed to another Error.

XXXI.

That Bleeding in May will preserve the Constitution against Illness during the ensuing Summer.

This Hereditary Whim has long been practised in many genteel Families in England. {172}

Without consulting any of the Faculty, whose Blood is too thick, or whose too thin, who have got too much Blood in their Veins, or who too little, they send for some Six-penny Bleeder, who performs this Operation upon the whole Family every Year, on May-day in the Morning.

Not to examine into the Causes of Mortality in May, leaving that Task to those who are able to assign them, it will be sufficient to remark, that the weekly Bills generally contain more Deaths in May than in any Month throughout the whole Year.

We are sure to have a Fortnight of unwholesome agueish Weather in May; and one would think, that the common Proverbs which are made use of in the Country to that purpose, would be sufficient to deter a Person from losing any Blood at that Season of the Year.

It is not impossible, but the Prepossessions which we have in Favour of the Charms of this Month, {173}
may proceed from a Perusal of the Latin Poets, or their Translators; whose Works are full of the various Beauties of the Spring. And very possibly, in Italy, where these Poets lived, that Part of the Spring may be pleasant and wholesome.

In England, we are all of us very sensible of the cold and wet Weather, which generally happens in this Month. And for my own Part, I must confess, that I think May not only the most dangerous, but likewise, upon the whole, the most disagreeable Part of the Year; and am quite certain, that if I was to be let Blood on May-day, I should have the Ague.

XXXII.

That Negroes are not a Part of the Human Species.

This is a Creolian Error, imbibed partly by the Prejudice of Education, and partly by the compleat Slavery which these poor Wretches are so unfortunate as to undergo. The passive Appearance of {174} these unhappy People at their Work, which sometimes resembles that of a Horse in a Mill, gives Master Tommy Sugar-Cane an Idea, which is the Cause of an Opinion, that a Negroe is Part of the Brute Creation, and therefore ought to be thrashed.

But indeed, Master Tommy, if I had the Care of thy Education, I would teach thee a more reasonable Way of Thinking.

Young Gentleman, you ought to consider that the Works of Nature are neither better nor worse either for your Approbation or Disapprobation of them. That Black is as good a Colour as White in itself; and that the Effect which particular Rays of Light have upon your Eye, is by no Means to determine the Beauty or Proportion of any Part of the Creation: And though your faithful Negroe does appear rude and uncultivated, that is owing to his Want of Education. Let him have Instructions in Music, you will find that his Genius is greater than your own; teach him to fence, {175} his Activity and Stratagem will surprize you. In short, instruct him in any Science, and he will discover a Capacity.

Therefore, if you have read Mr. Locke, (and if you have not, I would advise you to fit out one of your Ships and make a Voyage in Quest of him) Mr. Locke will tell you, that *it is the Understanding that sets Man above the rest of sensible Beings, and gives him all the Advantage and Dominion which he has over them*. And in another Place the same Author will tell you, that it is a wrong Connection of Ideas which is the great Cause of Errors: These are his Words, *This wrong Connection in our Minds of Ideas, in themselves loose and independent one of another, has such an Influence, and is of so great Force to set us awry in our Actions, as well moral as natural Passions, Reasonings, and Notions themselves; that perhaps there is not any one Thing that deserves more to be looked after*. This is the very Case with Master Tommy Sugar-Cane; a {176} wrong Connection of Ideas have lead him into this Error, concerning his poor Negroe; he has connected the Ideas of Horse, Slave, and Negroe, so strongly together in his Mind, that it is not in his Power to separate them again. And I am credibly informed by those who understand it, that there is as much Pleasure in whipping a Negroe, as in driving a Phæton and Pair.

XXXIII.

That Negroes are the Descendants of Cain, and that the Colour of their Skins is that Mark which was set upon Cain after killing Abel.

This is a very pretty ingenious Thought of some one, who was doubtless in love with his own Complexion. I have heard it affirmed by some with such Warmth, that it seemed in vain to reason with them about it. {177}

Before we can have any Grounds for such an Affirmation, it will be necessary to prove that it is a Disgrace to have a dark Complexion; for, if it is no Disgrace to have a dark Complexion, then there can be no Badge or Mark of Infamy in being black; if it is a Disgrace to have a dark Complexion, then the Way of Reasoning must be this: The Irish and Scotch having fine Skins, are better than the English; the English and French, than the Italians and Spaniards; the Italians and Spaniards, than the Algerines; and so on, till we come to the Line. To me, this seems so absurd, that I must beg Leave to quit the Subject, till some one has convinced me, that a white Horse is better than a black one.

XXXIV.

That Love is nothing but Concupiscence to a high Degree, or that Love and Lust are the same Thing.

Love is a Passion, which, though we read of it in the Classics, is but seldom experienced in these {178} Northern Climates.

I never met with a North-countryman who would allow that there is any Difference between Love and Lust, and even in the Southern Parts of the Kingdom it is but slightly felt; what little we have of it in England, serves only to make Diversion for the Girls, one among another, and does not often produce any Thing of bad Consequence. But in Southern Climes the Effects of it are violent, as well as much more frequent. The desperate Actions which our Tragedies are full of, will appear more natural, if we consider what Country we are in during the Time of the Play.

In England, we should esteem a Person, who killed himself for the Love of one of inferior Birth and Fortune, but a very silly Fellow; whereas in Spain or in Italy, to fall upon a Sword for a beautiful Woman, is looked upon as a certain Indication of a great Soul, and as a Proof that the Heart of the Enamoured was possessed of a Sentiment unknown to the Minds of the Vulgar. Not {179} to dwell upon the many Instances, which have happened both among the Ancients and Moderns, of People who have died for Love, I shall just make a little Enquiry into the Nature of that Disorder, for so it may be called, since it sometimes proves fatal.

That Affection which is called Love, seems to be a Fever, not only in the Mind, but an actual Fever, attended with the Symptoms of that Disorder; and differs from all others in this Particular, it is what no Physic can cure. The Symptoms of it are much like those of that Distemper, which

the East-Indians sometimes die of, when they pine for their native Country.

If this is the Case, Love is so far from being another Term for Lust, that it rather opposes that Desire, which is generally the Concomitant of Health. {180}

The Heart is capable of a Wound from this little mischievous Urchin, before Maturity arrives; for the Truth of which I appeal to every one who has Sensibility enough, to be capable of receiving the Impression of Love, whether he never found himself electrified by a fine Lady, when he was about the Age of thirteen.

To conclude: If I hear a Person very positive that Love and Lust are the same Thing, I take it for granted, that his Nerves are so coarse and callous, that nothing less than the Stroke of a Blacksmith's Hammer can possibly have any Effect upon him.

XXXV.

That the Hedge-Hog is a mischievous Animal; and particularly, that he sucks Cows, when they are asleep in the Night, and causes their Teats to be sore.

The Antipathy which People have taken against this Animal, is chiefly owing to his Form. He is {181} ugly and clumsy, and, not being able to run away, like most other Animals, is forced to have Recourse to his natural Armour, which, though it is merely defensive, is apt to disgust those, who cannot satisfy their Curiosity about him; as there is nothing to be seen but a round Ball of sharp-pointed Bristles, till he is put into Water, and then he is forced to open himself and swim.

By the bye, some Naturalists have affirmed, that he is like the Porcupine; but that, we can assure the Reader, is a Mistake. A Porcupine is as large as ten Hedge-Hogs; besides, there is not the least Resemblance in the Form of the Animals, or in their Manner of Defence. The Hedge-Hog, upon being discovered, lies quite still, and depends upon the Impenetrability of his Armour for Safety; whereas the Porcupine is tolerably swift, and is not able to conceal himself under his Quills, as they do not cover above half his Back. When he is pursued he makes a full Stop, and has the Power of drawing up the whole Body of his Quills, so as to dart them all together into any {182} one who attacks him; and in all Probability he will leave one or two in your Legs, if you go too near him, and make him angry, which is very soon done. I once saw a Stick put to a Porcupine, and he broke two or three of his Quills against the Stick, though they are very hard and tough. Some say, that the Quills of a Porcupine are of a poisonous Nature. But, begging Pardon for this Digression about the Porcupine, we will return to the Error which was mentioned, concerning the Hedge-Hog.

It may be observed in the Works of Nature, that all Animals, of whatsoever Kind they are, whether they come under the Denomination of Birds, Quadrupeds, Reptiles, or Fishes, are provided with such Organs and Weapons as are convenient for the procuring of their Sustenance, as well as such as are formed for their Self-Defence.

The Lion *roaring after his Prey*, has Weapons proper for the vanquishing and devouring that {183} Prey.

The Bull, whose principal Food is Grass, is provided with Armour round his Tongue and Nostrils, which is Proof against the Thistles and venomous Insects that make a Part of his coarse Diet.

The Monkey is possessed of Hands for selecting the eatable Parts of his Nuts and Fruit from the poisonous Rind.

The Hawk is furnished with long Wings for pursuing, keen Eyes for discerning, and sharp Talons for taking the granivorous Birds, which are his Prey; whilst they are provided with Beaks of a proper Shape for picking up the Corn, as well as Gizzards, or strong Muscles, which, by the Help of Gravel Stones, that are contained in them, grind the separate Grains of Corn, as they are discharged from the Crop, out of which they proceed gradually. {184}

The numberless Instances of this Kind which might be brought, are too tedious to mention here; it will be sufficient to remark, that there is no such Monster to be found in the Creation, as an Animal with Weapons and Implements improper for the Acquisition of that Food which is to be the Support of its Life, or unfurnished with such a Means of Defence, as is most suitable to its Self-preservation.

The Hedge-Hog is a peculiar Instance of this: As he is rather slow of Foot, if he should happen to be surprized in his Travels, he can gather himself up into a Coat of Mail, which answers two Ends; as it is a *Deceptio Visus*, looking like a Clot covered with dried Grass; and as it consists of sharp Spikes upon a thick Skin, which serve both for a Sword and Target, either to secure him against the Tread of a Horse, or the Assaults of Dogs and Hawks. Then as his Habitation is in Hedges, he has a Mouth formed for the Reception of Hips, Haws, and Sloes, which are his Food; and which, doubtless, he hoards up in some little Repository, known only to himself. His Nose is {185} formed to search for Roots near the Surface of the Earth, which must not be very large, otherwise he would be unable to manage them, as his Mouth is remarkably small, and does not seem capable of containing any Thing larger than a small Pea; for which Reason we may suppose it not only improbable and unnatural, that the Hedge-Hog should attempt to suck the Teats of a Cow, when she is asleep, as it does not seem formed by Nature for such an Operation; but we will endeavour to prove from Hydrostatics, that it would be impossible for him to acquire any Milk at

all by such a Trial.

It is certainly true, that the Reason why a Vessel contains Water, or any other Fluid, within it's Sides, and hinders it from dispersing, is, because the Pressure of the Air at the Top of the Vessel keeps it down; and it is as true, that when the Vessel is turned up side down, the Liquor in it will still be kept in, by the same Pressure of the Air, notwithstanding the Force of Gravity, provided {186} the Surface of the Water is not disturbed in turning the Vessel; which may be easily proved by the Experiment of a Drinking-Glass and a Piece of Paper. It is upon this Principle, that the Milk in the Dug of an Animal, is kept in it's proper Place, and does not fall to the Ground; though it must be acknowledged, that there may be some other Causes assigned likewise.

Now if a Vessel of Water is put into an Air Pump, as soon as the Air is extracted from the Receiver, in which the Vessel stands, the Water immediately ascends up out of the Vessel, and overflows the Brim, the Air, which was the Cause of it's being kept down, being removed.

This is the Case with an Animal which gives Suck. The Teat is close embraced round by the Mouth of the young one, so that no Air can pass between: A Vacuum is made, or the Air is exhausted from it's Throat, by a Power in the Lungs; nevertheless, the Pressure of the Air {187} remains still upon the Outside of the Dug of the Mother, and by these two Causes together, the Milk is forced into the Mouth of the young one.

But a Hedge-Hog has no such Mouth, as to be able to contain the Teat of a Cow; therefore any Vacuum, which is caused in it's own Throat, cannot be communicated to the Milk in the Dug. And if he is able to procure no other Food, but what he can get by sucking Cows in the Night, there is likely to be a Vacuum in his Stomach too.

It may be objected here, that former Legislators have thought proper to allow a Reward to be given for killing this Animal, on Account of the Mischief he has been supposed to do. To which I answer, that former Legislators have thought proper to burn old Women, for being Witches, if they would not sink when they were put into a Pond; and I will venture to affirm, that there is just as much Sense in burning a Witch, as in setting a Reward upon a Hedge-Hog. {188}

XXXVI.

That a Person is the better or the worse for being of any particular Calling or Profession.

This Error shall be dressed in a Clerical Habit. But I fear those venerable Robes will share the same Fate here, which attends them in other Places; they will give a double Force to the Mistakes and Failings of the Wearer.

Luke XVIII. Verses the xth, xith, xiith, and xiiith. *Two men went up into the temple to pray; the one a Pharisee, and the other a publican. The Pharisee stood and prayed thus with himself; God, I thank thee, that I am not as other men are, extortioners, unjust, adulterers, or even as this publican. I fast twice in the week, I give tithes of all that I possess. And the publican, standing* {189} *afar off, would not lift up so much as his eyes unto heaven, but smote upon his breast, saying, God be merciful to me a sinner.*

The Oriental Teachers thought proper to convey their Doctrines of Morality in Parable. Doubtless, the Method is plain and easy to be understood; elegantly shewing us the Truth, whilst we cannot help confessing that we discern it, and this without giving much Disgust by laying open the Foibles of any Party; it is capable of comprehending all the Figures of Poetry and Rhetoric, and these Figures are the least liable to be detected, whilst they are clothed in the Disguise of Parable, which must be allowed to be a great Advantage; *Artis est celare artem* holds good in this Case, as well as in others. And if one Person has an Inclination to bring another to his Way of Thinking, he must endeavour to be as plain and simple in his Manner as possible, for this Method alone carries with it the Appearance of Truth; whether we argue on the right Side of {190} the Question, or on the wrong, this Method of Proceeding will hold good in some Measure; but especially, if we want to instil true Principles of sound Morality, it has a double Force. Our Blessed Saviour, doubtless, for this Reason thought proper to deliver his Doctrines of Morality in this convincing, self-evident Dialect; he saw plainly that the Cabalistical Stile of the Pharisees, was by no Means a Language proper to convey new and wholesome Precepts into the Minds of the Vulgar. No: He chose rather to make Use of this compact and intelligible Method of inculcating his Precepts, namely Parable. We have no greater Instance of his Skill, than this of the Pharisee and Publican.

In the Handling of this Subject, we shall consider the Human Species in different Lights; as a reasoning philosophizing Animal, who thinks he has a right to enquire into the Phœnomena of Nature, and to make Use of that Right, and of those Senses, which God has given him; and as a Person, who is forced to submit to the the superior Judgment of other Men, and takes Things for {191} granted as he is told them. The first of these is what we generally understand when we say Men of Science, Men of Learning, Men of regular Education, and the like. These may be ranged into Variety of different Orders and Ranks, in regard to their different Professions, Studies, Turns of Genius, Amusements, Abilities, Applications, &c.

We may with Propriety reduce all these different Sentiments concerning Mankind, into two Branches; namely, Men of Business, and Men of Recreation or Pleasure.

Of those who come under the Denomination of Men of Business, each one is apt to think himself

of that Order which is most respectable. For Instance, one who professes the Law, may know that Mankind is apt to tax him with Injustice and Dishonesty, but that, he comforts himself, is of no great Signification; for what amongst the Vulgar is stiled Dishonest, among People of Fashion, would be palliated by the agreeable Name of exquisite Address. And so he makes himself very {192}
easy about what vulgar Imputations may be laid to his Charge by the Mob, so long as he has the Gentry on his Side. And they too may tax him with Dishonesty if they please, but he makes no Doubt but he shall soon have some of them applying to him for Justice, as all Causes must go through the Hands of those of his Profession; and he does not see but Things are determined fairly enough in the End. In short, he concludes with thinking, that his Profession is as useful as any other, (and in that perhaps he may be right) and that it is profitable, and of great Importance, and therefore, that the Sons of the Robe may justly be said to be more honourable.

The Physician is of another Way of Thinking. He knows full well, that Health is of more Consequence than Riches, for (says he) what Pleasure can a Man have from a great Estate, if he has not Health to enjoy it? The Lawyer may out talk him perhaps, but he thinks he has saved {193}
more Lives, at a much cheaper Rate than the other has recovered Estates in Chancery. They may make light of his Art, but he is certain likewise, that they will all stand in Need of his Skill sometime or other; and therefore thinks, on Account of the Importance of his Profession, that the Sons of Galen are most honourable.

The Philosopher differs from them both. He thinks, that all that is wrote upon Parchment must treat of something very trifling, with Respect to what he is concerned in. It may be, says he, that this Parchment may contain some Conveyance of some small Tract of Land, belonging to some one private Person; but what is that? he has just been taking Measure of the whole Earth. He thinks that Physic may have Merit in it's Way; for a Man skilled in Physic may preserve the Life of an Animal who inhabits the Globe; but what is this to what he has been contriving of? He has been taking Care of the Health of the Universe; he has discovered a Comet, and has been {194}
calculating how near it will approach to the Earth's Orbit; he has been settling the Degrees of Heat it contains, at such and such Distances, and what Danger we should all be in, of being totally demolished, if it was to approach but a small Distance nearer; he has been finding out the Situation of the Polar Stars, that Navigators may sail in an unknown Sea without Danger; he has been fixing the exact Limit of the Trade Winds, where they may be certain of being blown Home again safe. He thinks these are Matters of a high Nature, much beyond any Thing else, and therefore, that his Profession is of the highest Importance. Three Professions have been mentioned, every one of which is apt to think his own Order of the greatest Consequence. We should find it exactly the same, if we were to take a Survey of the inferior Trades, and mechanical Men.

Those likewise, who think proper to devote their Time to Amusements, if we examine into their {195}
Behaviour, we shall find them, in general, no less partial to their own Taste than the Men of Business; which we shall easily discern, if we make Observations at any Public Place, where many of this Kind resort to. Gentlemen who are fond of Play, most heartily despise all the Noises that can be made upon Instruments, all the Daubings which can be smeared upon Canvass, and all the Nonsense that can he crammed into Books. The only Music that can give them any Pleasure, is the rattling and spirited Sound of the all-hazardous Dice-Box; the only Paintings which can strike them, must be drawn at full Length, upon the mercenary Card-Table; the only Books which, in their Opinion, contain any Sense in them, are those which treat upon the noble Science of Gaming.

The Sportsman wonders what any Body can see in London, or in those make-shift Entertainments which are contrived to pass Time away in Town; he cannot bear to sit fretting over a Card Table. {196}
The only Music that delights him, is the chearing Sensation which he perceives, when he is awaked from Sleep, by the confused Harmony which pierces his Ear, from the shrill Throats of his never-erring Hounds, impatient for the glorious Fatigue (as he calls it) of the ensuing Day; which he follows at the Hazard of his Life, over Dangers of Mountains, and Woods, and Rivers, and craggy Cliffs, and returns Home well pleased and happy with the Thoughts of his Exploits: Whilst the London Citizen prefers his Armed-chair, and a good Fire, and the Daily Advertiser; and sneers at all the others for senseless Wretches, because they don't understand the Rules of Principal and Interest.—All these Examples may serve to shew, how wrapt-up Men are in their particular Engagements of Business and Pleasure, and how in love they are with their own Opinions: So in love with them, that they cannot look upon the Sentiments of others with common Charity. {197}

We all think ourselves of the highest Importance, and that there would no existing without us; how this comes to pass shall be next enquired into, by returning to the Matter of different Professions. We behave with regard to our public Professions, in this Respect, just as we do in our private Characters: As we can easily discern the Vices of other Men, and forget our own, so it happens in the present Case; we can easily discern the Advantage which the Public reaps from our own Profession, but it is with great Difficulty that we are brought to examinine what Use we ourselves derive from that of another. This was the very Case with the Pharisee in the Text; he stood, and prayed and said, *God, I thank thee, that I am not as other men are, extortioners, unjust, adulterers, or even as this publican*. He payed Tithes of all that he possessed. And what great Merit was there in that? If he had not thought proper to pay Tithes of his own Accord, no Doubt, there was as much Law to compel him in those Times as in these; but the Misfortune is, {198}
this Pharisee was under the same Mistake which Pharisees in all Ages labour under, he could see plain enough into what he thought his own private Qualifications, but could not discern the Use

which the Public reaped from his Companion. The Publican on the other Hand did not so much as lift up his Eyes to Heaven, but smote his Breast, and said, *God be merciful to me a sinner*. He acknowledged that he was of a Profession which, however necessary it might be in itself, nevertheless brought upon him the Odium of his Countrymen, and which made him liable to many Irregularities in his Behaviour, made him forced to be guilty of many Extortions from the poorer Sort of People; he confessed that his Profession did necessarily bring all these Sins upon him, for which he then implored Forgiveness. *I tell you*, says our Saviour, *this man went down to his house justified rather than the other*. But what Reason can be given, why the Pharisee should not be justified? It might be said, that the Pharisee was conscious to himself of living according to {199}
the Laws of his Country, and of doing his Duty, and that he thought it incumbent upon him to return Thanks to the Maker of all Things, for giving him such good Inclinations, and for putting it into his Power to make a good Use of them.

This would be very charitable Reasoning, if one could be brought to believe, that the Pharisee was really such a Sort of a Man as he pretended to be; but it is sufficiently evident, by the Stile and Manner of the Parable, that this Pharisee was intended to be like other Pharisees in all Times: he would be thought to be much better than he really was, and had worked himself up to such a high Pitch of Pride and Self-Conceit, as to boast of his supposed Qualifications even to his Maker.

Doubtless this excellent Parable strikes at the very Root of all Hypocrisy, and vain-glorious outside Shew. For here was the Publican, very probably a much better Man than the Pharisee, {200}
who had neither imbibed such high Notions of his own Worth, nor pretended to any such fine Qualifications; he very willingly acknowledged his Faults, and with the greatest Modesty and Diffidence of himself, that high Recommendation both in the Eyes of God and Man, did not even think himself worthy to look up to Heaven, but smote upon his Breast and said, *God be merciful to me a sinner*.

What has been said may serve to shew the excellent Morality, which these Parables of our Saviour's contained; they contained such Sort of Lessons as must be useful, so long as the World exists; for there will always be such Pharisees as are here mentioned by our Saviour, and to whom, in another Place, he repeats the Words, *Wo unto you scribes and Pharisees, hypocrites*, so often. Isaiah says, Chap. ix. ver. 20, 21. *Wo unto them that call evil good, and good evil; that put darkness for light, and light for darkness; that put bitter for sweet, and sweet for bitter! Wo unto* {201}
them that are wise in their own Eyes and prudent in their own Sight!

Our Saviour did not mean to aim with the Force of his Doctrine at Publicans and Pharisees alone, his Doctrine was of an Universal Nature: And we must not suppose that could ever be his Intention; and lest future Ages should hereafter make such a Mistake, the Evangelist has given us his Opinion what he thought our Saviour intended by this Parable. *He spake this Parable*, says St. Luke, *unto those which trusted in themselves that they were righteous, and despised others*.

Here it must be observed, that though our Saviour was pleased to say, that *the Publican went down to his House justified* rather *than the Pharisee*, yet he by no Means sets either of them as a Pattern for our Example. We must not therefore misunderstand this Passage so dangerously as to think, that if we be but modest, we may be guilty of what enormous Vices we think proper, {202}
because that would be giving the Words of our Saviour a wrong Interpretation. A middle Character, between these two Extremes, is rather to be aimed at. It is to be wished, that we could so navigate ourselves through the dangerous Rocks and Quicksands of Land, as to avoid both the Sins of the Publican, and the vain-glorious Boasting of the Pharisee: And by that Means, we shall be enabled without Fear, to sail through the dark Sea of Death, even into the Regions of Eternity, where the Gates of Hell shall not prevail against us.

FINIS.

ERRATA. {203}

Page 54, instead of *Conis* read *Canis*.
72, instead of *Boatman's* read *Boatswain's*.
91, instead of *the* read *their*.
ditto, instead of *amazed* read *amused*.
110, instead of *lighter* read *higher*.
165, instead of *jabebat* read *jacebat*.

NOTES

[1] What are these Masks? Hear you me, Jessica,
Lock up my Doors, and when you hear the Drum,
And the vile Squeaking of the Wry-neck'd Fife, &c.

[2] Rusticus expectat dum defluat amnis.

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